



The Information-Seeking Behaviour of Students: A Case of University of Dubai

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Abstract- The information seeking behaviour, is considered as a human behaviour to search for information in purposeful way to find the gap. This behaviour sometimes is very undefinable. The study investigated use of electronic resources by students of the College of Business Administration (CBA) and College of Information Technology (CIT). That is, it examined possible factors and problems in their searching habits, information seeking, use and retrieval in satisfying their needs. Therefore, the study focused on information seeking behaviour of students and barriers to utilizing online resources to execute academic tasks. Students of University of Dubai ultimately, due to cultural effects adopts different searching processes, use different phrases and mostly spend more time to search for information to satisfy their needs. It is assumed that poor information skills are preventing them from searching information effectively.

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I. INTRODUCTION

Probably the increase of web-based information accessible via the Internet and the development in electronic publishing and related digital technology have induced abundance of electronic resources and services in the library. The dynamic change of library resources and swift change to electronic resources have brought about the significant challenges and opportunities to libraries. Perhaps the countless types of information as well as numerous search engines in different locations to be available in a single platform needs special searching skills to assist students to meet their needs. Many universities in UAE, including University of Dubai, are anonymously investing in electronic resources to increase access to their growing communities in various horizons. The library is providing thousands of scholarly journals through the subscriptions to number of academic databases along with web based resources. It is obvious that provision of those electronic resources will need some technical library settings for accommodating the growing information needs. Evaluation of plentifully available resources is highly important for designing, developing and maintaining effective information retrieval and information uses in a real-life operational environment [1]. Perception into information seeking can be gained by understanding how users seek information sources and how they choose contents to meet their needs.

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In the digital environment, users' dilemma is on what is satisfactory and choosing what is best. In practice satisfactory translates into judgment that the information is good enough to achieve searcher's needs. Borlund [2] observed that "undergraduates employ a coping strategy in their search for information, often seeking to find enough information to fulfill assignment requirements with the least cost in terms of time or social efforts..." users are confronted with too much unevaluated information and select sources based on authors they already heard about or familiar with or even referred to. In universities regardless to their backgrounds tend to see themselves are capable of searching sources with less instruction. There is a need of changing library information delivery approach to get meaningful usage of information, at the meantime students learn more how to use digital information sources effectively.

Electronic resources are gaining prominence in GCC libraries which are trying their best to cope with the dynamic advancements in digital technologies. GCC libraries are witnessing a shift from emphasis upon holdings towards the importance of being gateways to networked information [3]. University of Dubai Library is amongst those trying to follow the trends with eager. Recently University of Dubai Library has experienced extraordinary growth of electronic resources in its collection. It is necessary to conduct the study to investigate how students at the university library are seeking information to satisfy their needs. The study also attempts to explore the students' behaviour in information seeking and needs to understand problems they face while searching electronic resources in the library.

II. LITERATURE REVIEW

The literature review on studies of information seeking behaviour is widespread. Prabha [4] found that undergraduate students stop searching for information when they decide they have enough information for their assignments. These findings support those of Barrett's [1] who argued that students look for enough information to meet their course needs. Urquhart [5] studying information seeking behaviour with disciplinary differences conceded in this regard, that different disciplinary approaches are not necessarily monolithic in their information search patterns, but differ according to the discipline. A potential way of looking to information seeking behaviour may involve information seeking patterns

of an individual that includes searching pattern, internal processes regardless of discipline and its information needs.

There are a lot of surveys that point out abundance growth of business information on the internet and the impact of its seeking behaviour. In investigating information seeking behaviour, Nicholas et al. [6] has brought significant changes in information seeking patterns. Nicholas et al. [7] used a log data obtained from three different sources and analysed log transactions of students, faculty, researchers and librarians to determine their information seeking behaviour reported that students are among the highest users of online databases compared to other groups in academic community. A study conducted at the United Arab Emirates University, Abdulla [8] reported that the migration from print to electronic resources at UAEU library raised some concerns in seeking behaviour. Another study by Urquhart and Rowley [9] highlighted the factors that influence students' information seeking behaviour in two categories, Macro factors comprising information source design, technology infrastructure, accessibility and organisational culture. Micro factors category has its emphasis on information literacy, search strategy, role of academics in changing information behaviour of students, discipline and curriculum pedagogy and training support.

