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Evaluating the impact of library services on the academic success of undergraduate students: Special reference of H.N.G.U., Patan students

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Abstract
Academic success of undergraduate students is strongly influenced by the availability, accessibility, and quality of library services. The present study focuses on Hemchandracharya North Gujarat University, Patan (HNGU) undergraduate students to assess the extent to which library resources, facilities, and services impact their academic achievement. Using a mixed-method research design, data was collected from 250 undergraduate students across various faculties through structured questionnaires and interviews. The findings reveal that students who frequently use library services demonstrate higher levels of academic performance, information literacy, and research skills compared to non-users. Digital services, reference support, and availability of updated resources were identified as the most significant factors in influencing academic success. The study highlights the need for continuous modernization of library infrastructure and student-centric service models.

Keywords: Library services, academic success, undergraduate students, HNGU, information literacy, digital resources

Introduction

University libraries have traditionally played a vital role in supporting academic and research activities. In the 21st century, their role has expanded beyond being repositories of books to becoming active knowledge hubs offering both physical and digital services. The academic success of undergraduate students depends not only on their personal efforts but also on the academic support ecosystem, among which library services hold a pivotal position.

At Hemchandracharya North Gujarat University, Patan (HNGU), the central library and affiliated college libraries cater to the information needs of thousands of undergraduate students across disciplines. Evaluating the impact of these services on academic success provides insights into how effectively the library contributes to student learning, knowledge acquisition, and academic performance.

2. Objectives of the study

- To analyze the usage patterns of HNGU undergraduate students in relation to library services.
- To identify which library services most significantly contribute to academic success.
- To assess student perceptions regarding the effectiveness of library facilities.
- To suggest improvements for maximizing the role of libraries in supporting undergraduate education.

3. Review of literature

A large body of research has emphasized the importance of library services in supporting academic excellence, student retention, and overall learning outcomes. This section reviews existing studies in both international and Indian contexts.

3.1 Library Usage and Academic Achievement

Several researchers have explored the direct relationship between student library usage and academic performance. Kuh & Gonyea (2003) [6] noted

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that students who actively engage with library resources demonstrate stronger critical thinking, analytical skills, and higher grades. Similarly, Soria, Fransen, & Nackerud (2014) [13] found that library use is positively correlated with GPA, persistence, and retention among undergraduate students. These findings suggest that frequent interaction with library services contributes to academic achievement beyond classroom learning.

3.2 Role of Library Collections and Resources
The strength of a university library often lies in the quality and accessibility of its collections. Whitmire (2002) [15] highlighted that access to textbooks, reference works, and scholarly journals directly impacts students' ability to complete assignments and perform well academically. In the Indian context, Singh & Kaur (2018) [12] emphasized the role of updated reference collections and textbooks in aiding undergraduate students from rural and semi-urban backgrounds, where personal access to study materials is limited.

3.3 Digital Libraries and E-Resources
The growth of Information and Communication Technology (ICT) has transformed the way student's access knowledge. Tenopir (2013) [13] demonstrated that e-resources and online journals enhance research quality and information-seeking behavior among students. A study by Sharma (2020) [10] on Indian university students found that e-journals, databases, and institutional repositories play a significant role in improving academic performance, particularly in science and technology disciplines. Furthermore, Patel (2021) [10] noted that remote access to digital resources became critical during the COVID-19 pandemic, ensuring continuity of learning.

3.4 Library Services and Student Satisfaction
Effective library services go beyond collections. Reference support, information literacy training, orientation programs, and user-friendly facilities enhance students' learning experiences. Jackson (2005) [5] concluded that libraries offering personalized reference services see higher student satisfaction levels. In India, Gupta & Sharma (2019) [4] studied undergraduate students in Gujarat universities and found that library orientation programs significantly improve awareness and utilization of library resources, leading to better academic outcomes.

3.5 Reading Habits and Study Environment
The physical environment of libraries also influences academic success. Montgomery (2014) [9] pointed out that quiet study spaces and group discussion rooms help students concentrate and collaborate more effectively. In the Indian setting, Mehta (2017) [8] reported that well-designed reading spaces in university libraries encourage longer study hours and reduce dependency on external coaching or private study centers.

