CHAPTER II

REVIEW OF LITERATURE

2.1 INTRODUCTION

Review suggests a method and technique of dealing with a problematic situation, which may also suggest avenues of approach to the solution of similar difficulties, a scholar may be facing. It can provide the investigator with new ideas and approaches, which may not have occurred. It also assists the researcher in evaluation his own research efforts by comparing them with related efforts done by others¹.

Keeping the previous references as guidelines, efforts were made to find out that the researches completed are related to the present study.

2.2 EARLIER RESEARCH REVIEW STUDIES ON INFORMATION SEEKING BEHAVIOUR

A summary of the writings of recognised authorities and previous researchers provides evidence that the concerned researcher is familiar with what is already known and what is still unknown and untested. Since effective research is based upon past knowledge, this step helps to eliminate the duplication of what has been done, and provides useful hypotheses and helpful suggestions for significant investigations².
A number of works of a reviewing methodological or theoretical nature on users studies has appeared. The most inclusive bibliography is 'Bibliography of user Surveys 1950-1970' compiled by Atkins in 1971. Her collection of 687 studies for all types of libraries except for special libraries is based upon a review of 1,200 studies during the two decades, 1950-1970. Those not included were for reasons of non-relevance or duplication. The large number of studies alone strongly demonstrates the interest in and activity on user studies.

Each year a review of user studies is published in the 'Annual Review of Information Science and Technology'. Also, user studies are currently indexed in 'Library Literature'; "Library and Information Science Abstracts" (LISA), and 'Research in Education' (ERIC).

Gupta (1991) has reviewed the literature of the yester years, which covered more than 140 references on Information Seeking Behaviour published mostly in journals, edited books and conference volumes from India. Perhaps this is the most comprehensive review on the subject of Information Seeking Behaviour.

2.3 CLASSIFICATION OF STUDIES ON INFORMATION SEEKING BEHAVIOUR

Many studies have been carried out, in the different parts of the world, particularly in India, USA and UK. The findings of major studies are grouped under different headings as follows:


- Information Seeking behaviour models
- National level studies
- Institutional studies
- Studies related to various professions
- Network and IT environment relating to information seeking behaviour

2.3.1 Information Seeking Behaviour Models

Kawatra (1985)\textsuperscript{19} conducted a study on the User Studies: State-of-the-art, which highlights the attitude of the users, findings of the user studies and also the reasons for conducting various user studies. The author aims to find out information seeking attitude of users, suggest areas of user attitudes for research, indicates the gaps in knowledge of users and outlines the techniques which might be useful for undertaking further research.

The studies conducted in India and abroad have been reviewed by Kawatra (1986)\textsuperscript{20}. It presents a psychological perspective on research in librarianship and also explores the potential for application of psychological research, principles and practices to behavioural research in librarianship. The problem of determining user behaviour and need for conducting user studies, before designing user education programmes, have also been stressed.

Whitmire (2003)\textsuperscript{21} explores the relationship between undergraduates' epistemological beliefs and their information-seeking behaviour. Twenty
undergraduates attending an Ivy League University were interviewed about their search process as they completed a major research paper during their senior year. Epistemological beliefs affected topic, the use of mediators, search techniques, the evaluation of information, and the ability to recognise authority. Epistemological beliefs also affected several stages of the Information Seeking Pattern model: topic selection, pre-focus formulation, focus formulation, and collection. These findings provide a rich theoretical foundation for future information seeking behaviour research and will assist academic reference librarians by providing insights into the impact of undergraduates' epistemological beliefs on their information seeking behaviour.

Meho and Tibbo (2003)\textsuperscript{22} revised David Ellis's information-seeking behaviour model of social scientists, which includes six generic features such as starting, chaining, browsing, differentiating, monitoring and extracting. The authors included four additional features namely accessing, networking, verifying and information managing besides the six features of Ellis model\textsuperscript{23}.

