Full Length Research Paper

Information seeking behaviour of business school students: A special study of Universities and Colleges located in Academic City, Dubai, UAE.

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The major purpose of the study was to examine the information seeking behaviour of Business School students in Academic City, Dubai, UAE. This study made effort to determine the sources consulted and the general pattern of information gathering system by the students. The study adopted a survey, and data were collected using a questionnaire administered to two thousand three students from eighteen universities and colleges located in Academic City, Dubai, UAE. Major findings from the current study are: academic related information was the main reason for need of information; Internet and electronic resources are the most vital source of the academic information. This is a typical representation of the population of the business school students of the universities and colleges located in Academic City, Dubai, UAE. The paper is a product of recent survey carried out by the authors; hence the findings reported here are original and reflect the current views and practices of information seeking behaviour of business school students of universities and colleges located in Academic City, Dubai, UAE.

Key words: Information seeking behaviour, library resources.

INTRODUCTION

It is human nature to constantly search for ways of satisfying its ever increasing quest for resolving problems. Information seeking is thus a natural and necessary mechanism of human existence (Marchionini, 1995). The emergence and development of internet and Information Communication Technologies (ICT), coupled with the growth of knowledge has made information so paramount. This has led to research on the value of information in various disciplines like education, psychology and information management.

Information seeking behaviour can broadly be defined as that which is concerned with determining user's information needs, information searching behaviour and finally the use of information. Through the ages informa-tion scientists have been studying about how people seek and make use of information. The various ways people use to get the required information. Not only the information scientists but various disciplines including but not limited to psychology, marketing, decision making, innovation etc have always been interested in studying the information seeking habits of clienteles. Thus, there exists a strong recognition amongst information scientists of the interconnectivity of disciplines involved in research on all aspects of information.

The subject information seeking behaviour can be claimed to be as old as the human race. Over the period of time, the term information seeking behaviour has evolved into a subject of Information science. Meho and Tibbo (2003) explained that early during the 1980s - 1970s, the focus was placed on the evaluation of infor-mation collections, concentrating on information services and systems and how to make them more relevant to

their users. Itoga (1992) explains that during the early 1970s - 1980s, this position changed, as attention shifted from looking at physical information systems as sources of information to information seeking both as concept and process. Research conducted during this period attempted to depict the characteristics of users as a sociological group, which explains the steps people take to satisfy their information requirements. During the 1080s, Taylor (1968), Kuhlthau (1991), Wilson (1981, 1997, 1999) and Ingwersen (1992, 1996)'s studies show that deciphering questions concerning information requirements could not only be done from a systems point of view, but also from an individual's perspective.

UAE is developing policies and institutions, to support its full transition towards a business and knowledge economy. The country has rightly chosen to promote a business and knowledge-based economy and offers a conductive environment for entrepreneurs to flourish. It is essential to encourage intra-preneurship for innovation to grow and facilitate the shaping of a business and knowledge based economy that produces admirable results. Education sector today is one of the key sectors in UAE. The sector, which accounts for approximately 24% of the total government expenditure, has an estimated market size of US$7.31 billion.

Definitions

Information

The term information originated from the Greek words, typos, idea and morphe, evolving into the Latin word information. The most explicit definition in the literature defines information as recorded experience that is used in decision-making. The term Information has been defined, interpreted and used differently in disciplines (Losee, 1997:1).

Westbrook (1993) supports the notion that data, through a process of change, become organised, thus becoming information.

Only when human beings assign meaning and interpretation to information does it become knowledge. Analysing information transforms it into knowledge, which may result in some form of action (Westbrook, 1993).

Information needs

Kuhlthau defines information need is an urge that makes people to seek information. The need of information evolves from something missing, which necessitates the seeking of information that might contribute to understanding and meaning.

Belkin et al. (1982) see information as a method used to solve problems.

MacKay defines information needs on four different

levels. The visceral need is an existing need one that either on a conscious or unconscious level is still un-expressed. It can manifest itself in the form of 'unease', which could potentially develop into action as more information becomes available.

The conscious need is an expressed need, albeit expressed rather vaguely, ambiguously and indecisively. By communicating the need, it is hoped that clarity can be achieved.

