

Print or Digital? Exploring Preferences and Usage of E-Resources among Undergraduate Students in Agricultural Universities.

Dr. Kulveen Kaur

Bhai Kahn Singh Nabha Library, Punjabi University, Patiala - 147 002

Abstract

The findings indicate a clear shift toward digital platforms, with users expressing a high level of comfort in accessing and utilizing e-resources. Features such as fast searching and ease of downloading emerged as the most valued attributes, highlighting that efficiency and user-friendliness are key determinants in the effective use of electronic collections. The study reveals that users prefer a combination of print and electronic formats of information resources. This suggests that e-resources complement the traditional print resources. The study concludes that a hybrid model of library, integrating print and electronic resources, is most suitable for meeting the diverse needs of undergraduate users. The findings underscore the importance of enhancing the usability and functional efficiency of e-resources while maintaining a balanced and inclusive collection development strategy.

Keywords: maintaining, efficiency, functional, development

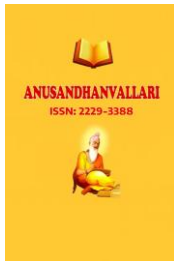
1 Introduction

Technology is integral to education and learning. The influx of electronic information has brought a sea change in the outlook of libraries. This has sparked a revolutionary change in the information-seeking behaviour of youth. The changing landscape of information and electronic resources has brought a significant transformation in the way information is produced, searched, and consumed. Traditional resources, though, provide the immeasurable joy of reading and holding a book closer to you; digital or electronic resources require a screen, but are efficient, portable, user-friendly, and provide instant access. The choice between print and electronic information resources has become unnecessarily indistinct because of the stability of printed information, which can be conserved for future generations, and the varied features of electronic information sources.

This paper broadly explores the resource preference of print or digital resources and the utilization of electronic resources. The study contributes to the understanding of evolving user preferences in agricultural universities and provides insights for developing user-centric library services in the context of the print-to-digital transition.

2 Literature Review

Library resources are integral to the higher education system. Several studies have focused on the print vs. electronic resources landscape of libraries. Agboola (2010) explored the use of print and electronic resources by the agricultural science students in Nigerian universities for their academic work. The study highlights that the importance of print resources cannot be undermined, but electronic resources have much potential. However, the inadequacy of internet connectivity and the lack of user skills are the major hindrances in the use of e-resources. Ji, Sung Wook et al. (2014) investigated the users' preferences and learning outcomes of print versus electronic



resources. It was found that users preferred the electronic format for accessing and the print format for deep learning. Two-thirds of the users preferred to take printouts for learning and accessing. Kumar, Vinod, Vandana, Batra, D. K. (2018) emphasise the usage of e-resources by the management students in Nagpur. Students show uneven awareness of e-resources, as the majority of users are aware only of EBSCO and Emerald databases. However, the use of print resources was slightly higher than that of e-resources. Yamson et al. (2018) stated that 134 (57.0%) users always prefer the print format of resources for their academic work while 101(43%) occasionally preferred the electronic resource format. Bhat (2018) examined users' engagement with e-resources and observed that e-resources have a positive impact on the users of agricultural universities. Scientists, research scholars and master's students have uniformity in using e-resources. However, the study lacks in taking the views of users with respect to print resources. Idiegbeyan-ose et al. (2019) highlight the preference of undergraduate students and reveal that 110 (47.6 %) users prefer print resources, and 110(47.6 %) users prefer electronic resources. This implies that both print and electronic resources are complementary in meeting the information needs of undergraduates.

The studies reflect a valuable insight regarding the shift in education from print to digital resources. A comprehensive study has been undertaken to gain knowledge of how often users choose each format and the comfort they find in using a particular format, and if e-resources have eased the task of research. This study enables a critical analysis of the existing information dissemination set-up of agricultural universities and the users' preference for electronic resources.

3 Objectives and Methodology

To keep pace with the evolving needs of society, libraries are becoming dynamic in its resources and services. Students have different perceptions and preferences regarding the use of e-resources. The study is confined to the undergraduate users of three agricultural university libraries of Punjab, Haryana and Himachal Pradesh.

The objectives of the present study is to:

- (a) assess the purpose of the visit to the library
- (b) identify the preference regarding the format of information resources.
- (c) know the comfort in using e-resources.
- (d) explore whether e-resources can replace print resources

A structured questionnaire was developed for the purpose of data collection and distributed randomly to 151 undergraduate students. The data has been collected from 82 UG students from PAU, 32 students from CCSHAU, and 37 from CSKHPAU. In addition to the demographic profile of the students, various significant parameters such as purpose of visit to the library, preference of format of the information resources, users' comfort in the use of e-resources, etc., are framed according to the objectives of the study. Besides this, expert opinion was sought for deciding the appropriateness and the sequence of the questions in the questionnaire. To maintain the accuracy of information and eliminate non-response error, the researcher interviewed all the respondents individually, which resulted in a 100 per cent response rate.