2.3.2 National Level Studies

Strother; Lancaster and Gardiner (1986)\textsuperscript{24} surveyed five hundred randomly selected dentists in Louisiana and determined the nature and types of information sought by dentists.

In the study of information use pattern among Indian historians, Karisiddappa; Sangam and Maheswarappa (1989)\textsuperscript{25} identified difficulties
faced by the historians in the use of information; its awareness and usefulness of information services in NASSDOC, New Delhi.

Abifarin (1994) examined the information seeking behaviour of agricultural students in selected Nigerian universities. The analysis of the study shows that students make less use of the library than expected. Thus the study corroborates the general finding that the library shelves are disorganised because users have a little idea about the systematic library usage. The author also recommends that the library orientation, strongly focused on information gathering, be established where they are non-existent and intensified where they are already in place.

Karelse (1994) in National Symposium of Information for all, Cape Town, South Africa, February 1994 discusses the process of development in South Africa in order to provide a picture of the setting in which librarians operate and the challenges they face and to underline the relationship between information and development. He considers the process of change in information work pave the way for a discussion of an interactive approach to information work. He further describes some of the components of interactive information work illustrating the concept with the description of the Elsie River case study, a demonstration of the involvement of library services in the everyday operations of a community. This provides example of the information needs of the people of South Africa.

Lundeen, Tenopir, Wermager (1994) studied the information needs of Hawaii’s rural health care practitioners and their methods of accessing
through interviews and mailed questionnaires and identified the barriers to information access.

Marcella (1995)\(^29\) describes the results of a Scottish Library and Information Council funded project into the business information needs of companies in the rural areas of the northeast of Scotland. Based on survey by questionnaire, interviews and case studies, the study describes the information providers available to rural businesses, the pattern of present use of such agencies by companies, the nature of respondents' information needs, problems in accessing information and attitudes to IT.

Lee and Pow (1996)\(^30\) examined the two non-functional aspects of user requirements viz., information channel disposition and information demand characteristics in the hospital information systems of 66 Clinical Physicians in Hong Kong and compared with those groups of 51 Finance Professionals and identified the significant differences between the profiles of these two groups.

While Nicholas and Colgrave (1996)\(^31\) analyzed the information use pattern by the local authority councillors in Britain, Thapisa (1996)\(^32\) conducted a similar study of Parliamentarians in Botswana.

Hari Krishna Reddy and Karisiddappa (1997)\(^33\) studied the information seeking behaviour of 160 professionals in the field of disabilities in India, which reveals that informal channels are used more for information gathering. Journals are preferred as formal source of information and books are used more for providing consultation and offering therapeutic / diagnostic services.
Spink, Kaeckel and Sidberry (1997)\textsuperscript{34} investigated the information needs of low-income African-American households at Wynnewood in Dallas, Texas, in relation to employment, health, news and security issues. On the other hand, Gollop (1997)\textsuperscript{35} explored the ways in which urban, older African-American women in obtaining health information.

The impact of the use of library services and information by Physiotherapists on their decision-making for patient care has been examined by Ashcroft (1998)\textsuperscript{36} through questionnaire from 37 National Health Service Trust hospitals in the Northern Yorkshire region. The "Critical Incident" technique was used to pinpoint a particular situation when a need for information connected with patient care.

Anwar (1998)\textsuperscript{37} portrays results of a questionnaire survey of academic librarians perceptions of their continuing professional development needs in Malaysia. The study concentrated on the continuing professional development environment at academic libraries: constraints affecting participation; suitable period and duration for continuing professional development activities; and potential competencies for developing continuing professional development programmes in the areas of professional, information and communication technology, management, and research skills. It presents a range of recommendations to develop these continuing professional development programmes.

In two surveys conducted by Marcella and Baxter (1999, 2000)\textsuperscript{38,39} on the information needs of people in the UK, found that a majority of the
respondents depend on public libraries for government information and mass media for current information.

