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## STUDY ON THE EFFECTS OF ICT ON ISB OF USERS IN ACADEMIC LIBRARIES IN UNION TERRITORIES

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# **STUDY ON THE EFFECTS OF ICT ON ISB OF USERS IN ACADEMIC LIBRARIES IN UNION TERRITORIES**

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## **ABSTRACT**

To ascertain the degree to which Internet users are aware of and utilize Internet resources and services, a survey was performed in Union Territories, the results of which are reported in this study. The study looks at how Internet users utilize search engines to find information. Data collection methods included a survey and follow-up interviews with postgraduate students, faculties, and librarians. The chosen sample of 12 Colleges received a total of 300 questionnaires; 271 valid samples were obtained. The information was examined based on the demographics of Internet users, how they search for information online, how they utilize online tools and services, how reliable the information is online, how difficult it is to use the Internet, and how much Internet literacy is necessary. More time was spent online by the academic staff than by the pupils. Although Internet search engines were the most popular means for finding information, other approaches were also employed, including databases, gateways, and the World Wide Web (WWW). As significant Internet services, respondents cited search engines, email, and the World Wide Web. About 60% of respondents thought that the Internet was a helpful tool for education and research because of the high quality of the information available there. Some of the variables affecting Internet usage were listed as slow speed, lack of training, and information overload. Additionally, suggestions are provided to enhance the usage of the Internet, such as the creation of subject gateways and a well-planned Internet literacy programme.

**KEY WORDS:** Information Seeking Behaviour, ICT, Users, Academic Colleges

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## **INTRODUCTION**

Astronomy and Astrophysics are no exception as research over the past two decades has helped to improve understanding of users' Information Seeking Behavior (ISB). Modernizing information services will be successful only with the use of information and communication technology (ICT). It is now widely acknowledged that information and communication technology (ICT) has brought about a change in the very structure of information and its conveyance, as well as new methods of processing information. This study is based on a survey intended to ascertain how Indian users of astronomy and astrophysics seek information. The major goal of the study is to identify the information sources used, the general information-gathering behavior of users, and the effects of information and communication technology on information-seeking behaviour among users of astronomy and astrophysics. Other studies have backed up the current one. **(Singh 2000; Robbins & Kern 2007).**

ICT is the most effective medium in the twenty-first century for boosting users' information-seeking behaviors. To deliver academic quality to the stakeholders, schools, colleges, institutions, and universities must utilize ICT. As a result, the majority of nations' educational systems work to keep up with the ICT's rapid development and integration into the classroom, which has a direct impact on the emergence of new job categories in the global labor market. Technology-based learning environments offer chances to interact with a simulated reality and so aid in bridging the gap between learning and functioning. **P. Tynjala (2006)**

## **REVIEW OF LITERATURE:**

**Shantadevi, T., Mudigoudar, J. (2020).** The reviewer conducted a survey on Internet usage among select undergraduate students at the government school at various stages. The study examined how the internet and websites were used across a range of demographic groups, categories, and Network usage. This also looks at the numerous websites utilized on the internet and the particular kinds of software employed to stop damage. Many colleges have installed technologies like laptops for academic use. Thanks to the usage of the Internet, there are now many social welfare initiatives available to help students. The study shows that the majority of students have taken advantage of government-sponsored programs, subsidies, and funds, and they have also improved online streaming search engines. There are a lot of pupils in the science stream. Numerous reasons exist for why students utilise the internet. **Shukla, K. (2019).** In this modern era, the use of virtual communication is expanding across all spheres of

life. Modern methods are being used by library patrons to find important information. Social networking websites are becoming more and more popular. One experiences an information explosion due to the constant flow of information from all sources. Since social networking sites have made the globe incredibly interconnected, experienced librarians must connect the user. Our goal is to provide a more detailed explanation of the best ways to share knowledge and the function that the newest technology plays in our daily lives. **Manjunatha, N., & Babu, K. S. (2018)**. The results of the study showed that the majority of people use the Internet as a source of knowledge and that email is utilized to exchange information. The students completed self-training to become familiar with conducting internet data searches. Online data searches are used when writing articles. The library's main setback was the lack of newly released materials. The inadequacy of the data cannot be specified as the primary cause of the decrease in library use. **X Mercy Angeline (2017)**. The author contends that the effect on information-seeking behavior, which now operates on the effect of ICT, is helpfully questioned by the survey approach while speaking with distributed users. ICT is crucial and plays a significant influence in the emergence of psychological inequality in our society. It is also noted that most respondents are younger than 20 to 24 years old. The purpose of 72.8% of visitors to the library is to support academic work. Most users have chosen to use the necessary information in both paper and electronic versions. In the library, more than 70% of patrons use Internet resources to look up information. A little over half of users go to the library frequently. The majority of patrons are content with some of the library's resources. ICT systems are evolving more quickly and efficiently. **Swamy, H.M.C (2017)**. The report discussed the agricultural science libraries at the University of Karnataka and the problems they were having. The author outlined the many publicly accessible online resources for agricultural scientific material on the internet, including e-journals, directories, and interactive libraries. They also highlighted some multimedia services in farm science and described their scope and usability. **Katagi, S. (2017)**. Academic libraries are indeed thought of as the core of education in this scenario. Given that all of the facilities available for students are currently reconfiguring the library to students and that these papers are primarily based on the library room, various changes to education in academics, services, and libraries are running regularly for students in libraries. **Suresha (2016)**. Analysis of patron satisfaction with library resources and services. According to the report, many respondents were satisfied with the library's amenities and offerings. Additionally, he discovered that consumers most frequently utilize books, and that library circulation systems are the most popular service. Users also provided suggestions on how to improve the dependability and accessibility of library services. **Babu, B.R. (2013)**. The

