

Computer Literacy and Electronic Resource Utilization among Academic Users in Higher Education Institutions**Dr. S. Mahalakshmi**

Librarian, C. Kandaswami Naidu College, Anna Nagar, Chennai, Tamilnadu.

Abstract

Computer literacy is an important enabling factor in the effective use of electronic information resources. This article examines computer literacy and selected digital-access characteristics of faculty members and research scholars in three university environments in Tamil Nadu. The study uses data from the doctoral survey covering Anna University, University of Madras and Agricultural University. A descriptive design and simple random sampling procedure were employed. From 894 questionnaires distributed, 736 usable responses were obtained. Percentage analysis, one-way ANOVA, chi-square, weighted average and correlation procedures were used in the original study. Overall, 45.7% of respondents strongly agreed that computer literacy was important for accessing electronic resources. The study also found that computer use and e-resource experience were widespread, although access conditions were not uniform. A total of 55.8% reported having internet connectivity at home, while 42.4% reported that they did not. Significant differences were reported in the original analysis between age and computer literacy and between educational qualification and computer literacy. Differences were also identified for selected relationships involving e-resource access and user characteristics. The findings indicate that availability of electronic resources alone does not ensure effective use; users require appropriate digital skills, connectivity and guidance. The article recommends structured information-literacy programmes, digital-skills development and improved access infrastructure as complementary components of university e-resource policy.

Keywords: Computer literacy; Digital literacy; Electronic resources; Information access; Academic users; Higher education.

Introduction

The thesis identifies computer literacy as a major component of effective access to digital information. It reports that 45.7% of respondents strongly agreed that computer literacy is necessary for accessing e-resources. The growth of digital scholarship has made the effective use of electronic information an important component of university teaching, learning and research. Academic libraries increasingly provide access to electronic journals, books, databases, reference sources and web-based services. Understanding how users interact with these resources is therefore necessary for effective library planning.

Background of the Study

The doctoral study on which this article is based examined the perception and usage of electronic resources in three different university environments in Tamil Nadu. It considered computer literacy, research productivity, experience of e-resource use, library facilities, purpose and barriers, search strategy and user satisfaction. The original thesis used a questionnaire survey of faculty members and research scholars and organized the investigation around these dimensions.

Statement of the Problem

Although universities provide electronic information resources, differences in computer literacy, internet access and prior experience may influence the ability of faculty members and research scholars to use those resources effectively. The article therefore focuses on the digital competency dimension of e-resource use.

Objectives of the Study

1. To assess respondents' computer-literacy perceptions in relation to e-resource access.
2. To examine patterns of computer and internet use among academic users.
3. To assess the relationship between selected demographic characteristics and computer literacy.
4. To examine the role of e-resource experience in digital information use.
5. To identify implications for improving digital information literacy.

Methodology**Research design**

A descriptive research design was adopted in the original study.

Population

The population comprised faculty members and research scholars of Anna University, University of Madras and Agricultural University in Tamil Nadu.

Sample

A total of 894 questionnaires were distributed and 736 usable questionnaires were returned, giving an 82.32% response rate. The final respondents comprised faculty members and research scholars from the three surveyed universities.

Sampling technique

Simple random sampling was adopted. The researcher obtained lists of faculty members and research scholars from the concerned departments and selected respondents using the sampling procedure described in the thesis.

Data collection

Primary data were collected through a structured questionnaire covering demographic characteristics, computer literacy, research productivity, experience and frequency of e-resource use, library facilities, purpose and barriers, search strategies and user satisfaction. The questionnaire was

reviewed by experienced researchers and experts, and a pilot survey involving 20 faculty members and 10 research scholars was conducted before final data collection.

Statistical techniques

The original study used percentage analysis, mean, standard deviation, one-way ANOVA, chi-square, weighted-average methods and rank correlation. The specific techniques reported in each article are used descriptively in accordance with the original thesis.

Results and Discussion

The original survey found that computer literacy was widely recognized as important for accessing electronic resources. The three-university total showed 45.7% strongly agreeing with the importance of computer literacy.

Indicator	Result
Computer literacy	45.7% strongly agreed that computer literacy is important for accessing e-resources.
Home internet	55.8% reported home internet access.
No home internet	42.4% reported no home internet connection.
Computer use	Respondents across the universities reported regular computer use, with alternate-day use prominent in the overall finding.
Inferential findings	Significant differences were reported between age and computer literacy and between educational qualification and computer literacy.

The results should be interpreted within the scope of the original survey. They describe the perceptions and practices of the 736 respondents and should not be generalized beyond comparable populations without further research. The pattern across the three universities indicates that electronic resources had become an important component of academic information use, while access, digital skills, service support and institutional differences continued to influence the user experience.

Major Findings

1. Computer literacy was recognized as an important prerequisite for accessing e-resources.
2. Internet access was available to a majority but remained absent for a substantial proportion of respondents.
3. Age and educational qualification were associated with significant differences in computer-literacy measures in the original analysis.
4. Digital infrastructure and user competency need to be addressed together.
5. User education can reduce difficulties associated with electronic information access.

Conclusion

Computer literacy functions as an important bridge between the availability of electronic resources and their actual use. The findings suggest that universities should treat digital competency as

a continuing academic support requirement rather than as a one-time technical skill. E-resource subscriptions should therefore be accompanied by information-literacy and digital-skills initiatives.

References

1. Allison, C. M., Bottu, S., Heckadon, M. I., & Leider, A. M. (2016). An Analysis of Student Internet Usage and its Impact on the Infrastructure of a School's Information Technology Services. Proceedings of Student-Faculty Research Day, CSIS, Pace University, May 6th, 2016.
2. Divya, L., & Pillai, S. K. (2015). Use of Internet Tools and Services by Research Scholars of the University of Kerala. SRELS Journal of Information Management, 52(6), 471-478.
3. Eke, H. N., Omekwu, C. O., & Agbo, J. (2014). Internet Search Strategies Employed by Library and Information Science Students of University of Nigeria, For Research. Library Philosophy and Practice (e-journal), 1194. Retrieved from <http://digitalcommons.unl.edu/libphilprac/1194>.
4. Hossain, A., Arifin, M. M., Ahammed, S., & Hossain, M. T. (2018). Social, Academic Performance among Internet Use and Its Impacts on University Students: A Case Study in Bangabandhu Sheikh Mujibur Rahman Science and Technology University. Arts Social Science Journal, 9(5), 411. DOI:10.4172/2151-6200.1000411
5. Hossain, M. A., & Rahman, M. H. (2017). Comparative Study of Internet Usage among University Students: A Study of the University of Dhaka, Bangladesh. European Scientific Journal, 15(34), 134-150.
6. Mallya, J., & Lakshminarayanan, S. (2017). Factors Influencing Usage of Internet for Academic Purposes Using Technology Acceptance Model. DESIDOC Journal of Library & Information Technology, 37(2), 119-124. DOI: 10.14429/djlit.37.2.10694
7. Raval, B. N., & Mandalia, S. H. (2014). Internet Use by Faculty Members: A Study. SRELS Journal of Information Management, 51(3), 155-158.



International Research Journal of Education and Technology (IRJEdT)

|| ISSN: 2581-7795, Impact Factor 5.007 ||

|| Peer-Reviewed | Open Access | International Journal ||

|| Volume: 08 | March: 03 | March- 2025 | www.irjweb.com ||