The formalised need is formally stated as a rational statement.

The compromised need represents the question as eventually posed to an information system.

Information need is a dynamic process; the knowledge absorbed leads to renewed knowledge.

Information seeking

Information seeking involves two entities. One is the seeker and the other is the information. Information seeking is seen as a process with which humans engage to purposefully change their state of knowledge.

Kuhlthau (1991) conceives information seeking as users' constructive effort to derive meaning from information in order to extend their state of knowledge on a particular issue or topic. This activity incorporates a series of encounters with information within a space of time, rather than a single reference incident.

Marchionini (1995) states that searching for information is experientially not a straightforward act. It is a process and form of problem solving that goes through problem recognition, problem articulation, source selection, query formulation, search execution, examination of results, extraction of required information, and reflection. Once relevant information is located, the information seeker studies, copies and integrates it with what is already available, thus enabling problem solving.

Marchionini and Komlodi (1998:97) state that Information seeking is seen as a process with which humans engage to purposefully change their state of knowledge. This process is said to be internally active as information seekers direct attention, accept and adapt to stimuli, reflect on progress and evaluate the efficacy of continuing.

Information seeking behaviour

Information seeking behaviour can be described as an individual's way and manner of gathering and sourcing for information for personal use, knowledge updating and development.

Fairer and Wessels (1990) refer to information seeking behaviour as the way people search for and utilize information. Information seeking behaviour is how people use information in their work environment. The need of

information seeking behaviour arises due to information need of the information seeker, who in order to satisfy it, makes demands upon formal or informal information sources or services, resulting in either success or failure.

Taylor (1990) also noted that after interacting with the information sources what a user actually needs may not eventually tally with what is practically available, due to constraints either within the stock or due to the user's own inadequacy.

Purpose of the study

Libraries are always an integral part of any academic institutions. Libraries today are not limited to campus of the parent organization. Today is the age of information; the traditional libraries have been converted to digital ones, to reach more wider geographical area. The growth of ICT and its use in the developing countries, particularly in the Middle East countries have been fast catching up with the developed countries. The gap in catching up with the developed countries can be seen in the usage pattern of electronic resources in the libraries.

The phenomenal growth in ICT technology and the new initiatives by the government have led the UAE based educational organizations to build their library e-resources. The transformation of traditional libraries to digital libraries has given more challenges to the library user community.

The purpose of the study was to examine the information seeking behaviour of Business School Students in the universities located in Academic City, Dubai. These include both the undergraduate and post graduate students. The study made effort to determine the sources consulted and the general pattern of information gathering system by the students. The study adopted a descriptive survey design and data was collected using a question-naire administered to 2300 respondents from the universities given in the list below. The present study gains importance against the backdrop of the transfor-mation from traditional resources to the digital resource. Enormous research has been carried out on information seeking behaviours; however very few studies have focused on the information seeking behaviour of the business students in Dubai Academic City. The present study attempts to fill the gap.

This paper is the original survey carried out by the author and reflects the current views and practices of information seeking behaviour of business school students in the universities and colleges located in Academic City, Dubai.

1. Manipal University
2. BITS Pilani Dubai Campus
3. Institute of Management Technology.
4. SP Jain Center of Management, Dubai Campus
5. British University in Dubai

6. Canadian College
7. Hult
8. Manchester University
9. Amity University
10. Al Ghurair University
11. Heriot Watt University
12. Hamdan Bin Mohammed e-University
13. Murdoch university
14. American University in the Emirates
15. Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST)
16. Zayed University

Scope

The scope of the study is limited to business school students of universities and colleges located in Academic City, Dubai, UAE.

Hypotheses

The study was quantitative, with the following hypotheses tested to establish the information seeking behaviour of the business students in the universities/colleges located in Academic City of Dubai.

1) Purpose of searching for Information
2) What format of information resources the students prefer to get their information
3) Resources used to search for the required information.
4) Channels the students use to search for information
5) Library services satisfaction rate.

