The Effect Of Library Management Systems On Efficiency And User Satisfaction In Government College Libraries Of Karnataka

¹Dr. Vinodkumar H, ²Dr. Arvindkumar Bhadrashetty, ³Dr. Prakash B

- ¹ Librarian, Government First Grade College Jewargi Dist: Kalaburagi (Karnataka) vinodkumarhosmani@gmail.com,
- ² Librarian, Government First Grade College Aland Dist: Kalaburagi Karnataka arvind.bhadrashetty@gmail.com,
- ³ Librarian, Government First Grade College Bidar Dist: Bidar (Karnataka) <u>vagmare@gmail.com</u>,

How to cite this article: Vinodkumar H ,Arvindkumar Bhadrashetty, Prakash B (2024). The Effect Of Library Management Systems On Efficiency And User Satisfaction In Government College Libraries Of Karnataka. *Library Progress International*, 44(3), 13761-13767.

Abstract

This paper analyzes the library management systems of Government College Libraries of Karnataka to identify how well they perform and to what extent undergraduate students are satisfied with the systems in place. The descriptive questionnaire was filled by 500 respondents using Google Forms. Based on the statistics, the books and services received in the library seem to be good generally, especially regarding staff, location, and reading hall. More than 85 percent of the library users used the collection in reference for studying and writing purposes. Most are contented, but improvement opportunities exist with regard to location, operating hours, and other aspects of the library. To make the library an irreplaceable academic resource, the research emphasizes the requirement of reacting to client grievances; it concludes by advising the administration of the college and the library authorities to focus more on filling up the gaps in service delivery.

Keywords:Library Management System, User Satisfaction, Library Resources & Services, Government Colleges of Karnataka, Undergraduate Students.

1. INTRODUCTION

Libraries should fulfil patrons' information requirements through efficient resource use and excellent service. User studies provide input and usage statistics for library resource and service evaluation. Libraries must understand patron needs and adapt to new expectations to succeed today. Patron satisfaction with college libraries' resources and services determines their effectiveness and usefulness. Items it commonly evaluates include: Resource Accuracy, Relevance, and Currency: Availability, Journals, and Databases; Easy access to digital and physical library materials, including search tools; Service Quality: How quickly library staff help customers, give directions, and answer questions. The library's study and research spaces' convenience, cleanliness, and usefulness. Digitalization, remote access, and resource access. User Engagement: Events, events, and workshops that encourage library use.

User satisfaction and improvement areas can be disclosed by surveys, interviews, and focus groups. Do you want to study university library customers' happiness in a certain area? Consider how well academic library contents suit student, instructor, and researcher needs. Important considerations are: Currency and Relevance: How current and relevant the library's collection is to academic interests and courses. Online databases and platforms make digital and physical resources accessible. The collection's high-quality books, journals, multimedia, and specialty items; User Support: How well library workers help patrons find information, research, and navigate resources; Technology for resource discovery, access, and remote provision; Facilities for study, research, and collaboration: layout, comfort, and amenities.

We use interviews, focus groups, and surveys to assess consumer satisfaction and identify areas for improvement.

How do you want to study academic library patron satisfaction? Academic library services include several factors that affect patrons' experiences. Crucial elements: First and foremost, reference and research assistance: how successfully library staff answer research questions, promote information literacy, and help users use library resources; Circulation Services: Easy borrowing and returning of physical and electronic reserves; Interlibrary loan provides speedy access to non-library materials. High-quality programs and workshops that assist users become better researchers and use library resources should be connected to the library's instruction goals; Technology Help: Computers, printers, scanners, Wi-Fi; Library spaces: pleasant, accessible, and suitable for study, group work, and silence. Services for instructors, undergraduate students, and distant learners are the seventh category.

1.1. Objectives of the Study

- To find out what undergraduate students think of the Government college libraries and information resources of Karnataka.
- To determine why undergraduate students uses the library's resources.
- To gauge how satisfied patrons are with the resources and services offered by the library.

2. LITERATURE REVIEW

Khan, A. U. et. al. (2023)demonstrated how the development of technology has accelerated the utilization of library resources, strengthened management abilities, enhanced user performance, and ultimately improved academic services and performance. Apart from the implementation and utilization of technology, proficient leadership has yielded favorable results in enhancing user efficiency and upholding proactive academic library services. Dynamic technology has completely transformed human socioeconomic endeavors, such as higher education, business, healthcare, and academic customer service. Using the newest technology results in increased output, self-assurance, better management abilities, successful performance, and creative educational services. This paper seeks to determine if helpful technologies and capable user managers facilitate users' resource utilization, boosting research productivity and enhancing academic library services in the age of ethnocentrism. The primary data used in this study was gathered from university students in the provincial capital through the use of a printed research questionnaire. In order to evaluate the instrument's applicability before distribution, the writers contacted service professionals and developed the instrument using the Likert scale. This study developed a conceptual model with several related hypotheses based on the technology acceptance model in order to assess the applicability of the research model. Structural equation modelling software was used for path analysis and model creation on the data.

