USAGE OF ICT-BASED SERVICES AND RESOURCES AMONG THE RESEARCH SCHOLARS OF SOUTH CAMPUS LIBRARY, UNIVERSITY OF DELHI

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ABSTRACT

This paper is intended to evaluate the use of Information and Communication Technology (ICT)- based services among the research scholars of the South Campus, University of Delhi. To conduct the study, a survey research method was used, in which a total of 120 questionnaires were distributed randomly; 110 were returned and analyzed to meet the study's objectives. The study found that the maximum number of scholars use ICT-based resources and services weekly, and the maximum number of scholars use E-book/E-journal-type ICT resources. Most research scholars are satisfied with the ICT infrastructure of the South Campus Library; however, the lack of skilled staff is a significant problem for scholars when using ICT-based resources and services.

Keywords: *ICT, Research Scholar, South Campus Library, ICT Resources, ICT services.*

1. INTRODUCTION

ICT, which stands for Information and Communication Technology, is integral to any library, providing advanced services and automating its operations. With the advent of ICT, libraries can manage and provide their resources and services digitally. The use and application of ICT (Information and Communication Technology) in library and information services have revolutionized the way we access and manage information. With ICT, libraries can digitize their collections, making them accessible online to a wider audience. It also enables efficient cataloging, searching, and retrieval of information, saving time and effort. Additionally, ICT facilitates online library services, such as e-book lending, virtual reference assistance, and interactive learning platforms. Overall, ICT enhances the effectiveness and reach of library and information services in the digital age. ICT plays a crucial role in enhancing access to information, promoting digital literacy, and supporting the learning and research needs of college students. ICT can provide access to online databases, offering students scholarly articles, research papers, and other digital resources. ICT enables college libraries to provide e-books and e-journals, allowing students to access them anytime, anywhere on their devices. By integrating with Learning Management Systems (LMS), ICT helps libraries provide access to library resources and services within the online learning environment.

2. OBJECTIVES

a) To find out the type of tool used for ICT-based resources.
b) To measure user satisfaction through the use of ICT.
c) To find out the type of ICT-based resources used in the library
d) To find out the type of ICT-based service provided by the library.
e) To identify the challenges faced in the use of ICT.

3. METHODOLOGY

Research has become an essential aspect of human activities, driving the growth and development of knowledge and the management of libraries and organizations. To conduct the study "*Usage of ICT-Based Services among the Research Scholars of South Campus Library, University of Delhi,*" the following databases were used: *Web of Science, Scopus, LISA, LISTA, and Emerald*. To complete the study, a well-structured questionnaire was used to collect data. A total of 120 questionnaires were randomly distributed among the research scholars of South Campus, and 110 were returned. The collected data were analyzed using MS-Excel to meet the objectives of the study.

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4. LITERATURE REVIEW

Ahmad & Sheikh (2021) did a case study at the University of the Punjab, Pakistan. The main objective of the research was to review the impact of information and communication technologies (ICT) on students of the University of the Punjab, Pakistan. To conduct the study, a survey method was used, with a questionnaire as the data collection tool. A total of 275 questionnaires were distributed and returned, and it was found that the university has access to various information and communication technologies (ICT) resources and has many pieces of ICT equipment available for use. The ICT infrastructure helps users search, retrieve, and consult various information sources to meet their information needs. Olatoye, Nekhwevha & Muchaonyerwa (2021) conducted a study of undergraduate students using a survey method with a questionnaire. A total of 377 questionnaires were distributed, and 266 were received. The main objective of the research is examining the significance of information and communication technologies (ICT) on students in undergraduate level and found that maximum number of students use online repositories with 73 (28.6%) followed by electronic library resources with 60 (22.6%) Subba & Das (2019) objective of the study was to find out the usage of ICT in 20 colleges of west Bengal. To study the status of Library automation, ICT Infrastructure, and to find the barriers to the implementation of library automation. Mohamedhoesein (2017) analyzed the use of ICT by second-year college students in the Netherlands. The research was conducted in the fall of 2014 at the Department of Technology at the Hague University of Applied Sciences. For data collection, an online survey was administered to 223 second-year students in the Department of Technology. Of 223 online questionnaires, 136 were returned, for a response rate of 61%. It was found that the majority of respondents were male (75%), and the rest were female (25%). It was noted that the Ethnicity was observed, with 70% of the respondents in the majority and 30% in the minority. A considerable number of users (68%) were from the Netherlands, whereas the fewest respondents (2% each) were from Suriname, Colombia, and Morocco, respectively. Buarki, Hepworth & Murray (2011) conducted a study to examine the needs and abilities regarding ICT tools and techniques. Anunobi and Edoka (2010) examined how the university library plays a pivotal role in the information-providing system for teaching, learning, and research. Chandrasekar and Venkatesh (2010) among the Health Science libraries in Mangalore. The results revealed that the study was conducted using a questionnaire survey. It is also noted that most respondents were from the medical, pharmacy, dental, and physiotherapy fields. Kumar & Biradar (2010) discussed that the paper reviews the use of information and communication technology (ICT) in College libraries in Karnataka. The study investigates ICT infrastructure, librarians' attitudes towards ICT use, the current status of library automation, and barriers to its implementation. The study used a questionnaire to collect data. The study found that ICT in college libraries has not reached a very high level. The study observed that various factors are responsible for achieving their very high level, i.e., lack of training and a shortage of qualified staff are the primary reasons that library operations cannot be automated. Lack of budget, lack of manpower; however, library professionals among the Karnataka College libraries have a positive attitude towards the use of ICT applications