LITERATURE REVIEW

Thamaraiselvi (2009) made a study on changing roles for the future academic library. He urged that information revolution and the knowledge that is available on the Web have created new challenges to these traditional professional ethics. The emerging challenges of acquiring and providing access to electronic knowledge resources require librarians to shift their focus from traditional resources to manage and provide quality on-line infor-mation service to the knowledge society. So the vision of the future academic library professional must be to create a World Class Networked Global Library and Information Centre to provide timely web based quality information service to the user in time in the e-learning environment.

Xuemei (2009) has made an attempt to study the information seeking behaviour in digital age. The study reveals that electronic information resources play an essential role in these researchers' information seeking pursuits. Among the eight types of Internet information technologies rated, the Web, databases, and e-journals

Table 1. Purpose of searching Information.

Purpose	Responses	%
Academic	1699	90.71
Entertainment	70	3.73
Jobs	35	1.86
News	40	2.13
Health	28	1.49
Investment	1	0.053

Table 2. Format of information resources.

Purpose	Responses	%
Print	761	40.63
Electronic	1112	59.36
Microfiche/microfilm	00	00

are ranked first, second, and third in importance, followed by online catalogs and e-mail. Social sciences researchers use electronic information resources more often than humanities researchers. Doctoral students and assistant professors (both academically junior) have a higher rate of usage of electronic information resources than their more senior colleagues. All of the participants surveyed utilized electronic resources for their research at some point in the research process, and will continue to employ them as a means of gathering information. Easy access to information anytime and anywhere is important to these researchers, making them desire even more electronic information resource availability.

Brazilian social science researchers in their study have found that although print resources are still the most frequently used, electronic resources are becoming increasingly popular.

Marchionini (1995) explains information-seeking behaviour and changing environment, including the ways that the electronic environment has influenced users. He highlights the human-computer interaction for information-seeking.

Stenmark and Jadaan (2006) have made a study of Intranet users' information-seeking behaviour using search log files. They collected and analysed three different years like 2000, 2002 and 2004 to study the shifting trend of information-seeking behavior in intranet search.

Basimalla (2000) in his study reports that seeking information from the Internet often starts from a search engine, using either its organized directory structure or its text query facility.

Exhaustive literature has been reviewed by authors, but the important one has been highlighted in this article. The study cited above indicates that considerable work has been done on information-seeking behaviour.

METHODOLOGY

This study adopts a qualitative and quantitative data approach to information-seeking behaviour, using Survey method as the primary tool for data collection. A pre structured questionnaire drafted with 5 questions was distributed to students of 18 Universities/colleges in the Academic city Dubai.

The 2300 questionaires were distributed in the libraries of the said universities/colleges. 1873 responded with the completed

surveys, and the same was used for the data analysis. 8.52% of the respondents started the survey and returned it without completing it. 10.05% of the students did not return the survey form. The physical presence of the researcher with the respondents, and small number of questions has improved the response rates, since researcher can follow-up with the respondents at the site. The response rate of the survey was 81.43%.

Data analysis

The data collected from the students were analysed using simple percentage technique with appropriate graphic illustrations.

RESULTS

After the analysis of the data, the following results were constructed.

Survey question 1

What is the purpose for searching for information?

Information need is often understood in information science as evolving from a vague awareness of something missing and as culminating in locating information that contributes to understanding and meaning (Kuhlthau, 1993).

Table 1 indicates that 1699 (90.71%) students search for academic information. 70 (3.73%) students search information on entertainment. 40 (2.13%) of the students search for information pertaining to current affairs viz news. 35 (1.86%) search for jobs/employment related information. 28 (1.49%) indicates they search for information related to personal health. 1 (0.053%) of the students search for information on investment. Therefore, it can be accepted from the table that students generally search information for their academic purpose (Figure 1).

Survey Question 2

What format of information resources do you prefer?

