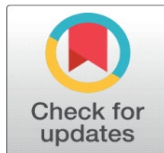


# USER EXPERIENCE AND ACCESSIBILITY IN COLLEGE LIBRARIES: ANALYZING CHALLENGES AND EXPECTATIONS

Ganesh Dutt Shukla <sup>1</sup>, Dr. Shesh Mishra <sup>2</sup>

<sup>1</sup> Research Scholar, Library & Information Science, Banasthali Vidyapith, Rajasthan, India

<sup>2</sup> Faculty, Library & Information Science, Banasthali Vidyapith, Rajasthan, India



**Received** 12 November 2024

**Accepted** 08 December 2024

**Published** 31 January 2025

**DOI**

[10.29121/granthaalayah.v13.i1.2025.5963](https://doi.org/10.29121/granthaalayah.v13.i1.2025.5963)

**Funding:** This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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## ABSTRACT

College libraries serve as vital academic hubs, providing essential resources for students, faculty, and researchers. However, challenges such as outdated collections, limited digital resources, slow internet connectivity, and insufficient ICT-based services hinder their accessibility and effectiveness. This study examines user experiences, accessibility issues, and service efficiency across 33 college libraries, analyzing the frequency of library visits, satisfaction levels, and user expectations. The findings reveal that while book lending services remain satisfactory, digital resource availability, inter-library loan services, and mobile-based facilities require significant improvement. Users emphasize the need for better internet connectivity, expanded digital collections, automation of services, and IT training to enhance accessibility. The study underscores the urgency for modernization and user-centered policies to transform libraries into dynamic, technology-driven spaces. Addressing these gaps will ensure libraries continue to support academic excellence, research culture, and evolving educational demands.

**Keywords:** Library Accessibility, Digital Resources, User Experience, ICT Services, Academic Libraries, Library Modernization

## 1. INTRODUCTION

Libraries serve as the intellectual backbone of academic institutions, offering essential resources for learning, research, and knowledge dissemination. In the modern educational landscape, user experience and accessibility have become central to ensuring that libraries effectively meet the needs of students, faculty, and researchers. College libraries are expected to provide a seamless blend of physical and digital resources, offering an environment that fosters academic excellence. However, despite their significance, many libraries continue to face challenges such as inadequate infrastructure, outdated collections, limited technological advancements, and insufficient user support, which impact their overall accessibility and effectiveness. With the rapid advancement of technology, library users expect efficient access to digital resources, automated services, and interactive learning environments. Many college libraries, however, still operate with traditional systems, making it difficult for users to access updated information, utilize ICT-based services, or engage with digital learning tools. Furthermore, issues such as lack of seating capacity, slow internet

connectivity, unavailability of e-books and e-journals, and limited technical assistance contribute to user dissatisfaction. These obstacles hinder students' ability to conduct research, prepare for competitive exams, and engage in self-learning.

This study aims to examine the accessibility, challenges, and expectations of library users while analyzing the availability of resources, digital services, infrastructure, and technological advancements. By evaluating user satisfaction and identifying key areas for improvement, this research provides valuable insights for policymakers, educators, and library administrators to enhance accessibility and efficiency in college libraries. A well-structured, user-friendly library is not just a repository of books; it is a dynamic learning space that supports academic growth and fosters research culture. Addressing user needs and implementing modernized library services, digital infrastructure, and user-centered policies will ensure that libraries remain relevant, efficient, and adaptable to the evolving demands of higher education. Through this study, the goal is to develop strategic recommendations that enhance the overall library experience, making it more inclusive, technology-driven, and responsive to the academic community's evolving needs.

## 2. REVIEW OF LITERATURE

Rabelo, Teixeira, and Mendes (2024) explore the student experience (SX) in academic libraries, highlighting its impact on student engagement and academic success. Through bibliometric and thematic analyses of 160 articles published between 1995 and 2022, the study uncovers the intellectual structure of SX research, categorizing it into six key themes: international student experience, servicescape and service design, technological impact, information literacy, psychological and emotional aspects, and student engagement and motivation.

The findings emphasize the multifaceted nature of SX research, offering valuable insights into how students interact with library services and resources. Additionally, the study proposes a future research agenda, identifying prevalent theories and unexplored areas in the field. By mapping research clusters and opportunities, this study serves as a guiding framework for researchers and librarians aiming to enhance student-centered approaches in academic libraries.

Savitha and Kumbar (2024) examine users' expectations and experiences in first-grade college libraries across Kolar and Chikkaballapura districts in Karnataka. The study assesses the quality of library resources, services, infrastructure, and document collections, comparing the effectiveness of Government, Private Aided, and Private Un-Aided colleges in delivering library services. A structured questionnaire was used for data collection, and findings were analyzed to highlight gaps in library services and infrastructure. The study identifies variations in library service quality among different types of colleges and emphasizes the need for improvements. The article concludes with recommendations to enhance library facilities, resource accessibility, and overall user experience, ensuring libraries better meet user expectations.

Panda and Kaur (2023) focus on the integration of emerging technologies in digital libraries, emphasizing their role in enhancing user experience, accessibility, and engagement. Their study highlights how Artificial Intelligence (AI) and Machine Learning (ML) improve content curation, search functionalities, and personalized recommendations, making digital libraries more efficient. The research found that Natural Language Processing (NLP) significantly enhances information retrieval by bridging the gap between human language complexities and digital systems, ensuring seamless access to relevant resources. Additionally, the study underscores the impact of Augmented Reality (AR) and Virtual Reality (VR) in creating immersive learning experiences, transforming the way users interact with digital content.