5. DATA ANALYSIS

5.1 Frequency of Use of ICT Resources and Services provided by the Library

Table 5.1 shows that 36% (40) of respondents use ICT resources and services weekly, followed by 35% (38). This proves that the maximum number of scholars are aware of and use these resources daily to meet their information needs.

Table 5.1: Frequency of Use of ICT Resources and Services

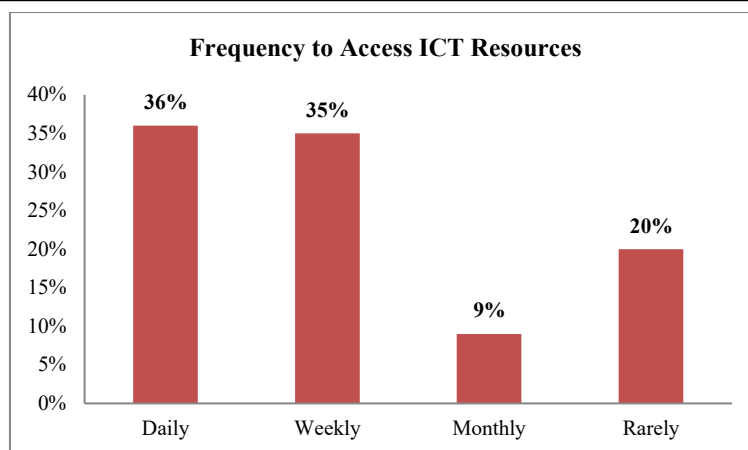| Frequency	No. of Response (N=110)	Percentage (%)
Daily	40	36%
Weekly	38	35%
Monthly	10	9%
Rarely	22	20%
Total	**110**	**100%**

Fig. 5.1: Frequency of Use of ICT Resources and Services

5.2 Types of Resources Used

Table 5.2 shows the maximum number of research scholars on the South Campus who used e-books and E-Journal resources when using ICT, with 55% (60). This indicates that scholars are highly engaged in accessing E-books and E-Journals to fulfill their information needs, followed by internet-based services with 27% (30).

Table 5.2: Types of Resource Used

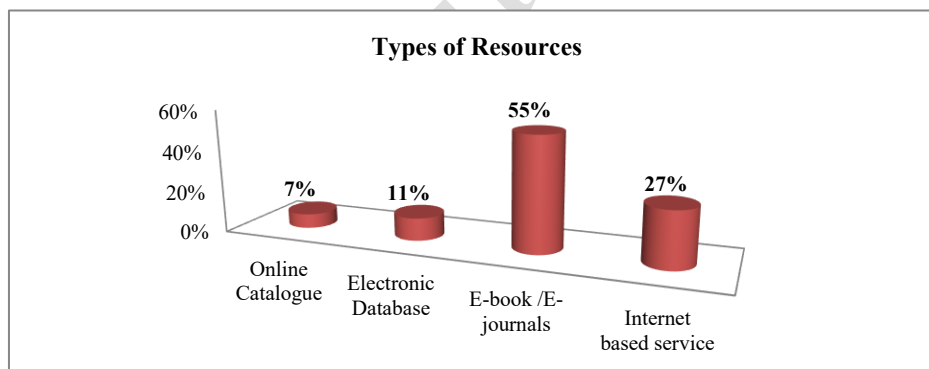| Types of Resource	No. of Response (N=110)	Percentage (%)
Online Catalogue	8	7%
Electronic Database	12	11%
E-book /E-journals	60	55%
Internet-based Resources	30	27%
Total	**110**	**100%**