From Table 2, it was found that an overwhelming majority 1112 (59.36%) of the students prefer electronic resources. The print resources 761 (40.63%) stood second in the preference list. Microfiche.microfilms are not preferred by the students (Figure 2).
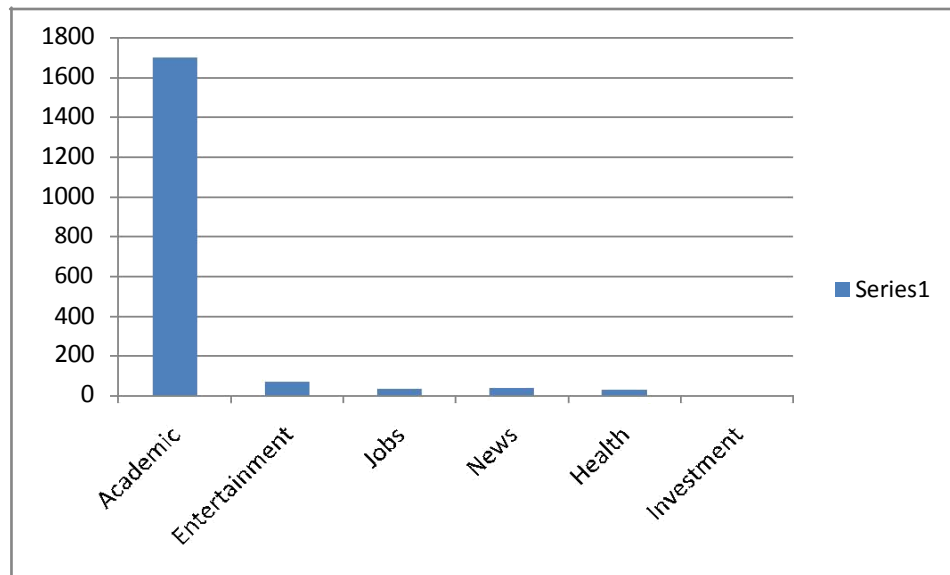
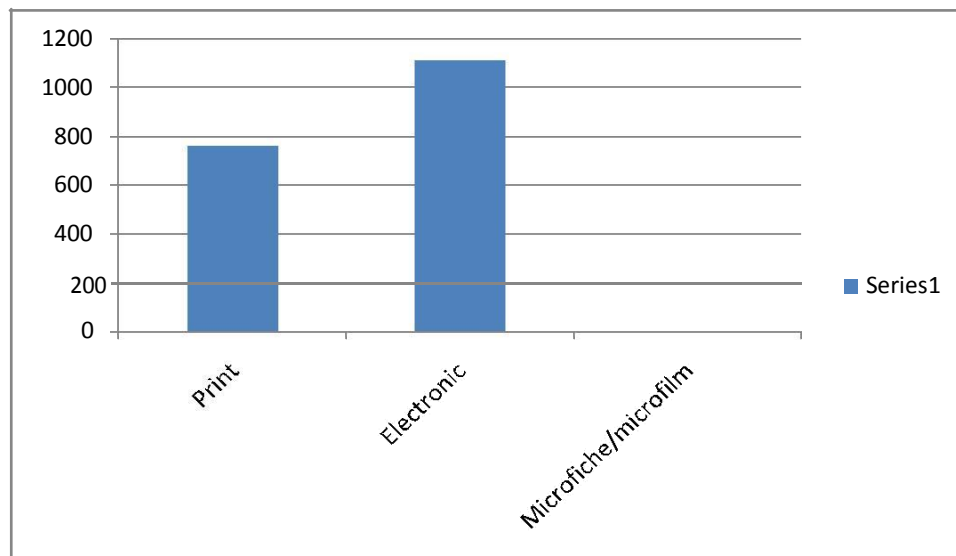**Figure 1.** Purpose of searching Information.

Figure 2. Format of information resources.

Survey Question 3

Which of the following do you use as a source of infor-mation for your research?

Table 3 shows the students' preference of information sources for their informational needs. The results reveal that internet and books were the most preferred and used. 28.53% of the students preferred the internet compared to 26.32% for books. This followed the use of journal articles and class notes as the second preference of the students. About 14.79%of the students preferred journal articles compared to 9.82% for class notes (Figure 3).

Government and statistical resources were the 3rd

preference of the students, followed by using of theses and Dissertations, conference proceedings and news-papers. Only 6.13% of the students preferred information from conference proceedings, compared to 4.21% for theses and Dissertations and 1.87% for newspapers. Manuscripts and archives were not preferred by the students as they were considered as outdated informa-tion. Oral interviews and audio visual materials were preferred by marginal number of students.

