CHAPTER – II

REVIEW OF LITERATURE

Shokeen and Kushik (2002)\(^1\) report on a study about information seeking behaviour of social scientists in the universities of Haryana. The study showed that most of the social scientists visit the library daily. The preferred search tools were indexing and abstracting periodicals and citations in articles. Current journals and books were preferred sources of information.

Reneker, M. (1992) investigated\(^2\) Information-seeking activities of 31 faculty at Stanford University. Using a naturalistic approach and qualitative techniques for the data collection, mainly personal interviews, the study found a close relationship between knowledge of the information environment and the sources used. Sethi (1990) used a questionnaire to study the information-seeking behaviour of 256 social science faculty members in Indian universities. It was found that respondents preferred journals, books, government documents, and reference sources for meeting their information needs. Hart (1993)\(^3\)

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notes that reported faculty made about seven visits each semester to the library and looked at how scholars in different disciplines vary in their use of library resources.

Smith (1987)\textsuperscript{4} reported that about one-half of the respondents from Pennsylvania State University relied more on their personal collections and borrowing materials from other libraries. Guest (1987) noted that 85 percent of the respondents relied on their personal collection as a major source for information for teaching and research. The author also found that librarians were rated lowest as a source for getting information.

Suriya, Sangeetha, and Nambi in (2004)\textsuperscript{5} evaluated the Information-seeking behaviour of faculty members from Government Arts Colleges in Cuddalore District was studied by, with reference to information-seeking pattern of faculty members in the library. Most of the respondents visited the library several times a week to meet their information needs.


Anwar (2007)\textsuperscript{6} reports that in Pakistan, the evaluation of information needs and information-seeking behaviour has gained interest during the last two decades. On different research studies of different groups of people in Pakistan. Bhatti (2008) carried out a survey on student needs in the Islamia University of Bahawalpur. Shahzad (2007) conducted a survey to find out the information-seeking behavior of faculty members from all three faculties, i.e., science and technology, social sciences, and humanities of Government College University, Lahore.

Judy Drennan, Jessica Kennedy and Anne Pisarski, (2005)\textsuperscript{7}, the authors identified 2 key student attributes of student satisfaction: (a) positive perceptions of technology in terms of ease of access and use of online flexible learning material and (b) autonomous and innovative learning styles. The authors derived measures of perceptions of technology from research on the Technology Acceptance Model and used locus of control and innovative attitude as indicators of an autonomous and innovative learning mode. First-year students undertaking an introductory management course completed surveys at


the beginning and at the end of course work. The authors analyzed the data by using structural equation modeling. Results suggest that student satisfaction is influenced by positive perceptions toward technology and an autonomous learning mode.

Jennifer Rowley and Christine Urquhart (2007)⁸, attempt to synthesize the two main perspectives in the research studies: (a) small-scale studies of student information behavior; and (b) the studies that focus on the quantitative usage of particular electronic information services in universities, often including implications for training and support. The Framework developed a multimethod, qualitative and quantitative methodology for the continued monitoring of user behavior. This article discusses the methods used and the project-management challenges involved, and concludes that at the outset, intended impacts need to be specified carefully, and that funding needs to be committed at that point for a longitudinal study.

Carita Kiili, Leena Laurinen and Miika Marttunen, (2008)⁹, investigated how students evaluate Internet sources in an authentic

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learning task. Upper secondary school students \((n = 25)\) were asked to look for source material on the Internet in order to write an essay. They were asked to verbalize their thoughts during the material gathering process. Their verbalizations and actions on the Internet were recorded and analyzed. The five evaluation profiles emerged: 1) versatile evaluators; 2) relevance-orientated evaluators; 3) limited evaluators; 4) disorientated readers; and 5) uncritical readers.

Abdullah Almobarraz, (2009)\(^{10}\), examine the characteristics of internet that affect its adoption by faculty members of Imam Muhammad Bin Saud University (IMSU) in Saudi Arabia. The framework of the study was the attributes of innovations offered by Rogers. The result revealed that the majority of IMSU faulty members used the Internet for research and academic activities twice a month or less, indicating a low Internet adoption rate. Multiple regression analysis showed that all attributes of innovation individually predicted Internet adoption. The combination of all attributes indicated the model could predict Internet adoption among faculty.