Banwell and Dixon (1999) present the finds of the GINN project "Governors Information Needs", which took place between January 1996 and December 1997. The central hypothesis underlying the project was that individual School Governors, in England and Wales, have individual information needs, which are not being well met at present. The research has found this get the information they need; Governors know what they need; and if they get it, whether they use it effectively. The study considers whether the information they use is the best available in relation to the decisions they must make. Findings indicate that School Governors mostly do not use information or have much notion of operating in an information culture. They state the opinion that it is important for them to be well informed; and yet the main source of information used by School Governors is the Head Teacher, whose management of the school the Governors are legislated to oversee.

Mercer and Wotherspoon (1999) report results of a questionnaire survey, conducted among UK rural communities, to examine the current information needs of users in these communities, their difficulties in obtaining information and to assess the acceptability of information provision through information technology (including the Internet and World Wide Web). This study took as its central point, the 1993 report, prepared by Capital Planning Information Ltd. For British Library Research and Development Department (BLRDD) and Department of Heritage: Library and Information in rural areas
of England and Wales. It also concludes that there is currently a much greater awareness of the information needs of rural users, but this awareness is stifled to some extent by factors regarded as being beyond the control of library authorities and others. Great reliance is being placed on the use of information technology to provide information to and within rural communities.

Marcella and Baxter (1999) reports the results of a survey of information needs and information seeking behaviour of a national sample of the UK population. Major finds include that the majority of respondents had sought information in the past and that an even greater number predicted a future needs for information. Over three quarter of respondents said that they would use public libraries and between half and three quarters would approach Citizens Advice Bureaux, Post Offices, Government departments or family and friends. Face to face communications and reading a book were the most popular means of accessing information, but a wide variety of other preferred options were cited. Only a small proportion expressed a preference for using a computer to seek information, and there was a clear emphasis on public libraries as an appropriate location for accessing electronic information.

Banwell and Gannon-Leary (2000) investigated the information seeking behaviour of UK students and academics in relation to electronic information services. This study provides illuminative and conceptualised pictures built up over a time and in different disciplines.
Popoola (2000)\textsuperscript{44} analyzed information needs and services of health consumers in Nigeria and found that there was a significant relationship between the levels of education of the health consumers and sources of information used. Books/reports, medical laboratories, film houses and medical library records office were rarely used for searching pertinent information on health care services.

The pattern of information seeking by Women in the European Union has been investigated by Marcella (2001)\textsuperscript{45}, reveals that women value information and use a wide range of categories of information in relation to their educational, professional and personal life.

While Rowland and Rubbert (2001)\textsuperscript{46} studied the information needs and practices of part-time and distance learning students of higher education in the UK, outside the Open University and Thorsteinsdottir (2001)\textsuperscript{47} surveyed the information seeking behaviour of distance learning students in Library and Information Science in Sweden.

Davies and Bath (2002)\textsuperscript{48} identifies the use of maternity information sources by Somali women living in a northern city in the UK through exploratory focus group and semi structured interviews and found that they seek and use information from several interpersonal sources, from friends and neighbours.

Given (2002)\textsuperscript{49} explores the complex interweaving of the students' everyday and academic information needs in light of Reijo Savoainen's
framework for the study of everyday life information seeking. Findings include the role of social and cultural capital in the students' information seeking, the diverse ways that everyday and academic contexts inform one another, and the importance of not separating the everyday from other life situations in studies of individuals' information seeking behaviours.

Heperuma (2002)\textsuperscript{50} studied the information gathering habits of arts scholars in Sri Lankan universities and found that the arts scholars gather information for three basic types of activities viz., teaching, research and administration.

Singh; Satija and Sandhu (2002)\textsuperscript{51} conducted a survey of information seeking behaviour of the farmers of Punjab, which reveals that farmers are progressive and they adopted the new technology relating to agriculture, comparatively earlier and faster than their counterparts in other States.