link between consciousness and societal conduct is explained in the title. Here is a model that demonstrates how to think. To suggest the development of interactions utilizing the ideas of knowledge's fullness and emptiness, model elements are built. It concentrates on the theoretical and methodological aspects of the model. The actions of both data providers and data seekers are mentioned. The model outlines challenges and remarks related to knowledge exchange before stating ties to culture. **Khan, N.B.R. (2013)**. The article explains how digital libraries are progressing to exchange e-documents and how 24-hour access is made possible to digital libraries for a variety of end users. It also discusses ICT and the use of data resources. **Mahajan and Kaur (2012)**. As a result, 50% of users are unaware of the significance of the research's findings, and many of them are unfamiliar with terms like effect variables, credentials, and indexing.

#### **OBJECTIVES:**

- To identify the approach and behavior of the users towards library.
- To investigate the information requirements by the users
- To identify the frequency of library's use by the user.
- To find out the problems and challenges faced by users during seeking and use of Information.
- To explore the impact of ICT on learning behavior of users.
- To investigate the patron opinion on electronic resources

#### **RESEARCH METHODOLOGY**

The information required for this study is gathered from primary and secondary sources using a survey-based methodology. A questionnaire is used to gather primary data, and secondary materials including books, journals, and conference proceedings are also used. Eight respondents responded to the well-structured questionnaire that the researcher had produced for the gathering of primary data and personally given to the college librarians of the respective colleges. The gathered data were correctly tallied. This essay's primary goal is to inform readers about the services offered by the academic college libraries in Daman, Diu & Dadra, and Nagar Haveli in terms of library usage, amenities, electronic resources, and ICT. Table 1 lists the colleges' specifics.

**Table 1: List of Colleges**

<b>Sr. No.</b>	<b>Colleges</b>	<b>Established year</b>
1	Dr. A.P.J. Abdul Kalam Gov.College, Silvassa	2011
2	Smt.Devkiba Mohansinhji Chauhan College of Commerce and Science, Silvassa	2006
3	Smt.Devkiba Mohansinhji Chauhan College of Law, Silvassa	2014
4	SSR College of Arts, Commerce and Science, Silvassa	2006
5	SSR College of Education, Silvassa	2007
6	SSR College of Pharmacy, Silvassa	2007
7	SSR Institute of Management and Research, Silvassa	2008
8	Namo Medical Education and Research Institute, Silvassa	2019
9	Vaidik Dental College and Research Centre, Nani Daman	2017
10	College of Education, Daman	1966
11	Government College (Arts, Commerce and Science), Daman	1966
12	Government College (Arts, Commerce and Science), Diu	2013

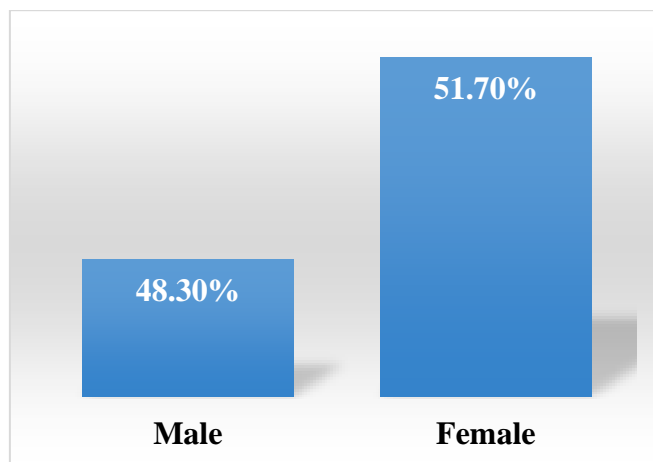
**ANALYSIS AND INTERPRETATIONS**

Data gathering is crucial to the survey process. To identify the true issues, the data collected must be accurate and true. Tables, pie charts, histograms, and other visualizations were used to organize and analyze the obtained data. To investigate and assess the relationship between research difficulties, this analysis makes an effort to transform data into plainly clear and interpretable formats.