Hilary Tomney and Paul F. Burton, (1998)\textsuperscript{11}, assessed attitudes towards electronic journals they examined the current level of use of these publications by university academics in five faculties. Consideration is given to both users and non-users, examining why they use or do not use this medium. The perceived advantages and disadvantages of electronic publication are also examined. The results suggest that, although the actual number of academics using electronic journals at present may be low, academics are willing to try this new medium. There are more users among academics in the Science and Engineering faculties than in the Arts or Business. This paper conducted that the principal limiting factor is that of time to find electronic journals: academics initially simply need time to come to terms with the new technology and to locate electronic resources.

Beck (1997)\textsuperscript{12}, viz five criteria for evaluating web sources: accuracy, authority, objectivity, currency, and coverage. The author provides both useful descriptions of what to look for and a rationale for each criterion. The author also provides suggestions to instructors for successful internet assignments such as providing guidance, checking

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the site to make sure it is still functional, making sure students record time and date of access, and using established, trustworthy web guides and directories, among others.

Schrock (1995)\textsuperscript{13} created a set of materials to help students “\textit{critically evaluate a Web page for authenticity, applicability, authorship, bias, and usability.}” The author designed a series of checklists for use at the elementary, middle, and secondary school levels in both English and Spanish, which are available in both html and pdf formats on website. In one revised article, she provided 26 criteria for evaluating Web pages. Although both general and commonsensical in nature, her suggestions are a practical guide that students at all levels could find useful as they navigate the web.

Alexander and Tate (1996)\textsuperscript{14} provide an instructional model with two goals: (1) “\textit{Provide materials to assist in teaching how to evaluate the informational content of Web resources}”, and (2) “\textit{Provide a bibliography of materials on applying critical thinking techniques to Web resources.}” Their bibliography contains web evaluation articles and books as well as links to additional web evaluation sites, several of which deal with more scholarly issues such as the critical analysis of information sources, including journals. They also make available


several evaluation instruments that they designed for different types of Web pages because they contend that different criteria are needed for different types of pages.

Beck’s (1997)\textsuperscript{15} notes that students should record time and date of access, we should add that they should pay attention to the date of creation and modification for the pages they are using. Likewise, as instructors, the author refers that there is a need to make sure of providing such dates for students to ensure that the material we think they are viewing is, in fact, what they are using.

Amanda Spink and Bernard J. Jansen, (2004), provide an overview of recent research conducted from 1997 to 2003 that explored how people search the Web. The article reports selected findings from many research studies conducted by the co-authors of the paper from 1997 to 2003 using large-scale. The researchers examined the topics of Web searches; how users search the Web using terms in queries during search sessions; and the diverse types of searches, including medical, sex, e-commerce, multimedia, etc. information. Their Key findings include changes in search topics since 1997, including a shift from entertainment to e-commerce queries. Further findings show little change in many aspects of Web searching from 1997-2003, including query and search session length.

Rajeev Kumar and Amritpal Kaur, (2005), analyzed the use of the Internet and related issues among the teachers and students of engineering colleges of Punjab, India. A well structured questionnaire was distributed among the 960 teachers and students of all the engineering colleges of Punjab. The response rate was 84.2 per cent. The present study demonstrates and elaborates the various aspects of Internet use such as, frequency of Internet use, most frequently used


place for Internet use, purposes for which the Internet is used, use of Internet services, ways to browse the information from the Internet, problems faced by the users and satisfaction level of users with the Internet facilities provided in the colleges. The result of the survey also provided information about the benefits of the Internet over conventional documents. This study makes suggestions to make the service more beneficial for the academic community of the engineering colleges under study.

Becker (1998)\textsuperscript{18} conducted a study on the Internet use by 2250 teachers from public and private schools in the U.S. The study revealed that 90% of the teachers had Internet access. More than half of the teachers had Internet access at home. A majority of the teachers used Internet to find information resources for preparing their lessons.

Singh (1998)\textsuperscript{19} conducted a research study on the use of Internet by the librarians in Malaysia. The main findings of the study indicated that 90% of the respondents used the Internet for work related purposes. Most of the respondents were recent users.


Voorbij (1999) examined the use of the Internet amongst students and academicians in the Netherlands. A questionnaire was distributed among 1000 members of the academic community and three focus-group interviews were also held with faculty members. The study revealed that the Web was being used primarily to search general, factual, ephemeral or very specific information. The study also revealed that students and academicians faced many problems while searching the Web. Williams (1999) reported the use of information technology and the Internet in his project entitled "Information Technology in Michigan: Adult and Teen Survey Report." The results indicated that the majority of the respondents used the Internet at least once a week and 45% at least once a day.

