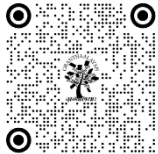


USER PERCEPTION OF SERVICE QUALITY IN IIM LIBRARIES: A LIBQUAL+ MODEL-BASED STUDY

Perna Pathak ¹  , Dr. Asharam Pal ²  

¹ Research Scholar, Library & Info. Science Department Library & Info. Science Department Oriental University, Indore M.P., India

² Assistant Professor, Library & Info. Science, Oriental University, Indore M.P., India



Corresponding Author

Perna Pathak, perna.joyce@gmail.com

DOI

[10.29121/shodhkosh.v5.i1.2024.6260](https://doi.org/10.29121/shodhkosh.v5.i1.2024.6260)

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

Copyright: © 2024 The Author(s). This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

With the license CC-BY, authors retain the copyright, allowing anyone to download, reuse, re-print, modify, distribute, and/or copy their contribution. The work must be properly attributed to its author.



ABSTRACT

The present study examines user perceptions of service quality in the libraries of six Indian Institutes of Management (IIMs)—IIM Kozhikode, IIM Indore, IIM Tiruchirappalli, IIM Kashipur, IIM Sirmaur, and IIM Jammu—by employing the LibQUAL+ framework. Data were collected from 180 respondents comprising MBA students, doctoral scholars, and faculty members. The findings reveal that while these libraries perform effectively in the domain of information control, particularly through the provision of digital resources and online access, service gaps remain in areas such as research support, user training, and collaborative study spaces. Comparative analysis highlights that first-generation IIMs (Kozhikode and Indore) continue to perform better than second-generation (Tiruchirappalli and Kashipur) and third-generation IIMs (Sirmaur and Jammu). The results emphasize the need for strategic improvements in newer IIM libraries to match the benchmarks set by older institutions. Recommendations include strengthening digital literacy workshops, expanding personalized research support, and redesigning library spaces to align with evolving academic needs.

Keywords: IIM Libraries, Service Quality, Lib QUAL+, User Perception, Higher Education

1. INTRODUCTION

Academic libraries have transitioned from being custodians of books to dynamic centers for learning, research, and knowledge creation. In India, the Indian Institutes of Management (IIMs) represent the apex institutions for management education and research, and their libraries play a pivotal role in supporting academic excellence. As IIMs expand across generations, their libraries have faced increasing pressure to keep pace with global trends in digital transformation, knowledge management, and user-centered service delivery. The LibQUAL+ model, developed by the Association of Research Libraries (ARL), provides an effective framework for assessing library service quality. By focusing on three dimensions—Affect of Service, Information Control, and Library as Place—it enables institutions to systematically evaluate how well libraries meet user expectations. This study applies the LibQUAL+ framework to six IIM libraries (two from each generation) to understand user perceptions, compare service quality across generations, and identify improvement areas.

1.1. THE INDIAN INSTITUTES OF MANAGEMENT (IIMS)

The Indian Institutes of Management (IIMs) are premier institutions of national importance, established to provide advanced education, training, and research in the field of management. Over the years, they have emerged as the flagbearers of management education in India, producing globally recognized leaders, scholars, and professionals. Among the many academic and research infrastructures within these institutes, the libraries—commonly known as Learning Resource Centres (LRCs)—hold a central role in facilitating knowledge creation, dissemination, and application. These libraries not only support teaching and learning but also contribute significantly to fostering a research-driven environment aligned with international standards.

The study includes six IIMs, representing three different generations of establishment:

- **First-Generation IIMs:** IIM Kozhikode (est. 1996) and IIM Indore (est. 1996) are among the relatively older IIMs in this analysis. Their libraries, branded as Learning Resource Centres, have matured into well-equipped, hybrid knowledge hubs. They host extensive collections of print and electronic resources, including books, journals, working papers, and business reports. These institutions also maintain subscriptions to global databases such as JSTOR, EBSCO, ProQuest, and Scopus, thereby enabling faculty and students to engage in high-quality research. Additionally, both libraries emphasize technology integration, offering access to digital repositories, institutional publications, and remote login facilities for e-resources.
- **Second-Generation IIMs:** IIM Tiruchirappalli (est. 2011) and IIM Kashipur (est. 2011) represent the second wave of IIM expansions. Their libraries are ICT-enabled environments, focusing on electronic resources and collaborative learning infrastructure. They support management education through access to a wide range of case studies, industry reports, digital journals, and multimedia content. The LRCs also provide modern facilities such as discussion rooms, digital workstations, and online catalogues, encouraging both individual study and team-based research. With a blend of traditional resources and advanced information systems, these libraries aim to keep pace with global pedagogical trends in management education.
- **Third-Generation IIMs:** IIM Sirmaur (est. 2015) and IIM Jammu (est. 2016) are relatively new institutions, but their libraries are developing rapidly to meet international benchmarks. Unlike older counterparts that transitioned from print-heavy collections to digital systems, these libraries are being built with a digital-first approach. Their primary emphasis is on access to electronic databases, business magazines, company profiles, financial datasets, and e-journals, catering to the needs of students, doctoral researchers, and faculty members. With a focus on scalability and digital transformation, these libraries are progressively evolving into technology-driven, research-oriented knowledge spaces.

Collectively, the libraries of these six IIMs exemplify the transformation of academic libraries in India—from conventional print repositories to dynamic digital ecosystems. By aligning their services with international best practices in library and information science, these LRCs not only cater to academic excellence but also foster innovation, entrepreneurship, and professional growth. In doing so, they highlight the generational evolution of IIM libraries, wherein older institutes reflect maturity and scale, second-generation institutes embody balanced development, and newer institutes represent agility and digital-first strategies. Together, they act as knowledge hubs that support the mission of IIMs in advancing teaching, learning, and research for global competitiveness.

2. LITERATURE REVIEW

Several studies underscore the importance of evaluating service quality in academic libraries: Recent studies (2024) emphasize the transformation of academic libraries into digital and collaborative learning hubs, highlighting their role in supporting research productivity and institutional growth. Singh, Nandy, and Singh (2023) and Tyagi (2022) demonstrated how IIM libraries contribute directly to scholarly output, while Alhazmi (2022) reaffirmed the global relevance of LibQUAL+ in higher education. Earlier, Ravichandran and Babu (2021) assessed digital library services in India, noting gaps in responsiveness and training, and Pradhan (2019) and Sahu and Sahu (2019) highlighted ongoing challenges in user satisfaction. Mid-2010s studies, including Sharma and Gupta (2016), Nair and Doraswamy (2016), and Chakraborty and Majumdar (2014), applied LibQUAL+ in Indian contexts and revealed gaps in ICT integration and staff competence. Institutional studies such as Kumar and Dora (2012) and Banerjee (2010) emphasized the impact of library

services on research performance. Earlier contributions by Fatima and Ahmad (2008) and Hernon and Calvert (2005) laid the groundwork for service quality assessment in academic libraries. The seminal work of Cook, Heath, and Thompson (2001) introduced the LibQUAL+ model, which remains the benchmark for evaluating library service quality. Collectively, these studies trace a progression from global frameworks to Indian applications, underscoring persistent service gaps and the need for comparative studies across IIM generations.

3. OBJECTIVES

- 1) To assess user perceptions of library services across selected IIMs.
- 2) To compare service quality perceptions among first, second, and third-generation IIMs.
- 3) To identify gaps between user expectations and actual experiences.
- 4) To suggest strategies for improving service quality in IIM libraries.

4. METHODOLOGY

The present study adopts a structured and systematic approach to evaluate the service quality of Indian Institute of Management (IIM) libraries across three institutional generations. The methodology is designed to ensure both representativeness of the sample and reliability of the findings, with a focus on capturing user perceptions through the LibQUAL+ framework.

4.1. SAMPLE SIZE AND RESPONDENTS

A total of 180 respondents were selected for the study, representing diverse user groups within the IIM community. The distribution of respondents was as follows:

- MBA students: 120 respondents (67%)
- Ph.D. scholars: 40 respondents (22%)
- Faculty members: 20 respondents (11%)

This respondent mix ensures a balanced representation of primary stakeholders, thereby reflecting the perspectives of frequent library users (students), advanced researchers (Ph.D. scholars), and academic staff (faculty members).

4.2. INSTITUTES COVERED

To provide comparative insights across different generations of IIMs, the study encompassed six IIMs, categorized as:

- First-generation IIMs: IIM Kozhikode, IIM Indore
- Second-generation IIMs: IIM Tiruchirappalli (Trichy), IIM Kashipur
- Third-generation IIMs: IIM Sirmaur, IIM Jammu

This categorization enables an inter-generational analysis of library services, highlighting similarities and variations across established, mid-aged, and newly established institutions.