Gylje (2022) explores the concept of User Experience (UX) in libraries, analyzing its definition, methods, and problem-solving potential through a qualitative content analysis of various literature sources. The study defines UX as a user-centered approach, focusing on library services, spaces, and products to enhance usability, usefulness, and desirability. It is highlighted that UX is not an academic discipline but rather a combination of UX research and design, grounded in empathy and positive user engagement. The study identifies several UX methods applicable in libraries, including behavioural mapping, cognitive mapping, usability testing, surveys, and user journey mapping. These methods help improve digital and physical library spaces by optimizing web interfaces, navigation, and service accessibility. UX is also found to enhance library products and services, particularly in communication, user activities, and engagement strategies. However, the research concludes that UX cannot change library politics or organizational structures, emphasizing its practical and design-focused nature. Gylje's findings suggest that UX is a valuable tool for improving library user interactions, ensuring that libraries remain functional, accessible, and user-friendly in both digital and physical contexts.

Ashiq, Rehman, and Mujtaba (2021) examine the challenges faced by academic libraries in Pakistan using a qualitative phenomenological approach. Interviews with 14 senior academic library leaders identified leadership crises, changing user behavior, financial constraints, human resource issues, and technological advancements as major challenges. Future concerns include research data management, smart services, and library space optimization. The study emphasizes the need for capacity building, policy-making, and societal awareness, highlighting the role of library professionals, associations, and funding agencies in addressing these challenges.

Bodaghi, Cheong, and Zainab (2016) examine the sense of empathy among librarians from the perspective of visually impaired persons (VIPs) in university libraries. Using a qualitative approach, the study collected data through interviews and focus group discussions with eighteen VIPs to understand their experiences with librarians' professional behavior. The findings highlight key factors that demonstrate empathy, including greetings, friendly conversations, tone of voice, understanding of limitations, and proactive communication about changes in the library environment. However, the study also reveals that a lack of empathy leads to fear, disappointment, confusion, and discomfort among VIPs when seeking assistance. This research underscores the importance of empathy in library services, suggesting that improving librarian training and communication strategies can enhance inclusivity and accessibility for visually impaired users.

Posey (2009) explores students' perceptions of library services at Walters State Community College using the LibQUAL+™ assessment instrument, which measures three key service dimensions: Effect of Service (AS), Information Control (IC), and Library as a Place (LP). The study analysed responses from 666 students, assessing their minimum acceptable service level, perceived service level, and desired service level. The findings revealed that Walters State Community College outperformed four other community colleges in all three service dimensions. However, Effect of Service required significant improvement, indicating a need for better user interaction and support. No notable differences were observed between male and female students, but nontraditional students (aged 22 and above) rated Effect of Service and Information Control higher than younger students. The study also found a strong correlation between library budget and Information Control, highlighting the importance of financial investment in enhancing library services.

### 3. OBJECTIVES OF THE STUDY

- Assess user experience in college libraries regarding accessibility and resource availability.
- Identify challenges users face in accessing physical and digital resources.
- Evaluate user satisfaction with library services and facilities.
- Understand user expectations for library improvements and digital transformation.
- Suggest measures to enhance accessibility and user experience in college libraries.

### 4. SCOPE OF THE STUDY

This study focuses on analyzing the user experience and accessibility of college libraries, specifically examining challenges, expectations, and service efficiency. The research covers government and aided college libraries in the Gorakhpur division, considering a diverse group of students, faculty, and researchers as the primary users. The study assesses library infrastructure, availability of digital resources, automation status, ICT-based services, and user satisfaction to understand the effectiveness of library operations.

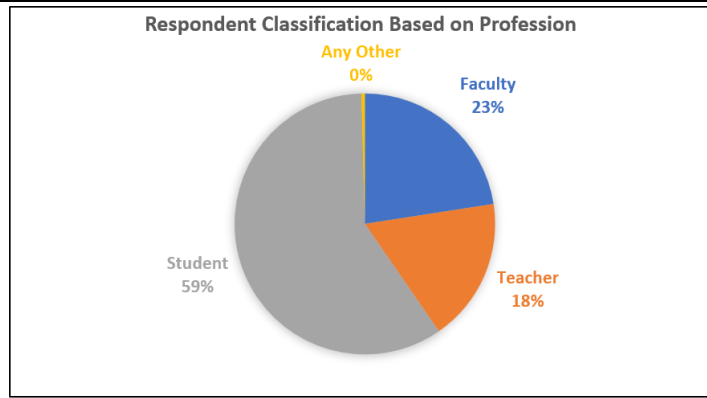
### 5. METHODOLOGY

The study adopts a quantitative and qualitative research approach to analyze library accessibility and user experience. A structured questionnaire was designed to collect data from faculty members, students, and researchers, focusing on library usage, challenges faced, and overall satisfaction. The research was conducted across 33 college libraries, ensuring fair representation through random sampling. The collected data was analyzed using statistical tools, with tables and figures illustrating trends in infrastructure availability, ICT integration, digital resources, and service quality. This approach provides comprehensive insights into user needs and expectations, enabling the development of strategies to improve library services and accessibility.