Fig. 5.2: Types of Resource Used

5.3 Satisfaction Level of ICT Infrastructure and Services of the Library

Table 5.3 shows that 27% (30) of respondents reported that they are delighted with the library's ICT infrastructure and services, and 36% (40) reported that they are Satisfied with the ICT infrastructure and services of the library. This indicates that the library is offering better ICT Infrastructure and Services to research scholars.

Table 5.3: Satisfaction Level of ICT Infrastructure and Services of the Library

Satisfaction Level	No. of Response (N=110)	Percentage (%)
Very Satisfied	30	27%
Satisfied	40	36%
Neutral	25	23%
Dissatisfied	12	11%
Very Dissatisfied	3	3%
Total	**110**	**100%**

Satisfaction Level

Fig. 5.3: Satisfaction Level of ICT Infrastructure and Services of the Library

5.4 Most used ICT tools for studies

Table 5.4 shows that the maximum number of scholars used 55% (60) Desktop Computers for their studies, followed by smartphones at 27% (30), while 9% (10) scholars used laptops in the South Campus Library.

Table 5.4: Most used ICT tools for studies

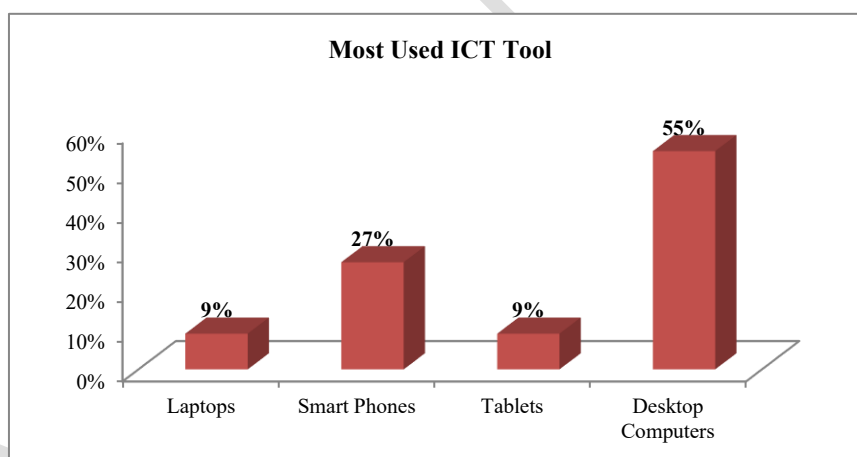| Most used ICT tools	No. of Response (N=110)	Percentage (%)
Laptops	10	9%
Smart Phones	30	27%
Tablets	10	9%
Desktop Computers	60	55%
Total	**110**	**100%**

Most Used ICT Tool

Fig. 5.4: Most Used ICT tool

5.5 Challenges Faced while Using ICT for Academic Purposes in the Library

Table 5.5 Shows that the maximum number of scholars 36% (40) are facing lack of skilled staff to trained them to access ICT based resources followed by 29% (32) respondents' response that they are facing Internet issue while using the ICT for academic purpose while 11% (12) respondents' response that they are facing difficulty in navigation while using the ICT.

