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## Information needs and Information-seeking behavior of undergraduate students: A remote area perspective

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## **Information needs and Information-seeking behavior of undergraduate students: A remote area perspective**

### **Abstract:**

Nowadays it is the prerequisite of the libraries to know the information-seeking behavior of the users and provide the services according to their needs. The prime purpose of the current study is to examine the information needs, information sources, information-seeking behaviors. As well as find out the challenges the undergraduate face while using the library. The survey research method was used to collect the data. With the help of a structured questionnaire, the data was collected and a random sampling method was used for this purpose. The results of the study revealed that 220(62%) undergraduates need information for their semester work and 102 (29%) need job-related information. Moreover, 155 (44.2%) undergraduates used social media to get their needed information, and 130(37.1%) followed by a discussion with friends. 80 (22.85%) of undergraduate students visit the library for study purposes, 70(20%) visit the library for reading newspapers and for political information. While seeking the needed information, undergraduate students have reported different barriers such as poor internet connectivity, lack of ICT facilities, not being aware of the usage of OPAC, and ICT knowledge limitation. The findings of the current study will be helpful for librarians towards the restructuring of information literacy programs to enhance the current information-seeking behavior of undergraduate students. It may inform the higher authorities about the obstacles faced by the undergraduate students in information-seeking and thus stimulate them towards the up-gradation of internet and ICT facilities in the institutions. This study addressed the gap in the literature on information-seeking behavior in the Context University of Balochistan. It uncovered characteristics that both limit and enhance undergraduate students' use of the library. To assist their learning, the insights could lead to the creation of a stable information literacy program at the University of Balochistan.

**Keywords:** information-seeking behaviors; Information needs; information sources and services; undergraduate students, University of Balochistan, Pakistan.

### **Introduction**

Information has become one of the most important aspects of our everyday lives. To satisfy these information needs, information seekers look in multiple ways and in a variety of contexts. The initiation of the internet and other technology has sped up the entire information-gathering process (Singh, Kumar, Khanchandani, 2015; Silva & Chandrawamsa, 2016). Today, every

individual needs information for personal use as well as for professional development and social survival. However, the information needs of these individuals are different from each other. For investigating, searching, selecting using, and sharing purposes the information-seekers use multiple ways. Such approaches, methods, and ways are called information-seeking behavior. Since the mid-twentieth century, the word "information-seeking behavior" has been used in professional literature (Manjunath & Babu, 2018). When an investigator or information-seeker realizes that their current knowledge is insufficient for making decisions or conducting research, they engage in information-seeking behavior (Kumar, 2013). As a result, investigators or information-seekers seek information from a variety of sources, including libraries to fulfill their information need. Books, journals, encyclopedias, theses, dissertations, and online academic databases are all examples of information sources found in libraries (Rafiq & Ameen, 2009; Khan & Khan, 2020).

In the literature society, now the libraries are the most commonly used sources of knowledge and information. The information sources in libraries are reliable, applicable, and easy to use, and they have greatly aided students in their ongoing research. Therefore most property information seekers prefer libraries for searching their needed information (Majid, Anwar, and Eisenschitz, 2000; Sani, 2017; Nwone & Mutula, 2018; Kamanda, 1999). The need for information at that time arises when the researcher feels that something is missing and he or she tries to fulfill that research gap (Lone, Mir & Gani 2017; Mellon, 2015). For this purpose, the information seekers use a variety of sources for information seeking including the internet, teaching faculty, supervisors, and libraries. Among these all, libraries are considered to be the most important source of information. As libraries provide both types of resources electronic and traditional in a wide range to meet the information needs of the users (Law, 2009).

Moreover, in the digital age, digital libraries are playing a very important role to meet information seekers' information needs and promoting study, learning, and teaching. Furthermore, the undergraduate need research information like topic selection, literature review, databases searching, data analysis techniques, learning of information searching skills, information literacy, publishing, citation analysis, and writing of theses for this purpose they visit the library frequently (Khan and Khan, 2020).

The information seekers while searching for information face several problems also. These problems are may be internal or external for the information seeker. The external problems or barriers are placed on a person from without. This type of barrier can be spatial (e.g., a long-distance to a library), temporal (not enough time available for information seeking), or socio-

cultural (e.g., bureaucratic inertia). Internal obstacles, on the other hand, arise from within a person and are divided into two categories: cognitive and affective. Unawareness of appropriate information sources and poor search abilities are cognitive obstacles. Negative feelings, such as the fear of discovering negative facts when finding medical information, are common affective barriers (Savolainen, 2016; Savolainen, 2015; Lambert, Loisel & Macdonald, 2009; Balog, Badurine and Lisek, 2018). Sani (2017) also expressed that the majority of information seekers, particularly in digital format, are unable to accurately use library information retrieval tools. Therefore they are unable to fulfill their information need on time. While we talk about Pakistan as a developing country and it is expected that the information seekers face numerous problems while searching for their needed information just like internet issues, unawareness of appropriate information sources, and retrieval tools, and lack of ICT skills (Khan and Khan, 2020).

