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Attitude of users towards information seeking in e-environment: A case study

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Abstract
This study indicates how interest in e-resources, especially Open Access Resources, is growing among younger generations. The information acquired from 130 students about changes in their information-seeking behaviour is examined in this study. Only 20% of library visits are for research, but the bulk of students 85.38 percent go there for preparation of examination. Nearly half of the students use both print and electronic resources. The majority of students first check for books at the library before moving on to databases and online resources. It is crucial to assist and direct them when they use the library's services and resources to gather information. Most students visit the library on their own to find the information they require. Due to developments in information technology, information gathering, utilization, analysis, and transmission have all reached new levels.

Keywords: Information, information seeking, ISB, internet, electronic resources

1. Introduction

The expanding selection of digital and analogue media that are available to students has an impact on their learning preferences. In the past 10 years, there has been a tremendous uptake of digital platforms that let students share knowledge and seek information, including Twitter, Facebook, Blogger, My Space, Live Journals, chat rooms, and Instant Messaging, to name a few. Despite the fact that their use has grown significantly in recent years, previous media including telephones, handwritten notes, and letters sent via the postal system have not yet been totally replaced as a means of communication. Information technology has played a significant role in our daily lives since the beginning of the "Information Age." In recent years, IT has significantly impacted our daily life. From smart phones to e-book readers to gaming PCs, from corporate storage systems to web applications to quantum computers, from digital photography and image editing to Portable mp3 players, multimedia applications, and monitoring devices, from automated vacuums in the home to customizable automatic mode in cars and real-time control mechanisms in electric hybrid vehicles, from the digital platform and the WWW.

1.1 Definitions of information

Similar to how energy and gravity are present everywhere, information is also everywhere. On the one hand, information appears to be more complex than other fundamental concepts or qualities like matter, energy, or force.

Furthermore, there is no generally applicable definition of information that can be applied to all types of information processes and objects, such as art, symbols, communications, texts, books, and other documents, hypermedia, multimedia, and so on. However, in a nutshell, information can be defined as the outcomes of organized data analysis and organisation.

Belkin (1978) defined information as "the 'structure' of any text, which is capable of changing image structure of some recipient".

1.2 Information seeking

In 2005 Ingwersen & Järvelin said "Information seeking is a form of human behavior that involves seeking for information by means of the energetic inspection of information sources or information retrieval systems to satisfy the information need, or to solve a problem. In order to acquire information the user has to select information from a particular source, system, channel or service." According to Ellis in 2005 "the information-seeking process involves the activities of starting, chaining, browsing, differentiating and monitoring."

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Students' use of knowledge networks and applications, such as libraries and databases, along with individuals and frequently available sources of information, such as textbooks and journals, review, and fundamental acts, are all examples of information-seeking. The term refers to a student's use of informal information sources such like personal references for information, such as continuing to call or sending an email to friends and colleagues or distribution partners, having to look for confidential info, attending seminars, scouring the Digital platform, and trying to visit other presumptive libraries or related projects and see what other individuals have attained.

1.3 Information seeking behavior (ISB)
ISB is a term used to describe how people efficiently find and use information. The term was initially used in 1981 by Wilson. Information-seeking behaviour describes how people perceive their need for, desire for, and use of information.

2. Desh Bhagat University (DBU)
The university was established in 2012 under the Desh Bhagat University Act, which was passed by the Punjab government. DBU arose from the Desh Bhagat Group of Institutes that was founded in Mandi Gobindgarh in 1996. Chandigarh, Moga, Muktsar, Mandi Gobindgarh, and Kenya are all home to DBU. The central library of DBU is located on the first level of the students' center building. It is currently fully computerized, and all library services are managed using SIM ERP software and an embedded system linked to the university campus network, giving Internet and other ICT facilities to university teachers, researchers, and understudies. The central library has 92,000 printed volumes, which include dissertations, thesis, and textbooks. The collections are organized on open access bookcases in numerous places, and the library's reading and reference collections are updated on a regular basis. Every year, the DUB central library subscribes to 185+ print periodicals and publications, as well as databases like as EBSCO, DELNET, and AIR INFOTRACK, which allow IP-based access so that library patrons can access the databases from anywhere on campus. DBU's central library has its own WEB OPAC at the reference desk for library customers to search the library's materials with ease.