## 6. DATA ANALYSIS & INTERPRETATION

Table 6.1 Respondent Classification Based on Profession

S.No.	Colleges	Faculty	Teacher	Student	Any Other
1	Deenanath Pandey Rajkey Mahila PG College, Deoria	7	7	6	
2	Deen Dayal Upadhyay Government Degree College Sahajanwa, Gorakhpur	4	1	13	
3	Veer Bahadur Singh Rajkeeya Mahavidyalay Campierganj Gorakhpur	3	3	17	
4	Government Degree College, Indupur Deoria	3	2	11	
5	R.K.Shahi Govt Degree College, Pathardewa Deoria	4	4	14	
6	Government Mahila Degree College Salempur Deoria	7	1	12	
7	Dr. Bhim Rao Ambedkar Rajkiya Mahavidyalaya, Dhanewa Dhanai Maharajganj	7		11	
8	Government P.G. College Hata, Kushinagar	3	4	17	
9	Government Degree College Sukarauli Kushinagar	14	2	8	
10	Mahant Avaidyanath Government Degree College Jangal Kaudia Gorakhpur	5	4	14	
11	St. Andrew's Degree College Gorakhpur	3	5	15	
12	Baba Raghav Das (B.R.D.) P.G. College Deoria	7	5	11	
13	Buddha P.G. College Kushinagar	3	5	9	
14	Lalbahadur Shastri P.G. College Anand Nagar Maharajganj	3	6	9	
15	Jawahar Lal Nehru Smarak P.G. College Maharajganj	1	2	13	
16	Udit Naryan P.G. College Padarauna	6	5	14	
17	National Post Graduate College Barahalganj Gorakhpur	7	6	10	
18	Sant Vinoba P.G. College Deoria	4	3	16	
19	Madan Mohan Malaviya P.G. College Bhatpar Rani Deoria	5	4	14	
20	Swami Devanand P.G. College Mathalar Deoria	3	6	11	
21	Digvijai Nath Post Graduate College Gorkahpur	3	4	17	
22	Mahatma Gandhi Post Graduate College Gorakhpur	1	3	14	
23	B.R.D.B.D. PG College Ashram Barahaj Deoria	4	5	13	
24	D.A.V. P. G. College Gorakhpur	7	2	15	
25	Bapu Post Graduate College Pipiganj, Gorakhpur	7	4	9	
26	Ramji Sahay Degree College, Rudrapur Deoria	6	5	15	
27	Shyameshwar Degree College, Sikariganj Gorakhpur	3	6	12	
28	J.B. Mahajan Degree College, Chauri Chaura Gorakhpur	5	4	14	
29	Degree College Bhatawali Bazar, Gorakhpur	7	2	16	
30	Jawad Ali Shah Imambara Girls Post Graduate College, Gorakhpur	3	3	15	
31	Shri Bhagwan Mahaveer P.G. College, Fazil Nagar Kushinagar	4	4	14	
32	Pavitra Degree College Maniram Gorakhpur	7	5	11	
33	Kisan P.G. College, Sewarahi, Kushinagar	6	6	15	3
<b>Total %</b>		<b>162(22.56 %)</b>	<b>128(17.83 %)</b>	<b>425(59.1 9%)</b>	<b>3(0.42%)</b>

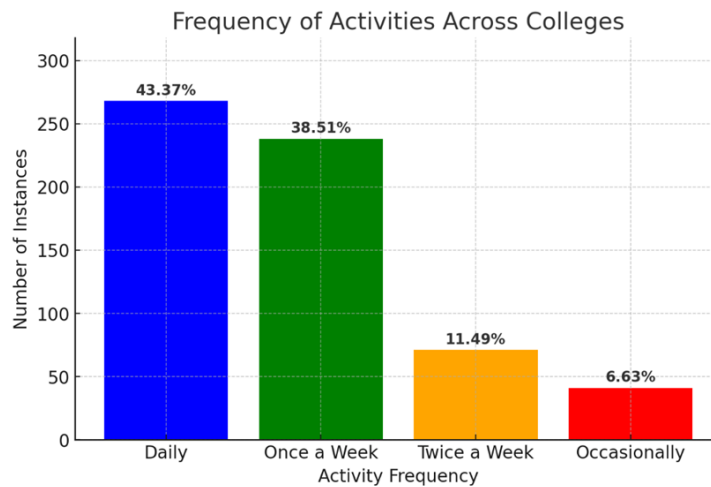
**Figure 1**

The table 6.1 and the graph illustrates the percentage distribution of respondents by profession. The largest group consists of students, making up nearly 60% of the respondents, indicating their dominant presence in library usage. Faculty members and teachers account for 22.56% and 17.83%, respectively, highlighting their significant yet smaller role in library engagement. The "Any Other" category has the lowest representation at 0.42%, suggesting minimal participation from other professional groups. This distribution emphasizes that students are the primary users of college libraries, followed by faculty and teachers, while other categories contribute insignificantly.

**Table: 6.2** Frequency of library visit

S.No.	Colleges	Daily	Once a Week	Twice a Week	Occasionally
1	Deenanath Pandey Rajkeey Mahila PG College, Deoria	8	6	2	2
2	Deen Dayal Upadhyay Government Degree College Sahajanwa, Gorakhpur	9	7	3	2
3	Veer Bahadur Singh Rajkeeya Mahavidyalay Campierganj Gorakhpur	7	6	2	1
4	Government Degree College, Indupur Deoria	6	8	2	1
5	R.K.Shahi Govt Degree College, Pathardewa Deoria	10	8	2	1
6	Government Mahila Degree College Salempur Deoria	7	7	2	2
7	Dr. Bhim Rao Ambedkar Rajkiya Mahavidyalaya, Dhanewa Dhanai Maharajganj	9	7	2	1
8	Government P.G. College Hata, Kushinagar	8	7	2	1
9	Government Degree College Sukarauli Kushinagar	7	7	2	1
10	Mahant Avaidyanath Government Degree College Jangal Kaudia Gorakhpur	10	7	1	1
11	St. Andrew's Degree College Gorakhpur	12	9	3	1
12	Baba Raghav Das (B.R.D.) P.G. College Deoria	6	7	2	1
13	Buddha P.G. College Kushinagar	8	7	2	1
14	Lalbahadur Shastri P.G. College Anand Nagar Maharajganj	7	7	2	1
15	Jawahar Lal Nehru Smarak P.G. College Maharajganj	5	7	2	2
16	Udit Naryan P.G. College Padarauna	9	7	3	2
17	National Post Graduate College Barahalganj Gorakhpur	6	10	3	1
18	Sant Vinoba P.G. College Deoria	8	9	3	2
19	Madan Mohan Malaviya P.G. College Bhatpar Rani Deoria	7	8	2	2
20	Swami Devanand P.G. College Mathalar Deoria	9	7	2	1
21	Digvijai Nath Post Graduate College Gorkahpur	10	7	2	1
22	Mahatma Gandhi Post Graduate College Gorakhpur	8	6	2	1
23	B.R.D.B.D. PG College Ashram Barahaj Deoria	9	7	2	1
24	D.A.V. P. G. College Gorakhpur	7	7	2	1