Ikojo-Odongo and Ocholla (2003)\textsuperscript{52} examines the information needs, information seeking behaviour and the impact of information use on artisan fisher folk and extension agents at three major lakes in Uganda. The findings reveal that fisher folk require different kinds of information to carry out fishing activities effectively and the methods adopted for accessing information.

2.3.3 Institutional studies

Sangameshwaran and Gopinath (1986)\textsuperscript{53} outlines the need and objectives of users study and review the various activities of National
Information Centre for Food Science and Technology (NICFOS), CFTRI, Mysore in this regard. The authors in the study identify the potential users and categories them, also identify the information requirements and evaluate the various existing services in respect of their utility to users to effect suitable modifications and introduce new service whenever necessary.

Devarajan (1989)\textsuperscript{54} conducted a survey on information needs and use pattern of Humanities Scholars working in the various departments in the University of Kerala. The study was conducted to understand the information needs, information gathering behaviour and use pattern of information of the humanities scholars. It is apropos to understand the definitions, connotations and scope of the humanities as a field of the study.

Malhotra (1990)\textsuperscript{55} studies the role of the faculty in promoting library use by the post graduate students. Two independent samples of post-graduate students have been taken one each from Haryana Agricultural University, Hisar and Punjab Agricultural University, Ludhiana to make an indepth study. This study identified and ranked statistically a total of nine variables, which could be used to predict whether method of instruction of teachers is library based or otherwise. The stated hypothesis has been tested by the use of Spearman’s Rank Correlation Coefficient in two different sample groups and their results compared.

Sangam and Biradar (1990)\textsuperscript{56} reports results of citation analysis study, involving MS theses submitted to Gulbarga University during 1982 to 1989, in the field of surgery, to determine the pattern of information use by
researchers. The study identifies the use of different sources of information, their language, countries of origin and subjects. It also discuss the obsolescence of the literature and applies Bradford's Law of Scattering. The findings of the study have implications for the development of needs based collection in library and Information centres in the filed of surgery.

John (1997)\textsuperscript{57} describes the information needs, use pattern and use behaviour of social scientists and delineates the investigation on aspects like objectives, methodology, analysis and interpretation and general trends with areas of research augmented to give supporting via-media and data that benefit them. The study reveals the information needs of social scientists in respect of documents in their variety of bibliographic form, their organisation and other services rendered by the library. The study adopts the survey method based on the questionnaire. The author distributed 130 copies of questionnaires among the research scholars in Social Science, of which 91 were responded. The data analysed in respect of researchers information needs, use pattern and use behaviour in various disciplines in social sciences are brought as a consolidated one so as to understand a comparative view of information use of social scientists in various disciplines and social scientists in general.

Kuruppu (1999)\textsuperscript{58} explains understanding the information needs and behaviour of workers in an organisation is the basis for designing and developing information systems and services to adequately satisfy their needs. The study discusses information needs, information seeking behaviour, and
methods used in studying them, especially in research organisations, and the importance of such studies. It also considers the use of the findings of such studies in making decisions relating to the design of information systems and services, as well as the impact of emerging information technology on information users and their information seeking behaviour.

Chandel (2000) study is a users study of the libraries of ICSSR Institute in Madya Pradesh. Dr. Baba Saheb Ambedkar National Institute of Social Science (BANISS), and Madya Pradesh Institute of Social Science Research(MPISSR), Ujjain are two ICSSR Institutes in Madya Pradesh. The author conducted the survey to know the users’ views regarding the available information & resource in the libraries for their use and the effectiveness of the services rendered by the libraries to the users.

Siddiqui (2001) “Use of library collection in the Jawaharlal Nehru University Library, New Delhi” in a user survey, regarding opinions, on different aspects of adequacy of collection and its use, in the J.N.U Library, New Delhi. It also discuss the various problems, so that the librarian may ensure maximum use of library collection within the available resources.

