



An Analysis Of User Engagement At Tamulpur College Library In Assam

Biju Narzary

Librarian

Tamulpur College, (BTR), Assam

Abstract: This study examines user engagement within the Tamulpur College Library located in Assam. The engagement of library users is imperative to promote library services and allocate resources across diverse dimensions. User engagement, within the library framework, encompasses active participation in library services, programs, and resources. Users represent the maintenance of library facilities and services, and enhance the learning activities. The research discusses fundamental parameters concerning library maintenance and user engagement. Data for the study were acquired from this library, emphasizing user performance and the upkeep of library resources. The findings reveal that 26% of the book collection is allocated to the Bodo department, while other departments account for less than 15% of the total collection. Notably, 64% of the users are female, and 36% are male; additionally, 64% of users fall within the age bracket of 20 to 24 years. This outcome aids in the identification of user engagement strategies and performance across various library programs, services, learning practices, and additional activities

Key-words: Library, Tamulpur College Library, Library Facilities, Library Services, Library User and User Engagement.

1. Introduction

The library management system for the academic libraries of Assam has improved the technological advancement. The library at Tamulpur College exemplifies efforts to cultivate an educational atmosphere within the region. This research scrutinized user involvement in learning methodologies pertinent to contemporary contexts. Users represent the most crucial element within library ecosystems (Muthuvennila & Kannan, 2020). The participants in the study concurred that their utilization of library spaces enhanced their capacity to study autonomously and to collaborate with peers on group projects and assignments, contingent upon the nature of the spaces provided (Deville & Sughrue, 2023). Libraries play a crucial role in both the prevention and mitigation of occurrences of academic dishonesty, while also contributing to the realization of nine Sustainable Development Goals (SELICEAN & Ilea, 2024). Students believed that the library resources and services provided were helpful to their academic achievements. This study examines the impact of selected student demographic characteristics on the perceived value of the library resources and services (De Groote & Scoulas, 2022). Various reading cultures need to be created by libraries and easy access to study and digital materials (Adetayo et al., 2024).

1.1. Tamulpur College Library

The Tamulpur College Library was located in the Tamulpur District (BTR), Assam, and initially started in 1993 in a temporary building and later shifted to the present permanent library building in the year 2018. The library is housed in a state-of-the-art building spread across 581.12 Sq. Meter (Ground Floor) with future plans to extend to the third floor. The library has grown in terms of digital facilities during the past few years. The library's mission is to provide text books, references, newspapers, periodicals, e-resources and research materials. The library collection is more than 7000 physical

books, 250 periodicals (Journal/Magazine), and 3 daily news paper. This library is providing reference books and GK to support the users for their job interviews. The library shares the old question papers every semester and allows access through Dspace institutional repository. The library is fully automated with Koha software for the digital library management system. In view of the changing scenario of the education system, it is planned to improve the infrastructure of the library every year. Tamulpur College library has used the DDC 23rd edition in every physical book. Books are shelved by their department wise. Call numbers help to access books easily.

1.1.1. Library Facilities

Tamulpur college library has offering library services by focusing user needs. The library also offers interlibrary loan services, enabling users to obtain materials from other institutions when needed. It was discussed in bellow:

- Reprographic Facility: offers a convenient solution for student and staff to meet their document needs. Users can access high-quality equipment for various tasks, ensuring professional results. The modest fee structure ensures accessibility while maintaining the service's sustainability.
- Internet & Wi-Fi: The high-speed internet access allowed library patrons to browse online resources, download e-books, and stream educational content seamlessly. Users could connect from various areas within and around the library building, promoting flexibility in study and work spaces. The free Wi-Fi service encouraged library members to spend more time at the library, encouraging a collaborative learning environment and increasing overall library usage.
- E-learning: Users can access online educational materials and resources through digital computers. The Wi-Fi connection enabled seamless browsing and downloading of e-books, research papers, and multimedia content relevant to their studies. This digital learning setup provided students with flexibility in their learning schedule and the opportunity to engage with interactive educational platforms.
- OPAC: Facilitating easier access to a broader range of physical books through an online platform. This increased accessibility not only improves user satisfaction but also encourages more frequent visits to the library.
- Smart ID card: Used a barcode in a smart identity card, and connected to Koha software for accessing the resources. This integration enhances user experience by streamlining access to library resources.
- Inter Library Loan: Offered to access physical books and a MoU with three different colleges for that purpose and other activities. This initiative aims to enhance user engagement by providing diverse access resources and encouraging collaboration between institutions.
- Orientation Program: Helps to clarify the doubts by conducting the program based on library services and activities. Libraries can foster an inclusive environment that promotes active engagement, enhances the educational experience, and supports the diverse needs of all library users.