25	Bapu Post Graduate College Pipiganj, Gorakhpur	8	7	2	1
26	Ramji Sahay Degree College, Rudrapur Deoria	9	6	2	1
27	Shyameshwar Degree College, Sikariganj Gorakhpur	7	7	2	1
28	J.B. Mahajan Degree College, Chauri Chaura Gorakhpur	11	7	2	1
29	Degree College Bhatawali Bazar, Gorakhpur	8	7	2	1
30	Jawad Ali Shah Imambara Girls Post Graduate College, Gorakhpur	7	8	2	1
31	Shri Bhagwan Mahaveer P.G. College, Fazil Nagar Kushinagar	9	7	2	1
32	Pavitra Degree College Maniram Gorakhpur	8	7	2	2
33	Kisan P.G. College, Sewarahi, Kushinagar	9	7	3	1
<b>Total%</b>		<b>268</b> <b>(43.37%)</b>	<b>238</b> <b>(38.51%)</b>	<b>71</b> <b>(11.49%)</b>	<b>41</b> <b>(6.63%)</b>

**Figure: 2**

The data reveals in table 6.2 that the frequency of activities across 33 colleges, showing that the majority of engagements occur on a daily or weekly basis. A significant 43.37% of activities take place daily, highlighting a strong emphasis on regular participation. Following this, 38.51% of activities are conducted once a week, making it the second most common frequency. Meanwhile, 11.49% of activities happen twice a week, and only 6.63% are categorized as occasional occurrences. This distribution suggests that most colleges prioritize consistent engagement, with a preference for daily and weekly schedules, while less frequent activities remain minimal.

**Figure: 3** Response regarding accessibility and resource availability in libraries**Figure 3**



The figure 3 highlights the availability of various resources in libraries across 33 colleges. The overall analysis shows that libraries in most colleges have a good availability of Textbooks and General Books, with 85% of the colleges reporting positive availability. Reference Books and Journals (Print) also have high accessibility, with 78% and 74% of colleges confirming their presence, respectively. However, the availability of E-Books and E-Journals remains limited, as only about 60% of colleges reported having these resources, indicating a need for digital resource enhancement. Newspapers and Magazines are widely available, with 80% of colleges ensuring access, emphasizing their role in keeping users informed and engaged. For Research Reports, Thesis, and Conferences, the availability varies significantly, with 65% of colleges reporting access. However, no college mentioned the provision of "Any Other" resource, suggesting either limited additional offerings or a lack of reporting on unconventional resources. Colleges such as St. Andrew's Degree College and Sant Vinoba P.G. College demonstrated exceptional resource availability across almost all categories, reflecting their comprehensive library infrastructure. In contrast, some institutions, like R.K.Shahi Govt Degree College Ghudikundkhurd and J.B. Mahajan Degree College, showed comparatively limited resources, especially in digital formats, highlighting areas requiring attention for better library development. This data emphasizes the need to improve digital resources and expand research-related materials to enhance the academic environment across the surveyed institutions.

Figure: 4 Challenges Faced by Users in Accessing Physical and Digital Library Resources