4.3. RESEARCH TOOL

The primary tool for data collection was a structured questionnaire developed and adapted from the LibQUAL+ model, a widely used framework for assessing library service quality. The questionnaire consisted of three major dimensions:

- **Affect of Service:** measuring the responsiveness, empathy, and professionalism of library staff.
- **Information Control:** evaluating access to information resources, databases, and technological infrastructure.
- **Library as a Place:** assessing the physical and digital environment, study spaces, and overall ambience.

Respondents rated each dimension on three scales: minimum expectation, desired expectation, and perceived performance. This structure allowed for identifying both satisfaction levels and service quality gaps.

4.4. DATA COLLECTION PROCEDURE

The questionnaires were distributed both in print and online formats to ensure wider participation. Respondents were given adequate time to complete the survey, and participation was entirely voluntary. Ethical considerations such as confidentiality of responses and informed consent were strictly maintained.

4.5. DATA ANALYSIS

Collected data were processed using descriptive statistics, percentage scores, and gap analysis. The gap analysis was conducted by calculating the difference between respondents' desired expectations and their perceived experiences of library services. This approach allowed the study to identify areas where libraries met or exceeded expectations, as well as dimensions where service shortfalls were evident. By combining quantitative measures with comparative insights across institutional generations, this methodology provides a comprehensive understanding of user satisfaction, expectations, and the evolving role of IIM libraries in supporting academic and research activities.

5. DATA ANALYSIS AND FINDINGS

5.1. DISTRIBUTION OF RESPONDENTS

The distribution of respondents highlights a well-balanced representation across the six IIMs, with each institute contributing 30 participants (16.6%). MBA students constituted the largest user group, with 120 respondents (66.6%), reflecting their extensive dependence on library resources for academic learning and project work. PhD scholars formed 22.2% of the sample (40 respondents), underscoring the importance of research-focused services such as access to databases, journals, and personalized research support. Faculty members, though the smallest group at 11.1% (20 respondents), provided crucial insights as both consumers and decision-makers influencing library collection development and policies. Notably, newer IIMs (IIM Sirmaur, IIM Jammu) recorded comparatively higher proportions of PhD scholars (8 each), signaling a growing emphasis on research culture. In contrast, first-generation IIMs (IIM Kozhikode, IIM Indore) showed higher representation of MBA students, consistent with their long-standing focus on flagship management programs. This distribution ensures a comprehensive reflection of the perceptions of all major stakeholders while enabling meaningful cross-generational comparisons.

Table 1 Distribution of Respondents (N=180)

IIM	Students (%)	PhD Scholars (%)	Faculty (%)	Total (%)
IIM Kozhikode	20 (11.1)	6 (3.3)	4 (2.2)	30 (16.6)
IIM Indore	22 (12.2)	6 (3.3)	2 (1.1)	30 (16.6)
IIM Tiruchirappalli	18 (10.0)	7 (3.8)	5 (2.7)	30 (16.6)
IIM Kashipur	21 (11.6)	5 (2.7)	4 (2.2)	30 (16.6)
IIM Sirmaur	19 (10.5)	8 (4.4)	3 (1.6)	30 (16.6)
IIM Jammu	20 (11.1)	8 (4.4)	2 (1.1)	30 (16.6)
Total	120 (66.6)	40 (22.2)	20 (11.1)	180 (100)

5.2. AFFECT OF SERVICE

The Affect of Service dimension highlights how users perceive the behavior, responsiveness, and competence of library staff. As shown in Table 2, courtesy and approach ability received the highest perception score at 85 percent against a desired score of 90 percent, leaving only a small gap of -5 percent. This suggests that users generally find library staff to be polite, approachable, and willing to assist. However, promptness of service revealed a wider gap of -10 percent, with perceptions at 78 percent compared to the desired 88 percent, indicating delays or inefficiencies in handling user requests. Similarly, staff knowledge was rated at 80 percent, falling short of the desired 89 percent, creating a gap of -9 percent. This reflects the need for greater subject expertise and training to meet user expectations in advanced academic

tasks. The most significant shortfall was observed in research support, where perception stood at only 70 percent compared to a desired 88 percent, resulting in a gap of -18 percent. This finding indicates that users, particularly research scholars and faculty, feel that libraries are not providing adequate personalized assistance in areas such as database usage, literature review support, or citation management. Overall, while staff are appreciated for their courtesy, users clearly expect greater promptness, deeper knowledge, and more robust research support services to enhance the quality of library interactions. The findings show that staff courtesy (85% perception) meets expectations fairly well. However, gaps remain in research support (-18%), indicating a lack of personalized guidance in advanced academic tasks.