Moreover, Laite (2000) surveyed 406 graduate and undergraduate students from Shippensburg University. The survey showed that 57.6% of the undergraduate students used the Internet 1-2 times per week and another 37.1% used it 1-2 times daily. More than

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50% of the graduate students used Internet 1-2 times per week and 37.7% used it 1-2 times daily. The survey showed that the most used Internet service was e-mail. A hundred percent of the graduates and undergraduate students used e-mail service.

Nicholas et al. (2003)\textsuperscript{23} conducted a study in the UK to examine the use of the web for health information and advice. More than 1300 people were surveyed. The study showed that 66% of the respondents accessed the Internet from home, 28% from workplace and the remainder (6%) used a combination of both workplace and home.

Hanauer et al. (2004)\textsuperscript{24} surveyed a diverse community college to assess the use of the Internet by the students for health-related information. The survey showed that although all the students surveyed had free Internet access through their community college, yet only 97% of the students reported having access to the Internet. The survey showed that 83% Internet users had access to the Internet at their home and 51% of the respondents accessed Internet at college or library. Eighty-one percent of the students reported to access the Internet most for college work and 80% for e-mail/chat.


A recent study by Asemi (2005)\textsuperscript{25} shows that all the respondents were using the Internet frequently because all faculties were provided connection to the Internet. It was revealed that the researchers of the university were getting quality information through the Internet. Fifty-five percent of the respondents searched for scientific information through the Internet because the university library had provided access to various databases and online journals for all the students and staff.

Bavakutty and Salih (1999)\textsuperscript{26} conducted a study at Calicut University, which showed that students, research scholars, and teachers used the Internet for the purpose of study, research and teaching respectively. The purposes of Internet use were: sending and receiving e-mails in connection with academic requirements, making a search on library catalogues, downloading images and communication with the peer.


Kooganurmath and Jange (1999)\textsuperscript{27} conducted a study, which revealed that a majority of the users used the Internet for communication, followed by the access to information. More than 70% of the users used it for higher studies and only 39% used it for discussions with peer groups. The most used services of Internet were e-mail, the Web, discussion forums, FTP and Telnet.

A study conducted by Mahajan and Patil (1999)\textsuperscript{28} revealed that the purpose of using Internet by research workers at Pune University was to conduct literature search; for students was to know curriculum based information; for teachers to find supporting information to write articles.

Naushad Ali (2000)\textsuperscript{29} conducted a study at Aligarh Muslim University, Aligarh. The study showed that more than 50% of the study population was satisfied regarding the timings of the Internet service, but were not satisfied with staff's cooperation, and reservation facility.


Majority of the respondents were not happy with the number of nodes available.

Chandran (2000)\textsuperscript{30} conducted a study at S V University, Tirupathi, which showed that more than 25% of the respondents used the Internet for 2-3 times a week and more than 56% used it for accessing information. A majority of the respondents used the Web and e-mail services of Internet. The purposes of using Internet included communication and information gathering. The sources used for identifying information about Internet included website itself, journals and magazines, staff and newspapers. A majority of the respondents used general websites as compared to recreational and discipline oriented websites.

Kanaujia and Satyanarayana (2003)\textsuperscript{31} conducted a study of the Science & Technology community of Lucknow city to assess the level of awareness and demand of web based learning environment among Science & Technology information seekers. The major findings of the study included:

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  \item The purposes of using Internet included communication and information gathering.
  \item The sources used for identifying information about Internet included website itself, journals and magazines, staff and newspapers.
  \item A majority of the respondents used general websites as compared to recreational and discipline oriented websites.
\end{itemize}


study revealed that 49.2% users browsed the Web for more than 2 to 4 hours and 14% for more than 5 hours a day. The study further showed that 36.6% users consulted e-journals regularly on the Internet, 40.4% used Internet for consulting technical reports, 24.8% to find online databases and 10.4% for telnet service.

Recently, Mishra, Yadav and Bisht (2005)\(^{32}\) conducted a study to know Internet utilization pattern of the undergraduate students of G B Pant University of Agriculture and Technology, Pantnagar. The findings of the study indicated that a majority of the students (85.7%) used the Internet. Out of the Internet users 67.7% were male students and 32.3% female students. The findings of the study also showed that 61.5% of the males and 51.6% of the females used Internet for preparing assignments. A majority of the respondents i.e. 83.1% male and 61.3% female respondents indicated that they faced the problem of slow functioning of Internet connection.