Elias, J. D., &Lubua, E. W. (2024) established how system dependability, usability, and functionality affect users' satisfaction with the system's applicability to the delivery of services. The operating staff of the selected case study acknowledged that they felt uneasy using the library system in their day-to-day work, which served as the impetus for the investigation. The study used a quantitative technique as its methodology. The 52 library employees that made up the study's sample were all included. As a result, information was gathered using a standardized questionnaire. Inferential statistics were employed in the analysis to determine the hypotheses' positions. The study concluded that users' reported pleasure with various library operations was highly impacted by the usability, functionality, and dependability of the system. According to this study, in order for users to support the Library Management System and other systems inside the business effectively, these variables should be improved.

Dwivedi, Y. K. et. al. (2013)indicated that customer views regarding RFID-enabled services are positively influenced by elements including system quality, usability, and user happiness. The key aspects are outlined in the closing part, which also offers recommendations for future study directions and a brief description of the research's related limitations. Many labor- and time-intensive, repetitive, and meticulous tasks are necessary for the operation and management of libraries. Therefore, many libraries are working towards automating much of their operations in order to improve efficiency and effectiveness. For item tracking and identification, libraries are using Radio Frequency Identification (RFID) technology instead of barcode systems, which eventually allows them to automate most of their procedures. The literature that is now available makes it clear that understanding the use and user-satisfaction components of RFID technology has received less attention than the technical, organizational, and implementation aspects of the field. Therefore, by experimentally assessing pertinent categories from DeLeon and McLean's IS Success Model, this study seeks to investigate factors affecting the utilization of RFID devices and user satisfaction in a library setting. Data was gathered from a total of 181

respondents who were all current users of an RFID-based library system using a questionnaire-based survey.

Xu, F., & Du, J. T. (2018) discovered that the age, gender, and educational attainment of users had a substantial impact on the DLs' affinity, which in turn affected user pleasure and loyalty. There are suggestions on how service providers and librarians might raise the caliber of digital libraries. There's a decline in users' commitment to digital libraries. Numerous studies have been conducted regarding user satisfaction in digital libraries. Nonetheless, it is uncommon to apply the loyalty and affinity theories to investigate the use of digital libraries. The aim of this study is to discover the characteristics that may affect user happiness and user loyalty to digital libraries by integrating the information system success theory, affinity theory, and Technology Acceptance Model. 426 genuine survey questions in all were gathered. The proposed research model and hypotheses were tested using structural equation modelling. The findings showed that perceived utility, convenience of use, and affinity for digital libraries (DLs) were all highly impacted by system and service quality rather than information quality. Perceived usefulness was influenced by DLs' affinity as well as perceived simplicity of use. Additionally, user happiness was significantly impacted by the perceived usefulness and affinity of DLs, which in turn affected user loyalty.

3. RESEARCH METHODOLOGY

3.1. Research Design

This study employs a descriptive survey research method to measure user satisfaction on the resources and services provided within the ambit of Government college libraries of Karnataka. The descriptive design enables the collection and analysis of quantitative data within the library to understand opinions of patrons regarding various services in libraries and pinpoint areas that call for improvement. In essence, the study primarily focuses on the efficiency of the library management system, as well as overall satisfaction with materials, facilities, and staff support.

3.2. Sample Population

The target population is 500 participants from Government college libraries at Karnataka. The response group is undergraduate students of B.Sc., BA and B.com streams. A total of 550 questionnaires were distributed, and 500 or 85 percent of that total—were returned. The sample was selected to represent the range of the habits of these students among scholars and in relation to time use while accessing the library.

3.3. Sampling Method

With the purposeful sampling strategy, undergraduate students who actually used the library resources were targeted for study. From these respondents, who frequently utilize library resources, a random sample was taken since the objective of the study focuses on undergraduate students' perceived satisfaction with library services.

3.4. Data Collection Tool

A structured questionnaire developed through Google Forms was used to collect the data. The questionnaire was designed to ask about various aspects of the library resources and services, such as, the reading room, staff, location, working hours, and knowledge aid. A 5-point Likert scale ranging from Very Satisfied to Very Dissatisfied was applied inquiring from the respondents to rate their satisfaction level. The questionnaire was divided into two major categories-Study stream and library time. This theory presumes that patrons regard the atmosphere, staff, materials, and services presented within the library.