### **Statement of the problem**

Academics have used information seeking as a social phenomenon to figure out how they express new ideas and remark on old research. Academic research includes observing how academics make informed decisions and identifying tools and ways for staying current with the literature (George et al., 2006). For this purpose, the libraries of academic institutions play a very important role. Libraries are the most widely used source of information available to literate society. As information-seeking behavior differs from person to person because of the variation of needs and context of the search. So the librarian should know what kind of information is needed by an information seeker and how to provide that needed information to that person (He, 2012). Therefore, the current study is conducted to examine the information needs of the users, information sources they are using for accessing information, and information-seeking behaviors of the users, library use in the current age. Moreover, the study identifies the challenges the undergraduate students face while searching for their needed information.

### **Objectives of the study**

1. To identify the information needs of the undergraduate students of the University of Balochistan
2. To examine the ways the undergraduate students use to meet their information needs in the University of Balochistan
3. To assess the sources the undergraduate students prefer for their academic works in the University of Balochistan

4. To investigate the challenges the undergraduate students face while searching their needed information in the University of Balochistan

### **Research Questions**

1. What is the information need of the undergraduate students of the University of Balochistan?
2. What are the ways and sources the undergraduate students use to meet their information needs in the University of Balochistan?
3. What are the sources the undergraduate students prefer for their academic works at the University of Balochistan?
4. Which type of problems do the undergraduate students face while searching for their needed information at the University of Balochistan?

### **Literature Review**

In the modern era, individuals require information for personal usage, professional progress, and social survival. The scholars believe that information needs are not homogeneous for everyone it differs from person to person. According to Kalbande (2019) information is a cornerstone of modern civilization on which practically everyone relies. Every individual uses that information according to his or her need (Silva & Chandrawamsa, 2016). Manjunath and Babu (2018) expressed that the progress of any nation will be impossible unless and until the information is made available to people who need it. According to them Policymakers, planners, economists, farmers, instructors, and research academics, doctors, engineers, librarians, and others all demand information in their personal, professional, and daily activities. According to Nwobasi, Uwa, and Ossai-Onah (2013) information needs of the information seekers are like variables that change over time. Similarly, an information requirement is defined as a knowledge gap that must be filled to make a choice or solve an issue. Moreover, Ikoja-Odongo & Mostert (2006) defined that the general information needs were related to finding a research topic, conducting a literature review, reading journals, using online research databases, and conducting other research, workshop and seminar presentations, academic activities, and life events that motivate a researcher towards information seeking (Shuhidan et al., 2019; Chaurasia and Chaurasia 2012; Jazeel and Dehigama, 2017; Natarajan, 2012).

Looking for information the term "behavior" refers to the acts and behaviors that are used to gather and obtain information. When an information seeker believes that their present knowledge is insufficient to answer a particular question for this purpose they seek information (Sheeja, 2010; Wilson, 2000). Moreover, Case & Given (2016) expressed that information-