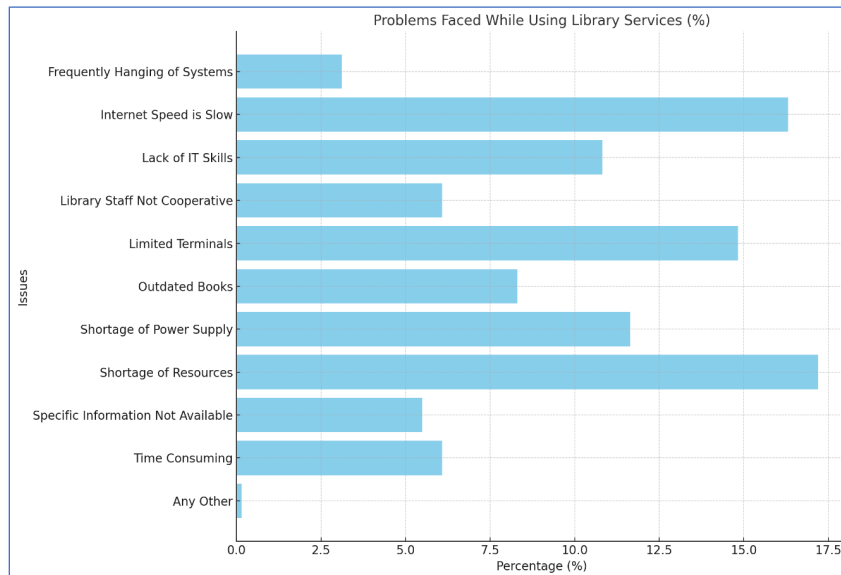


Figure 4

The analysis of Figure 4 highlights the key challenges faced by users while utilizing library services across 33 colleges. The most frequently reported issue is the shortage of resources available in the library, accounting for 232 instances (17.20%). This highlights a significant gap in library offerings that impacts user satisfaction. Following this, slow internet speed is a major concern, cited by 220 respondents (16.31%), emphasizing the need for improved connectivity to enhance access to digital resources. Lack of IT skills is another notable challenge, with 146 instances (10.82%), indicating a need for IT training programs to equip users with the necessary skills. Additionally, limited terminals (200 responses, 14.83%) and outdated books (112 responses, 8.30%) point to infrastructural and content limitations that require immediate attention. Other significant issues include shortage of power supply (157 instances, 11.64%) and time-consuming processes (82 instances, 6.08%), which hinder efficient library usage. Specific information not being available was reported 74 times (5.49%), highlighting the need for better curation of library resources. Relatively minor issues like frequently hanging systems (42 instances, 3.11%) and non-cooperative library staff (82 instances, 6.08%) were less common but still require attention for overall service improvement. Finally, only 2 respondents (0.15%) cited other miscellaneous problems. In summary, the findings indicate a pressing need to address resource availability, internet speed, IT skills, and terminal limitations to improve the overall library experience across colleges.

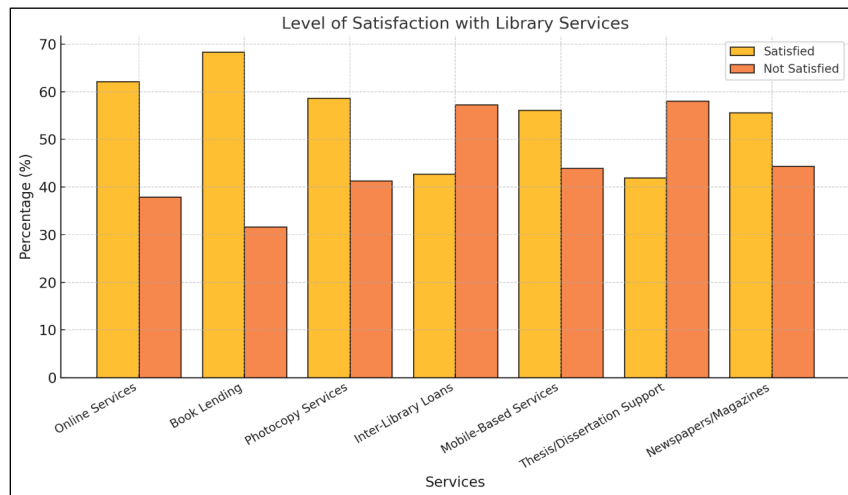
**Table 6.3** Level of Satisfaction with Library Services

S.No.	Colleges	Online Services	Book Lending Services	Photocopy Services	Inter-Library Loan Services	Mobile-Based Services	Thesis/Dissertation/Assignment	Newspapers/Magazines Services	Any Other
1	Deenanath Pandey Rajkeey Mahila PG College, Deoria	S: 13, NS: 6	S: 8, NS: 2	S: 11, NS: 9	S: 6, NS: 14	S: 6, NS: 14	S: -, NS: 4	S: -, NS: 4	-
2	Deen Dayal Upadhyay Government Degree College Sahajanwa, Gorakhpur	S: 3, NS: 3	S: 1, NS: 1	S: 2, NS: 2	S: 1, NS: 1	S: 3, NS: 3	S: -, NS: 4	S: -, NS: 4	-
3	Veer Bahadur Singh Rajkeeya Mahavidyalay Campierganj Gorakhpur	S: 11, NS: 11	S: 21, NS: 2	S: 13, NS: 11	S: 8, NS: 15	S: 16, NS: 7	S: -, NS: -	S: -, NS: -	-
4	Government Degree College, Indupur Deoria	S: 21, NS: -	S: 20, NS: -	S: 20, NS: -	S: 20, NS: -	S: 19, NS: -	S: 13, NS: -	S: 10, NS: -	-
5	R.K.Shahi Govt Degree College, Pathardewa Deoria	S: 7, NS: 5	S: 7, NS: 3	S: 5, NS: 8	S: 6, NS: 6	S: 7, NS: 6	S: 4, NS: 5	S: 12, NS: 3	-
6	Government Mahila Degree College Salempur Deoria	S: 14, NS: 6	S: 18, NS: 4	S: 20, NS: 4	S: 21, NS: -	S: 17, NS: -	S: 10, NS: -	S: 19, NS: -	-
7	Dr. Bhim Rao Ambedkar Rajkiya Mahavidyalaya, Dhanewa Dhanai Maharajganj	S: 21, NS: -	S: 21, NS: -	S: 21, NS: -	S: 20, NS: -	S: 19, NS: -	S: 13, NS: -	S: 20, NS: -	-
8	Government P.G. College Hata, Kushinagar	S: 14, NS: 7	S: 12, NS: 5	S: 14, NS: 6	S: 13, NS: 5	S: 14, NS: 5	S: -, NS: 6	S: 13, NS: 6	-
9	Government Degree College Sukarauli Kushinagar	S: 14, NS: 6	S: 10, NS: 4	S: 12, NS: 5	S: 11, NS: 5	S: 13, NS: 4	S: -, NS: 4	S: 11, NS: 5	-
10	Mahant Aavidyanath Government Degree College Jangal Kaudia Gorakhpur	S: 15, NS: 5	S: 11, NS: 4	S: 10, NS: 6	S: 8, NS: 10	S: 12, NS: 8	S: -, NS: 2	S: 14, NS: 4	-
11	St. Andrew's Degree College Gorakhpur	S: 14, NS: 6	S: 14, NS: 5	S: 14, NS: 5	S: 12, NS: 7	S: 15, NS: 5	S: 6, NS: 4	S: 13, NS: 5	-
12	Baba Raghav Das (B.R.D.) P.G. College Deoria	S: 15, NS: 3	S: 13, NS: 4	S: 11, NS: 4	S: 12, NS: 4	S: 10, NS: 5	S: 10, NS: -	S: 14, NS: -	-
13	Buddha P.G. College Kushinagar	S: 14, NS: 4	S: 15, NS: 4	S: 11, NS: 6	S: 12, NS: 4	S: 12, NS: 4	S: -, NS: 4	S: 12, NS: 5	-
14	Lalbahadur Shastri P.G. College Anand Nagar Maharajganj	S: 15, NS: 4	S: 12, NS: 6	S: 10, NS: 4	S: 8, NS: 6	S: 12, NS: 6	S: 6, NS: 4	S: 14, NS: 4	-
15	Jawahar Lal Nehru Smarak P.G. College Maharajganj	S: 14, NS: 4	S: 12, NS: 6	S: 10, NS: 4	S: 8, NS: 6	S: 12, NS: 6	S: 6, NS: 4	S: 14, NS: 4	-
16	Udit Naryan P.G. College Padarauna	S: 15, NS: 4	S: 14, NS: 5	S: 13, NS: 6	S: 11, NS: 7	S: 12, NS: 6	S: 12, NS: -	S: 13, NS: -	-
17	National Post Graduate College Barahalganj Gorakhpur	S: 16, NS: 3	S: 15, NS: 4	S: 14, NS: 5	S: 12, NS: 6	S: 13, NS: 5	S: -, NS: 4	S: 12, NS: 6	-
18	Sant Vinoba P.G. College Deoria	S: 15, NS: 4	S: 14, NS: 5	S: 13, NS: 6	S: 11, NS: 7	S: 12, NS: 6	S: -, NS: 5	S: 14, NS: 4	-
19	Madan Mohan Malaviya P.G. College Bhatpar Rani Deoria	S: 14, NS: 6	S: 13, NS: 6	S: 10, NS: 8	S: 9, NS: 7	S: 12, NS: 8	S: 10, NS: 6	S: 13, NS: 7	-
20	Swami Devanand P.G. College Mathalar Deoria	S: 13, NS: 6	S: 12, NS: 7	S: 11, NS: 8	S: 9, NS: 7	S: 11, NS: 8	S: -, NS: 6	S: 12, NS: 7	-