Survey Question 4

How do you discover information for study and research? Table 4 indicates that majority of the students (43.99%)

Table 3. Source of information.

Purpose	Responses	%
Books (Including e-books and Hardcopies)	493	26.32
Journal Articles (Including e-Journals and Hardcopies)	277	14.79
Class Notes	184	9.82
Theses and Dissertations	79	4.21
Conference Proceedings	115	6.13
Manuscripts, Archives	00	00
Book Reviews	00	00
Newspapers	35	1.87
Audio/Visual materials	14	0.74
Oral Interviews	9	0.48
Internet	534	28.53
Government Documents	63	3.37
Statistical Sources	70	3.74

Table 4. Information discovery.

Purpose	Responses	%
Library catalogues	137	2.61
Abstracts, indexes	32	1.70
Databases	264	18.84
Bibliographies	4	0.21
Online bookstores	00	00
Browsing the stacks in a library	353	14.09
Listservs, forums, or blogs	34	1.81
Bookstores	00	00
Search engines	824	43.99
Discussion with teachers and Classmates	176	9.39
Experts at other institutions	00	00
Librarians	49	7.31

depend on various search engine as their first step to search for information. 18.84% of the students use the electronic databases subscribed by the library. This reveals that the library electronic databases are widely used to search for information. This is followed by the students browsing the stacks in a library (14.09%) (Figure 4). 9.39% of the students find it easier to get the required information by discussing with their teachers and classmates. 7.31% of the students use the librarians as a channel to search for information. A percentage of the learners do also use the library catalogue to search for information. In the present study, 2.61% of the students use the library for this purpose. Students also use the help of Listservs, forums, or blogs to get information. The percentage of such students using the help from Listservs, forums or blogs is very less compared to any of the above category. Here, in this case the percentage is 1.80%. Most of the students searching for information are either not familiar with the indexing or abstracting

resources. A very narrow percentage of students use these resources for their information. In the present study only 1.70% of the students use the indexing or abstracting resources. Students do not prefer to use bookstores to search for their information.

Survey Question 5

How do you rate your satisfaction for library services?