seeking behavior is a common aspect of human life that becomes more prominent when one has to make a major life decision (Chowdhury, Gibb and Landoni, 2011). According to Majid and Kassim (2000 p.2) “information-seeking behavior is a set of actions that an individual takes to express information needs, seek information, evaluate and select information, and finally use this information to satisfy his or her information needs.” Therefore the scholars around the globe give serious consideration to the term information-seeking behavior. They widely discussed the faculty, researchers, scientists, mathematicians, graduate, undergraduate, and postgraduate students perspectives (Makinde, Jiyane and Mugwisi, 2020; Gyesei, 2020; Dilek-Kayaoglu, 2013; Khan and Khan, 2020; Howlader and Islam, 2019; Gordon et al., 2020; Gordon et al., 2018; Patitungkho, and Deshpande, 2005; Oak and Patil, 2014). Abdoulaye (2002) examined the information-seeking behavior of African students at the International Islamic University Malaysia. The findings showed that after using the library the information-seeking behavior of the (IIUM) students were changed. According to, Gyesei (2020) it is an important prerequisite for a library to provide efficient information resources and services to meet the information needs of the users. In a study, Hiller (2002) found that University of Washington undergraduate students preferred to study at the library rather look for articles or books (Wright et al., 2006). Kakai, Ikoja-Odong and Kigongo-Bukenya (2004) expressed that undergraduate students of Makerere University were using the library for the preparation of their assignments and their course work. These tasks lead the undergraduate students of Makerere University into seeking information. According to Ajiboye and Tella (2007) most of the undergraduate students were seeking information for their academic developments and for finding jobs (Korobili, Malliari and Zapounidou, 2011; Baro, Onyenania & Osaheni, 2010). Moreover, Bøyum and Aabø (2015) investigated how Ph.D. students discover, choose and use information and literature for their research. The findings showed that students preferred to search information from the library databases rather than Google. Most students preferred simple searching techniques and avoid the use of advanced searching techniques such as Boolean operators and truncations (Brindesi, Monopolib and Kapidakisa, 2013; Sinh and Nhung, 2012). Joo and Choi (2015) explored multiple factors affecting online library resource selection by undergraduate students. For this purpose, three dimensions of factors were investigated including usefulness and ease-of-use, resource quality, and individual differences. Findings showed that both usefulness and ease-of-use positively influenced the undergraduates’ use intention of online library resources. Meanwhile, in the digital-era undergraduates prefer online sources rather than traditional print resources (Lee, Paik and Joo, 2012; Kim, Yoo-Lee and Joanna Sin, 2011; Haglund and Olsson,

2008; Selwyn, 2008; Shukla and Lalrinenga, 2018; Okoh and Ijiekhuamhen, 2014). Moreover, Ali and Jan (2020) examined the information-seeking behavior of the Postgraduate students of social science at the University of Kashmir, Srinagar. The findings showed that post-graduate students prefer ICT applications more than printed materials for information-seeking behavior.

The information seekers face several difficulties when looking for information, which is characterized as hurdles that prevent them from identifying, selecting, accessing, evaluating, and using the information they require (Ogaba, 2012). Furthermore, according to the findings of many research publications, the information-seeking behavior of the undergraduate students was poor due to lack of awareness of library resources and services, the absence of information literacy instruction in universities, insufficient training opportunities, poor ability to use the information access tools and use the system, inadequate knowledge of using OPAC and uncooperative attitude of librarians and absence of a well-planned information system that they want (Callinan, 2005; Maybee, 2006; Kumar,2013; Ferdows and Ahmed, 2015; Joo and Choi, 2015;Obasuyi and Fredrick, 2015; Chinnasamy,2016; Sani,2017; Howlader and Islam, 2019).

### **Research Methodology**

This study was carried out using a survey research method. The survey method supported by a questionnaire has been found more suitable. A structured questionnaire was used as a data collection tool because it is simple, cost-effective, easy to distribute, and suitable for the study of a large population (Tashakkori & Creswell, 2007). Before distributing the instrument it was pretested. Two subject specialists were requested to check the suitability of the instrument. Furthermore, the recommended changes were incorporated into the final version of the instrument. After checking the suitability of the instrument it was pilot tested. The instrument was randomly distributed to 50 students of management science. After the pilot study, necessary changes were integrated into the instrument. Based on the pilot study the overall scale reliability which is checked in Cronbach alpha is .8 which indicates that the instrument is quite reliable. The instrument which is used in this study is having two parts (i) Brief bio-data of students; and (ii) Details of the resources, facilities, and services that the users obtain in their institution. The population of the study was undergraduate students of three different academic faculties named Arts and Humanities, Social Sciences, and Management and Information Sciences in the University of Balochistan. A total of 515 respondents were selected out of the total population. The random sampling technique was selected because of the unavailability of a complete list of target participants at these three faculties. Out of 515 distributed questionnaires, only 350 were

filled properly and considered. The obtained data through questionnaires were tabulated and analyzed with the help of Microsoft Excel.

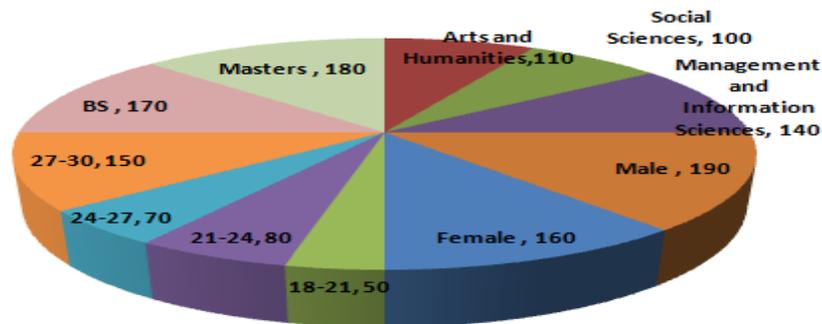
## Results and interpretation

### Demographic profiles

**Table 1**

Demographics information

Variable	Frequency	Percentage
<b>Faculty Name</b>		
Arts and Humanities	110	31%
Social Sciences	100	29%
Management and Information Sciences	140	40%
<b>Gander</b>		
Male	190	55%
Female	160	45%
<b>Age</b>		
18-21	50	14%
21-24	80	23%
24-27	70	20%
27-30	150	43%
<b>Enrolled program</b>		
BS	170	49%
Masters	180	51%