Hirsh and Dinkelacker (2003) has conducted a survey research that covered researchers from selected HP laboratories and Compaq laboratories regarding their usage of information sources and their preferred means of collaboration and information seeking. The research suggested that the information seeking behaviour of the participants was impacted by the unstable environment resulting from the recently completed merger and the
process of integrating two research organisations. Participants relied heavily on the internet and other web-based resources, more so than on their colleagues inside the company. Participants made their selections of which information resources to use based on how little time it took them to track down the information as well as the authoritativeness of the sources.

Murphy (2003)\textsuperscript{62} conducted a survey of interdisciplinary scientists conducting research at The U.S. Environmental Protection Agency (EPA) in Research Triangle Park, North Carolina. The survey was conducted to gain a clearer picture of how the interdisciplinary scientist seeks information, and in particular how the interdisciplinary scientist manages his / her time in regard to information-gathering tasks. Results indicate that many participants have at least some difficulty in keeping up with research in their field(s) of study in regard to time. As a result, many participants do at least some of their information-gathering in their off-time or delegate certain research responsibilities to others.

2.3.4 Studies related to Various Professions

Biradar and Vijayalaxmi (1990)\textsuperscript{63} discusses the pattern of information use adopted by researchers in the field of Neurology as indicated by citations in the D.M. (Neurology) dissertations submitted to the National Institute of Mental Health and Neuro Science (NIMHANS), Deemed University, Bangalore for period from 1979 – 1996. The study identifies the average number of references per dissertations, the use of different sources of information, states of the obsolescence of literature and lists the most
frequently cited periodicals by neurological scientists. It also notes the implications of the findings for the development of need based collections in library and information centres in the field of Neurology.

Barooah (1993)\textsuperscript{64} discusses the pattern of information use followed by scientists in the field of entomology through citation analysis of Indian Journal of Entomology for the year 1989. Identifies the various sources of information and their country of origin. A ranked list of Indian entomology journals and another ranked list of journals, irrespective of their country of origin, in the field of entomology from the view point of use by the Indian entomologists are given.

Dillon (1997)\textsuperscript{65} describes a study, which examine the information needs of secondary school teachers in rural New South Wales, Australia, particularly in relation to their professional development. The study explored 3 aspects of professional development: needs for, use of, and access to professional information. The study concludes that teacher librarians have pivotal role to play in serving the professional information needs of rural secondary school teachers and that computer networks provide an important means of overcoming these teachers' professional and geographical isolation.

Mendes and Meadows (1997)\textsuperscript{66} report results of a joint questionnaire and interview survey to determine the ways in which 4 groups of health professionals (consultants, junior medical staff, nurses and administrators) working in 3 hospitals in Brazil and 3 hospitals in the UK, use libraries and information resources. Patterns found in the 2 countries were compared. The
investigation was carried out in 2 stages. The first stage examined the role of the library and the second looked at information activities that did not involve the library. The conclude that the information activities of health professionals in Brazil and the UK follow a generally similar pattern, which in overall terms fits the general picture gained from previous studies. However, UK health professionals clearly have better access to publications (particularly periodicals) than their Brazilian counterparts, due to the latter’s problem of the acquiring foreign publications, the language barrier, poorer access to electronic information resource and greater difficulty in attending conferences. They further recommend that teaching hospitals in Brazil should make greater use of electronic communication and act as a focus for the information needs of non-teaching hospitals.

Adedibu and Adio (1997)\(^67\) reports a questionnaire survey of medical students at Ladoke Akintoa University of Technology (Lautech) Ogbomoso, Oyo State, Nigeria, to investigate their information needs and information seeking patterns. The survey revealed that 70 per cent of respondents spent 3-8 hours per week in the library consulting books relevant to their areas of specialisation, and 68 per cent of this category approached library staff for assistance in searching for the books of their choice. All of the samples agreed that the library staffs are always willing to assist. The respondents made various suggestions for the improvement of the library and staff alike.

