USE OF DIGITAL AND PRINT RESOURCES IN UNIVERSITY LIBRARIES AND THEIR IMPACT ON STUDENTS' ACADEMIC ACHIEVEMENT: EVIDENCE FROM INDIAN UNIVERSITIES

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Abstract: Academic libraries are increasingly operating in hybrid environments where digital and print resources coexist. Understanding how students utilize these resources and how such use influences academic achievement is essential for evidence-based library planning. This study investigates the extent of use of digital and print resources in university libraries and examines their relationship with students' academic achievement. A quantitative survey method was employed, collecting data from 420 students enrolled in selected universities in Haryana State, India. Descriptive statistics and Pearson's correlation analysis were used to analyze usage patterns and academic impact. The findings indicate extensive use of both print and digital resources, with a clear preference for electronic resources such as e-journals and online databases for assignments and research work. Print resources remain important for syllabus-oriented learning. A statistically significant positive correlation was found between effective utilization of library resources and academic achievement. The study highlights the continuing relevance of hybrid library collections and emphasizes the need for user education and professional librarian support to maximize academic benefits.

Keywords : Academic libraries; Digital resources; Print collections; Academic achievement; Library use; Higher education

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1.0 Introduction

University libraries have long been recognized as central to academic life, supporting teaching, learning, and research through access to authoritative information resources. In recent years, the rapid growth of information and communication technologies (ICT) has transformed academic libraries into hybrid systems integrating traditional print collections with a wide range of digital resources. This transformation has altered information-seeking behavior, resource preferences, and expectations of library services among students.

The increasing reliance on electronic journals, e-books, and online databases has raised important questions regarding the academic impact of library resource use. While digital resources offer advantages such as remote access, currency, and rapid retrieval, print resources continue to play a vital role in structured learning and conceptual understanding. Evaluating the combined contribution of digital and print resources to students' academic achievement is therefore critical for informed library management.

In the Indian higher education context, university libraries have significantly expanded access to digital resources through national consortia and institutional subscriptions. Haryana State represents a rapidly developing higher education environment, comprising state, central, agricultural, and private universities. Libraries in these institutions operate within a hybrid framework, making them suitable settings for examining patterns of resource use and academic impact.

This study addresses the following research question:

To what extent does the utilization of digital and print library resources influence

students' academic achievement?

By providing empirical evidence from Indian universities, the study contributes to the international discourse on library value and impact assessment.

2.0 Literature Review

Previous research consistently demonstrates a positive association between academic library use and student learning outcomes. Applegate (2009) emphasized that academic libraries function as essential learning spaces supporting focused study. Tenopir and King (2000) highlighted the scholarly value of electronic journals in improving research quality and productivity.

Studies focusing on digital resource use report a growing preference for electronic formats among university students. Kaur (2014) and Thanuskodi (2012) found that e-journals and databases are widely used for coursework and research due to ease of access and up-to-date content. Chowdhury (2010) observed that digital libraries enhance academic efficiency by reducing search time and enabling remote access.

At the same time, print resources remain academically relevant. Mulla (2011) reported that students continue to rely on print books for syllabus-based study and foundational learning. This supports the argument for maintaining balanced hybrid collections rather than fully replacing print resources.

The literature also emphasizes the importance of librarian support and information literacy instruction. Hernon and Altman (2010) argued that professional assistance enhances effective resource use and user satisfaction. Information literacy programmes have been shown to improve students' confidence and academic engagement (Singh, 2013).

Despite extensive research, limited empirical studies in the Indian context have examined the combined impact of print and digital resource use on academic achievement. The present study addresses this gap by offering statistically tested evidence from university libraries.

3. 0 Objectives and Hypothesis

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1. To examine the extent of use of print and digital resources by university students.

2. To assess students' perceptions of the academic value of library resources.

3. To analyze the relationship between library resource utilization and academic achievement.

3.2 Hypothesis

H₁: Effective utilization of digital and print resources in university libraries is positively correlated with students' academic achievement.

4.0 Methodology

4.1 Research Design: A quantitative, cross-sectional survey design was adopted to collect empirical data from student users of university libraries.

4.2 Sample and Data Collection: The study sample consisted of **420 students**, selected using stratified random sampling from selected universities in Haryana State. A structured questionnaire based on a four-point Likert scale was used to measure frequency of library use, type of resources used, and perceived academic impact.

4.3 Data Analysis: Data were analyzed using descriptive statistics (frequency and percentage) to identify usage patterns. Pearson's product-moment correlation coefficient was applied to test the hypothesis at the 0.01 significance level.

5.0 Results

The results indicate that a majority of students regularly use university libraries for academic purposes. Print books are widely used for examination preparation and syllabus-based learning, while digital resources are preferred for assignments, projects, and research activities.

Students reported that digital resources significantly save time and enhance the quality of academic work by providing access to current and peer-reviewed content. Correlation analysis revealed a strong positive and

statistically significant relationship between effective library resource utilization and academic achievement, leading to acceptance of the hypothesis.

6.0 Discussion

The findings support earlier studies that emphasize the academic value of library use. The strong correlation between resource utilization and academic achievement confirms that libraries contribute directly to learning outcomes. The coexistence of print and digital resources reflects a hybrid usage pattern consistent with international trends.

The results also highlight the importance of professional librarian support and information literacy initiatives in maximizing the academic benefits of library resources. These findings reinforce the argument that investment in both collections and human expertise is essential for effective academic libraries.

7.0 Conclusion and Implications

This study provides empirical evidence that effective use of digital and print resources in university libraries positively influences students' academic achievement. Digital resources enhance efficiency and research quality, while print collections remain essential for structured learning. The findings underscore the need for balanced collection development, strengthened information literacy programmes, and continued professional support.

For library administrators and policymakers, the study highlights the importance of sustaining hybrid library models and aligning library services with academic needs. Future research may extend this investigation through longitudinal or comparative studies across regions and disciplines.

8.0 References

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