3.6 Challenges in Library Usage
Despite their importance, challenges exist in maximizing the potential of library services. Adeyemi (2011) identified issues such as lack of updated resources, insufficient ICT facilities, and inadequate staff support as barriers to effective library use. In India, Raval (2022) [16] observed that many university libraries face funding shortages, outdated collections, and low levels of awareness among undergraduate students, which limit their overall impact on academic success.

3.7 Gap in Literature:
While global literature strongly supports the link between library services and academic success, limited studies have focused specifically on Indian state universities, particularly those located in semi-urban and rural regions like Hemchandracharya North Gujarat University (HNGU). Most existing studies highlight resource availability but pay less attention to the perceived impact of library services on undergraduate academic outcomes. This research attempts to bridge that gap by providing empirical evidence from HNGU students.

4. Research Methodology
Research Methodology in this study refers to the systematic approach used to examine the impact of library services on the academic success of undergraduate students at HNGU. It includes the techniques for data collection, analysis, and interpretation to ensure accurate and meaningful results

4.1 Research Design
The study follows a survey-based quantitative approach supported with qualitative feedback.

4.2 Population and Sample
The population comprised all undergraduate students enrolled at HNGU. A stratified random sample of 250 students was selected from Arts, Commerce, Science, and Professional courses.

4.3 Data Collection Tools
- Structured Questionnaire (both print and online forms)
- Focus Group Discussions with frequent library users
- Library Usage Records for secondary data

4.4 Data Analysis: Statistical analysis was performed using descriptive statistics, and percentage distribution.

5. Data analysis and interpretation
Data Analysis and Interpretation is the process of examining the collected data to uncover patterns, trends, and relationships. In this study, it involves analyzing how the usage and quality of library services affect the academic performance of undergraduate students at HNGU. The interpretation of the results helps in understanding the effectiveness of library resources in supporting students' learning and academic success.

Table 1: Frequency of Library Visits by Undergraduate Students at HNGU

Frequency of Visit	Students (N=250)	Percentage
Daily	75	30%
Weekly	100	40%
Occasionally	55	22%
Rarely / Never	20	08%
Total	250	100%
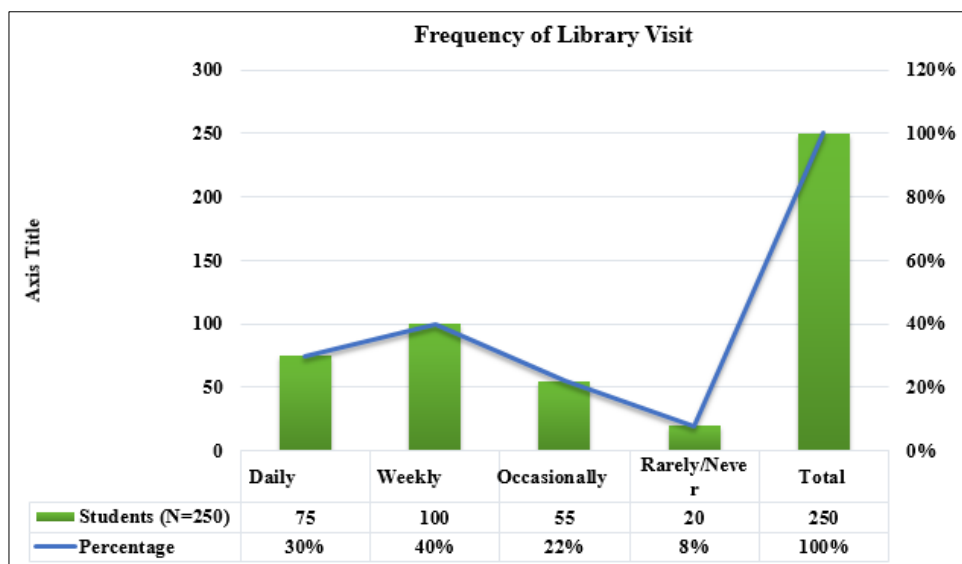
Data Analysis: The table shows the distribution of HNGU undergraduate students according to their frequency of library visits. Out of 250 students surveyed:

- 75 students (30%) reported visiting the library daily, indicating a strong habit of consistent usage.
- 100 students (40%) use the library on a weekly basis, making this the most common pattern of usage.
- 55 students (22%) visit the library occasionally, reflecting irregular engagement.
- 20 students (8%) reported that they rarely or never use the library.