1.1.2. Library Services

The college library has designed its specific rule to implement in library services. Circulation services guarantee that they have access to a variety of resources by enabling students to check out and return books. Reference services offered users in finding information and carrying out research. The following is a discussion of a few library services:

- Circulation: The circulation work is done on user needs, issuing two books to a user for 15 days, and offering one renewal to each user. The circulation manager has managed the overdue fines and other relevant activities as per the rules of the library. It plays a crucial role in maintaining a positive atmosphere and providing essential information to users, and reflects service quality.
- Reference Service: Offer reference services in the circulation section, store the books separately in bookshelves, and provide required information to the user. The organization of reference collections is essential for enhancing user access and satisfaction in library services.
- Periodical Services: It has separate periodical records, like both a journal and a magazine. These are not issued to users but allow them to study inside the library. Users can access these records for research and reference, enhancing their understanding of various topics without physical books.
- Cataloguing: It is part of the library that is used for preserving book details in digital and manual form. Users can access library resources through this data as required. This access enables efficient retrieval of information and supports both research and educational needs.
- Acquisition: Allow to select the required material to the student, and teacher based on whether the material is purchased from the vendor. This selection process ensures that the materials available are verified and meet the necessary standards for educational use.

- **Digital Library:** The library is managed by digital software with an internet connection. Library is installed by Koha integrated software, and the DSpace institutional repository handles the library collections and data. Library has a separate website to maintain different information about the library. The website serves a crucial platform for accessing resources and services, enhancing user engagement, and providing information.
- **Digitization:** This work is done by scanning old question papers and uploading them to the institutional repository. The old question paper is required for future reference for the users. It was applied in the examination if necessary. This initiative enhances the overall learning experience for students engaged in their studies.
- **New Arrival:** New arrival books are counted as per the list in detail and displayed on the table, where users can access them easily. This approach enhances visibility and encourages engagement with new arrivals in the library's collection.

The Tamulpur College Library serves as a vital academic resource center for students and faculty members. Located within college premises, the library houses an extensive collection of books, journals, and digital materials covering various disciplines. The facility provides a quiet and conducive environment for study and research, equipped with modern amenities such as computer terminals and Internet access. The library regularly updates its collection to ensure relevance to current academic curriculum and emerging fields of study. With its commitment to fostering intellectual growth and supporting the college's educational mission, the Tamulpur College Library plays a crucial role in enhancing the learning experience of its patrons.

1.2. Library User

User means those who are using a specific item for their activities. It is known as a user. The library user can be called patron, and those who are connected to library services, resources and library activities are known as library user. User satisfaction at the library refers to how patrons feel after utilizing its information resources and services, and their propensity to use it in the future. User satisfaction in libraries refers to how patrons feel after utilizing the resources and services for information and how likely they are to return when they need information again (Temboge & Ga'anda, 2022). There are two ways to define user satisfaction: process-oriented and outcome-oriented. The process-oriented approach focuses on how people develop their sense of fulfillment. The satisfaction that results from a consuming or use experience is an outcome-oriented approach that refers to when discussing satisfaction in terms of the evaluation process's outcome. For any product, service, or program, the user experience is a crucial metric of user satisfaction and service quality (Pushparaja et al. 2021). The user's satisfaction with textbooks, journals, reference books, periodicals, and back volumes is high. It is very concerning that libraries satisfy the minimal level of user happiness (Pal & Barman, 2021). The library has put fundamental strategies into place to boost patron engagement, enhance resource usage, and stay relevant in the digital age.

- **Personalized recommendations:** Employ user data to propose pertinent materials based on borrowing history and individual interests. This methodology enhances user engagement by guaranteeing that the recommendations are customized to personal preferences, thereby augmenting satisfaction and frequency of use.
- **Interactive programs:** Implement structured orientation sessions and reading habit initiatives to motivate users and cultivate a sense of professional development and educational engagement. These approaches increase user satisfaction and support a more engaged community surrounding the library's services.
- **Digital platforms:** Deploy user-centric online communications via email to improve accessibility and facilitate effective communication. Libraries can enhance user engagement with innovative technologies, recommendation systems, and interactive user experience. This technological integration modernizes library services and empowers users to pursue educational qualifications.
- **Feedback mechanisms:** Systematic feedback solicitation from visiting users and guests, involving them in the collection development and service evaluation processes. This feedback serves library initiatives and ensures services meet users' needs and expectations.
- **Collaborative spaces:** Establish group study and digital learning environments to cultivate learning behaviors across diverse user interests. These collaborative spaces enhance user engagement by promoting interaction and facilitating a richer educational experience.
- **User-driven acquisition:** Enable patrons to propose acquisitions or engage in the selection processes for new materials. This approach guarantees that the resources offered align with their interests and needs.