21	Digvijai Nath Post Graduate College Gorkahpur	S: 15, NS: 4	S: 14, NS: 5	S: 13, NS: 6	S: 11, NS: 7	S: 12, NS: 6	S: -, NS: 5	S: 14, NS: 4	-
22	Mahatma Gandhi Post Graduate College Gorakhpur	S: 14, NS: 5	S: 13, NS: 6	S: 10, NS: 6	S: 8, NS: 7	S: 11, NS: 8	S: -, NS: 6	S: 12, NS: 6	-
23	B.R.D.B.D. PG College Ashram Barahaj Deoria	S: 15, NS: 4	S: 14, NS: 5	S: 13, NS: 6	S: 11, NS: 7	S: 12, NS: 6	S: -, NS: 5	S: 14, NS: 4	-
24	D.A.V. P. G. College Gorakhpur	S: 14, NS: 5	S: 13, NS: 6	S: 10, NS: 6	S: 8, NS: 7	S: 11, NS: 8	S: -, NS: 6	S: 12, NS: 6	-
25	Bapu Post Graduate College Pipiganj, Gorakhpur	S: 15, NS: 4	S: 14, NS: 5	S: 13, NS: 6	S: 11, NS: 7	S: 12, NS: 6	S: -, NS: 5	S: 14, NS: 4	-
26	Ramji Sahay Degree College, Rudrapur Deoria	S: 13, NS: 5	S: 12, NS: 7	S: 11, NS: 8	S: 9, NS: 7	S: 11, NS: 8	S: -, NS: 6	S: 12, NS: 7	-
27	Shyameshwar Degree College, Sikariganj Gorakhpur	S: 15, NS: 4	S: 14, NS: 5	S: 13, NS: 6	S: 11, NS: 7	S: 12, NS: 6	S: -, NS: 5	S: 14, NS: 4	-
28	J.B. Mahajan Degree College, Chauri Chaura Gorakhpur	S: 15, NS: 4	S: 14, NS: 5	S: 13, NS: 6	S: 11, NS: 7	S: 12, NS: 6	S: -, NS: 5	S: 14, NS: 4	-
29	Degree College Bhatawali Bazar, Gorakhpur	S: 14, NS: 5	S: 13, NS: 6	S: 10, NS: 6	S: 8, NS: 7	S: 11, NS: 8	S: -, NS: 6	S: 12, NS: 6	-
30	Jawad Ali Shah Imambara Girls Post Graduate College, Gorakhpur	S: 15, NS: 4	S: 14, NS: 5	S: 13, NS: 6	S: 11, NS: 7	S: 12, NS: 6	S: -, NS: 5	S: 14, NS: 4	-
31	Shri Bhagwan Mahaveer P.G. College, Fazil Nagar Kushinagar	S: 14, NS: 5	S: 13, NS: 6	S: 10, NS: 6	S: 8, NS: 7	S: 11, NS: 8	S: -, NS: 6	S: 12, NS: 6	-
32	Pavitra Degree College Maniram Gorakhpur	S: 14, NS: 5	S: 13, NS: 6	S: 10, NS: 6	S: 8, NS: 7	S: 11, NS: 8	S: -, NS: 6	S: 12, NS: 6	-
33	Kisan P.G. College, Sewarahi, Kushinagar	S: 15, NS: 4	S: 14, NS: 5	S: 13, NS: 6	S: 11, NS: 7	S: 12, NS: 6	S: -, NS: 5	S: 14, NS: 4	-