**Table 2: Total Response received**

<b>No. of Questionnaire Circulated</b>	<b>No. of Questionnaire Received</b>	<b>% of Response</b>
<b>300</b>	<b>271</b>	<b>90.33%</b>

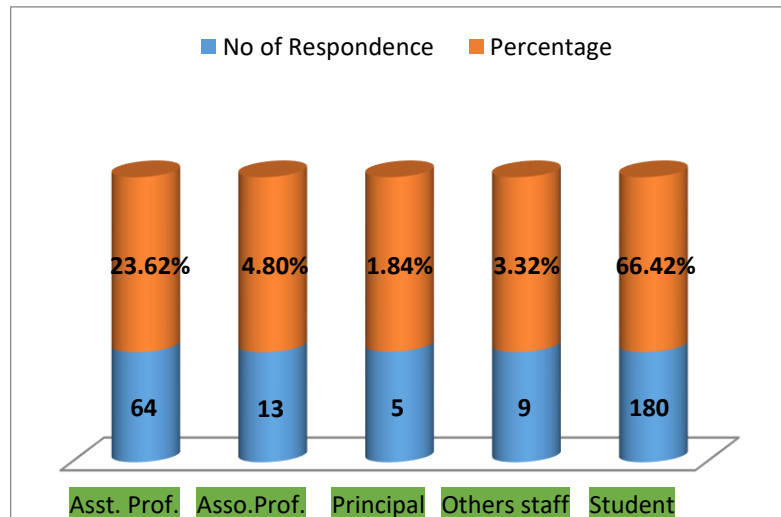
## Gender-Wise Distribution



**Fig.1: Gender-Wise Distribution**

According to Fig. 1, female faculty made up 51.70 percent of all respondents identified for the survey while male respondents made up the remaining 48.30 percent. The conclusion that can be drawn is that female faculty members make up the majority of responders.

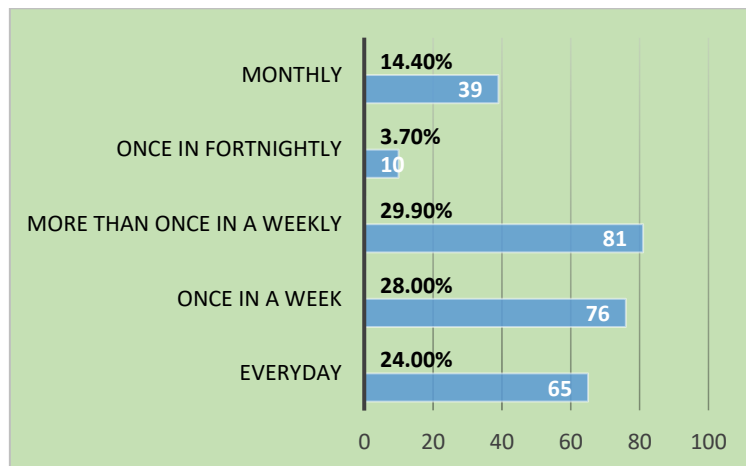
## Distribution via Designation of respondents



**Fig. 2: Designation of respondents**

According to Fig. 2, Assistant Professors make up 23.62% of the total respondents to the survey, Associate Professors make up 4.80%, and Principal/Director/Professors make up the final 1.84%. This is because several of the faculties under review have been in existence for less than 15 years, which is the minimum amount of experience necessary to become a professor. 3.32% are employed academically, i.e., as lab or assistant tutors, while 66.42% are students.

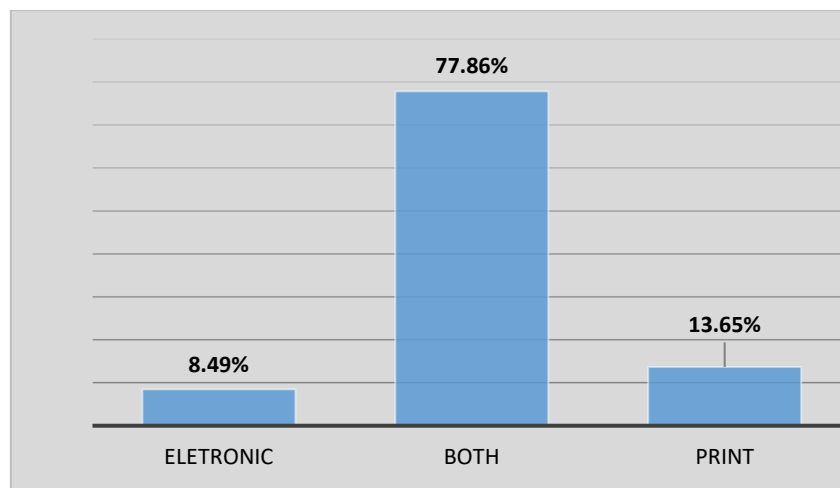
### Frequency of Library Visit



**Fig. 3: Frequency of Library Visit**

The frequency of visits to the library, whether daily, weekly, more than once a week, quarterly, or monthly, depending on the situation, is shown in Fig. 3 along with the data gathered. As a result, users go to the library. It was found that 24% of students visit the library every day, 14.4% visit monthly, 3.7% visit fortnightly, and 29.90% visit the library more than once every week.

