



COMPARATIVE ASSESSMENT OF ELECTRONIC RESOURCE FACILITIES AND USER EXPERIENCE IN ENGINEERING, SCIENCE AND AGRICULTURAL UNIVERSITY ENVIRONMENTS

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Abstract:

University environments differ in disciplinary orientation, information requirements and institutional infrastructure, and these differences may influence electronic-resource use. This article presents a comparative assessment of e-resource facilities and user experience among academic communities in Anna University, University of Madras and Agricultural University in Tamil Nadu. The study is based on 736 valid questionnaire responses from faculty members and research scholars. The original research adopted a descriptive design and simple random sampling, and data were analyzed using percentage, weighted average, one-way ANOVA, chi-square, standard deviation and correlation. The findings show that 35.3% of respondents visited the library daily and 41.2% considered the library's e-resource provision to be available to a large extent. Further, 51.6% reported that libraries organized user-education programmes periodically. E-journals were prominent among the available and used electronic resources. The comparative analysis also identified differences among university groups in computer literacy, e-resource facilities, satisfaction and related user characteristics. The overall weighted-average analysis placed Anna University first for several e-resource facility measures, while satisfaction rankings differed across the institutions; these are reported here descriptively rather than as an overall institutional judgment. The study indicates that institutional context matters in planning e-resource services. University libraries should assess their users' discipline-specific needs, access patterns and satisfaction levels and should use these findings to develop appropriate collections, training programmes and infrastructure.

Key Words: Comparative Study; University Libraries; Electronic Resources; User Experience; Library Facilities; Academic Community

Introduction:

The original thesis explicitly compares three university environments representing engineering, science and humanities, and agricultural academic contexts. The scope was limited to faculty members and research scholars in Anna University, University of Madras and Agricultural University. 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:

Different university environments may provide different levels and types of electronic resources and may have different user needs. A comparative assessment can help identify institutional variation in facilities, access, training and satisfaction.

Objectives of the Study:

- To compare selected e-resource facilities across the three university environments.
- To examine library visitation and user-education participation.
- To compare users' perceptions of e-resource availability.
- To identify differences in satisfaction and related user characteristics.
- To suggest institution-sensitive strategies for e-resource development.

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 comparative results show both common patterns and institutional variation.

Indicator	Result
Daily library visits	35.3% overall reported daily library visits.
E-resource provision	41.2% stated that libraries provided e-resources to a large extent.
User education	51.6% reported periodic library user-education programmes.
Major resource	E-journals were prominent in the reported availability/use pattern.
Comparative variation	The original inferential analysis identified significant differences for several user and service variables

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:

- The three university environments shared broad dependence on electronic information resources.
- Library visitation remained relevant despite increasing electronic-resource use.
- Periodic user education was reported by a majority.
- Patterns of facilities, computer literacy and satisfaction varied among the university groups.
- Institutional and disciplinary context should be considered when planning e-resource services.

Conclusion:

A single e-resource strategy may not address the needs of all university environments. Engineering, science and humanities, and agricultural communities may require different information resources, access arrangements and training approaches. Comparative user studies can therefore support evidence-based library planning and resource allocation.

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