Table 5.5: Challenges Faced while Using ICT for Academic Purposes in the Library

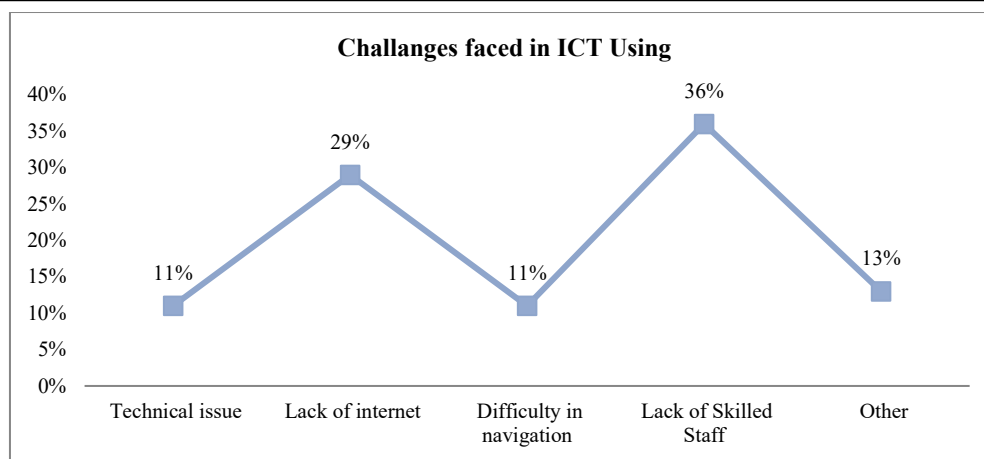| Challenges faced when using ICT	No. of Response (N=110)	Percentage (%)
Technical issue	12	11%
Lack of internet	32	29%
Difficulty in navigation	12	11%
Lack of Skilled Staff	40	36%
Other	14	13%
Total	**110**	**100%**

Fig. 5.5: Challenges Faced while Using ICT for Academic Purposes in the Library

5.6 Access and Availability of the Internet in the South Campus Library

Table 5.6 shows that 56% (62) of respondents reported that Access and Availability of the Internet are Adequate, followed by 33% (36) who reported that Access and Availability of the Internet are good/very good. In comparison, 11% (12) of respondents reported that the Internet's Access and Availability are poor/very poor.

Table 5.6: Access and Availability of the Internet in South Campus Library

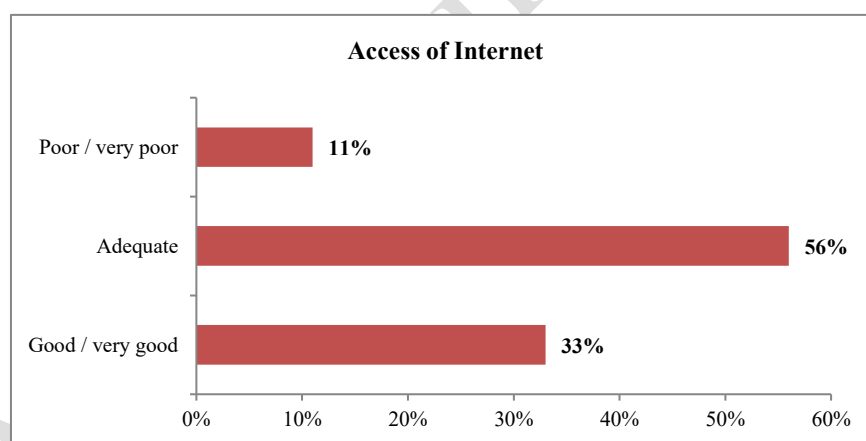| Access of Internet	No. of Response (N=110)	Percentage (%)
Good / very good	36	33%
Adequate	62	56%
Poor / very poor	12	11%
Total	**110**	**100%**

Fig. 5.6: Access and Availability of the Internet in the South Campus Library

5.7 Most Common ICT Activity

Table 5.7 shows that the maximum number of scholars, 64% (70), the most common ICT activity in the library is Online learning, followed by email, with 24% (26) as the most common ICT activity among scholars. This indicates that scholars of the South Campus Library are highly engaged in online learning to complete their information needs.

Table 5.7: Most Common ICT Activity

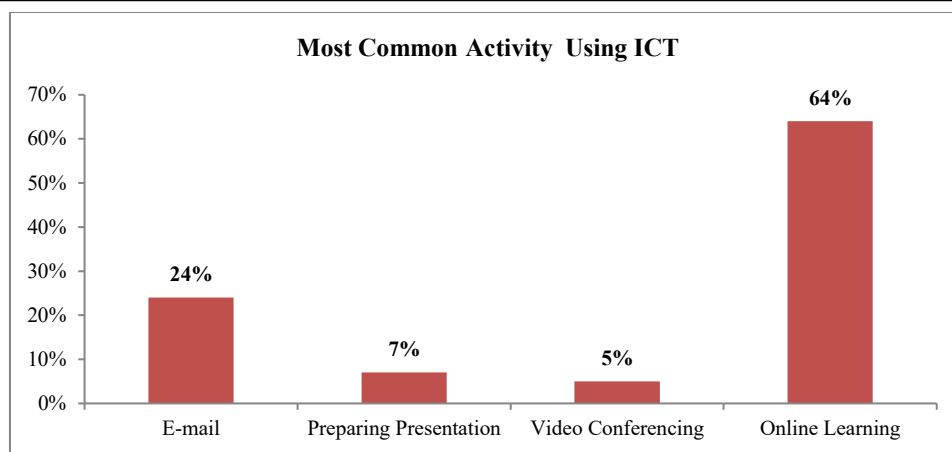| Most Common Activity Using ICT	No. of Response (N=110)	Percentage (%)
E-mail	26	24%
Preparing Presentation	8	7%
Video Conferencing	6	5%
Online Learning	70	64%
Total	**110**	**100%**