Table 5 indicates that 941 (50.24%) students who partici-pated in the survey are satisfied with the library services. These students are comfortable and satisfied with the services they get from library. 663 (35.39%) of the responded students are beyond satisfied with the library service. 290 (15.48%) of the respondents are either not happy or not satisfied with the library service. The per-centage of the respondents that are not at all happy with
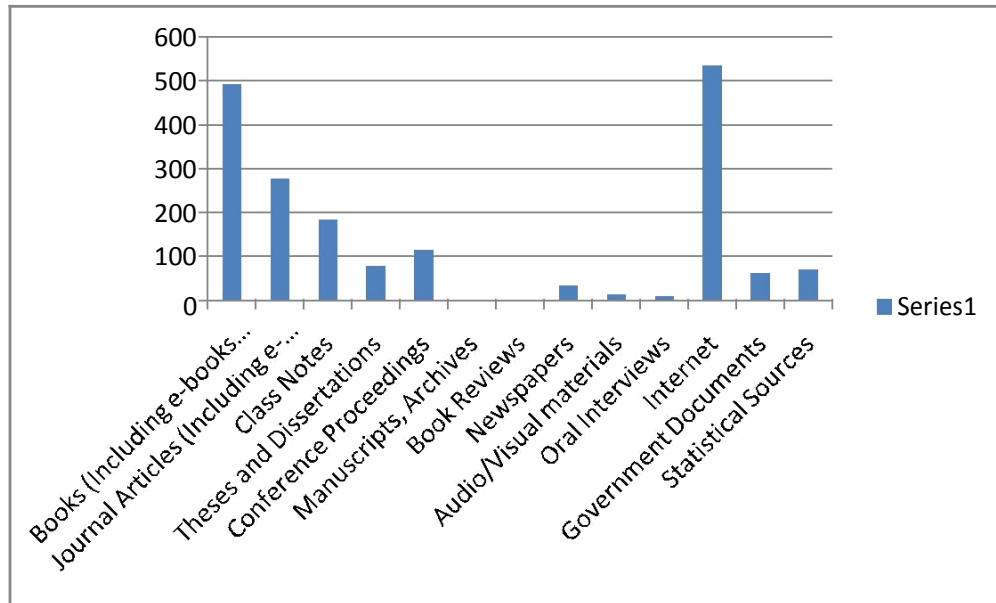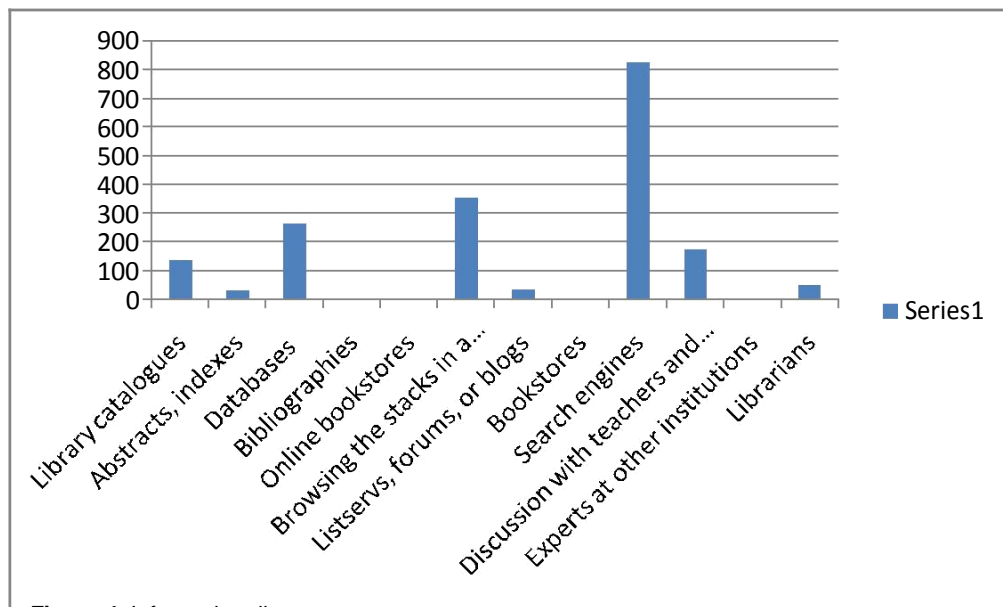
Figure 3. Source of information.

Figure 4. Information discovery.

Table 5. Rating of satisfaction for library services.

Purpose	Responses	%
Beyond Satisfaction	552	29.47%
Satisfied	941	50.24
Less Satisfied	204	10.89
Not satisfied	176	9.39%

the library service is very marginal 176 (9.39%) (Figure 5).

DISCUSSIONS OF THE FINDINGS

Dubai is a modern city with access to the latest of the technology available. The use of internet and computers is a common sight in Dubai. Almost all of the public places like the shopping malls, metro stations, parks and airport provide free Wi-Fi connections. Majority of the universities/colleges provide the computer and internet facilities to their students. Students usually use their internet from the libraries through Wi-Fi on their laptops on the university/college campus. By its very nature, access to the Web is intimately related to performing
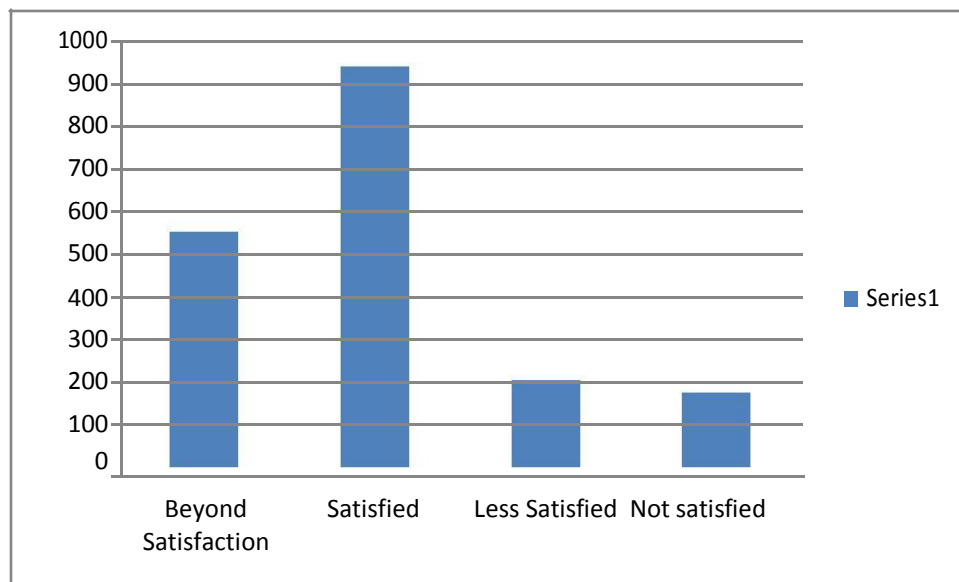
Figure 5. Rating of satisfaction for library services.