2. Literature Review

According to Boruah (2022), around 30% of patrons are unhappy with library services, pointing out problems such as insufficient orientation programs and communication barriers. These challenges influence user involvement, which affects engagement, satisfaction, and overall academic achievement in libraries throughout Assam.

Tatnall (2021) discusses that user participation in college libraries, especially in Assam, is a complex issue that intersects with broader themes of education and technology. This intersection is necessary for college libraries, as they adapt to the changing technological landscape to remain relevant and supportive of academic success. Involving users in the development of library services can lead to innovative solutions that meet.

Oral knowledge transfer, which encompasses cultural beliefs and historical narratives, faces significant challenges due to inadequate documentation and a lack of institutional support (Sharma, 2024). Collecting and preserving resources are active measures in these oral traditions to ensure their accessibility for future generations. While there is a consensus among library professionals regarding the significance of safeguarding oral knowledge, there are notable gaps in the execution of related initiatives. User participation underscores the necessity for well-designed and user-friendly library interfaces.

Rahman et al. (2019) highlighted that they identified the key factors influencing user participation in academic libraries throughout Assam, emphasizing the importance of collection development and collection management of library services. Gauhati University (GU) notably exhibits the highest levels of attendance and engagement among users. There is a significant drawback to the utilization of digital resources, such as inadequate funding and the necessity for better-trained staff.

Appleton (2020) examines methods for gathering student input, such as surveys and focus groups, highlighting the proactive role of academic librarians in engaging students. The study concludes that meaningful student involvement enhances library services and student experience. Strategies discussed include active learning, gamification, and student employment programs, all aimed at improving services and fostering a sense of ownership among students.

Manimekalai et al. (2024) identified that facilities such as printing and scanning at Madurai Kamaraj University significantly enhanced user satisfaction, thereby underscoring the importance of infrastructural components in shaping user experiences.

Zheng et al. (2024) examined the impact of university library strategies on student interaction and learning engagement, expressing that libraries function as catalysts for academic collaboration, particularly among students in liberal arts disciplines. The spatial arrangement and available amenities within libraries affect user propensity to engage.

Abukari (2019) examined the utilization and user satisfaction with the resources and services of the Narh-Bita College Library in Ghana. The findings indicated that library patrons expressed general satisfaction with the library services and resources. Furthermore, the study advocated for enhancements concerning the overall tranquility of the library environment and the electronic collection aspect.

Meena (2024) investigates the efficacy of Information Literacy Programs (ILPs) and strategies for user engagement within academic libraries. The results indicate a significant average increase of 23% in post-assessment scores, demonstrating the beneficial influence of ILPs on students' information literacy competencies. Additionally, user engagement metrics, which include a 30% increase in library utilization, highlight the dynamic interplay between library services and user involvement.

3. Objectives of the Research

- To find out the availability of departmental resources within the library.
- To investigate the enrollment demographics of users as categorized by gender.
- To analyze the level of user engagement with the circulation services offered by the library.
- To evaluate the satisfaction levels of users regarding the information resources and services rendered by the library.

4. Methodology

4.1. Research Design

The research design uses an analytical method to examine user engagement in the library. The quantitative approach has been followed to analyze the data structure. This research design focused on the Tamulpur College Library of Assam, where more than 15 hundred students are enrolled each year. The study focuses on the user engagement in the library for their learning experience in career building.

The data will be collected from the respective library in the year of 2024, based on requirements and observations of the library services. The secondary sources used to access relevant information from various websites. Microsoft Excel is a supporting tool for analyze the primary data.

4.2. Data Collection

The library stores the relevant resources in library databases with bibliographic information as required. In that connection, primary data is collected from the Tamulpur College library based on user participation. The primary data is collected from Koha Integrated Library Management Software, and other user attendance is collected from the manual gate register, which is maintained systematically by focusing on library needs. The secondary data is collected from different websites focusing on the study.