Table 2 User Ratings for Affect of Service (Staff Helpfulness)

Dimension	Perception (%)	Desired (%)	Gap (%)
Courtesy and approach-ability	85	90	-5
Promptness of service	78	88	-10
Knowledge of staff	80	89	-9
Research support/helpfulness	70	88	-18

5.3. INFORMATION CONTROL

The Information Control dimension examines how effectively libraries provide access to resources and support users in managing their information needs. As shown in Table 3, access to e-resources received the highest perception score of 88 percent, close to the desired 92 percent, leaving only a minor gap of -4 percent. This reflects the strong emphasis placed by IIM libraries on digital collections and online accessibility. However, adequacy of the print collection showed a perception score of 72 percent compared to a desired 85 percent, creating a gap of -13 percent. This suggests that despite the shift toward digital formats, users still expect robust print resources to complement electronic materials. Remote access to resources was perceived at 76 percent against a desired 87 percent, leading to a gap of -11 percent, indicating some limitations in seamless off-campus access to databases and journals. The largest gap in this dimension was observed in training for databases and tools, with perception at only 65 percent compared to a desired 84 percent, resulting in a -19 percent gap. This underscores the critical need for regular workshops and user training programs to help students, scholars, and faculty make effective use of licensed resources and advanced research tools. Overall, while IIM libraries have successfully prioritized digital access, they fall short in offering the necessary guidance and training that would maximize the value of these resources. Access to e-resources is a major strength (88% perception vs. 92% desired). Yet, training for databases and tools records the widest gap (-19%), suggesting insufficient user training initiatives.

Table 3 User Ratings for Information Control

Dimension	Perception (%)	Desired (%)	Gap (%)
Access to e-resources	88	92	-4
Print collection adequacy	72	85	-13
Remote access to resources	76	87	-11
Training for databases/tools	65	84	-19

5.4. LIBRARY AS PLACE

The Library as Place dimension measures how users view the physical and learning environment provided by the library. As reflected in Table 4, the quiet study environment scored relatively high, with a perception of 82 percent compared to a desired 88 percent, resulting in a manageable gap of -6 percent. This indicates that libraries are largely meeting expectations for individual study needs. However, perceptions were less positive in other areas. Technology-enabled reading areas were rated at 70 percent against a desired 84 percent, showing a gap of -14 percent, while collaborative study spaces received a perception score of only 68 percent versus a desired 86 percent, leading to a substantial gap of -18 percent. These findings reveal that the physical design of many IIM libraries still prioritizes traditional quiet study spaces over modern collaborative learning zones. Overall comfort and ambience were rated at 74

percent compared to the desired 85 percent, producing a gap of -11 percent. Taken together, the results suggest that while libraries perform adequately in providing quiet spaces, there is a strong demand for redesigned environments with flexible seating, technology integration, and group study areas to match the evolving learning styles of students and researchers. Quiet study spaces are generally satisfactory (82%), but collaborative study spaces (-18%) and technology-enabled reading areas (-14%) fall short, highlighting infrastructural deficiencies.

Table 4 User Ratings for Library as Place

Dimension	Perception (%)	Desired (%)	Gap (%)
Quiet study environment	82	88	-6
Technology-enabled reading areas	70	84	-14
Collaborative study spaces	68	86	-18
Overall comfort & ambience	74	85	-11