Wilson [10] generalizes a theoretical model of continuing information seeking cycle which recognises the episodic nature of information seeking. Although the model focuses on the information seeking process, it doesn't openly explore the conclusion stage. Therefore, the factors those individuals employ in deciding when to stop information seeking are not identified. In another study, Dutta [12] reviewed 56 scholarly articles from the developing countries focusing on two areas: i) Comparing information needs of urban and rural dwellers and ii) discussing their information seeking behaviour and where possible to draw similarities with their counterparts in the developed world. The key finding arising in this review ascertained that urbanites in developing countries show similar information seeking behaviour regardless to geographic location and the highly educated one perform fairly as their counterparts in developed countries. The study found evidence of the difference in the information needs between the urban and rural population in the developing countries. Therefore, it would be precisely correct to say that information needs and searching behaviour are affected by an individual's geographic location. This is why this study conducted in the Middle East to explore geographical differences. The technological advancements are changing the ways people communicate, methods of learning, teaching and research are becoming more varied and dynamic [14].

III. THE STUDY

The study was mainly quantitative and questionnaire was designed to study students' information-seeking behaviour. In particular, it investigated four sources of information seeking behaviour namely information seeking, information needs, use and retrieval.

A questionnaire was designed based on the previous literature to study students' information seeking behaviour at University of Dubai library. Five point Likert scale was used to measure how far students were using information resources in the library. SPSS package version 20.0 was used to analyse data. Ten students and a reference librarian were used to pre-test the questionnaire. Based on their feedback the questionnaire was revised to the final form. Respondents were asked to fill the questionnaire which includes 3 parts. Firstly, demographic information, secondly information resources use, and thirdly barriers to use electronic resources.

Participants of this study were randomly chosen amongst students of the University at the frame of $n/n =$ above 10% of the population. A total of 200 questionnaires were personally delivered to the sample when they entered the library. It was self-administered questionnaire and students were given ample time to respond. Out of 200 questionnaires only 175 were returned to the researcher which made response rate 87.5% which is reasonable. All respondents were students of University of Dubai, College of Business Administration and few from College of Information Technology at the time of the survey.

IV. RESULTS

This section presents findings relevant to information seeking behaviour. Findings from table 1 showed the descriptive statistics from the reliability analysis. The distribution of sources of information seeking behaviour variables are close to each other, the highest rating given to information needs (0.663). The results showed that students made significant use of electronic resources. However, it is interesting to report that 83% of students cited that the primary resources of information for their assignments were electronic resources to fulfill their daily information needs and execution of academic tasks. Respondents were asked to express their opinion regarding the difficulties they face in using electronic resources. They mentioned that barriers of information seeking, mainly cited that they are facing difficulties in choosing databases (20%), lack of searching skills (18%), identifying reliable articles (12.8%) of search results and 4% cited lack of qualified staff. While 45.2% cited that they are not facing any problem at all. It seems that respondents were affected by their collective culture in searching electronic resources. Social pressure in Arab society is tremendous, and public opinion is the main drive force to moves, praises, or

condemns of the individual behaviour. So, respondents shy away to raise any problem which will reflect ignorance to their society. The individual Arab is, first and foremost, a part of an extended family.

While in the real sense they stated that they are getting some tips from faculty and friends to use

electronic resources as the nearest sources. Students are using commercial websites to search for their needs instead of interacting with academic databases, which is really upsetting phenomenon. Due to students' exposure to internet in early stages of study, they are so weak in searching techniques of academic databases.