### Nature of source prefer for information gathering



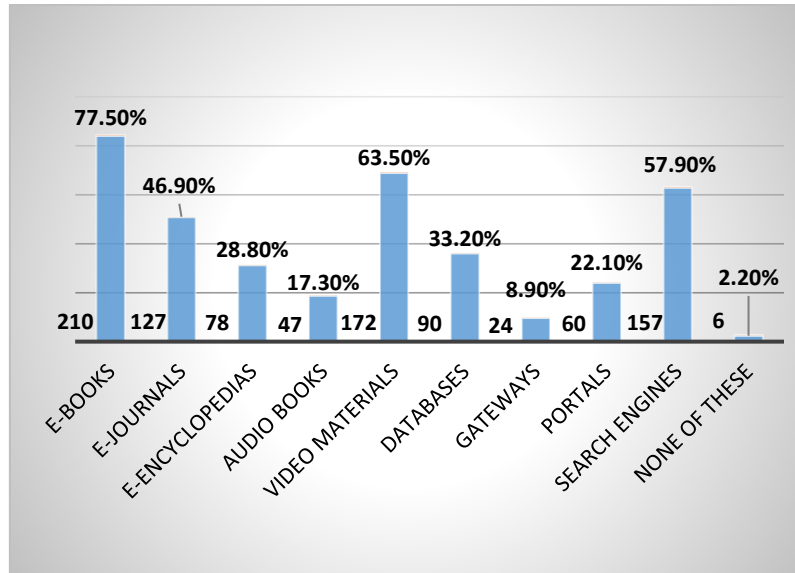
**Fig. 4: Nature of source prefer for information gathering**

According to Fig. 4, a maximum of 211 users (77.86%) prefer printed and hard format results, while 37 (13.65) prefer electronic and printed information in all formats. Several users out of 23 (8.49%) use electronic formats, which include library items. Therefore, the majority of consumers prefer to see all varieties in soft and print. Users may easily carry it around with them thanks to the usage of a soft format, which is also quick to handle and easy to print, copy, and paste. Additionally, end-user, electronic, and soft-copying facilities are very useful to the



library. To accommodate the most people, the library will employ e-forms from within the building.

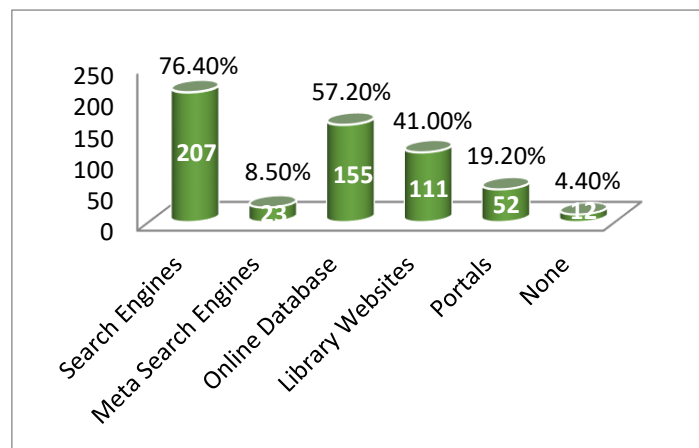
### Information referred by various electronic sources



**Fig. 5: Electronic Sources Refers**

The Fig. 5 illustrates, it was observed that users are selected multiple options so total is more than actual users. 77.50% prefer E-Books 46.90% E-Journals, 57.90% Search engines, 63.50% video materials, 33.20% database, 28.80% E-encyclopedias, 8.90% Gateways.

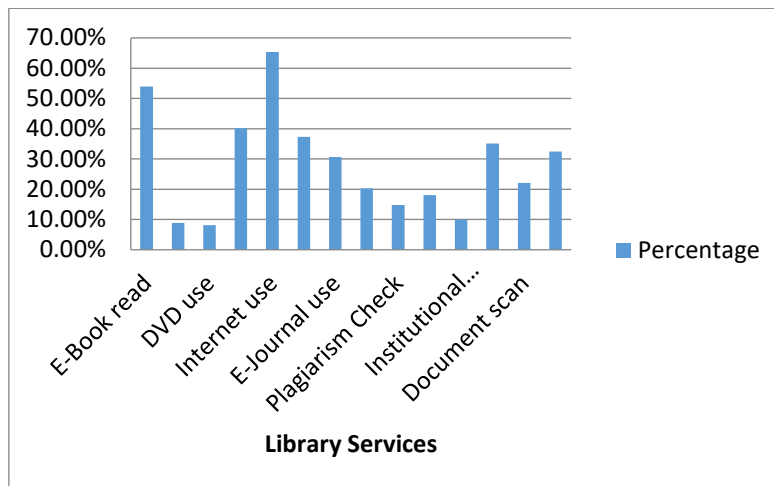
### Online tools used for information seeking



**Fig. 6: Online Tools used for Information Seeking**

The responses represented by Fig. 6, it was shows that 41.00% are used tool as library websites for seeking information, 76.40% are Search Engines, 8.50% are Meta search engines, 57.20% are online databases.