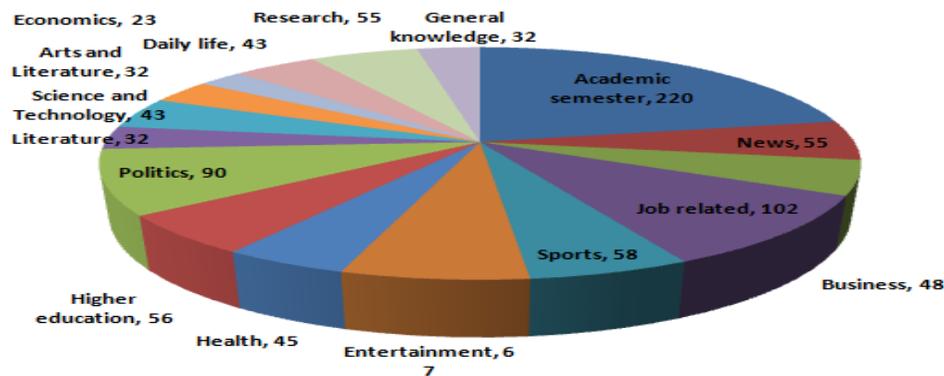
*Figure 1: Demographics information*

(Table 1) shows the demographic distribution of the survey respondents. The largest numbers of respondents 140(40%) were from the faculty of management and information science 110(31%) from arts and humanities and 100(29%) from social sciences. Among the participants, 90(55%) were male and 160 (45%) were female. 150(43%) participants were between the age of 27-30 and 70(20%) were between the age of 24-27, 80(23%) were between the age of 21-24 and 50(14%) were between the age of 18-21. Among the respondents, 180(51%) were master's level students and 170(49%) were BS level students (*Figure 1*).

**Table 2**

## Information Needs of the Respondents

Information Needs	Frequency	Percentage
Academic semester	220	62%
News	55	16%
Business	48	14%
Job related	102	29%
Sports	58	17%
Entertainment	67	19%
Health	45	12.8%
Higher education	56	16%
Politics	90	25%
Literature	32	9.1%
Science and Technology	43	12.2%
Arts and Literature	32	9.1%
Economics	23	6.57%
Daily life	43	12.2%
Research	55	15.7%
General knowledge	32	9.1%

*Figure 2: Information Needs of the Respondents*

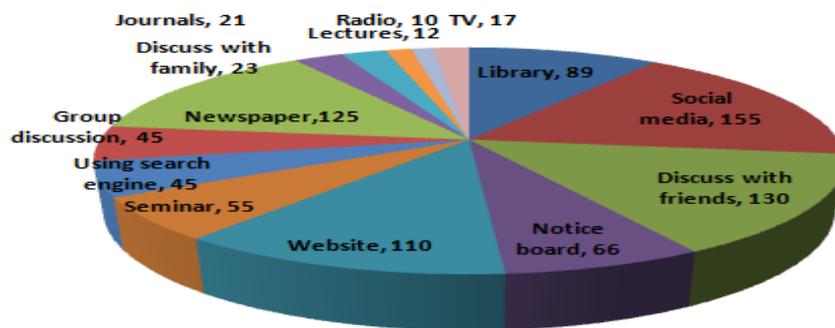
In an attempt to understand the need for information, respondents were asked what information they often need. (Table 2) reveals the information needs of the respondents. It was quite obvious that most of the respondents needed academic semester information 220(62%) for their semester work. Here academic semester refers to all information related to academic activities, i.e. semester schedule, assignments, midterms, exams, report writing, internship and class activities as well as research work. The result shows that they often needed that type of information which fulfills their academic activities. The second-highest number of respondents 102 (29%) needed job-related information which is very significant in the perspective of Balochistan. Balochistan is the largest province in the country but job-related opportunities are very limited in this province. After graduation one of the biggest tasks is to get a job. Therefore mostly respondents need

information related to their field in the market. Very few respondents needed all the information that was listed in the questionnaire. It is interesting to note that a good number of respondents 90(25%) needed political information. It is obvious that Balochistan University has a glorious past and substantially contributed to the emerging of literacy and it is the first mother university in the province. This province is one of the province of Pakistan which is most affected by terrorism from last few years. It might be the reason that University of Balochistan undergraduates are interested in politics and need political information (*Figure 2*).