4. DATA ANALYSIS AND INTERPRETATION

4.1. Number of Respondents

Table 1: Demographic Profile

Category	Details	Number of Respondents	Percentage	
Questionnaire Distribution	Total Distributed	550	100%	
	Respondents	500	85%	
	Non-Respondents	0	0%	
Stream of Study	B.Sc.	210	42.00%	
	BA	85	17.00%	
	B.com	205	41.00%	
Time Spent in Library	Less than 1 Hour	195	39.00%	

1 to 2 Hours	270	54.00%
More than 2 Hours	35	7.00%

Data for the user's demographic and usage of the library questionnaire are presented in Table 1. The response rate of 85 percent was obtained, which is very high since it did not result in any non-respondent cases, hence good survey participation in terms of follow up. 500 replies were achieved from the 250 questionnaires handed out. The academic streams are well represented among the respondents: 42% are in the B.Sc., 17% in the BA, and 41% in the B.com. Diversity will ensure that a wide cross-section of student experiences is represented by these findings. How many hours did you spend in the library? The majority of the respondents, 54%, reported spending one to two hours. Thirty-nine percent reported spending less than an hour, and only 7% reported spending more than two hours. Given this trend, the students mostly visit the library seldom, hence making it very essential to the undergraduate students enrolled in these streams. This information is a good overview of the general student body and the kinds of information that are very informative on how to use the library.

4.2. Purpose of Library Visit

It would be possible to discern clearly the attitude of students towards the library by asking about the reason for the visit. The reason why visitors visited the library is shown in the following graph (table 2).

Table 2:Purpose of Library Visit

Activity	Percentage
Photocopying	20.70%
Writing Theses and Assignments	68.10%
Renewing Books/ Issuing/ Returning	55.90%
Using Computers to Retrieve Information	3.90%
Making Speeches and Homilies	31.28%
Using Books and Journals as References	85.86%
Studying	71.69%

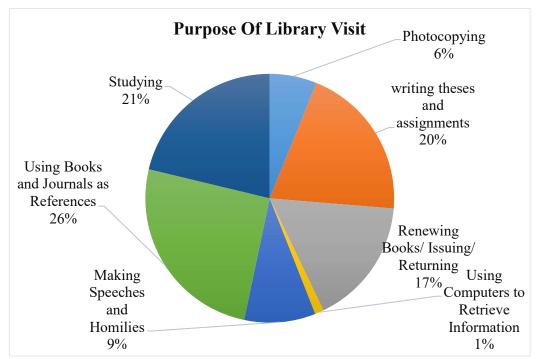


Figure 2: Purpose of Library Visit

Table 2 above illustrates that 85.86% of respondents visit the library in order to consult books and journals. According to the data, 71.69% and 68.10% of participants, respectively, spend their time studying and writing assignments and theses in libraries. 55.90% of students come to the circulation area to check out, return and renew books. Based on the available statistics, the least common purposes include preparing speeches and homilies (31.28%), photocopying (20.70%), and utilizing computers to acquire information (3.90%).

4.3. User Satisfaction with Library Facilities

The world is competitive. The library needs to offer top-notch resources in order to draw patrons. When patrons get frustrated and dissatisfied with the services they are receiving from the library, the library will begin to fail. An evaluation of the library's offerings is conducted, which is a determining element in patron satisfaction. The gathered information about the amenities is provided.

Factor	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	Total
Library Staff	200	160	80	60	0	500
Student Librarians	248	205	34	8	5	500
Library Location	270	172	38	15	5	500
Library Building	202	240	30	20	8	500
Library Atmosphere	192	168	93	32	15	500
Library Working Hours	238	172	70	5	15	500
Knowledge Assistance & Personal Attention	208	207	65	10	10	500