some kind of search. Normally when students start to search for information they always look to the sources or channels that are time and cost effective, and that allows them to quickly put the matter on the draft by copy paste and then they can easily do the printing. The respondents here in this study (in Question No. 2 and 4) may have never used a card catalogue, but the respondents are more comfortable with the electronic facilities. Using the said advantages of the electronic resources and the search, students most of the time use the search engines like the Google, yahoo or other search engines to search for their information. Over the years, the academic libraries have been giving more importance to electronic resources, as these resources are accessible from anywhere and anytime. These have proved an edge over the print resources. The ease of search and access to full text of information has made it the students' first choice of format, compared to the print format. But students always tend to stick databases or the resources that provide the full text of the information. In this process they may miss a vital research or information that may not be available in the electronic format, as not all information is available in electronic format.

The data obtained by the survey provide insight into the information seeking behaviour of business students. The results revealed in this study almost tally with the earlier studies conducted on the information seeking behaviour by Littlejohn and Benson. This current study also shows that the need of information for the students is mostly for academic purpose.

With the advent of the Internet technology, integration of the Information technology (IT) tools into higher education stream has become an easy task (Alsunbul, 2002; Altbach, 2002; James, 1996).

Analysing question 1 which sought to know the purpose of information search of the students, it was found out

that 1699 (90.71%) of the students searched information for academic purpose. It is evident that students seek information mainly to update knowledge, prepare for examinations and to do assignments.

The results shown in Table 1 support the study done by Kakai et al. (2004) which reveals that students' information seeking behaviours promote academic excellence. From the hypothesis tested, it was confirmed that the students search for information for academic purpose.

Analysing question 2 which sought to know what format of information the students preferred in their pursuit of searching information,

Table 2 indicates that electronic format of almost all major information resources were preferred for academic purpose than the printed resources. The reasons that the students prefer electronic resources are associated with the searching capabilities, sources, tasks and users. The ease of searching, use, source and familiarity of resources play a major role for the students to choose electronic resources instead of print resources. The present study also validate the studies done in the past that accessibility, ease of use, comprehensive coverage, accurate/reliable results, and cost of sources are the factors that influence users' selection of information sources (O'Reilly, 1982; Liu and Yang, 2004; Kim and Sin, 2007; Lee et al., 2008; Hamade and Al-Yousef, 2010; Boumarafi, 2010; Chaurasia and Chaurasia, 2012).

From the hypothesis tested, it was confirmed that the students prefer information in electronic format to print.

Analysing question 3 which sought to know the sources of information the students used to search for the required information,

Table 3 indicates that Internet or the free resources available on internet was the most preferred resource by the students. The exponential growth of the World Wide Web is exerting power over the evolution and development

of information-seeking behaviour (Nahl, 1998). Due to the diversity of online information available on the Web and the constantly increasing number of publicly available Web-sites, Web search-engines have developed into widely used services and essential tools for finding online specific information of interest. Students often begin their research process at the computer. Spink (1996) found that nearly 80% of users at the beginning of their search use the help of computers. Valentine (1993) found that college students tended to start their research with something familiar, and among students the sources with which they are most familiar are digital in nature. Overall there is a strong preference for digital sources. This preference is reinforced by a lack of familiarity with print sources. Bucknall and Mangrum (1992) found that 26% of his survey respondents said they would never use printed indexes or abstracts and another 27% they would only use those sources if they were the only thing available.