3. Literature Review
Kumar and Das (2019) [22] attempted this study of Manonmaniam Sundaranar University, Tirunelveli to show that it was information that attracts readers to the library. Understudies were qualified by convenience sampling. Itemized concentrates on the usage pattern and conduct of respondents alongside specific recommendations had been demonstrated to improve the library services further. The initial 196 willing library users on the times of information assortment were selected by the researcher for data collection. Close ended Questionnaire with 42 questions was utilized as a tool to gather information. Due to development of ICT and rapidly changing world of information dissemination, the libraries need to change by reshaping and redesigning themselves. Library professionals needed to investigate the value, importance and sufficiency of these parts, for example, framework, sources and library services in this changed working and serving climate. In this study, researcher had to distinguish and tackled the issues of users

who were not happy with library services. Henceforth getting ISB of the respondents was a significant zone of research to effectively attract users to the library.

George (2018) [23] attempted this study to examine the ISB of women living in rural areas about Family Planning in Epe Local Government, Lagos State. The method of survey research was utilized. The study's included 120 people. The questionnaire was used to collect the necessary details. A pilot survey was also conducted to ensure the instrument's relevance and dependability; the tool used for analysis of data was basic frequency counting, percentage, and correlation. The majority of the respondents did not complete higher education, which has an impact on their information seeking behavior, especially when it comes to family planning information. This demonstrates a lack of understanding of family planning among the respondents. The study area's high rate of illiteracy, inability to access structured sources of information due to poverty, lack of an effective and efficient information distribution system, and language barrier are all considered major issues affecting rural women's ISB.

4. Objectives
The purpose of the research is to know:
1. How much people know about library resources and how do make use of them.
2. How often do they visit the library and look for both printed and electronic resources?
3. What is their purpose in using library resources?
4. Which website is visited the most by them?
5. What are the problems encountered by them while they access the resources of the library?

5. Scope
The scope of this study covered a fraction of students from Computer Science Engineering discipline studying at Desh Bhagat University, Mandi Gobindgarh.

6. Methodology
The following is the process used to acquire primary and secondary data and information:

6.1 Surveying
Users were surveyed about their actions, preferences, circumstances, values, and/or characteristics, and their answers were collected directly from them. 200 questionnaires were given out in total, but only 130 of them were filled out by the participants, yielding a 65 percentage response rate. Statistical methods were used to analyse, group, and tabulate the data.

6.2 Observation
Observing how users interact under certain circumstances, activities, and different times, for instance.

6.3 Record analysis
Attaining written records or any other artifacts of earlier communication (like as documents, notes, or stats) and deriving generalizations about clients from these documents is referred to as record analysis.

6.4 Analysis
The ISB of pupils is primarily determined by eight characteristics:

Table 1: Time analysis – Frequency of use of e-library by the students.

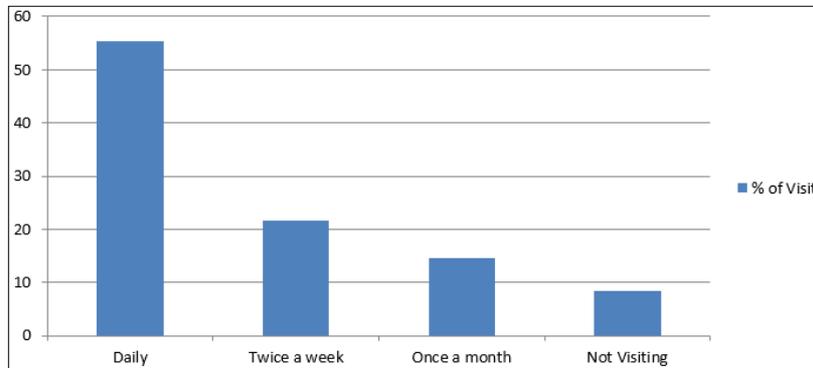| Frequency of Visits	No. of Respondents	% of Visit
Daily	72	55.38
Twice a week	28	21.54
Once a month	19	14.62
Not Visiting	11	8.46
Total	130	100

Fig 1: Frequency of usage of e-library by the students

It is observed from the data represented in figure1, that majority of students-72(55.38%) visit e-library to obtain information on daily basis, 28 (21.54%) users visiting it two times a week, 19 (14.62%) of users visit hardly one time in a month and only 11 (8.46%) users don't even visit the library.