**Table 3**

Information sources used by the undergraduate

Information Sources use	Frequency	Percentage
Library	89	25.4%
Social media	155	44.2%
Discuss with friends	130	37.1%
Notice board	66	18.8%
Website	110	31.4%
Seminar	55	15.7%
Using search engine	45	12.8%
Group discussion	45	12.8%
Newspaper	125	35.7%
Discuss with family	23	6.57%
Journals	21	6%
Lectures	12	3.42%
Radio	10	2.85%
TV	17	4.85%



*Figure 3:* Information sources used by the undergraduate

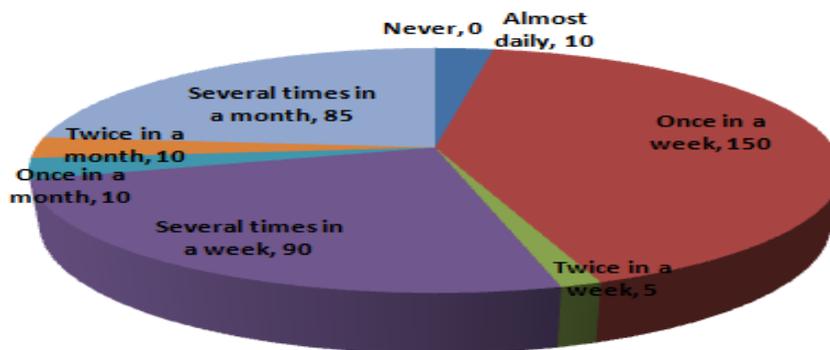
A wide range of sources is used by respondents to meet their needs, with some being more significant than others. For this purpose, respondents were asked where they usually go to get information to meet their information needs. (**Table 3**) lists the sources of information where they met their information need. The largest group 155 (44.2%) used social media to get their needed information. Moreover, 130(37.1%) followed by a discussion with friends. The next

largest group used a newspaper 125(35.7%) to meet their information need and that is followed by a website 110(31.4%). It is interesting to know that respondents prefer social media to meet their information needs. Moreover, one positive aspect is to have a discussion with their friends about their academic activities in the semester (*Figure 3*).

**Table4**

Frequency to visit the library

Frequency (Library visit)	Frequency	Percentage
Almost daily	10	3%
Once in a week	150	43%
Twice in a week	5	1%
Several times in a week	90	26%
Once in a month	10	3%
Twice in a month	10	3%
Several times in a month	85	24%
Never	0	00%



*Figure 4: Frequency to visit the library*

Respondents were asked to indicate the frequency of visiting the library (**Table 4**). The data reveals that the largest group of respondents 150 (43%) visit the library once a week. The next largest group 90(26%) stated that they visited the library several times a week. 85(24%) stated that they visit the library several times a month. The data indicated that there is no any kind of respondent who never visits the library. Which is the positive aspect that the respondents know about the importance of library (*Figure 4*).

**Table5**

Reasons for visiting library

Reasons for visiting library	Frequency	Percentage
To study	80	22.85%
Reading job-related book	50	14.28%
To borrow books	30	8.57%
A quiet place to read	50	14.28%

Browsing shelves	5	1.42%
Reference	5	1.42%
To use the computers	5	1.42%
OPAC	0	00%
Reprography service	10	2.85%
To read newspapers	75	21.42S%
To use the Internet	30	20%
For research	5	1.42%
To access to online journals	5	1.42%
Attending seminar	0	00%
To read magazines	0	00%