4.3. Data Analysis

The analysis of data is based on user participation within the library. This data was examined using a specific diagram presented in the research paper. The study, titled “An Analysis of User Engagement at Tamulpur College Library in Assam,” was systematically analyzed with the help of graphical representation, which includes: line diagram, pie diagram, cylinder diagram, scatter diagram, and doughnut diagram. The outcomes of this research analysis are detailed below:

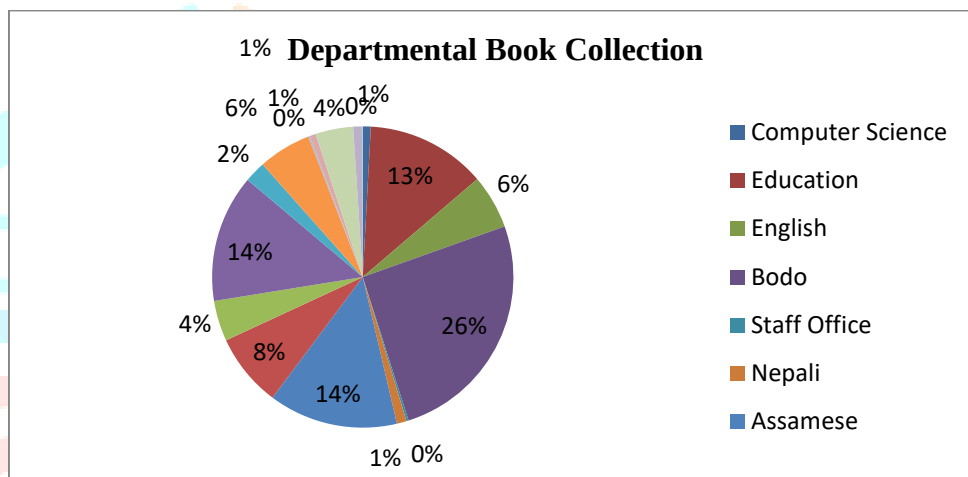


Figure 1: Departmental Book Collection

Figure 1 indicates the collection of different departments in the library. The data shows that the Bodo department has 26% of collection in the library, which is the highest number of collections, and donated books are less in the data. Secondly, the Assamese and Political Science department has 14% of the book collection each. Thirdly, the Education department has 13% of the book collection, and other department has less than 10% of the book collections in the library. This data shows that the library has several collections at present.

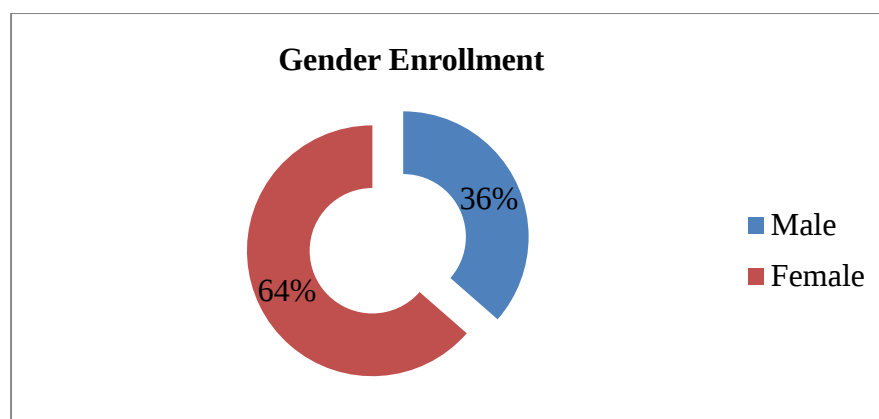


Figure 2: Gender Enrollment

Figure 2 highlights the users' enrollment and specified gender to understand the user performance in the library. The data shows that 64% of female users and 36% of male users are enrolled in the library. The data indicates that the female users are mainly involved in various activities of the library.