Table 3:Users' Satisfaction with the Facilities of the Libraries

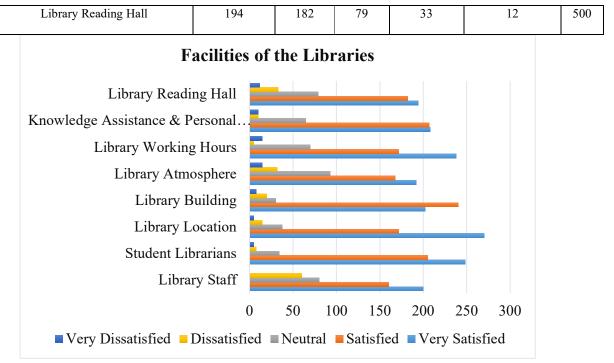


Figure 3:Users' Satisfaction with the Facilities of the Libraries

Table 3: Summary of Responses on User Satisfaction of Library Facilities. Most of the responses were positive. As shown in Table 3, for example, 200 customers ranked Library Staff as "Very Satisfied," and 160 say they were "Satisfied." This shows that library staff are effective in supporting and aiding the clientele and therefore patron satisfaction. Student Librarians received particularly high ratings: 248 undergraduate students were "Very Satisfied," and 205 "Satisfied." This is a good indication of the service delivered by student librarians to meet user needs. Library Location also had high degrees of satisfaction, with 270 students rating it "Very Satisfied." Responses to questions on Library Building and Library Atmosphere tended to reflect a more balanced view. While the majority students are satisfied, there were also high levels of dissatisfaction. That means improvement levels in some aspects are in order. Indeed, while 240 patrons found the Library Building "Satisfied," 30 were neutral and 20 unsatisfied. Library Working Hours and Knowledge Assistance & Personal Attention had polarized feedback results. While many students reported satisfaction, a large proportion of students reported neutrality, meaning potential areas for improvement exist. Lastly, the Reading Hall in the Library was appreciated by 194 students who perceived it "Very Satisfied." Several students expressed dissatisfaction with the services here and indicated scope areas to be improved.

5. CONCLUSION

The library is an expanding institution. The ability of a library to close the gap between the amount of information resources and services that are given and the amount that is demanded is essential to the library's success. The goal of the study was to determine how satisfied Central University of Karnataka's undergraduate students are with its library resources and services. Via a systematic questionnaire, it offers the chance to learn about undergraduate students' opinions about the library. The study's conclusions demonstrate that, for the most part, Undergraduate students are happy with the resources and services provided by the library, yet there are several areas in which the library needs to improve. The management of Central University of Karnataka and the Mysore University campus authority should, in light of the aforementioned conclusions and recommendations, not only preserve and enhance the resources and services that the residents find satisfactory, but also work to enhance those that cause them grave concerns. To address the issues that users have reported having when utilizing the library's resources and services, serious action must be made.

REFERENCES

- 1. Borbely, M. (2011). Measuring user satisfaction with a library system according to ISO/IEC TR 9126-4. Performance Measurement and Metrics, 12(3), 157-171.
- 2. Dwivedi, Y. K., Kapoor, K. K., Williams, M. D., & Williams, J. (2013). RFID systems in libraries: An empirical examination of factors affecting system use and user satisfaction. International Journal of Information Management, 33(2), 367-377.
- **3.** Elias, J. D., &Lubua, E. W. (2024). The impact of usability, functionality and reliability on users' satisfaction during library system adoption. The Journal of Informatics, 1(1), 13-21.
- **4.** Kaur, K., Mohamad, P., & George, S. (2006). Quality management service at the University of Malaya Library. Library management, 27(4/5), 249-256.
- **5.** Khan, A. U., Rafi, M., Zhang, Z., & Khan, A. (2023). Determining the impact of technological modernization and management capabilities on user satisfaction and trust in library services. Global Knowledge, Memory and Communication, 72(6/7), 593-611.
- **6.** Masrek, M. N., & Gaskin, J. E. (2016). Assessing users satisfaction with web digital library: the case of UniversitiTeknologi MARA. The International Journal of Information and Learning Technology, 33(1), 36-56.
- 7. Munyao, M. M. (2017). Total Quality Management for User Satisfaction in Library Operations and Services with Reference to Usiu-africa Library (Doctoral dissertation, University of Nairobi).
- **8.** Nwagwu, W. E., & Sulaimon, A. A. (2022). Use, accessibility, and satisfaction of librarians in selected higher educational institutions in Oyo State, Nigeria with integrated library management systems. African Journal of Library, Archives & Information Science, 32(2), 215-232.
- **9.** Putra, S. J., Subiyakto, A., Yunita, I., Gunawan, M. N., &Durachman, Y. (2018). Assessing the user satisfaction perspectives of information system: A library case study in Indonesia. Indonesian Journal of Electrical Engineering and Computer Science, 12(1), 95-101.
- 10. Samadi, I., Masrek, M. N., & Yatin, S. F. B. M. (2014). The effect of individual characteristics and digital library characteristics on digital library effectiveness: A survey at University of Tehran. World Applied Sciences Journal, 30(30), 214-220.
- **11.** Tan, T. S., Chen, T. L., & Yang, P. H. (2017). User satisfaction and loyalty in a public library setting. Social Behavior and Personality: an international journal, 45(5), 741-756.
- **12.** Xu, F., & Du, J. T. (2018). Factors influencing users' satisfaction and loyalty to digital libraries in Chinese universities. Computers in Human Behavior, 83, 64-72.
- **13.** Xu, F., & Du, J. T. (2019). Examining differences and similarities between graduate and undergraduate students' user satisfaction with digital libraries. The Journal of Academic Librarianship, 45(6), 102072.
- **14.** ZareMehrjerdi, Y. (2017). Library performance evaluation in a dynamic environment using patron satisfaction. The Electronic Library, 35(2), 374-390.

Zhang, Z. (2019). The effect of library indoor environments on occupant satisfaction and performance in Chinese universities using SEMs. Building and Environment, 150, 322-329