Table 2: Purpose behind information seeking

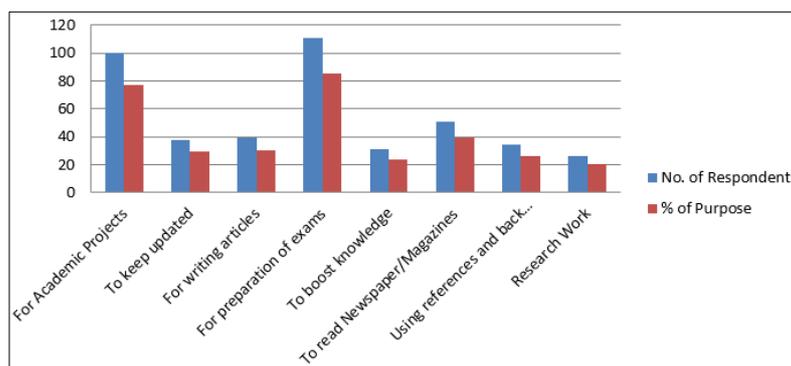| Purpose	No. of Respondents	% of Purpose
For Academic Projects	100	76.92
For keeping updated	38	29.23
To write articles	39	30.00
To prepare of exams	111	85.38
For boosting knowledge	31	23.85
For reading Newspaper /Magazines	51	39.23
Using references and back volumes	34	26.15
Research Work	26	20.00

Fig 2: Purpose behind information seeking

It is seen from fig. 2, approximately most of the users visit library to prepare for exams (85.38%) next being preparation of academic projects (76.92%). Less users use the library for the purpose of research (20%). It can be concluded that the motive behind establishing the e-library & subscribing e-journals hasn't been fulfilled, as very few researchers use e-resources & e- library for their research practice.

Table 3: Type of information source utilized by students

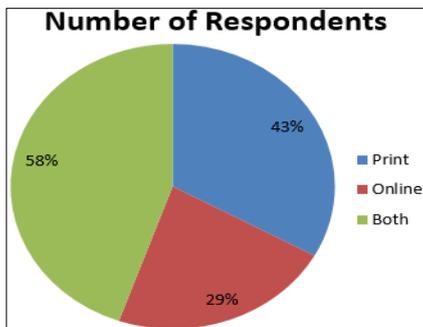| Source	No. of Respondents	% of Respondents using Library Resources
Print	43	33.08
Online	29	22.31
Both	58	44.61
Total	130	100

Fig 3: Type of information source utilized by students

As per data in Table & fig. 3, 58 (44.61%) users use print as well as online resources, 43 (33.08%) utilize print resources & 29 (23.31%) use online resources to fulfill their information needs. Therefore, it's sure that printed resources have significant role in satisfying their requirements in digital environment also.
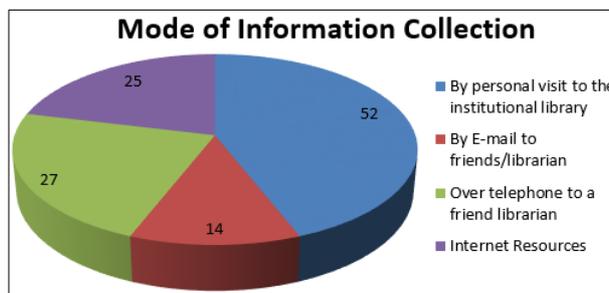
Table 4: Importance of information sources available in the Library for the students