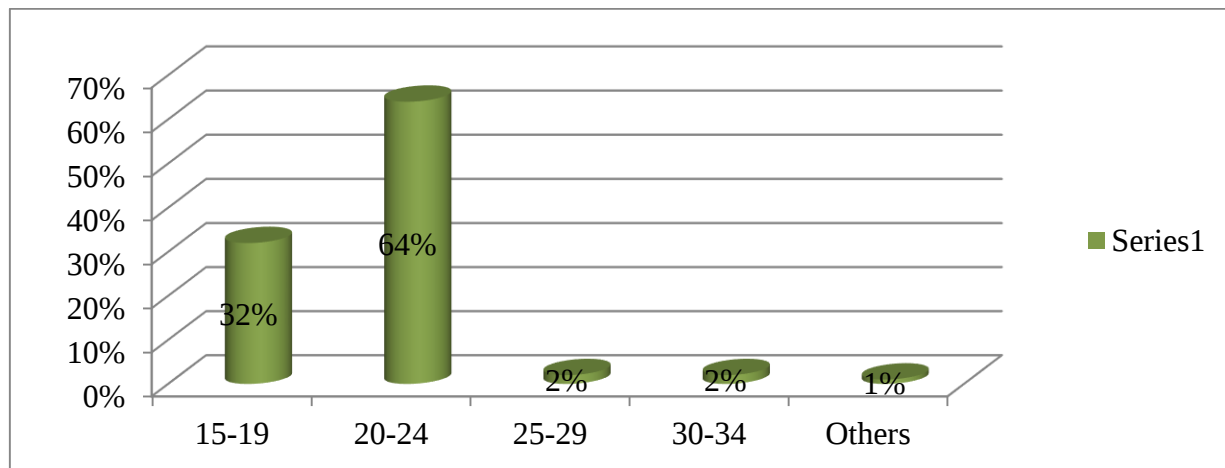


Figure 3: Different Age Group

Figure 3 indicates the different user age groups and found that the 20-24 age group users are engaged in 64% of the various library services. The age groups of 15-19 are engaging in the second largest majority of 32%, and the age groups of 30-34 are engaging the third largest majority. The age group of 25-29 is the fourth largest majority, and the other group is the smallest majority compared to them. The data shows that most users are between 20 to 24 years old.

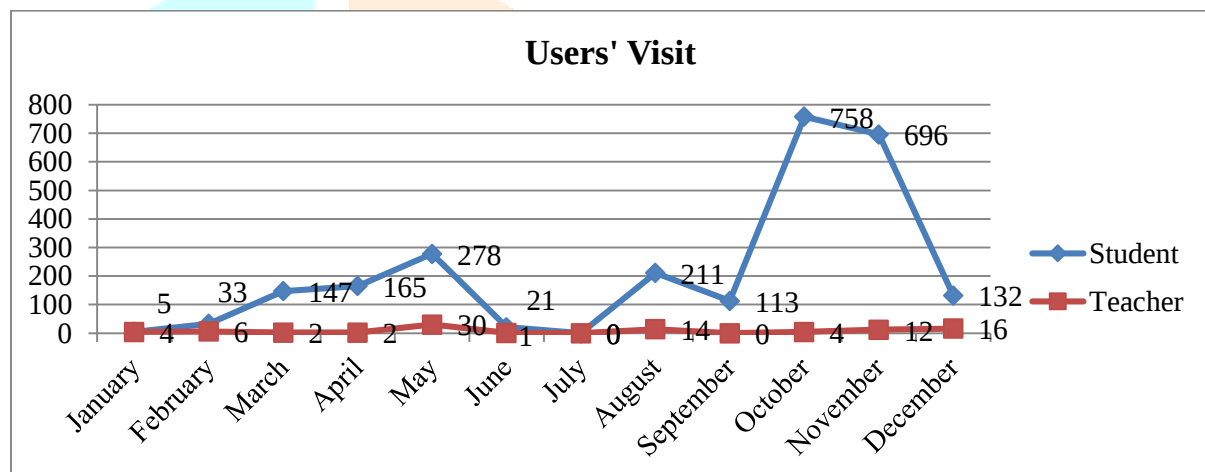


Figure 4: Users' Monthly Visit

Figure 4 shows the students' and teachers' engagement in the library. The data illustrate that the highest number of students visited in October and November, and the lowest number of visits was observed in January. The users visit for fewer than 300 days in other months, and no one visits in July. Other data shows that most teachers visit in May and fewer visits have been seen in June; otherwise, no one visits the library in July and September. If the data is counted on average, only eight users visited the library per day.