4 Data Analysis

Undergraduate students are the core assets of the university framework, elevating their skills through the strategic use of information resources is a direct pathway to academic excellence.

Significant aspects related to the above objectives were investigated and analysed, therefore.

4.1 Use of Library: Library visit

Libraries play a vital role in bridging the divide, especially in the context of education, information access, and digital inclusion. They connect the scholars with information, technology, and learning opportunities contributing to inclusive growth and informed societies. Table 1 indicates the frequency of the students with respect to the library visit on a daily or weekly basis. The daily usage of the library is highest among CCSHAU students (40.62%), followed closely by PAU (39.24%), while CSKHPAU shows relatively lower daily usage (27.78%). Similarly, the proportion of students accessing e-resources twice a week is comparable across the PAU (35.44%) and the CSKHPAU (33.33%) showing slightly higher engagement of the students than the students of CCSHAU (28.12%).

Universities	Daily (%)	Twice a week (%)	Fortnightly (%)	Monthly (%)	Occasionally (%)
PAU	39.24	35.44	3.8	3.8	17.72
CCSHAU	40.62	28.12	6.25	9.38	15.62
CSKHPAU	27.78	33.33	2.78	8.33	27.78

Table 1 Frequency of Library visit

In contrast, the occasional usage of the library is notably higher among CSKHPAU students (27.78%) compared to PAU (17.72%) and CCSHAU (15.62%), suggesting relatively less frequent engagement. However, fortnightly and monthly usage remains relatively low, indicating that the majority of students prefer more frequent interaction with the hybrid nature of the resources.

4.2 Purpose of Library Visit

Purpose	Average Rank	Average Score	Total
Issue/Return of documents	3.64	60.72	809
Consultation of books	2.44	75.79	991
Class assignment	2.68	72.81	955
Research	4.69	47.64	651
Access E-resources	5.40	38.70	543
Recreation	6.65	23.14	355
Update yourself	4.87	45.41	624
Access Internet	5.75	34.31	490

Table 2 Purpose of Library Visit

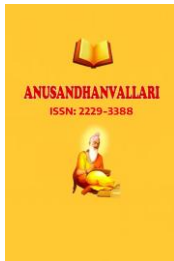


Table 2 illustrates the purpose of library visits by the students, which reveals notable variations in the user preferences. Among all the purposes, the majority of students visit the library to consult books that have the highest average score (75.79) and the lowest average rank (2.44), making it the most preferred activity among the students of all the universities. This is closely followed by the class assignment, indicating that students like to visit the library. Issue and return of documents also shows significant usage with a total average score of 809 and a relatively favourable rank.

On the other hand, the purpose of using the library for recreation emerged as the least preferred, with the lowest average score and the highest average rank, indicating minimal use of library resources for leisure activities. Similarly, lower average scores for accessing the Internet and accessing e-resources suggest comparatively limited digital or online usage.

Overall, the findings highlight that the primary purpose of library use is for traditional activities such as book consultation and class assignments, taking precedence over digital use.

Correlating the findings of Table 1 and Table 2, it indicates that rather than a shift from print to digital, the study highlights a balanced integration of both formats, reinforcing the continued relevance of hybrid library systems in academic research.

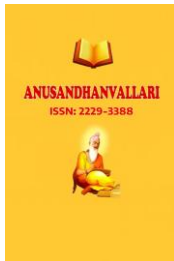
4.3 Print vs. Electronic Information Resources

The cutting-edge technology and the debate between print and digital collections have evolved as a result of globalisation and technological innovations. Print collection offers deep reading and more reliability, whereas digital collections excel in accessibility and faster real-time updates. Table 3 highlights the students' preferences for variable features of e-resources. It reflects that students are primarily driven by attributes such as fast searching, ease of downloading, and ease of note-making.

Features of e-resources	Average Rank	Average Score	Total
Fast searching	2.93	72.96	1067
Easy to download	3.52	66.41	978
Easy to make notes	3.91	62.14	920
Round the clock availability	5.25	47.28	718
Availability in advance of print resources	5.26	47.06	715
Customization of the document	6.04	38.45	598
Easily accessible	4.48	55.74	833
Less Space	6.50	33.37	529
Portability	7.09	26.75	439

Table 3 Features of E-resources

Fast searching attribute is the most highly preferred feature, with the lowest average rank and the highest average score, highlighting its importance to the students. Easy to download and easy to make notes features of the electronic resources also rank high, specifying efficiency and user-friendliness of the e-collections are the key priorities for enhancing library services. Additionally, easily accessible features and other features such as round



the clock availability and availability of e-resources in advance of print resources are used moderately indicating that students value accessibility but slightly less than efficiency-related features (fast searching, ease of downloading, etc.).