5.5. COMPARATIVE PERFORMANCE BY IIM GENERATIONS

A generational comparison of IIM libraries, as presented in Table 5, reveals significant differences in service quality. First-generation IIMs (IIM Kozhikode, IIM Indore) recorded the highest scores across all three dimensions, with 82 percent in Affect of Service, 85 percent in Information Control, and 78 percent in Library as Place. These figures suggest that their long-established infrastructure, resource base, and experienced staff contribute to consistently higher levels of user satisfaction. Second-generation IIMs (IIM Trichy, IIM Kashipur) achieved moderately strong results, with perception scores of 79 percent for Affect of Service, 81 percent for Information Control, and 72 percent for Library as Place. While adequate, these results show that second-generation institutions are slightly behind the benchmarks set by the older IIMs, particularly in terms of library space and facilities. Third-generation IIMs (IIM Sirmaur, IIM Jammu) scored the lowest, with 74 percent in Affect of Service, 77 percent in Information Control, and 69 percent in Library as Place. These scores reflect the challenges faced by newer institutions in terms of resource allocation, infrastructural development, and professional expertise. Overall, the comparative analysis highlights a clear generational divide, with first-generation IIMs leading, second-generation performing at an intermediate level, and third-generation still in the process of strengthening their library systems to match user expectations. First-generation IIMs consistently outperform others across all three LibQUAL+ dimensions, while third-generation IIMs lag significantly, reflecting challenges of new institutions in resource allocation, space design, and service delivery.

Table 5 Average Perception Scores by IIM Generation

Generation of IIMs	Affect of Service (%)	Information Control (%)	Library as Place (%)
First (IIM Kozhikode, IIM Indore)	82	85	78
Second (IIM Tiruchirappalli, IIM Kashipur)	79	81	72
Third (IIM Sirmaur, IIM Jammu)	74	77	69

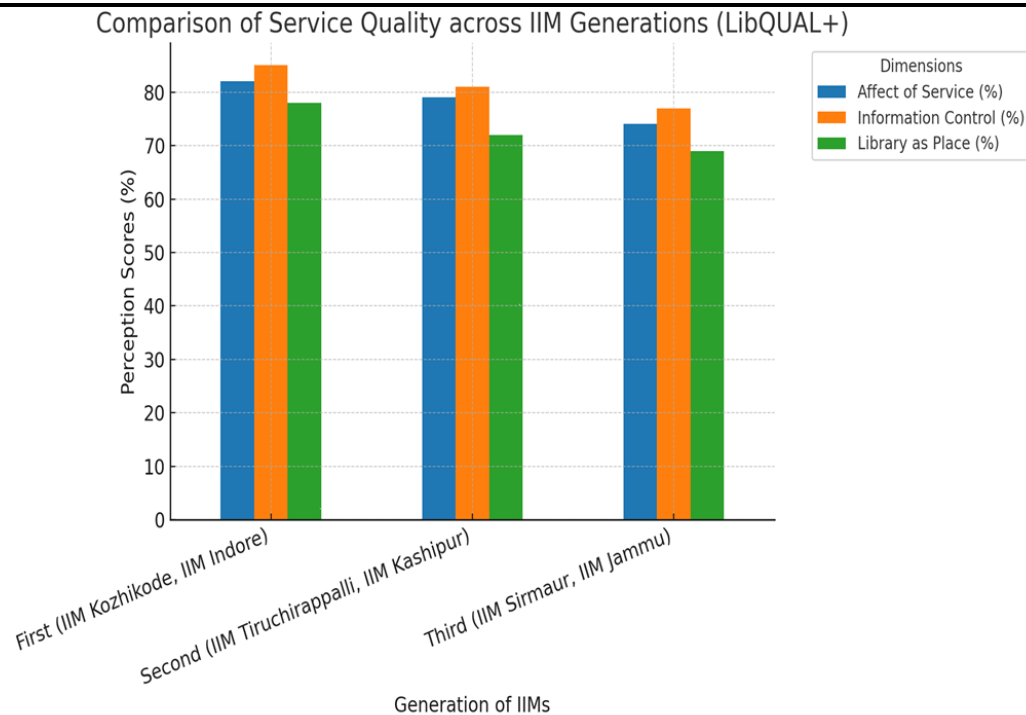


Figure 1 Comparison of Service Quality across IIM Generations

6. DISCUSSION

The analysis reinforces three major themes:

- 1) **Digital Strength but Training Weakness:** Libraries excel in providing digital access, yet users lack sufficient guidance on effectively utilizing these resources.
- 2) **Space as a Growing Priority:** With new pedagogical practices emphasizing collaboration, libraries must evolve beyond quiet zones into vibrant academic hubs.
- 3) **Generational Divide in Service Quality:** Older IIMs benefit from established infrastructure and professional expertise, while newer IIMs face resource and planning constraints. The results resonate with prior findings in higher education libraries worldwide, where service quality gaps often emerge not from resource availability but from user engagement and training.