Kingkaew Patitungkho and Neela J. Deshpande, (2005)\(^{33}\), report the results of a study of the information seeking behaviour of faculty member of Rajabhat Universities in Bangkok, Thailand. Data were


collected by using a questionnaire from seven faculties in Rajabhat Universities. Results show that most of respondents stated their method of seeking information by consulting a knowledgeable person in the field. Two hundred and thirteen respondents seek information for preparing lectures. Fifty-four percent of faculty members access more documents was references from a book. It is revealed that most of the faculty members used textbooks. Seventy four percent of respondents read information materials in Thai and twenty four percent read materials in English. The Internet had been almost universally adopted; they trace materials from the library via the Internet. Google.com was used for searching information by respondents. They use frequently e-mail for communication. It is found that 42 percent of respondents use the Education Resources Information Centre database. The majority of respondents faced the common problem while seeking information i.e. unavailability of information.

Suriya, Sangeetha and Nambi (2004)\textsuperscript{34} carried out a research work on "Information seeking behaviour of Faculty Members from Government Arts Colleges in Cuddalore District." The purpose of their study was to investigate, how faculty members seek information from

the library. It mentions that most of the respondents visited the library several times a week to meet their information needs. Regarding the type of search made by the respondents the majority of the respondents made their search by subject.

Shokeen and Kushik (2002)\textsuperscript{35} studied about information seeking behaviour of social scientists working in the universities located in Haryana. They reported most of the social scientists visit the library daily. The first preferred method of searching the required information by the social scientists followed by searching through indexing and abstracting periodicals, and citations in articles respectively. The social scientists use current journals followed by books.

Challener (1999)\textsuperscript{36} investigated artists and art historians teaching in five liberal arts colleges and three universities. Results found that they need information for teaching. The participants almost all subscribe to art journals, and many read newspapers. They visit libraries frequently, usually more than one library. A large percentage of both art historians and artists are using computers for teaching.


Reneker (1992)\textsuperscript{37} investigated the information seeking activities of 31 members of the Stanford University academic community over a two-week period during the 1990-91 academic year. She adopted the naturalistic approach and employed qualitative techniques for the data collection using mainly personal interviews. Informants’ perception of their information environment is expressed in positive terms, and there is a close relationship between knowledge of the information environment and the sources used. Information seeking is embedded in the day-to-day activities and relationships of the participants and is triggered both by the articulation of need and availability of information. A large number of needs are satisfied by sources the informants created or organized themselves and by interpersonal information sources. The findings of the study indicated that the action of information seeking originated from a wide variety of needs like personal, professional and entertainment.

P A Manda, F Mukangara, (2007)\textsuperscript{38}, examined the association between gender and the use of electronic information resources among postgraduate students at the University of Dar es Salaam, Tanzania.


The study was conducted in December 2005 and integrated both qualitative and quantitative research designs. A sample of 100 postgraduate students was selected using a stratified proportionate random sampling procedure with a 97% response. Data analysis involved the use of cross-tabulation and qualitative descriptions. Findings revealed that gender is associated with the use of electronic information resources and male postgraduate students were more likely to use electronic information resources than female students.

Joseph Megameno Ndinoshiho, (2010)\textsuperscript{39}, investigated the Masters’ dissertation submitted to the University of Cape Town. A self-administered questionnaire was administered to 163 students and interviews were conducted with 15 students in August and September 2007. The results revealed that the majority of students made the greatest use of the Internet. The OPAC was moderately used, while e-databases were substantially under-utilized. Students used EIS for a variety of purposes including obtaining academic information and current awareness. The main barriers that students faced in using EIS were the shortage of computers, unreliable Internet connection, and

lack of skills. The majority of students relied upon their fellow students to acquire EIS skills.

Behçet Oral, (2008)\textsuperscript{40}, a study carried out in Ziya Gokalp Education Faculty at Dicle University during 2005-2006 academic year by the participation of 440 student teachers in total. "Likert Type Attitude Scale Toward the Use of Internet", was used to determine the student teachers' attitudes toward the Internet and "The Attitude Scale Toward Democracy" was used to find out the attitudes of the student teachers toward democracy. The data are analyzed by using variance analysis and correlation techniques. Scheffe test is used for significance test. A positive significant correlation was determined between subscales using Internet in teaching", "using Internet in research", "liking to use Internet in teaching", "using Internet in communication" and "using Internet in sharing information of attitude scale towards using Internet and subscales inclination to democracy", "devotion to democracy" and "qualities of democracy of attitude scale towards democracy. According to student teachers' purpose of using Internet, the difference between their attitudes towards "devotion to democracy" and "qualities of democracy" is significant. In addition, the difference between their attitudes toward "devotion to democracy" is significant in terms of the benefits provided by Internet.