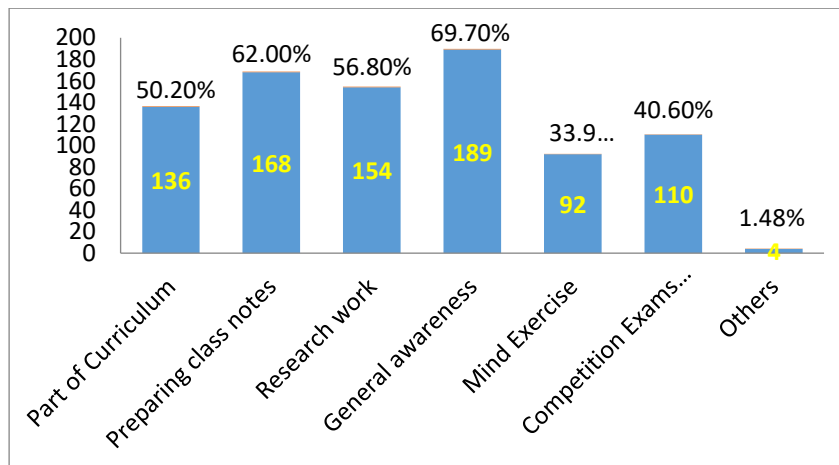
## ICT services using at Library



**Fig. 7: ICT Services at Library**

The above Fig. 7 a 53.90% E-Book Read, an 8.90% OPAC Use, a 30.60% E-Journal Use, a 20.30% Access E-Journals, a 14.80% Plagiarism Check, a 40.20% Online Database Search, and a 32.50% and 22.10% Document Print & Scan usage of the ICT service. There are more options here than there are genuine users.

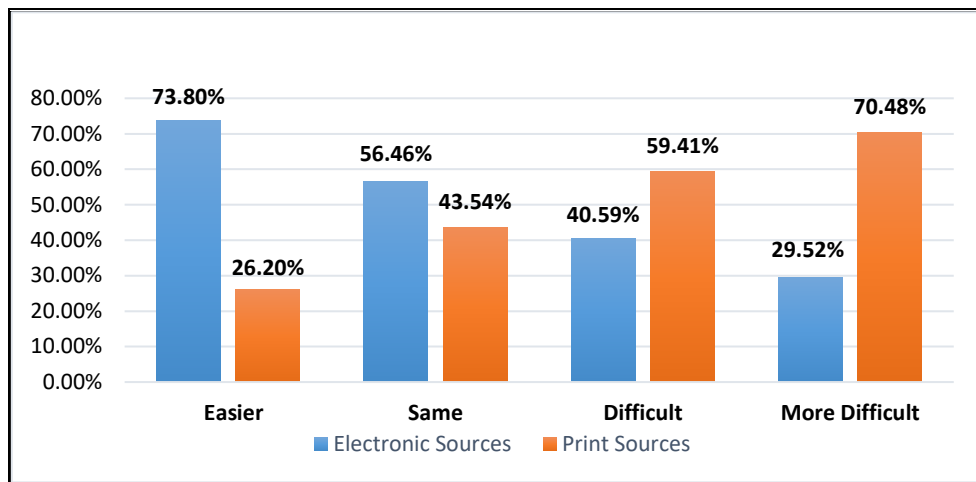
## Purpose of seeking Information



**Fig. 8: Purpose of seeking Information**

The analysis displayed in Fig. 8. It explains that different people may have different goals when seeking clarification. The ability to understand the diverse information-seeking intentions was the subject of the question. Based on a study of the data, it can be said that 56.80 percent of users use research. Prepare for competition exams and general awareness, respectively, 40.60% and 69.70%. 62% for the creation of class notes, and 50.20% for a portion of the curriculum. For others, 1.48% Users were given more than one option, so the total was higher than the actual number.

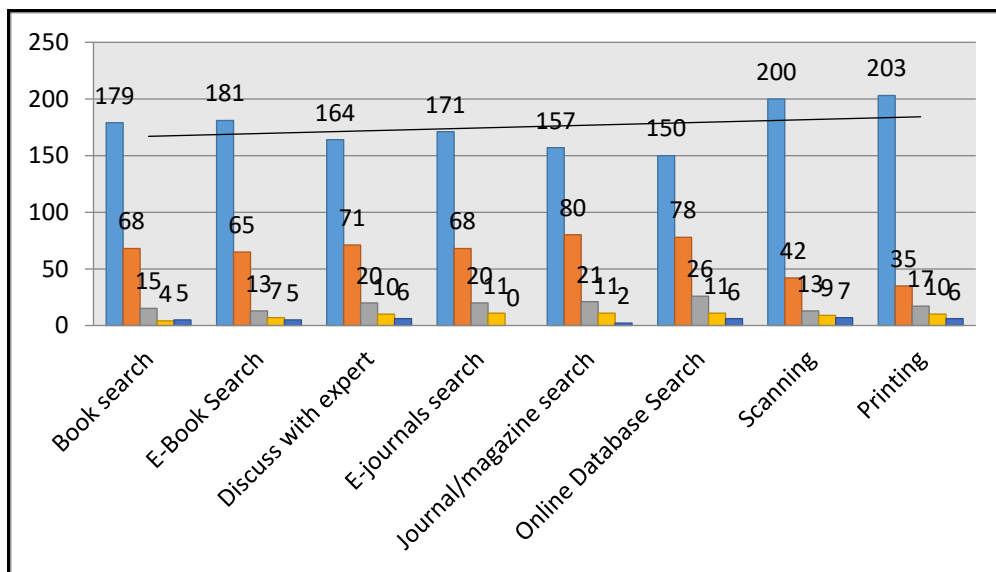
## Opinion about Electronic Sources and Print Sources