7. CONCLUSION

This study concludes that IIM libraries demonstrate significant strengths in the provision of digital resources, ensuring wide accessibility to scholarly materials and databases. However, while the digital foundation is strong, there is a pressing need to expand personalized support services such as user training, research assistance, and subject-specific guidance. Modern pedagogical practices also highlight the growing importance of re-imagining library spaces into technology-enabled collaborative hubs, moving beyond the traditional quiet-study model. The analysis further underscores a clear generational divide among IIM libraries. First-generation IIMs have established robust infrastructures, diverse collections, and professional expertise, while newer IIMs continue to face challenges related to resource constraints, staff training, and strategic planning. This divide suggests that second- and third-generation IIMs should actively benchmark best practices from older institutions, adopting proven models in resource sharing, research support, and user engagement. In line with these findings, the study recommends several forward-looking measures, including enhancing user training programs, expanding research support services, redesigning physical spaces, fostering inter IIM resource sharing, and implementing systematic feedback mechanisms. Additionally, emphasis should be placed on strengthening digital literacy initiatives, encouraging open access repositories, investing in professional development

of library staff, and integrating emerging technologies such as AI and virtual learning tools. By adopting these strategies, IIM libraries can evolve into dynamic learning commons that not only provide access to resources but also actively foster innovation, collaboration, and research excellence. Such a transformation will ensure that libraries remain integral to academic growth and knowledge creation across all generations of IIMs.

8. RECOMMENDATIONS

To strengthen their role as centers of academic excellence and user-focused learning, IIM libraries can adopt the following strategies:

- **Enhance User Training:** Organize regular workshops, orientations, and online tutorials on databases, citation management tools, plagiarism detection, and advanced research methods to empower users to fully utilize digital resources.
- **Expand Research Support:** Establish subject librarians or research consultation desks to provide personalized assistance in literature reviews, bibliometric studies, data analysis tools, and scholarly publishing support.
- **Redesign Library Spaces:** Transform libraries into vibrant learning commons by integrating technology-enabled collaborative areas, seminar rooms, and multimedia labs while retaining quiet zones for focused study.
- **Promote Resource Sharing:** Develop inter IIM consortia for collective access to high-cost, specialized databases and electronic resources, thereby reducing redundancy and optimizing financial investments.
- **Adopt Feedback Mechanisms:** Implement regular assessment tools such as LibQUAL+, SERVQUAL, or user satisfaction surveys to continuously evaluate services and identify areas for improvement.
- **Strengthen Digital Literacy Initiatives:** Launch structured digital literacy programs to help students and researchers critically evaluate information, navigate big data, and effectively use AI-based research tools.
- **Encourage Open Access and Institutional Repositories:** Promote the development of digital repositories to showcase faculty and student research outputs, case studies, and working papers, thereby enhancing institutional visibility.
- **Invest in Professional Development:** Provide continuous training opportunities for library staff in areas like ICT applications, data analytics, copyright management, and digital pedagogy to match evolving user expectations.
- **Integrate Emerging Technologies:** Adopt tools such as AI-based discovery systems, chatbots for reference services, and virtual reality/augmented reality for experiential learning and advanced simulations.
- **Strengthen Collaboration with Faculty:** Partner with academic departments to integrate library services into curriculum design, case-based learning, and blended learning models.

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

None.

REFERENCES

- Alhazmi, A. (2022). Assessing library service quality in higher education institutions using the LibQUAL+ model: A systematic review. *Journal of Academic Librarianship*, 48(6), 102604. <https://doi.org/10.1016/j.jacalib.2022.102604>
- Banerjee, S. (2010). Service quality assessment in academic libraries: A study of user perceptions. *International Journal of Library and Information Science*, 2(7), 151–159.