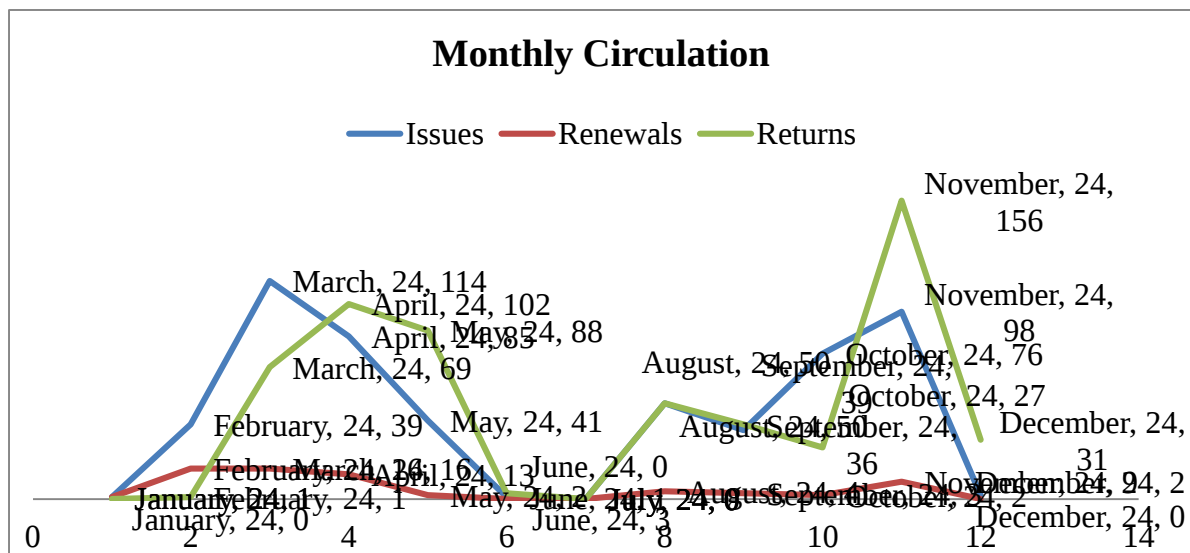


Figure 5: Users' Monthly Circulation

Figure 5 shows the monthly circulation work in the library. The data show that issues, returns, and renewals are available in circulation work. Users issued the highest number of books in March, and no books were issued in July. On average, two books are issued by the user every day. Second, the data illustrates that the users return the highest in November, and no one returns the books in January and July. Users return fewer than 100 books in other months and return an average of two books per day. Finally, the data illustrate that the users renewed the highest in February and March. Otherwise, no one renews the books in June, July, or December. Users renewed fewer than 15 books in other months, with an average of six books each month. The data illustrate the user performance in library circulation and their best practices.

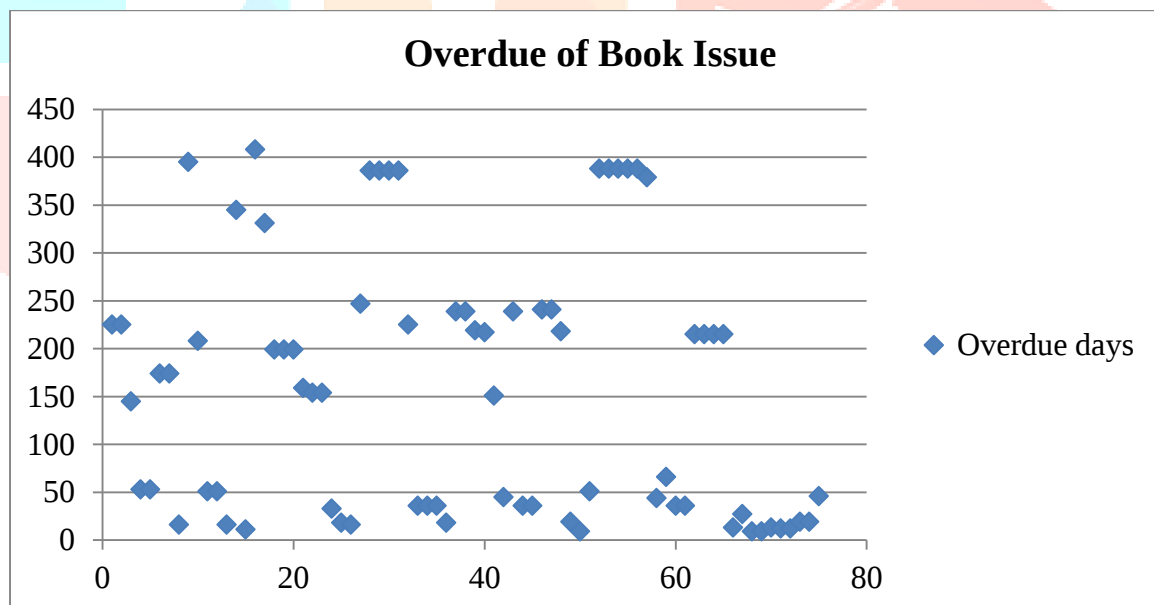


Figure 6: Overdue of Book Issue

Figure 6 illustrates the users' overdue in issuing books. The graph indicates users and days. The highest overdue was 400 days, and the lowest was 9 days. Other users are increasing the overdue period by more than nine days, and some users have nearly 400 days of overdue in 2024. The data show that 80 users had overdue items in the library.