Fig. 5.7: Most Common ICT Activity

5.8 ICT-Based Services Used by Scholars

Table 5.8 indicates the ICT-based services provided by the South Campus Library. Most scholars use the Database Search/OPAC/E-Library type of ICT-based service, with 50% (55), followed by Internet Service with 24% (26).

Table 5.8: ICT-based Services Used by Scholars

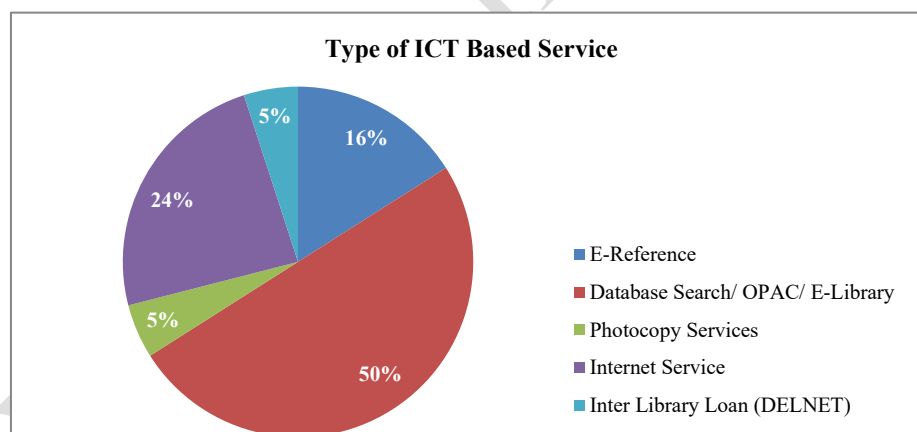| Type of ICT-based Services	No. of Response (N=110)	Percentage (%)
E-Reference	18	16%
Database Search/ OPAC/ E-Library	55	50%
Photocopy Services	5	5%
Internet Service	26	24%
Inter Library Loan (DELNET)	6	5%
Total	**110**	**100%**

Fig. 5.8: Type of ICT-Based Service

6. FINDINGS

a) The Study found that 36 % (40) respondents are utilizing ICT resources and services on weekly basis followed by weekly basis with 35% (38).

b) The Study found that the maximum number of research scholars of the South Campus used e-books and E-Journals resources when using ICT, with 55% (60).

c) The Study found that 27% (30) of respondents responded that they are very satisfied with the ICT infrastructure and services of the library, 36% (40) of respondents answered that they are Satisfied with the ICT infrastructure and services of the library.

d) The Study found that the maximum number of scholars used 55% (60) desktop computers for their studies, followed by smart phones 27% (30).

e) The Study found that the maximum number of scholars, 36% (40), are facing a lack of skilled staff to train them to access ICT-based resources.

f) The Study found that 56% (62) of respondents responded that the access and Availability of the Internet is adequate, followed by 33% (36) of respondents who responded that the access.

g) The Study found that the maximum number of scholars, 64% (70), the most common ICT activity in the library is Online learning, followed by email, as the most common ICT activity of scholars, with 24% (26).

h) The study found that most of the scholars are using the Database Search/ OPAC/ E-Library type of ICT-based service, with 50% (55).

7. CONCLUSION

The study concludes that Information and Communication Technology (ICT) plays a crucial role in enhancing the accessibility and effectiveness of library services at the South Campus Library, University of Delhi. The integration of ICT has transformed traditional library functions, allowing for improved resource management and user engagement. The findings indicate that the use of ICT has positively impacted students' learning experiences. Despite the positive outcomes, the study highlights several challenges faced by students, including limited access to ICT resources and internet connectivity issues. The study suggests that the library should focus on increasing awareness of ICT tools and improving the quality and speed of internet access.

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