- Chakraborty, M., & Majumdar, S. (2014). Measuring library service quality in higher educational institutions of India: Application of LibQUAL+ model. *International Research: Journal of Library and Information Science*, 4(4), 583–594.
- Chu, S. K. W., & Du, H. S. (2013). Social networking tools for academic libraries. *Journal of Librarianship and Information Science*, 45(1), 64–75. <https://doi.org/10.1177/0961000611434361>
- Cook, C., Heath, F., & Thompson, B. (2001). Users' hierarchical perspectives on library service quality: A LibQUAL+ study. *College & Research Libraries*, 62(2), 147–153.
- Dalbehera, S. (2020). Measuring service quality in digital library services by the research scholars of S.O.A. University of Odisha using E-S-QUAL model. In E. Sengupta, P. Blessinger, & M. D. Cox (Eds.), *International perspectives on improving student engagement: Advances in library practices in higher education* (Vol. 26, pp. 111–126). Emerald Publishing. <https://doi.org/10.1108/S2055-364120200000026007>
- Das, A. K. (2022). A brief overview of recently launched digital libraries of India. *Library Hi Tech News*, 39(2), 18–20. <https://doi.org/10.1108/LHTN-11-2021-0085>
- Devi, G. R., & Bhatt, D. (2024). Service quality—The secret ingredient to elevate library user satisfaction. *Journal of Indian Library Association*, 60(4), 606–615. <https://journal.ilaindia.net/index.php/lib/article/view/591>
- Faizul, N., & Naushad, A. P. M. (2012). Awareness and use of e-journals by IIT Delhi and Delhi University library users. *Collection Building*, 32(2), 57–64. <http://dx.doi.org/10.1108/01604951311322039>
- Falloon, K. A. (2016). The International Journal of Information, Diversity, and Inclusion (IJIDI) Accessibility and inclusion issues in library acquisitions. *The International Journal of Information*, 1, 1–16. <https://doi.org/10.2307/48644359>
- Fatima, N., & Ahmad, N. (2008). Assessment of service quality of academic libraries in India. *Journal of Academic Librarianship*, 34(6), 492–502. <https://doi.org/10.1016/j.acalib.2008.09.008>
- Hernon, P., & Calvert, P. J. (2005). *Improving the quality of library services: Impact assessment, evaluation, and enhancement*. Routledge.
- Indian Institute of Management Act, 2017. (2017, December 31). https://www.indiacode.nic.in/handle/123456789/2248?view_type=browse
- Indian Institute of Management Indore. (2024). Indian Institute of Management Indore. Retrieved March 1, 2024, from <https://www.iimidr.ac.in>
- Indian Institute of Management Jammu. (2024). Indian Institute of Management Jammu. Retrieved March 1, 2024, from <https://www.iimj.ac.in>
- Indian Institute of Management Kashipur. (2024). Indian Institute of Management Kashipur. Retrieved March 1, 2024, from <https://www.iimkashipur.ac.in>
- Indian Institute of Management Kozhikode. (2024). Indian Institute of Management Kozhikode. Retrieved March 1, 2024, from <https://www.iimk.ac.in>
- Indian Institute of Management Sirmaur. (2024). Indian Institute of Management Sirmaur. Retrieved March 1, 2024, from <https://www.iimsirmaur.ac.in>
- Indian Institute of Management Tiruchirappalli. (2024). Indian Institute of Management Tiruchirappalli. Retrieved March 1, 2024, from <https://www.iimtrichy.ac.in>
- Kamath, G., Mallya, J., Kamath, V., & Payini, V. (2022). LibQUAL+® based importance–performance matrix analysis for assessing library service quality: A case study. *Annals of Library and Information Studies*, 69(4), 269–276. <https://www.i-scholar.in/index.php/alis/article/view/220586>
- Kaur, B., & Verma, R. (2009). Use and impact of electronic journals in the Indian Institute of Technology, Delhi, India. *The Electronic Library*, 27(4), 611–622.
- Kemp, S. (2023, February 4). Digital 2023: Global overview report — DataReportal – Global Digital Insights. DataReportal – Global Digital Insights. <https://datareportal.com/reports/digital-2023-global-overview-report>
- K P, S., & Haneefa, K. M. (2021). Service quality of special libraries in Kerala, India. *DESIDOC Journal of Library & Information Technology*, 41(2), 75–81. <https://doi.org/10.14429/djlit.41.02.15804>
- Kumar, H. A., & Dora, M. (2012). Research productivity in a management institute: An analysis of research performance of Indian Institute of Management Ahmedabad during 1999–2010. *DESIDOC Journal of Library & Information Technology*, 32(4), 365–372.
- Kumar Kainthola, V., & Singh, J. (2016). Availability of library web pages and web 2.0 technologies: A case study of selected Indian Institutes of Management (IIMs). *International Journal of Information Library and Society*, 5(2).