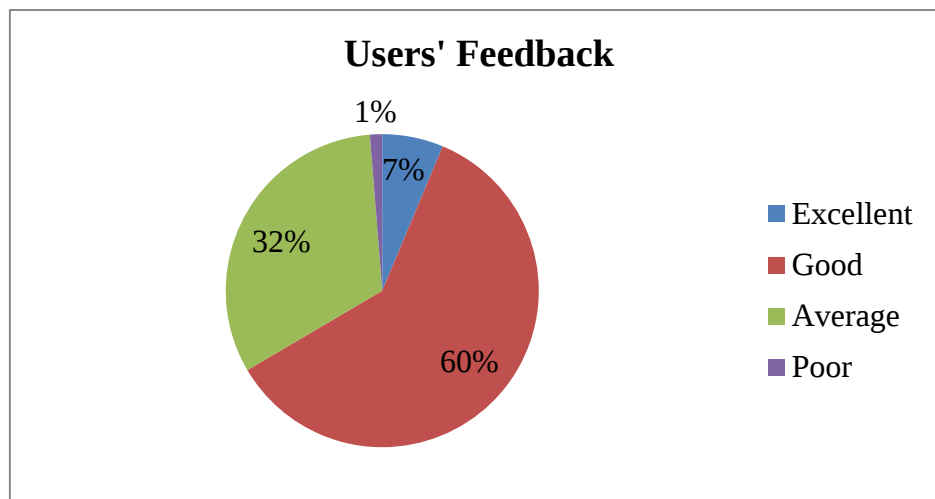


Figure 7: Library Users' Feedback

Figure 7 shows the users' feedback and satisfaction with Tamulpur College Library services. The data suggest that 60% of users' exhibit good performance in library services, 32% perform on average, 7% perform excellently, and 1% perform effectively.

4.4. Research Finding and Recommendation

The findings suggest that the library is considering expanding its collection, particularly in underrepresented departments. It is better to meet user needs and preferences. This analysis highlights the importance of understanding user demographics and engagement patterns to inform library resource allocation and service improvements. This study emphasizes the necessity for libraries to adapt their collections and services based on user engagement trends, ensuring that they meet the evolving needs of their diverse populations.

The result indicates that average only eight users visited the library per day in 2024. The percentage of female users was 64%, and that of male users was 36%. This trend highlights the importance of targeted outreach programs to engage male users and promote balanced participation in library activities. This outreach should focus on breaking down gender stereotypes and encouraging male participation in library programs, similar to the initiatives observed in various libraries. Such initiatives can significantly enhance user engagement, foster a more inclusive environment, and benefit library communities.

The result indicates that the cylinder chart displays the age distribution of library users, indicating that the majority (64%) fall within the 20-24 years age group, followed by 32% in the 15-19 years age group. This trend highlights the importance of targeting library services and programs to meet the needs of younger users, particularly those aged 18–24. This demographic insight emphasizes the necessity for libraries to tailor their resources and outreach efforts towards the preferences and interests of younger patrons.

These findings highlight the significant variations in library usage patterns among students and teachers throughout the academic year, emphasizing the need for targeted outreach and support during peak engagement months. The result shows that the students visited the library in the month of October, November, and other site teacher mostly visited the library in the month of May. No one visit in the month of July. These patterns suggest that strategic library services may need to be adjusted to meet with user demands. Librarians should consider implementing flexible programming and resources to cater in the library.

The analysis of circulation data revealed significant trends in user behavior, highlighting peak borrowing periods and overall engagement of library patrons throughout the year. The result highlights the circulation pattern in library services that the users are highest issues in March, returns in November, and renewals in February and March. It shows that 2 books are issued and returned by the user every day. These findings suggest that libraries can leverage data analytics to better understand user behavior and enhance service delivery, and fostering a more engaging library environment.

These findings are consistent with prior research showing that user forgetfulness is the predominant factor contributing to overdue returns. The results show that the user has more than 400 days of overdue, and 75 users have overdue in 2024, who have not paid the overdue dues in the library. Libraries can decrease the rates of overdue items, which improve behavioral communication strategies.

The results indicate that efficient measures, such as the automation of circulation processes and the dissemination of timely notifications, may assist in alleviating issues with overdue items. These findings suggest that library services provide user support for educational information. The results show that users are given good library services. User engagement through systematic feedback can substantially enhance library services and user satisfaction. Library services can be implemented using customized strategies based on user feedback to yield more effective results.

5. Conclusion

The analysis shows various critical insights concerning library usage patterns, user demographics, and service satisfaction. The study highlights the need to personalize library materials and services to meet the increasing demands of a diverse user base, focusing on the 20-24 age groups, which forms the majority of library users. The data demonstrate a gender disparity in library usage, with female users outnumbering male users, emphasizing the necessity for specialized outreach efforts to encourage balanced participation.

The study emphasizes the cyclical nature of library use throughout the academic year, with peak engagement times observed for both students and teachers. The examination of circulation data provides significant insights regarding borrowing trends, which improve collection management and user experience. User feedback reveals that library services are typically viewed positively, with 60% of users rating their experience as good. However, the report identifies room for improvement, particularly in handling overdue items and improving user interaction tactics. The findings indicate that adding automated circulation processes and timely notification systems could dramatically reduce late rates while improving overall service efficiency.