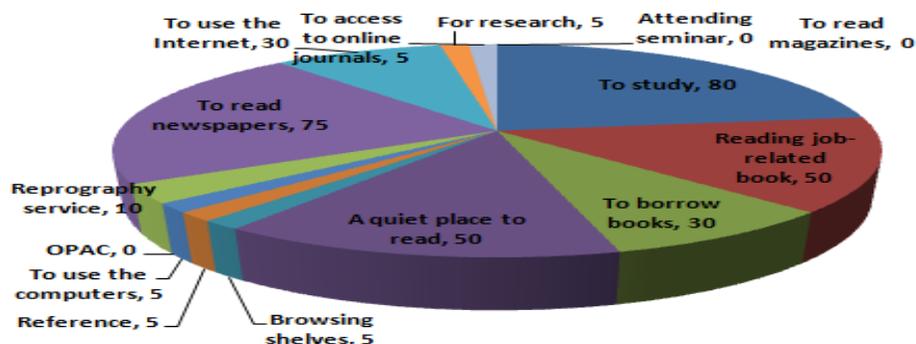


Figure 5: Reasons for visiting library

As shown in (Table 5), the largest group 80 (22.85%) of respondents visit the library for study purposes. The next largest group 70 (20%) visit the library for reading newspapers which are followed by reading job-related books 50(14.28%). These are very significant findings 50(14.28%) respondents use the library for reading room places. Moreover, 30(20%) respondents are using the library for the internet.30 (20%) respondents use the library to borrow books related to their subject (Figure 5).

Table6

Preferred sources in the Library

Preferred sources	Frequency	Percentage
Printed Sources	50	14.28%
Electronic sources	50	14.28%
Both of the sources	250	71.42%

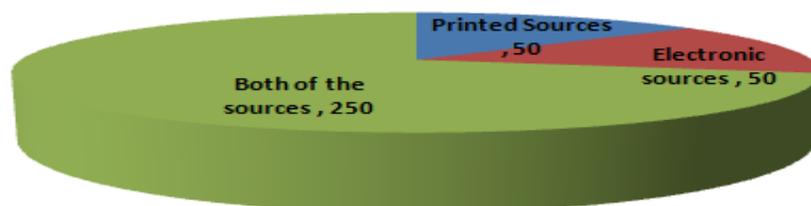


Figure 6: Preferred sources in the Library

The result in (Table 6) shows that the frequency of the use of printed sources is lower than the electronic sources. But the largest number of respondents 250 (71.42%) preferred both printed and electronic sources (Figure 6).

Table 7

Preferred Electronic sources in the library

Preferred Electronic sources	Frequency	Percentage
E-journal	10	2.85%
E-Book	10	2.85%
Email	10	2.85%
OPAC	5	1.42%
Databases	5	1.42%
Websites	10	2.85%
Google scholar	10	2.85%
Social Media	240	68.5%
HEC digital library	50	14.28%

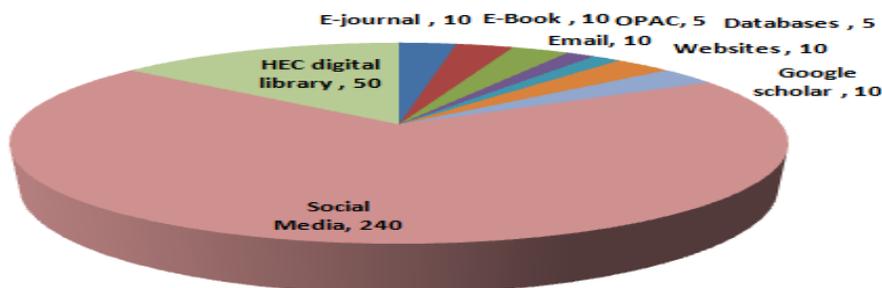


Figure 7: Preferred Electronic sources in the library

As shown in (Table 7), the largest group 240 (68.5%) of respondents are Preferring social media for the seeking of information. The next largest group 50 (14.28%) are Prefer the HEC digital library for accessing any kind of information. Moreover, 30(20%) respondents are using the library for the internet.30 (20%) respondents use the library to borrow books related to their subject (Figure 7).

Table 8

Satisfaction with library Services

Satisfaction with library services	Frequency	Percentage
Strongly dissatisfied	10	2.85%
Dissatisfied	10	2.85%
Neutral	20	5.71%
Satisfied	260	74.2%
Strongly Satisfied	50	14.28%

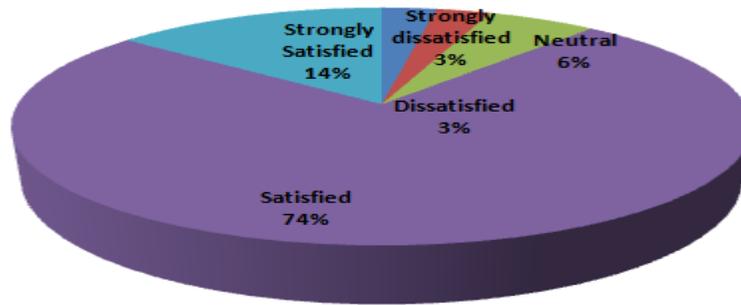


Figure8: Satisfaction with library Services

The result shows that respondents visit the library for many reasons and most of the respondents do not visit the university library frequently. Respondents were asked how satisfied they are with the library services. The largest numbers of respondents 260 (74.2%) are satisfied. Moreover, 50(14.28%) are strongly satisfied with library services. The next group 20 (5.71%) are neutral and 10(2.85%) are dissatisfied with the library services.