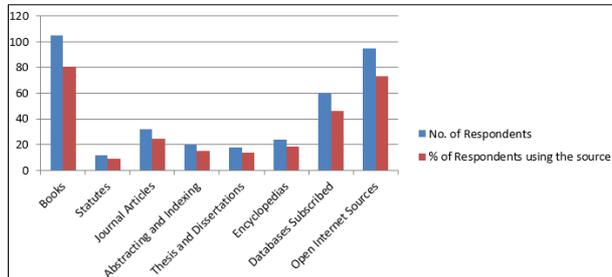| Source of Information	No. of Respondents	% of Respondents using the source
Books	105	80.77
Conference Papers	12	9.23
Journal Articles	32	24.62
Abstracting and Indexing	20	15.38
Thesis and Dissertations	18	13.85
Encyclopedias	24	18.46
Databases Subscribed	60	46.15
Open Internet Sources	95	73.08

Fig 4: Importance of information sources available in the Library for students

According to this data, significance of books is still in more among users: 105 (80.77%), then comes browsing Open Internet sources 95 (73.08%) users, databases subscribed 60(46.15%) users, Journal articles 32 (24.62%)students, Encyclopedias 24 (18.46%), Abstracting & Indexing 20 (15.38%), Thesis and Dissertations are significant for 18 (13.85%) users and statutes are used by 12 (9.23%) only.

Table 5: Approach used to collect information

Mode	No. of Respondents	Percentage
By personal visit to the institutional library	52	40.00
By E-mail to friends/librarian	14	10.77
Over telephone to a friend librarian	27	20.77
Internet Resources	25	19.23
Any other Mode	12	9.23

Fig 5: Approach used to collect information

This figure shows that 52 (40%) students themselves visit library for collecting the required information, 27 (20.77%) students gather information through telephone to Librarian/ friend, 25 (19.23%) gather using resources available on Internet, 14 (10.77%) students gather by e- mail to Librarian/ a friend and 12 (9.23%) gather information by other modes.

Table 6: Preferred E- information source of students

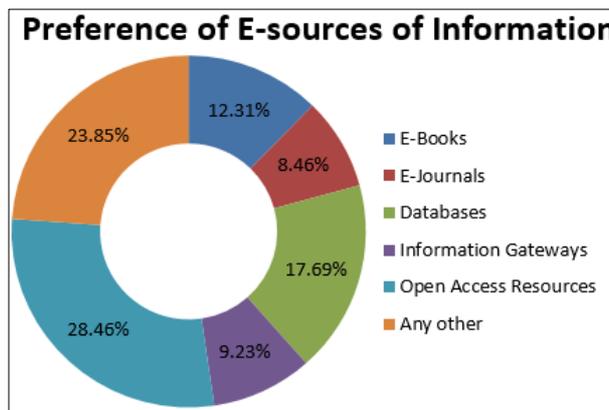| Preference	No. of Respondents	Percentage
E-Books	16	12.31
E-Journals	11	8.46
Databases	23	17.69
Information Gateways	12	9.23
Open Access Resources	37	28.46
Any other	31	23.85

Fig 6: Preferred E- information source of students

It is observed from the above figure that most students prefer OA resources i.e. 37 (28.46%) followed by databases 23 (17.69%), e- books 16 (12.31%), then information gateways 12 (9.23%), e- journals in fifth place with 11 (8.46%) students preferring them. So it is clear that most of the students browse Open Access resources.

Table 7: Satisfaction level of users by library's own e- resources.

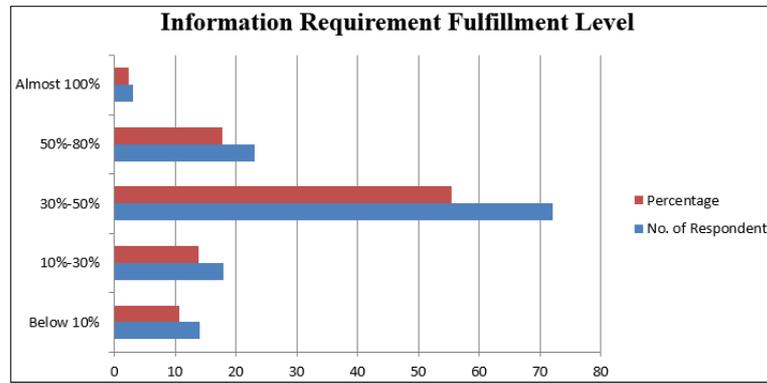| % of Information Requirement Fulfilled	No. of Respondents	Percentage
Below 10%	14	10.77
10%-30%	18	13.85
30%-50%	72	55.38
50%-80%	23	17.69
Almost 100%	03	2.31