**Fig. 9: Opinion about Electronic Sources and Print Sources**

According to Fig. 9, the majority of respondents (73.8%) thought it was easier to compare information obtained from electronic sources than from print ones, whereas 70.48 % said it was much harder to do so.

## Time spend for collecting data per day in Library



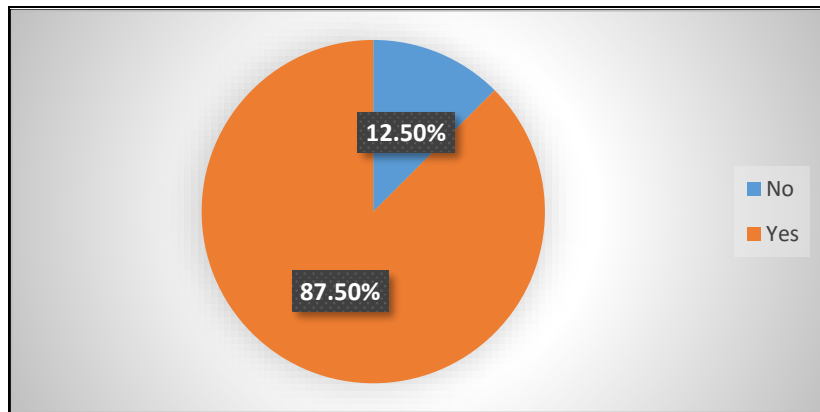
**Fig.10: Time spend for collecting data per day**

One intelligence strength that requires an indicator is the amount of time spent gathering information. In order to gather information, the professors and students were required to estimate their time spent on various tasks. Fig. 10 responds to them.

Fig. 10 reports the daily time spent collecting data. For the book search, 179 respondents took less than one hour, 68 respondents took more than one but under two hours, 15 respondents took more than two but under three hours, 4 respondents took more than three but under four

hours, and 5 respondents took longer than four hours. 203 respondents took less than one hour to print their data, while 35 respondents took longer. More than 1 but fewer than 2, more than 2 but fewer than 3, more than 3 but fewer than 4, more than 3 but fewer than 6, and more than 4 respondents. The majority of the respondent's daily time spent gathering data was under an hour.

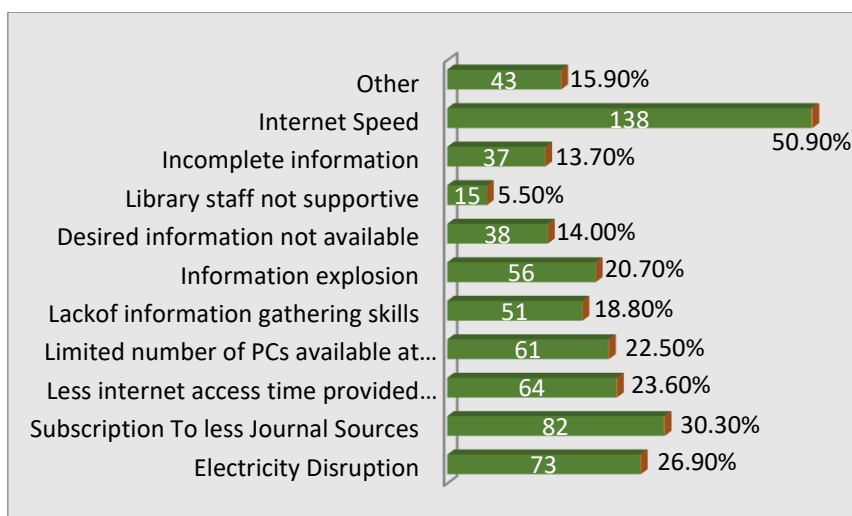
### Usefulness of library training Programme in Information Searching



**Fig.11: Usefulness of Information Search Training Programme**

According to Fig. 11, out of 271 users, 237 (87.50%) think the library's ICT search training programme is helpful to them, while 34 (12.50%) say they don't utilise it at all. Here, we can observe that people are content with this kind of instruction. When it comes to using computers and ICT to locate and collect information to meet your demands, you want to rely on yourself.