Table 3 shows that several useful and credible sources were not frequently selected, such as Journals, Books, Dissertations and thesis, conference proceedings and other institutional repositories. Although they perceive these sources as credible and useful, students are less likely to use them due to their lack of accessibility, familiarity and ease of use. This corroborates with the findings of Lieberthal (2009) who reported that students heavily use a variety of web sources.

From the hypothesis tested, it was confirmed that the students find internet the easiest and quick resource for their information requirement.

Question 4 sought to know the way how students discover the information.

Information seeking behaviour in electronic age has led to many recent studies. All these studies have shown that the amount of information available on web and the constantly increasing number of publicly available Web-sites are growing day by day. Users are provided with sophisticated search engines handling natural-language queries and offering search aids such as disambiguation and spelling suggestions. Search behaviour and expectations appear to be changing radically.

Table 4 shows that majority of the students use search engine as their first step to search for information. A major percentage of the students use their preferred search engines to get their required information. The students consider the search engines and online databases easier to use and faster. The students also feel that web search engines are more cost-effective and even more reliable than libraries (OCLC, 2006). The participating students were either 'mostly' or 'always' using web search engines for acquiring the needed information.

It can be inferred that students actually find it easier to locate materials on the internet than searching through the library, a task which may seem laborious. The importance of library or the librarian playing an important role in the process of information search process has rarely been understood by the students. The results of the

JUBILEE (JISC User Behaviour in Information seeking: Longitudinal Evaluation of Electronic Information Services), JUSTEIS (JISC Usage Surveys: Trends in Electronic Information Services) and the EDNER (Formative Evaluation of the Distributed National Electronic Resource) projects have indicated that Web search engines are the first tools to be used in information seeking and their use "predominates over all other types of EIS [Electronic Information Seeking]" (Griffiths and Brothy, 2002).

The findings in the present study upheld the outcome of the OCLC survey, find web and search engines much more convenient than online or physical libraries. From the hypothesis tested, it was confirmed that the students find search engines as the best channel of seeking information followed by library catalogue, online databases and other channels.

Question 5 sought to know the satisfaction rate of library services.

Libraries should take utmost care while selecting and acquiring resources and services, keeping in view the demands of their users. The success of any library depends to a large extent on the selection of library resources and its services. The students are the major users of library in an academic environment. In above sections it was revealed that though students mostly depend on search engines to search for information, in addition to search engines and various online resources students are using the library resources and services for their informational needs. Majority of the students are of the opinion that their institution libraries have enough information sources that they need for their informational needs and the students are satisfied with services provided by the library.

Conclusion

Internet has become an easy source of accessing information and E-eesources as is evident from the present study. As technology has gained an ever large foothold in the domain of business education, the digital resources appears to have a significant impact on information seeking behaviour of the majority of library users. Good number of students frequently seeks information from E-resources. The findings of the study indicated that the guidance on authenticity and use of the resources available free on internet is necessary, and guidance in the use of library resources and services was necessary to help students meet some of their information requirements. Faculty members should give more assignments to the students and guide the students to the authentic resources for their research. Libraries can establish multiple search scopes and tailor them to the needs of specific user groups. As revealed from this study, the predominant information needed by undergraduate students is academic information to enable them write their

assignments, seminar papers, prepare for their class discussions, examinations and tests, and to write their final year research papers more than any other information such as information on personal life, social life, health information, employment, and global information which were all rated low by the students.

This trend of using the resources that are easy to use and available is evident that the students are not aware of the latest updates on information, and this may miss a lot of facts in the research of the respondents. Students in order to meet the deadlines and complete the academic formalities are avoiding these resources for easy efforts.

The results of this study reveal that the respondents are satisfied with the services provided by the university/ college library. As the needs and levels of satisfaction of various users vary, the libraries always have difficulties to satisfy everyone's needs.

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