Fig 7: Satisfaction level of users by library's own e- resources

It is clear from this figure, 72 (55.38%) users are 30-50% satisfied by the information from e-resources availed by the library, 14 (10.77%) users said that their information requirement fulfilled by the library through e-resources is less than 10%, 18 (13.85%) users are 10% - 30% satisfied, 23 (17.69%) users' 50%-80% information requirement is fulfilled and only 3 (2.31%) respondents are completely satisfied with information requirements from e-resources.

Table 8: Searching Strategy Used for searching e-resources

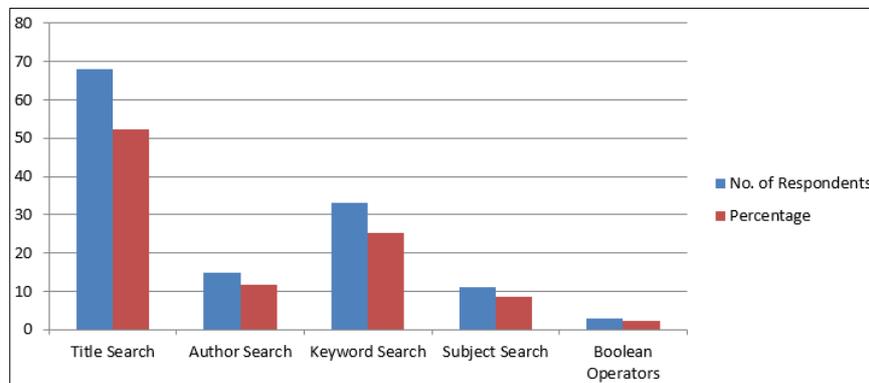| Searching options used	No. of Respondents	Percentage
Title Search	68	52.31
Author Search	15	11.54
Keyword Search	33	25.38
Subject Search	11	8.46
Boolean Operators	03	2.31

Fig 8: Searching Strategy Used for searching e-resources

Careful observation of this data shows that most of the students prefer title search method for searching information (52.31%), followed by keyword searching (25.38%), Author Searching (11.54%) and Subject Searching (8.46%). Boolean Operators proved to be the least used searching technique amongst the students, with just 2.31% respondents.

7. Problems faced while using library resources
According to the investigation, students don't fully utilize information sources of library when they are seeking information, this is because of not much knowledge about ICT facilities or the conventional teaching approach employed in classrooms, this discourages them from utilizing library information. Users have a misunderstanding regarding values and roles of a library and information experts in their study, this leads to the increases usage of a variety of information-gathering tactics that do not involve the usage of library or its professionals.

8. Conclusion
According to studies on student information competency, children must demonstrate various distinct behaviours and abilities to accomplish that competence. It was discovered that, even in today's environment, students depend on conventional methods and techniques for obtaining and utilizing information resources, and that a shift in their

information seeking patterns is required because students do not use advanced skills such as Boolean search, etc. caused by lack of knowledge. When participants were asked to include subject of their current assignment and keyword they use, it was observed that the most of students have difficulty choosing the apt keywords, subject headings, and Boolean search methods. Instead of limiting vocabulary descriptors, students typically make the mistake of relying only on free-text, basic language searching strategy. Students should also know how to use filtering and broadening tactics to conduct a search in the right direction. Remembering and précising are often described as maximizing the retrieval of proper records while restricting inappropriate items from being retrieved. Students should attend library awareness seminars and workshops to enhance their understanding of how to use library's resources and services, enabling them to utilize all of the library's services and resources.

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