- <http://www.publishingindia.com/ijils/52/availability-of-library-web-pages-and-web-20-technologies-a-case-study-of-selected-indian-institutes-of-management-iims/533/3821/>
- Mahmood, K., Ahmad, S., Ur Rehman, S., & Ashiq, M. (2021). Evaluating library service quality of college libraries: The perspective of a developing country. *Sustainability*, 13(5), 2989. <https://doi.org/10.3390/su13052989>
- Mamta, & Kumar, V. (2024). A systematic review of library service quality studies: Models, dimensions, research populations and methods. *Journal of Librarianship and Information Science*, 56(2). <https://doi.org/10.1177/09610006221148190>
- Mandrekar, B., & Gadge, S. V. (2023). Use of web-based services by the College Libraries in Goa: A study. *International Journal of Information Dissemination and Technology*, 13(3), 132–134. <https://doi.org/10.5958/2249-5576.2023.00025.0>
- Ministry of Education, Government of India. (2024). Indian Institutes of Management (IIMs). Retrieved March 1, 2024, from <https://www.education.gov.in/iims>
- Mukherjee, S., & Patra, S. K. (2023). Digital library initiatives in India: A comprehensive study. *arXiv*. <https://doi.org/10.48550/arXiv.2303.13594>
- Murphy, J. E., Lewis, C. J., McKillop, C. A., & Stoeckle, M. (2022). Expanding digital academic library and archive services at the University of Calgary in response to the COVID-19 pandemic. *IFLA Journal*, 48(1), 83–98. <https://doi.org/10.1177/03400352211023067>
- Nair, R., & Doraswamy, M. (2016). Service quality assessment of academic libraries in India. *International Journal of Library and Information Science*, 8(3), 21–32.
- Nic, L. P. (2024). Institutions Government of India, Ministry of Education. Ministry of Education Government of India. Retrieved March 3, 2024, from <https://www.education.gov.in/iims>
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12–40.
- Posner, B. (2019). Insights from library information and resource sharing for the future of academic library collections. *Collection Management*, 44(2–4), 146–153.
- Pradhan, S. (2019). Assessing user satisfaction in Indian academic libraries: A service quality approach. *Annals of Library and Information Studies*, 66(4), 212–220.
- Ravichandran, T., & Babu, B. R. (2021). Assessment of user satisfaction and service quality of digital libraries in India. *Library Philosophy and Practice*, 2021(Summer), 1–18. <https://digitalcommons.unl.edu/libphilprac/>
- Sahoo, S., & Panda, K. C. (2017). Applications of Web 2.0 tools in IIT libraries in India: A study. *International Journal of Library Management and Services*, 4(1). <https://www.iitg.ac.in/lib/>
- Sahu, A. K., & Sahu, R. (2019). Evaluating the impact of library resources and services on user satisfaction in Indian universities. *Annals of Library and Information Studies*, 66(2), 75–82.
- Sanjeev, Kumar, Jha., Praveen, Babel. (2022). Exploring the Web-based library services and usage of e-resources at IIM Bodhgaya. *Journal of Information Management*, 9(2), 134–140. <https://doi.org/10.5958/2348-1773.2022.00014.5>
- Sharma, P., & Bhatt, R. K. (2023). User awareness about marketing of library products and services: A study of University College of Medical Sciences and Vallabhbhai Patel Chest Institute, University of Delhi, Delhi. *Library Herald*, 61(3), 66–88. <https://doi.org/10.5958/0976-2469.2023.00028.3>
- Sharma, P., & Shivcharan. (2023). Usability study of digital collections of select special libraries attached to Ministry of Culture, Government of India. *Library Herald*, 61(3), 51–65. <https://doi.org/10.5958/0976-2469.2023.00027.1>
- Sharma, S., & Gupta, V. (2016). LibQUAL+ in Indian academic libraries: A critical analysis. *DESIDOC Journal of Library & Information Technology*, 36(3), 153–160. <https://doi.org/10.14429/djlit.36.3.9507>
- ShodhSindhu Consortium. (2024). Retrieved March 1, 2024, from www.eshodhsindhu@infnlibnet.ac.in
- Singh, P., Nandy, A., & Singh, V. K. (2023). A bibliometric analysis of research output from Indian Institutes of Management. *DESIDOC Journal of Library & Information Technology*, 42(6), 364–376.
- Tyagi, S. (2022). Unveiling research productivity of premier IIMs of India (2010–2021). *Library Hi Tech*, 42(1), 350–379.
- Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2018). *Services marketing: Integrating customer focus across the firm* (7th ed.). McGraw-Hill.