Table1: Descriptive statistics

	Mean	SD	N	α -alpha value
Information seeking	37.44	13.202	175	0.85
Information use	26.73	5.848	175	0.89
Information needs	60.63	11.985	175	0.88
Information retrieval	21.76	3.970	174	0.88

In order to understand participants' information seeking behaviour possible correlation between sources of information were examined through Pearson correlation coefficient (table 2). Each first order factor was measured by different items varied between 3 - 6 items, each item was assumed to lead only on the respective dimension. The four factors namely information seeking, information needs, information use and information retrieval were analysed. Analysis showed that there is significant coefficient between sources of information. The highest coefficients were found between information needs and information-seeking. Second highest coefficients were found between information use and information needs. Third

highest was between retrieval and information seeking. A Mann-Whitney test was performed to test the sources of information-seeking behavior and socio-demographic that found no significant gender differences between participants regarding the information needs and information use although the women scored higher.

A Spearman coefficient performed to examine correlation between age and four sources of information-seeking. The results showed that, there is no significant correlation between age and four sources of information-seeking behaviour. This finding was expected as there were no much age differences amongst participants. Mean age of participants was 20.55, SD 1.23 and ranges between 19 - 24.

Table 2: Correlation between Sources of Information

Sources of information	Information seeking r(p)	Information user(p)	Information needs r(p)
Information seeking	1	0.79(<.001)	
Information use	0.54 (<.001)	1	
Information needs	0.60 (<.001)	0.82 (<.001)	1
Information retrieval	0.62 (<.001)	0.54 (<.001)	0.57 (<.001)

The subsequent ANOVA test was performed and showed that there are differences between three of the sources of information.

V. DISCUSSION

The present study examined the information seeking behaviour of the students. Findings of this study seems sufficient to measure information seeking behaviour of students in on going rapid development of communication systems (ICT). It is interesting to note that many respondents like to use electronic resources

and visit the library frequently to improve their performances, but they only access the databases recommended by their instructors particularly. Students cited that in their searching for information, they face problems such as lack of quality of retrieved information, which might be due to poor search strategies, search terms (phrases), clear subject knowledge and using search engines rather than academic databases. It is perceived that students are having a high degree of self-efficacy to access electronic resources and are so confident, but are surprised by huge number of search results retrieved. At the same it is difficult to identify the

reliable sources of their needs. These problems are mainly due to students being exposed to personal computers, smart phones, laptops, gadgets in the early stage of their studies. Therefore, this exposure created another problem of accessing unevaluated resources. This means that students have easy access to information through various commercial websites (Google, Yahoo etc.), academic data bases and social networks. The libraries with their strong mediated search support are no longer the primary sources for students. Subsequently, existing information seeking behaviour models may not sufficiently describe their approach to satisfy their information needs as in [14]. For instance, Wilson's [11] model provides some guidance on the search process but due to being developed prior widespread of the Internet as information source is not applied necessarily by students in the University of Dubai. Many students are executing search practice just by the tips from a friend or librarian. Many of them are not attending information literacy sessions while they are freshmen in the University.

The present day students mostly knew information as product and not as process, so young searchers of this generation tended to search horizontally rather than vertically, as in [16]. This creates difficulty to student in discerning valid information in a mediated search environment. Students are not following any searching model in satisfying their information needs. It is perceived that students' over confidence of their ability to use technology is the main cause of this searching behaviour. Students' self-efficacy of the use of technology was relatively found one of problems of getting quality information among them.