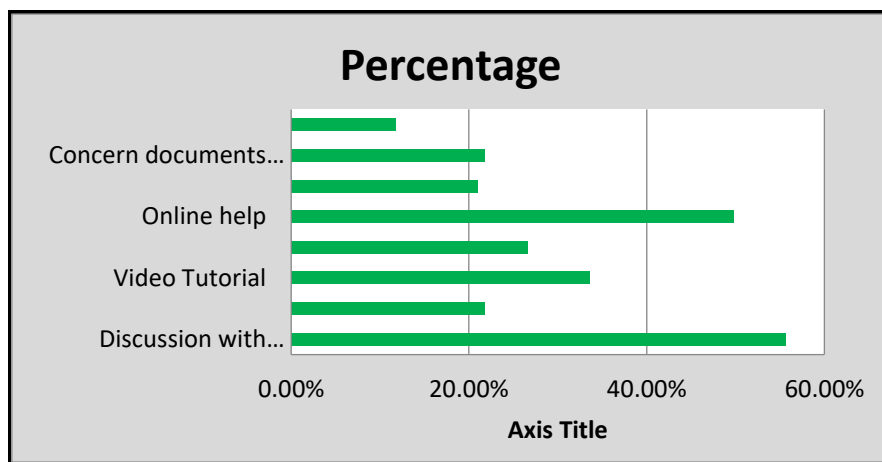
### Problem facing for finding information



**Fig.12: Problem facing for finding information**

Fig.12 above demonstrates that while the journal subscription is smaller for 82 users (30.30 percent), it affects a maximum of 138 users (50.90%) significantly. While only 64 users (23.60%) and 61 users (22.50%) experienced decreased internet connection time and limited PCs at the College, 26.90% (73) of users experience electrical disruption. In addition, it has been discovered that some users are having issues because of a lack of data-gathering abilities (18.80%) and an information explosion (20.70%). The Library can offer new projects with the most recent technologies to save users and library staff time and resources.

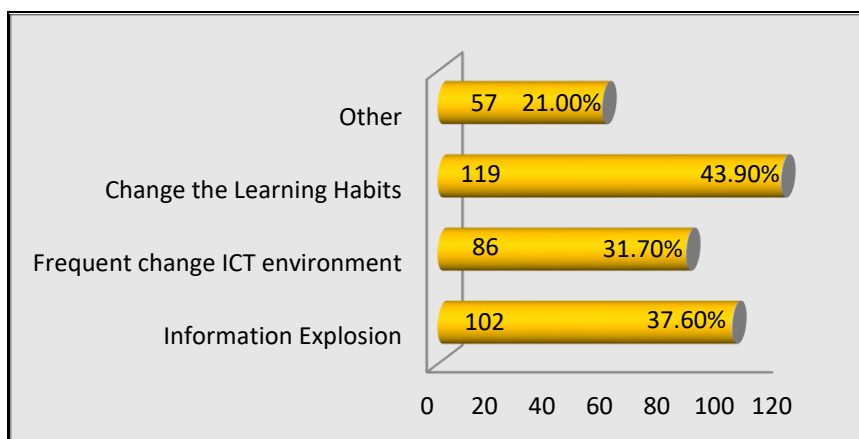
### Methods of use of Information seeking barrier



**Fig.13: Methods of use of Information seeking barrier**

Fig. 13 presents the same information. The majority of responders, 151 (55.70%), said they would like to discuss this information with the librarian. About 135 (49.80%) respondents said they used the internet for assistance, 91 (33.60%) said they learned information via video instruction, and 21% said they read concerned documents. They also said they used the library for orientation.

### Environment Affects in ICT related Information-Seeking Behavior



### Fig.14: Environment Affects to Information-Seeking Behavior

According to Fig. 14, 43.90% of people were impacted by the shift in learning habits. Due to the frequently changing ICT environment, 31.70%. 37.60% of the 21% result from information explosion and other variables.

### Satisfaction Level with library ICT related services

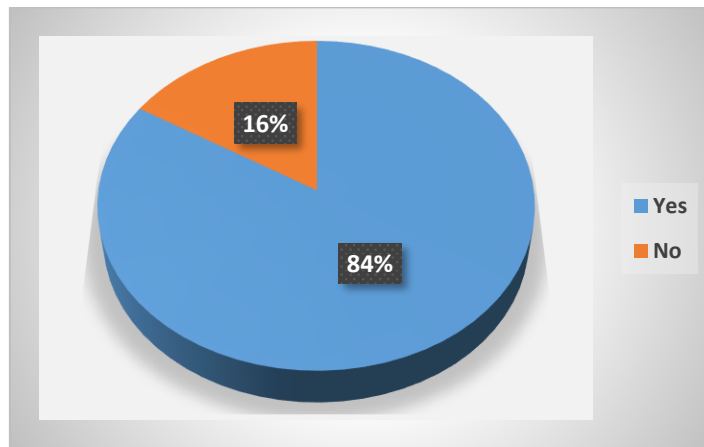


Fig.15: Satisfied Level with library ICT related services

According to Fig. 15, 84% of users are extremely satisfied with the ICT services provided by libraries, whereas 16% are not.