However, features with lower preference include customization of the document, less space, and portability, suggesting that while these features may be useful, they are not the primary drivers of library resource use.

Overall, the findings indicate that users prioritize speed, ease of download, and note-making capabilities of e-resources over other attributes. Also, it suggests consistency in students' perceptions. However, it reflects considerable variability in how differently features are valued.

4.4 Preference of Format and User Comfort

Table 4 determines the preference for different formats of resources. Among the universities, CSKHPAU shows the highest preference for combined format usage (83.78%), followed by CCSHAU (78.12%) and PAU (62.20%). PAU, however, has comparatively higher percentages for only print (13.41%) and only electronic (24.39%) formats, indicating more diverse preferences among its users.

Format	Only Print (%)	Only Electronic (%)	Both Print and Electronic (%)
PAU	13.41	24.39	62.2
CCSHAU	6.25	15.62	78.12
CSKHPAU	2.7	13.51	83.78

Table 4 Preference of Format of Information Sources

This suggests that although digital collections are gaining importance, they are not yet fully replacing traditional print materials. Overall, the findings suggest that users predominantly favour a hybrid model of information access, combining both print and electronic resources, while reliance on a single format remains limited.

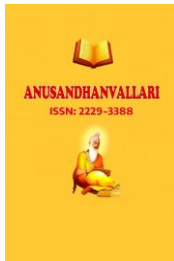
User Comfort	Yes (%)	No (%)
PAU	81.71	18.29
CCSHAU	84.38	15.62
CSKHPAU	86.49	13.51

Table 5 User Comfort in Using E-Resources

Table 5 determines the comfort of users in using the digital collection. The majority of users feel comfortable using the library facilities. Among the universities, CSKHPAU exhibits the highest comfort level (86.49%), followed by CCSHAU (84.38%) and PAU (81.71%). This illustrates that users across these universities have consistent perceptions of comfort.

4.5 Statement Analysis

Users' feedback on the statements 'Use of e-Resources has eased the task of research' and 'the e-resources can replace print resources' has been taken based on the data collected across the three universities. Table 6 identifies



the perception of the users if e-resources have eased the task of research. The result indicates a positive perception where the majority of users either agreed or strongly agreed with satisfaction. The CSKHPAU recorded the highest level of agreement, with 64.86 percent of users agreeing and 27.03 percent strongly agreeing, suggesting that users at CSKHPAU perceive the library services very positively. PAU and CCSHAU also show strong agreement levels, though CCSHAU respondents indicate some uncertainty among users.

Altogether, the responses indicate a positive perception toward e-collections, with a substantial majority of users expressing agreement with these statements. This suggests that users widely acknowledge the effectiveness of e-resources in facilitating research activities and recognize their potential to complement traditional print resources.

Universities	Strongly Agree (%)	Agree (%)	Strongly Disagree (%)	Disagree (%)	Can't Say (%)
PAU	30.49	56.1	1.22	4.88	7.32
CCSHAU	28.12	46.88	3.12	3.12	18.75
CSKHPAU	27.03	64.86	0.00	0.00	8.11

Table 6 Use of e-resources in research

Table 7 exhibits the level of agreement if e-resources can replace print resources. The majority of the users agree partially, where CSKHPAU users had particularly highly partial in agreement (81.08%), while CCSHAU displayed a more balanced response (46.88%).

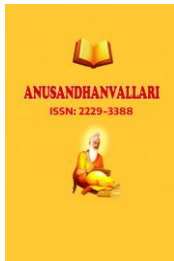
Universities	Fully Agree (%)	Partially Agree (%)	Disagree (%)
PAU	20.73	69.29	10.98
CCSHAU	43.75	46.88	9.38
CSKHPAU	16.22	81.08	2.7

Table 7 Can e-resources replace print resources

Overall, the findings indicate that users predominantly expressed moderate agreement, with strong agreement less common and disagreement rare.

Conclusion

The future of libraries is not defined by a choice between print and digital but by their balanced coexistence. While digital collections will dominate in terms of access and scalability, print will continue to hold significance for academic depth and preservation. Libraries of the future will be hybrid, user-centred, and technology-driven, ensuring that both formats work together to support research, learning, and knowledge dissemination.



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