Interpretation: A large majority of students (70%) visit the library either daily or weekly, showing that the library is an essential part of their academic routine.

- Weekly visits are most common (40%), suggesting that students align their library use with assignment deadlines, test preparation, or borrowing cycles.
- The 22% of occasional users and 8% of rare/non-users highlight a segment of students who may not be fully utilizing library resources, potentially due to lack of awareness, access to personal resources, or reliance on digital alternatives.
- The results suggest that library use is widespread among HNGU undergraduates, but targeted awareness programs could help engage the 30% of students who are less frequent users.

Table 2: Impact of Library Services on Academic Success (Self-Reported)

Library Service	High Impact	Moderate Impact	Low Impact	No Impact
Textbook & Reference Collection	62%	28%	08%	02%
Digital/E-Resources	58%	30%	10%	02%
Reference & Guidance Services	45%	35%	15%	05%
Reading Environment & Space	40%	42%	15%	03%
Library Orientation/Workshops	38%	40%	18%	04%
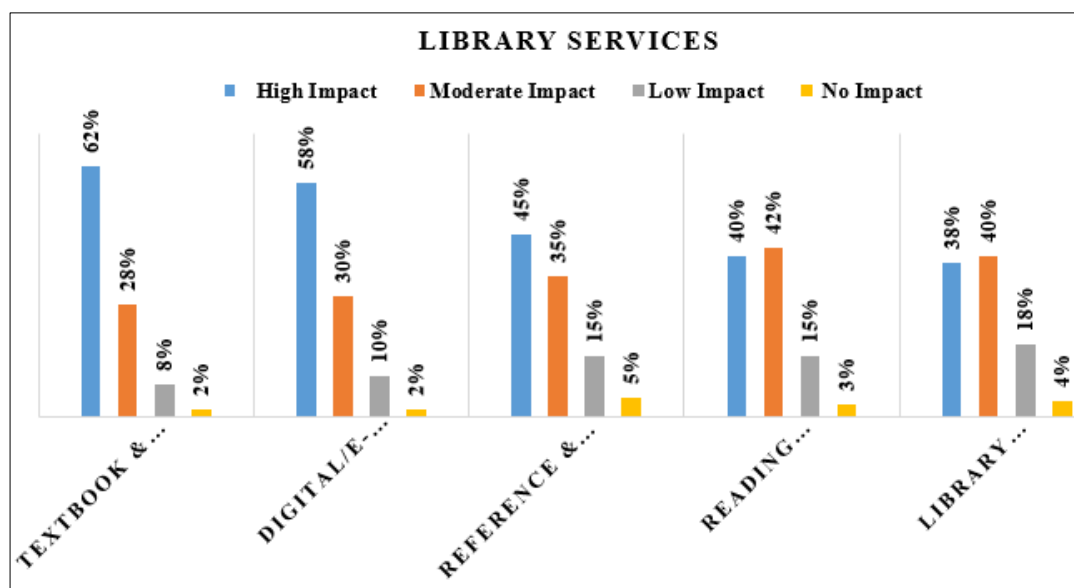
Data Analysis

1. Textbook & Reference Collection

- A majority of students (62%) rated the library's textbook and reference collection as having a high impact on their academic success.
- This indicates that the core print collection continues to be the most valuable service for undergraduate students, particularly in courses where prescribed textbooks and reference books are essential.

2. Digital / E-Resources

- 58% of students perceived digital resources as having a high impact, while 30% rated them as moderately impactful.
- This reflects a growing dependence on e-journals, online databases, and digital study materials, which are critical for assignments and projects.

3. Reference & Guidance Services

- Nearly half (45%) considered reference services as having a high impact, and 35% reported moderate impact.
- The results show that librarian support and guidance help students locate relevant resources and improve academic performance.

4. Reading Environment & Space

- The reading environment was rated highly impactful by 40% of students, while 42% rated it moderately impactful.

- This suggests that a well-maintained, quiet, and comfortable study environment significantly influences students' ability to concentrate and perform well academically.

5. Library Orientation/Workshops

- 38% of students considered orientation programs and workshops to have a high impact, while 40% rated them moderately impactful.
- Although these services are not as highly valued as core collections or digital resources, they play an important role in introducing students to available facilities and improving information literacy.