### Response about ICT has a tremendous impact on information-seeking behavior

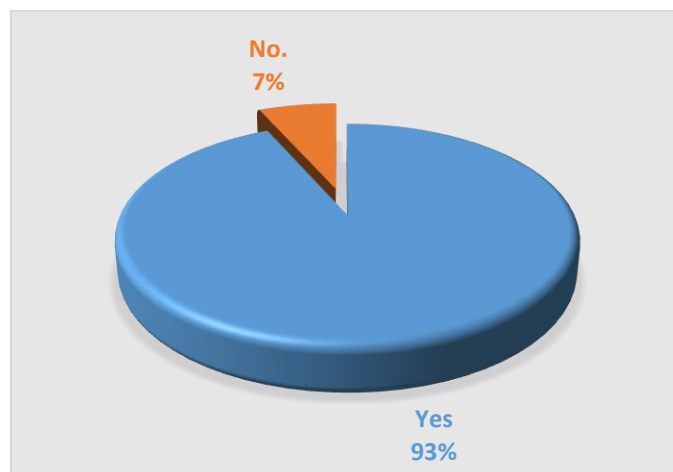


Fig. 16: Impact of ICT

According to Fig. 16, 93% of respondents thought that ICT had a significant impact on information-seeking behaviour, while 7% of respondents did not agree with the statement.

## **FINDING**

All the colleges that were chosen gave the researcher positive feedback. Staff members and students provided better responses, and the researcher received nearly all of the questionnaires needed for the study. It was discovered that the user response rate was significantly higher. According to the report's general respondents, women made up the majority while males made up the remainder. Most respondents (34.32%) are graduates, 26.57% are postgraduates, and the remaining respondents are undergraduates, M.Phil., and Ph.D. The responders' Ph.D. is their highest academic qualification. The majority of patrons visit the library more than once every week, while those who are interested do so daily, few patrons visit once per month, and at least one patron visits once every two weeks. So, it appears that the majority of users are both interested in and conscious of the value of the library. For informational purposes, the respondents make full use of both mediums—soft copies and hard copies—in the library. When compared to print material, electronic sources are not as frequently used. The collecting of information is preferred in hard copy by the pupils. When asked about their knowledge of several electronic sources, users' awareness of e-books outpaced that of audiobooks, databases, e-journals, gateways, and video resources. There are many internet resources for finding information, including websites that serve as libraries. When compared to library websites, search engines, meta-search engines, and online database tools are useless. Students and faculty make specific use of ICT advantages to browsing online data sets, OPAC, plagiarism check, access E-Journals, and conduct more thorough data collection activities. When learning more about the kind of ICT services being used in the library. ICT has made it possible for users to take use of a variety of services without the need for personal intermediaries. In general, IT is overburdened with activities like ownership, listing, development switching, program control, and so forth. According to the study's findings, the majority of respondents, or 70.85%, chose entirely new sources for the information collecting in the recent past, but the remaining respondents are still using the same procedures as they did ten years ago. According to the report, the respondents keep themselves current on social media. Online databases are the following choice. Newspaper and magazine reading are also used as self-update methods. Users spend fewer than two hours per day looking up e-journals and magazines, more than three hours per day talking to experts, less than four hours per day looking up e-books, and less than one hour per day scanning and printing, according to the report. The construction of the online index has a significant impact on our lives, and students and resources share their opinions about their favorite ICT devices for social event data through Search Engines, looking for any records, and organizing. For us to save time, it provides a better and more organized

approach. The use of electronic sources is significant, both highly and very dissatisfactory, satisfied by respondents. Additionally, it was shown that novices and college students were less satisfied. Data looking for behaviour expected of ICT offices in our inquiry are influenced by often changing ICT settings and learning preferences. The researcher deduces that the information search training program is beneficial because an overwhelming majority of respondents—87.5%—said that it was. The study shows that ISB is prejudiced as a result of the information boom and altered learning patterns, which are statistically significant as a result of technological development.

## **RECOMMENDATION**

The library should be fully resourced with enough computers. To enhance the ICT services, library employees should receive properly prepared ICT training. The library should increase the amount of time patrons can spend using ICT. ICT is a very beneficial, simple, and enjoyable way to obtain information and study material. Humans become less intelligent and more reliant on technology as a result. ICT-related services have a positive effect on consumers' behavior. Students should be made aware of the benefits of ICT tools through some kind of awareness program. ICT enables us to live robust and intelligent life. Finding knowledge now takes less time and effort thanks to information and communication technology. Libraries at colleges ought to be digitalized, so that they might be utilized and stored like rare books. Students should be made aware of the benefits of ICT tools through some kind of awareness program. All of the details regarding the library's services and offerings should be included on the website or home page, along with individual portal links to help users. Recommendations for library resources and services should come from the teacher and the student.

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