**Table 9**

Difficulties faced by undergraduate while seeking information

Difficulties of information seeking	Frequency	Percentage
Lack of knowledge to use OPAC	50	14.28%
Limited borrowing facilities in library	30	8.57%
Insufficient information resources	10	2.85%
Lack of awareness of various electronic databases	30	8.57%
Out-dated information	10	2.85%
Difficulty with locating articles in journals	5	1.42%
Manual system in libraries	30	8.57%
Lack of time	10	2.85%
Too much information to deal with	30	8.57%
Poor organization of materials	5	1.42%
Poor research services	5	1.42%
No special study room	5	1.42%
Lack of ICT knowledge	50	14.28%
Slow internet speed	100	28.57%
Poor ICT facilities	50	14.28%
Limited knowledge on the use of Keywords	5	1.42%
Inability to seek, to obtain, and to evaluate information	10	2.85%

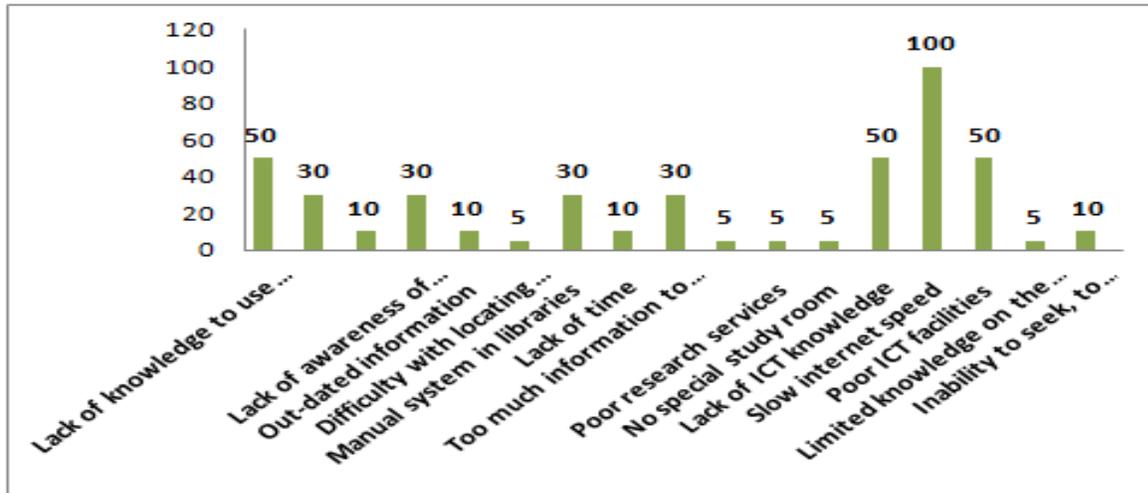


Figure 9: Difficulties faced by undergraduate while seeking information

The respondents face several problems in their information-seeking activities. The respondents were asked to indicate the problems that they generally face while searching for information to meet their needs. Their responses are presented in (Table 9). The top-ranking problem mentioned by a majority 100 (28.57%) mentioned slow internet speed 50(14.28%) of the undergraduate students is the lack of ICT knowledge and it is followed. A majority 50(14.28%) of the respondents complain about the Poor ICT facilities. The other problem the respondents mentioned 50(14.28%) lack of knowledge how to use the library OPAC. It is very disappointing because the library OPAC is the showcase where students could find the academic resources and excel at their academic activities. The following largest groups stated that they do not have the expertise to access electronic resources, lack of awareness of how to use electronic databases, and still in their libraries there is a manual system which they highlighted as a problem.

## Discussion

For the present study, few research questions were set, and addressed those research questions were asked by a survey method. The present study has explored the information-seeking behavior of the undergraduate students at the University of Balochistan which was underlying the information needs and the sources they used to meet those needs.

It is evident from the findings that undergraduate students largely needed the academic semester information for completing their semesters. This finding is very relevant because in the semester system usually, the students get limited time to do other extracurricular activities. They are busy with their class, midterm, tutorial, presentation, and so on. The second-largest groups of students need job-related information. The finding is very significant in the perspective of Balochistan as the graduate unemployment problem in Balochistan is high. It is in line with Ahmed & Hassan

(2020) report where it is noted that the graduate unemployment rate in Balochistan is 4.13%. It is very significant that compared to other sources, social media is completely ahead in meeting the information needs of undergraduates. It is in line with the Bicen, Sadıkoğlu & Sadıkoğlu (2015) and Mahadi et al. (2016) and Facemire (2020) studies where they showed that the use of social media by undergraduate students is increasing. It enables the formation of a social network with new people. They are even using social media to learn multiple languages. Moreover, majority of the undergraduate students all over the world are using social media for interacting with their friends, reading newspapers, browsing websites, and visiting the library to meet their information needs (Khan and Bhatti, 2011).