Interpretation

- Textbooks and reference collections remain the most impactful service for undergraduate students, followed closely by digital resources.
- Reference services and reading spaces also play an important supportive role in student success.
- Library orientation/workshops are helpful but underutilized, indicating that awareness programs could be strengthened to ensure students fully benefit.
- Overall, the data shows that both traditional print resources and modern digital services contribute significantly to students' academic achievement at HNGU.

Table 3: Correlation between Library Usage and Academic Performance (Hypothetical GPA Data)

Category of Users	Average GPA
Frequent Users	7.9 / 10
Moderate Users	7.1 / 10
Rare Users	6.4 / 10

Data Analysis

- Frequent Users of the library recorded the highest average GPA (7.9/10), showing strong academic performance.
- Moderate Users achieved an average GPA of 7.1/10, lower than frequent users but still above rare users.
- Rare Users had the lowest average GPA (6.4/10), indicating comparatively weaker academic success.

Interpretation

- The results demonstrate a positive correlation between frequency of library use and academic performance.
- Students who make regular use of library resources - whether textbooks, digital collections, or study spaces - consistently perform better.
- The GPA difference between frequent users (7.9) and rare users (6.4) highlights the added academic advantage that active engagement with the library provides.
- The findings align with existing literature (e.g., Soria *et al*., 2014; Singh & Kaur, 2018) [12, 13], which shows that higher library usage contributes to stronger grades, better research skills, and improved retention.
- This suggests that encouraging students especially those in the "rare user" category to use the library more often could potentially raise overall academic performance at HNGU.

6. Findings

Based on the survey responses, data analysis, and interpretation of results, the following key findings have emerged:

1. Library Usage Frequency

- A majority of undergraduate students (70%) visit the library either daily or weekly, highlighting the central role of the library in their academic routines.
- Only a small proportion (8%) reported rarely or never visiting the library, indicating relatively high overall engagement.

2. Impact of Library Services on Academic Success

- Textbook and reference collections were rated as the most impactful service, with 62% of students reporting a high impact on their academic success.
- Digital/e-resources were also highly valued (58% reporting high impact), reflecting the growing importance of ICT in education.
- Reference and guidance services were acknowledged by 45% of students as having a high impact, showing that librarian support continues to be important.
- The reading environment and study space were moderately to highly impactful (82% combined), emphasizing the importance of a conducive study atmosphere.

- Library orientation programs and workshops had moderate impact for many students, suggesting potential for improvement in awareness-building activities.

3. Library Usage and Academic Performance
- Frequent library users achieved the highest average GPA (7.9/10), followed by moderate users (7.1/10), while rare users had the lowest GPA (6.4/10).
- This indicates a strong positive correlation between library usage and academic achievement.

4. Traditional vs. Digital Services
- Both traditional print collections and modern digital resources were identified as critical to academic success.
- Students preferred a balanced blend of physical books for prescribed readings and digital databases for assignments, projects, and research.

5. Student Perceptions
- Students expressed high satisfaction with the availability of core resources but highlighted the need for further expansion of digital access, updated reference collections, and user-friendly spaces.
- Some students noted a lack of awareness about advanced services (such as online databases and orientation workshops), indicating a need for stronger outreach.

7. Suggestions / Recommendations
Based on the findings of the present study, the following suggestions are made to strengthen the role of HNGU libraries in enhancing undergraduate academic success:

Enhancement of Core Collections
- Regularly update textbooks, reference works, and subject-specific study materials to align with the latest syllabi and academic requirements.
- Strengthen inter-library loan facilities to ensure students have access to rare or specialized resources.

2. Expansion of Digital Resources
- Increase subscriptions to online journals, e-books, databases, and open-access repositories to meet the growing demand for electronic resources.
- Provide remote access facilities so students can use e-resources from home or hostels.

3. Improvement of Reference and Guidance Services
- Train library staff in user-centered reference services to provide personalized guidance for assignments, projects, and research.
- Introduce online chat/reference helpdesks for quick assistance.

4. Strengthening of Study Spaces and Environment
- Improve reading areas with adequate lighting, ventilation, and seating arrangements.
- Create dedicated zones for group study, silent study, and digital learning to suit different student needs.