Hirsh Sandra G. (1997)\textsuperscript{41} states, that “Younger students achieved lower success rates on complex-browsing tasks than on simple-browsing tasks. Many younger students also had difficulty understanding the vocabulary on some of the bookshelf topic headings and that some of the cataloging vocabulary used in the system was beyond the younger students reading levels.” Results from Hirsh’s study found that domain knowledge influenced search success on all types of tasks.

Che Zainab Abdullah, Hashim Ahmad and Rugayah Hashim, (2009)\textsuperscript{42}, examined the attitudes toward information and communication technology (ICT) of adult students. Attitudes were studied in an attempt to ascertain factors such as anxiety, confidence, liking and, usefulness at the diploma and undergraduate levels. A total of 500 adult students at various stages of study from diploma to undergraduate degrees participated in this research. The response rate was 56.8%. The statements were structured on a scale of one to five. Parametric and non-parametric analyses were executed by using SPSS. The results suggested that the adult students exhibited positive


\textsuperscript{42} Che Zainab Abdullah, Hashim Ahmad and Rugayah Hashim, (2009), “Attitudes Toward ICT of Electronic Distance Education (ePJ) Students at the Institute of Education Development”, University Technology Mara Information Systems: Modeling, Development, and Integration, Volume 20, Pages 222-228.
attitudes toward ICT in terms of usefulness and liking, but, semblances of low confidence and anxiety were also evidenced in the statistics.

Shu-Sheng Liaw and Hsiu-Mei Huang, (2003)\textsuperscript{43}, examined an individual attitude model towards search engines as a tool for retrieving information. This model integrates individual computer experience with perceptions. In addition, it also combines perception theories, such as technology acceptance model (TAM) and motivation, in order to understand individual attitudes toward search engines. The results show that individual computer experience, quality of search systems, motivation, and perceptions of technology acceptance are all key factors that affect individual feelings to use search engines as an information retrieval tool.

Ruiz et al (2006)\textsuperscript{44}, the learned use of e-learning contrasts widely between universities in the UK, and can range from the simple provision of course content on-line viz handbooks and lecture slides to the use of content management systems, or virtual learning environments to provide synchronous or asynchronous learning and assessment.


O'Neil et al (2004)\textsuperscript{45} supported the notion that universities are not fully utilising technological advances, questioning whether they will continue to meet the needs of shifting knowledge-based societies and increasingly diverse student populations.

Scott (2004)\textsuperscript{46} reports that university students were enthusiastic towards the use of a VLE and used it regularly, and the most notable negative issue was the lack of enthusiasm from academic staff. Similarly, e-learning was viewed positively by students studying dentistry, whilst teaching staff expressed negative views. Staff were concerned that the e-learning course available to students did not provide good standards of teaching by not delivering the same curriculum as traditional face-to-face teaching, and placing lecture notes on-line would reduced lecture attendance.

Newton (2003)\textsuperscript{47} identified over 20 (mainly US) surveys investigating staff attitudes to e-learning and VLEs. Several themes emerged from the survey and included lack of incentives and rewards.

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for staff involved in e-learning, and lack of strategic planning and vision.

Bruce (2005)\textsuperscript{48} states that, "information plays a significant role in our daily professional and personal lives and we are constantly challenged to take charge of the information that we need for work, fun and everyday decisions and tasks." In the digital era, research on information-seeking behavior has taken on even more importance worldwide. Most of the literature on information-seeking behavior comes from developed countries, while conditions in developing countries vary significantly.

Wilson (2000)\textsuperscript{49} investigated information-seeking behavior and satisfaction level of teachers at the National Textile University, Pakistan. The literature has many definitions of information-seeking behavior. The purposive seeking for information as a consequence of a need to satisfy some goal. In the course of seeking, the individual may interact with manual information systems such as a newspaper or a library, or with computer-based systems such as World Wide Web. The study explores the information seeking behavior of a community that is


engaged in research and development in the field of textiles, which is the backbone of Pakistan’s commerce and industry.

Sethi (1990)\(^{50}\) surveyed 256 social science faculty members in Indian universities. The study found that respondents preferred journals, books, government documents and reference services to fulfill their information needs as opposed to indexing and abstracting sources, book reviews, conference proceedings, dissertations and theses, newspaper clippings and other non-book sources that are in lesser use.

Al-Shanabri and Meadows (1995)\(^{51}\) observe that scholars in developing countries prefer informal sources because of the inadequacy of library collections and information infrastructure, ineffective library services, and lack of trained and cooperative library staff. Majid and Kassim (2000) studied the law faculty of the International Islamic University Malaysia, and found that they ranked books as the most important information source for teaching and research followed by law reports and statutes.