The findings in the current study show that undergraduates do not visit the library frequently but the largest numbers of respondents are only slightly satisfied with the services they get. Most of the students visit the library for study purposes, to prepare for either academic or job recruitment exams. The results obtained support the findings cited in other studies which validate the results of the current study (Callinan, 2005; Onuoha & Awoniyi, 2011; Rahman, Ara, & Khan, 2020). The undergraduate students primarily use the library as a place to study. A good number of students spent time browsing and reading newspapers. Reading newspapers is one of the important reasons to visit the library because a newspaper circulates the news of jobs and informs students about current national and international affairs. It shows from the findings that mostly undergraduate students are interested in political information. As Balochistan has a long historical background as well as this province is highly affected by terrorism from last few years. Moreover, Balochistan is a large region with abundant natural resources, oil, and a long coastline. But this province of Pakistan was worst hit by terrorists (Abbas, Baloch & Khoso, 2020).

It is evident from the findings that the undergraduate students at the University of Balochistan were unaware of the various information sources, resources, and services offered by the university library. The related studies results also highlighted that majority of the students were not aware of the e-resources, e-journals, OPAC, and other online databases (Ajiboye & Tella, 2007; Baro, Onyenania & Osaheni, 2010; Ali. and Jan, 2020; Gyesei, 2020).

The study also highlights that a higher percentage of undergraduates lacked ICT and OPAC knowledge. They are unaware of e-resources and lack knowledge of search strategies. Other institutional barriers like lack of reading materials and slow internet speed were also found. mostly in the developing countries, the undergraduate students lack knowledge of ICT, information search, using e-resources, and effective use of digital libraries (Ajiboye & Tella,

2007; Baro, Onyenania & Osaheni, 2010; Olorunfemi, & Mostert, 2013; Okoh & Ijiekhuamhen, 2014; Nwone & Mutula, 2018; Howlader & Islam, 2019; Khan and Khan, 2020) The barriers that the current study highlighted are almost similar to these studies.

### **Recommendation:**

- Library administrators should cooperate with faculty to persuade university officials to include an information literacy course in the curriculum (Hartmann, 2001).
- Sensitization should be the primary method for ensuring that students are well-equipped and educated about the information resources and services available in university libraries. To ensure effective sensitization, university libraries should utilize several marketing tactics, such as notice boards in faculties and resident halls, guides, and instruction manuals to ensure that users are always aware of what to do when in the library. In each section of the library, attractive posters describing the services and scope of collections should be used (Baro, Onyenania & Osaheni, 2010).
- By offering computers with internet connectivity in university libraries in Balochistan, a well-articulated and continuous effort is necessary to provide Information and Communication Technology (ICT) services (internet) in Balochistan university libraries and make them more accessible to students.
- The user instruction workshops should be promoted with the help of pamphlets that promote the collections, services, and library regulations in general, as well as current editions of video coverage/ tutorials, should be used to introduce new students to library resources and services.
- Librarians and faculty should also properly initiate and guide students in becoming good information resource users so that they do not rely solely on lecture notes to achieve their academic goals. This can be done by collaborating with faculty to integrate information literacy (IL) courses as well as ICT-related courses into the curricula.

### **Conclusion**

Information accessing and gathering could be a great challenge and a difficult task for the students of the University of Balochistan. These students are loaded with many assignments and class presentations that required them to source information on their own. As revealed from this study, the predominant information needed by undergraduate students is academic information to enable them to write their assignments, seminar papers, prepare for their class discussions, examinations, and tests, and to write their final year research papers as well as find information about jobs but they do not have time to find information on personal life, social life, health

information, and global information. Moreover, undergraduate students are using the library for their self-study and reading newspapers. They are also using library for political information. One of the positive aspects which highlighted from this study is that they are using social media for their academic works. Furthermore, during searching information they are facing several problems such as poor internet connectivity, ICT facilities, Lack of awareness of how to use OPAC and how to access e-resources. This study will help the library professionals to initiate an effective IL program in their library to train the library users about library use. Moreover, the findings portray a clear picture of the ICT facilities in the institutions of Balochistan, which will be helpful for higher authorities to improve the ICT facilities in the province institutions.

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