S = Satisfied, NS = Not Satisfied



**Figure 5**

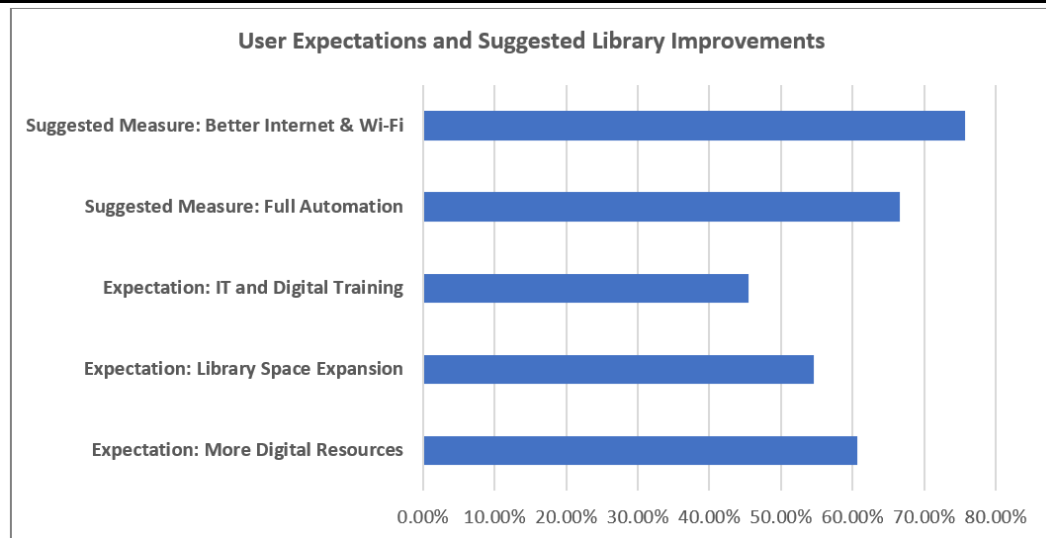
The analysis of table 6.3 and figure 5 highlights the varying levels of satisfaction with library services across the 33 colleges surveyed. Online services received a moderate approval, with 62.12% of respondents expressing satisfaction, while 37.88% were dissatisfied, indicating the need for better digital resource access. Book lending services emerged as a strength, with 68.35% satisfaction, showcasing their importance as a core function of libraries. However, photocopy services saw only 58.67% satisfaction, reflecting room for improvement in accessibility and quality. Challenges were evident in inter-library loan services, where only 42.72% were satisfied, pointing to significant gaps in collaboration and

resource sharing among institutions. Similarly, mobile-based services achieved 56.10% satisfaction, suggesting the need for enhanced user-friendly mobile tools. Support for thesis, dissertations, and assignments was notably lacking, with only 41.94% satisfaction, emphasizing the need for stronger academic support initiatives. Newspaper and magazine services showed moderate satisfaction at 55.62%, leaving scope for improved collection and availability. In summary, while traditional services like book lending are well-received, there is a clear need to address deficiencies in modern digital and collaborative services to meet evolving user expectations. Focusing on these areas can significantly enhance overall satisfaction levels.

**Table: 6.4** User Expectations & Suggested Measures for Library Improvements

S. No.	College Name	More Digital Resources	Library Space Expansion	IT & Digital Training	Full Automation	Better Internet & Wi-Fi
1	Deenanath Pandey Rajkeey Mahila PG College, Deoria	Yes	Yes	Yes	Yes	Yes
2	Deen Dayal Upadhyay Government Degree College Sahajanwa, Gorakhpur	Yes	Yes	Yes	Yes	Yes
3	Veer Bahadur Singh Rajkeeya Mahavidyalay Campierganj Gorakhpur	Yes	Yes	No	Yes	Yes
4	Government Degree College, Indupur Deoria	Yes	No	Yes	Yes	Yes
5	R.K.Shahi Govt Degree College, Pathardewa Deoria	Yes	No	No	Yes	Yes
6	Government Mahila Degree College Salempur Deoria	Yes	Yes	Yes	Yes	No
7	Dr. Bhim Rao Ambedkar Rajkiya Mahavidyalaya, Dhanewa Dhanai Maharajganj	Yes	No	Yes	Yes	Yes
8	Government P.G. College Hata, Kushinagar	Yes	Yes	No	Yes	Yes
9	Government Degree College Sukarauli Kushinagar	No	Yes	No	Yes	Yes
10	Mahant Aavidyanath Government Degree College Jangal Kaudia Gorakhpur	Yes	No	Yes	Yes	Yes
11	St. Andrew's Degree College Gorakhpur	No	Yes	No	Yes	No
12	Baba Raghav Das (B.R.D.) P.G. College Deoria	Yes	No	Yes	Yes	Yes
13	Buddha P.G. College Kushinagar	No	Yes	No	No	Yes
14	Lalbahadur Shastri P.G. College Anand Nagar Maharajganj	Yes	Yes	No	Yes	Yes
15	Jawahar Lal Nehru Smarak P.G. College Maharajganj	No	No	Yes	No	Yes