5. Library Orientation and Information Literacy Programs
- Conduct regular library orientation sessions for new students to make them aware of available services.
- Introduce information literacy workshops to enhance skills in searching, evaluating, and citing information sources.

6. Technology Integration and Innovation
- Adopt modern library management systems with mobile app integration, SMS alerts, and real-time resource availability.
- Provide training on the use of plagiarism detection tools, reference managers, and digital note-taking apps.

7. Promotion and Awareness
- Use social media platforms, WhatsApp groups, and university portals to actively promote library services.
- Highlight new arrivals, e-resources, and upcoming workshops to increase visibility and participation.

8. Feedback and Continuous Improvement
- Establish regular feedback mechanisms (surveys, suggestion boxes, online forms) to understand student needs.
- Incorporate feedback into decision-making to make library services more student-centric.

In short, the study recommends a balanced approach strengthening both traditional print collections and modern digital services, while also focusing on awareness, orientation, and user-friendly infrastructure.

8. Conclusion
The present study clearly establishes that library services play a significant role in enhancing the academic success of undergraduate students at Hemchandracharya North Gujarat University, Patan (HNGU). The findings reveal a positive correlation between the frequency of library use and academic performance, with frequent users demonstrating higher average GPA scores compared to occasional or rare users.

Among the services, textbook and reference collections and digital resources were identified as the most impactful, highlighting the need for both traditional and modern resources to coexist in supporting undergraduate education. Reference services, study spaces, and library orientation programs also contribute meaningfully to students' learning outcomes, though there is scope for greater awareness and utilization.

The study emphasizes that the university library is not just a repository of books but a knowledge hub that fosters information literacy, research skills, and academic engagement. By updating collections, expanding digital access, strengthening reference support, and conducting information literacy programs, the HNGU library can further enhance its role in shaping student achievement. In conclusion, libraries remain a pillar of academic success, and continuous investment in infrastructure, technology, and student-centered services is essential to maximize their impact in the digital era.

References

1. American Library Association. Presidential Committee on Information Literacy: Final Report. Chicago: ALA; 1989.
2. Astin AW. Student involvement: A developmental theory for higher education. J Coll Stud Pers. 1984;25(4):297-308.
3. Davis FD. Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Q. 1989;13(3):319-40.
4. Gupta N, Sharma P. Library orientation and information literacy among undergraduate students in Gujarat: A case study. Indian J Libr Inf Sci. 2019;13(2):45-54.
5. Jackson R. The importance of reference services in academic success. Ref User Serv Q. 2005;44(4):315-321.
6. Kuh GD, Gonyea RM. The role of the academic library in promoting student engagement in learning. Coll Res Libr. 2003;64(4):256-282.
7. Kuh GD. Assessing what really matters to student learning: Inside the National Survey of Student Engagement. Change Mag High Learn. 2001;33(3):10-17.
8. Mehta R. Impact of library study environment on academic success: An Indian perspective. Libr Prog Int. 2017;37(1):65-74.
9. Montgomery SE. Library space assessment: User learning behaviors in the library. J Acad Libr. 2014;40(1):70-75.
10. Patel R. Digital resources in higher education: Lessons from COVID-19 pandemic in Gujarat universities. J Inf Manag. 2021;8(2):112-120.
11. Sharma K. Role of e-resources in improving academic performance of Indian university students. DESIDOC J Libr Inf Technol. 2020;40(5):327-333.
12. Singh J, Kaur R. Availability and use of reference collections in university libraries: A study of rural and semi-urban institutions. Ann Libr Inf Stud. 2018;65(3):182-189.
13. Soria KM, Fransen J, Nackerud S. Stacks, serials, search engines, and students' success: First-year undergraduate students' library use, academic achievement, and retention. J Acad Libr. 2014;40(1):84-91.
14. Tenopir C. Use and users of electronic library resources: An overview and analysis of recent research studies. Libr Trends. 2013;61(3):430-439.
15. Whitmire E. Disciplinary differences and undergraduates' information-seeking behavior. J Am Soc Inf Sci Technol. 2002;53(8):631-638.
16. Raval H. Challenges of academic libraries in semi-urban Gujarat universities. Int J Libr Inf Stud. 2022;12(4):201-210.
17. Association of College & Research Libraries (ACRL). The Value of Academic Libraries Report. Chicago: ACRL; 2021.