Finally, this study highlights the importance of data-driven decision-making in improving library services and user happiness. Using these data, Tamulpur College Library may build targeted strategies to promote user engagement, improve resource usage, and encourage more inclusive and effective learning environment. Future studies might focus on implementing and analyzing the effectiveness of these recommended tactics and improving the library's impact on academic performance and user satisfaction.

References

1. Abukari, Z. (2019). *User Satisfaction of Resources and Services of Libraries: A Case Study of the Narh-Bita College, Tema, Ghana*. <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=6376&context=libphilprac>
2. Adetayo, A. J., Alawiye, M. K., Emmanuel, S., Omotoso, A. O., & Bello, T. O. (2024). Exploring University Students' Library Engagement: Reading Habits, Preferences, and Gender Dynamics. *Journal Of Digital Learning And Education*. <https://doi.org/10.52562/jdle.v4i1.884>
3. Appleton, L. (2020). Academic Libraries and Student Engagement: A Literature Review. *New Review of Academic Librarianship*, 26, 189–213. <https://doi.org/10.1080/13614533.2020.1784762>
4. Boruah, B. (2022). Challenges and possibilities in the academic libraries of Assam in promoting positive climate and culture in the educational institutes in the current scenario. *IP Indian Journal of Library Science and Information Technology*, 7(2), 96–100. <https://doi.org/10.18231/j.ijlsit.2022.017>
5. De Groote, S. L., & Scoulas, J. M. (2022). The Impact of the Academic Library on Students' Success, in Their Own Words. *Portal - Libraries and the Academy*, 22(2), 355–374. <https://doi.org/10.1353/pla.2022.0021>
6. Deville, S., & Sughrue, J. A. (2023). Linking Library Use to Student Engagement. *Journal of Library Administration*, 63(2), 179–199. <https://doi.org/10.1080/01930826.2022.2159240>
7. Meena, A. K. (2024). Information Literacy Programs: Assessing Effectiveness and User Engagement in Academic Libraries. *Journal of Global Research in Education and Social Science*. <https://doi.org/10.56557/jogress/2024/v18i18544>
8. Muthuvennila, S., & Kannan, P. (2020). *User Satisfaction With Library Information Resources and Services: Improvement and Innovation of Effective Activities of Research Scholars* (pp. 81–102). IGI Global. <https://doi.org/10.4018/978-1-7998-3559-2.CH005>
9. N, M., Sivakumar, C., & Kumar, P.S. (2024). INFLUENCE OF COLLEGE LIBRARY SERVICES ON USER SATISFACTION: A CASE STUDY AT MADURAI KAMARAJ UNIVERSITY, MADURAI. *PARIPEX INDIAN JOURNAL OF RESEARCH*. 13(9), 42-45. <https://api.semanticscholar.org/CorpusID:273953451>

10. Pal, N., & Barman, R. K. (2021). User satisfaction on library resources and services in Law College Libraries of Assam, India: A Study. *Library Philosophy and Practice*, 1-19.
11. Pushparaja, V., Yusoff, R. C. M., Maarop, N., Shariff, S. A., & Zainuddin, N. M. (2021). User experience factors that influence users' satisfaction of using digital library. *Open International Journal of Informatics*, 9(Special Issue 1), 28-36. <https://oiji.utm.my/index.php/oiji/article/view/165>
12. Rahman, M., Choudhury, T. A., & Barooah, P. K. (2019). Management of collection in university libraries of Assam in ICT environment: a study. *Library Philosophy and Practice*, 1. <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=5871&context=libphilprac>
13. SELICEAN, C. F., & Ilea, M. (2024). Current Trends in Research on the Role of University Libraries in Students' Academic Success: a Review. *Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca: Horticulture*, 81(1), 1–10. <https://doi.org/10.15835/buasvmcn-hort:2023.0031>
14. Sharma, N., 2024. Does Oral Knowledge Belongs to Library: Library Professionals' Perspective. Lecture Notes in Computer Science, pp.44–53. Available at: https://doi.org/10.1007/978-981-96-0865-2_4.
15. Tatnall, A., 2021. Editorial for EAIT issue 1, 2021. *Education and Information Technologies*, 26(1), pp.1–16. Available at: <https://doi.org/10.1007/s10639-020-10423-w>.
16. Temboge, A., & Ga'anda, U. A. (2022). Use and user satisfaction with library information resources and services in Federal University of Kashere library. *Researchgate. Net*, October.
17. Zheng, Z., Zeng, M., Huang, W., & Sun, N. (2024). The influence of university library environment on student interactions and college students' learning engagement. *Humanities and Social Sciences Communications*, 11, 1-14. <https://api.semanticscholar.org/CorpusID:268325336>