16	Udit Naryan P.G. College Padarauna	Yes	Yes	Yes	Yes	No
17	National Post Graduate College Barahalganj Gorakhpur	No	No	No	Yes	Yes
18	Sant Vinoba P.G. College Deoria	Yes	Yes	No	Yes	Yes
19	Madan Mohan Malaviya P.G. College Bhatpar Rani Deoria	No	Yes	No	Yes	Yes
20	Swami Devanand P.G. College Mathalar Deoria	Yes	No	Yes	No	Yes
21	Digvijai Nath Post Graduate College Gorkahpur	Yes	Yes	No	Yes	Yes
22	Mahatma Gandhi Post Graduate College Gorakhpur	No	No	No	Yes	No
23	B.R.D.B.D. PG College Ashram Barahaj Deoria	Yes	Yes	No	No	Yes
24	D.A.V. P. G. College Gorakhpur	Yes	Yes	Yes	Yes	Yes
25	Bapu Post Graduate College Pipiganj, Gorakhpur	Yes	No	No	Yes	Yes
26	Ramji Sahay Degree College, Rudrapur Deoria	No	Yes	Yes	Yes	No
27	Shyameshwar Degree College, Sikariganj Gorakhpur	Yes	Yes	No	No	Yes
28	J.B. Mahajan Degree College, Chauri Chaura Gorakhpur	No	No	No	Yes	No
29	Degree College Bhatawali Bazar, Gorakhpur	Yes	Yes	Yes	Yes	Yes
30	Jawad Ali Shah Imambara Girls Post Graduate College, Gorakhpur	No	Yes	No	Yes	Yes
31	Shri Bhagwan Mahaveer P.G. College, Fazil Nagar Kushinagar	Yes	No	No	No	Yes
32	Pavitra Degree College Maniram Gorakhpur	Yes	Yes	Yes	Yes	Yes
33	Kisan P.G. College, Sewarahi, Kushinagar	No	Yes	No	Yes	No
<b>Total %</b>		<b>20(60.61%)</b>	<b>18(54.55%)</b>	<b>15(45.45%)</b>	<b>22(66.67%)</b>	<b>25(75.76%)</b>



**Figure: 6**

The table highlights the key expectations of library users and the necessary improvements to enhance library accessibility and efficiency. The highest priority improvement is better internet and Wi-Fi, with 75.76% of colleges emphasizing the need for stronger connectivity, indicating that digital access remains a significant challenge. Similarly, 66.67% of colleges advocate for full automation, suggesting that modernized library management systems are essential for efficient service delivery. A significant 60.61% of colleges expect more digital resources, such as e-books, online journals, and research databases, highlighting the increasing demand for digital learning materials. Additionally, 54.55% of colleges request library space expansion, suggesting that inadequate seating and study areas impact the user experience. Meanwhile, 45.45% of colleges stress the importance of IT and digital training, indicating that many users face difficulties in navigating digital platforms and require training to optimize their library usage.

## 7. FINDINGS

- The study on user experience and accessibility in college libraries revealed several key findings regarding challenges, user expectations, and service efficiency. Most library users are students, highlighting their dominant role in library engagement, followed by faculty and teachers. Library visits vary, with a significant portion of users accessing libraries daily or weekly, demonstrating their importance in academic life. However, accessibility issues persist, particularly in digital resource availability, with many libraries lacking adequate e-books and e-journals.
- The primary challenges users face includes a shortage of physical and digital resources, slow internet connectivity, outdated collections, and limited ICT-based services. Insufficient IT skills among users also pose a barrier to accessing digital content effectively. Additionally, infrastructural problems such as limited seating capacity, power supply issues, and inadequate technical assistance further hinder an efficient library experience.
- User satisfaction with library services varies, with traditional services such as book lending receiving positive feedback, whereas inter-library loan services and digital tools show significant gaps. Many respondents express a need for improved online services, mobile-based facilities, and better access to research support.
- To enhance library efficiency, users expect better internet connectivity, expansion of digital resources, automation of services, and IT training programs. Modernizing library infrastructure and incorporating user-friendly digital systems can bridge the accessibility gap and meet evolving academic needs. Addressing these challenges through strategic improvements will contribute to a more inclusive and technology-driven library environment, supporting student learning and research effectively.

The findings indicate that while college libraries play a crucial role in academic support, they face significant challenges in resource availability, digital accessibility, and infrastructure. Students are the primary users, but limited digital resources, slow internet, outdated collections, and inadequate ICT services hinder their experience. Traditional services like book lending are well-received, but inter-library loans and mobile-based services need improvement. To enhance efficiency, users expect better internet, expanded digital collections, automation, and IT training. Addressing

these issues through modernization and user-centered strategies will make libraries more accessible, efficient, and supportive of academic growth.

## 8. CONCLUSION

The study highlights the essential role of college libraries in supporting academic pursuits while identifying key challenges that impact their accessibility and efficiency. The findings reveal that students are the primary users, relying heavily on libraries for learning and research. However, several obstacles hinder optimal library usage, including outdated collections, inadequate digital resources, slow internet connectivity, and limited ICT-based services. The lack of IT skills among users further restricts access to digital resources, underscoring the need for technical training and support. Despite these challenges, traditional library services such as book lending remain satisfactory, whereas inter-library loan services, mobile-based facilities, and digital content availability require significant improvements. Users have expressed a strong demand for enhanced digital infrastructure, automation of library services, and better research support. Expanding library space, improving internet connectivity, and integrating modern technology are crucial steps in addressing these issues. To ensure libraries remain relevant and effective in the evolving academic landscape, institutions must adopt user-centric policies, invest in digital transformation, and provide adequate training programs. Strengthening digital resource accessibility, upgrading infrastructure, and fostering an interactive learning environment will significantly enhance user satisfaction. By implementing these improvements, college libraries can evolve into dynamic, technology-driven spaces that meet the growing academic needs of students, faculty, and researchers.

## CONFLICT OF INTERESTS

None.

## ACKNOWLEDGMENTS

None.

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