The study highlights that students of University of Dubai precisely have reached macro factors that influence students' information set by Urquhart & Rowley [9] of having well information sources designed, technology infrastructure and accessibility, but organizational culture is not met. Students are compelled to search for information resources only required by instructor or mentioned in course syllabi. Regarding to micro factors set by Urquhart and Rowley [9] emphasising on information literacy there is no any embedded course on information literacy and they are satisfied with library orientation of the use of information resources to freshmen. There is strong likelihood that students are not aware of e-tutorials, so there is a need of marketing this service that will partly solve the problem of instruction of the use of the library resources. Having access to databases off campus was preference of 88% of students at their own spare time. This means that conservative culture of the Arabs bound many students and specially women to access information at home in order to avoid male and female interaction in information seeking. Many women use online resources so that they can stay physically separated with male while electronically connected in order to be modest, respectful and

seldom engage in social interaction with male [15] or sensitive topics. These cultural norms are predicted strongly to affect information-seeking behaviour in the region and elevating towards information technology in their studies. It might be assumed that women prefer to use offline sources such as asking family, friend and instructor when come to specific personal information needs in order to comply with cultural norms. It is very strange to report that when students asked about their preference resources of information, they reported commercial websites (Google, yahoo etc.) followed by academic databases. This means that students' search is still traditional nature of getting tips from relatives, colleagues (92%) and few rely on librarian tips. Almost 98.2% of students in this study reported that they knew how to search through library website but still rely on Google scholar to connect them to their respected databases. Although one search (via summon etc.) service available, but still they found that Google is easier to interact with than academic databases. The strongest correlation was found between information seeking and information needs ($r = 0.82$) which might mean that students were heavily involved in seeking information and use electronic resources to satisfy their needs (table 2). This finding concurs with Nicolas et al. [6]. The second strong correlation was found between information use and information needs ($r = 0.79$) which might mean that almost all participants' needs were relatively the same to do research projects and assignments. The third strong correlation was found between information retrieval and information seeking ($r = 0.62$) which might mean that students' searching activities stopped when they feel they have enough information to execute the assigned academic tasks. This finding doesn't defer from that of Prabha [4].

It seems that students are more indulged in social networks where they get quick feedback from colleagues or friends. This is another problems to rely on unedited source of information. ICT nationally and internationally has changed information-seeking behavior of students, as they articulate their needs in social networks and commercial search engines [17].

These findings showed that the outcomes of information seeking behaviour can be influenced by different information structures such as information seeking, needs, retrieval and availability of information, experience of the web search, surrounding environment and culture. No significant gender-based differences were found in regard to information seeking behaviour, although females scored higher than males. The dramatic changes in reference services data indicated that reference services are not utilized to the same extent in the past [16] and increasingly more students do not physically come to library or depend on social networks, friends' feedback and online chat with librarian. The online chat with librarian, has been used heavily by female students who were culturally forced to

be distantly segregated with male but electronically connected and share expertise in the subject or information seeking. Search strategies are still not to the extent as students rely on colleague's feedback and that might expose them to access peer reviewed journals, unedited publications and ultimately reduce the information quality.

VI. CONCLUSION

The main objective of this study was to explore the use of electronic resources by the University of Dubai focusing on information seeking behaviour. The results showed that students use electronic resources with limit of instructor's direction as knowledgeable persons along with tips from colleagues as nearest sources. There is a need of academics of playing pivotal role to enhance information seeking behaviour of students as knowledgeable persons consulted by students. Considering tremendous technology advancement in university education and teaching worldwide, there is some evidence that students' information seeking behaviour and use of electronic resources influenced by information literacy barriers. Therefore, information literacy skills are key focus so that students shouldn't suffer to navigate to authoritative and quality information sources. Having access to databases off campus was preference to students which means that would likely prefer to access at their own spare time, at their own convenient place rather than library. In other words, the library is no longer the only place to satisfy students' needs, but resources availability online is crucial. Considering the tremendous technology development in university education and teaching worldwide, it is expected that future students' information seeking behaviour will change tremendously as every level of their study will be online. Information literacy skills will be key focus from pre-university onwards. While the country is heading towards smart learning, students will no longer struggle with using software applications as will easily navigate electronic resources interfaces and fully utilize digital tools and none will struggle with basic electronic resources functionality.

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