Hammond and Mitchell (1997)\(^68\) report a survey on the information seeking behaviour of practitioner in accounting, architecture, psychology and
recreation / tourism. The aim was to improve information skills instruction programmes for students. Fewer than half of the survey respondents had discipline-specific library instruction. Practitioners identify a need for information but a low use of electronic resource. Data support the necessity of information skills for those entering the professions. Instruction should be information centred rather than library centred. Continuing education for professional’s information finding is needed.

Pelzer, Wiese and Leysen (1998) reports results of a questionnaire survey, conducted with veterinary medical students at Iowa State University in 1997, to determine their general use of the Veterinary Medical Library and how they sought information in an electronic environment. Comparisons were made between this study and an earlier study (Bulletin of the Medical Library association, 76(4) 1988, 328-333). Basic patterns of student activities in the library were found to be unchanged. The 1997 students used the library most frequently for photocopying. Office supplies, and studying coursework; and they preferred textbooks and handouts for current information. However, a major shift was seen from the use of print indexes and abstracts in 1987 towards the use of computerised indexes and other electronic resources in 1997. 60 per cent of the students reported using the Internet for current information. Overall use of electronic materials was highest among students receiving the problem based learning method of instruction. Most of the 1997 students indicated that electronic resources would be important for future education needs, particularly the wealth of information and services available on the Internet and World Wide Web.
Hallmark (2003)\textsuperscript{70} described the methods of access and retrieval of journal articles that were cited during 2000-2001 by atmospheric scientists from universities, federal government agencies, and private research institutes. Citations to articles originally published during 1995-2000 were chosen from the bibliographies of current articles published in eight journals in the atmospheric sciences. Each of one hundred authors received a personalised letter and brief questionnaire that addressed methods of access and retrieval of one of their cited articles. A large majority of those participating in the study reported that they used traditional (non-electronic) methods for both access and retrieval of that particular citation. Participants were also asked to comment on problems encountered in using electronic journals as well as problems with access and use of data for their research. Results provide a snapshot of the current information-seeking behavior of these scientists. The return rate of 61% suggests a high level of concern for their journal literature in this user community.

Ramos, Linscheid and Scafer (2003)\textsuperscript{71} have conducted a study to determine the extent to which physicians spent time in searching for evidence based answers. It has found that residency physicians have clinical questions but rarely use evidence-based sources to answer them.

2.3.5 Network and IT Environment

In the recent years, the impact of Information and Communication Technology (ICT) in the library environment influencing the Information
Seeking Pattern by the users. Few studies have been identified in this direction and are as follows:

Hert; Rosenbaum and Skutnik(1995)\textsuperscript{72} describes about the data on information needs and uses that were collected during Internet training from students in information networking classes at Indiana University, USA, during 1993 and 1994. Information needs, events, which led to the needs, and the sources used to resolve the needs were identified and categorised. The study discusses several implications for Internet trainers.

Marcella (1997)\textsuperscript{73} discusses that many university library and their users, the Internet represents potential and potential does not satisfy information needs, but it does raise expectations which in turn place enormous pressure on the library and information services. He examine the sources of the expectations and this pressure, which include mass media; perceptions of the academic staff and students; and the US scenario where internet use is integrated in to libraries pattern of service provision. He further draws attention of the Academic Librarians in the Social Science (ALISS) forum for discussing information technology and Internet developments, which aim to dissipate fear through sharing expertise.

Seiden; Szymborski and Norelli (1997)\textsuperscript{74} surveyed in a heterogeneous environment studying the information seeking behaviour of the undergraduate students in the digital library at Skidmore College, New York. The study was designed to assess students’ information seeking behaviour in general; elicit information about the search process; and discern how students had acquired
their knowledge of online searching and their level of expertise with online searching, computer applications and libraries. The results indicate that most undergraduates have a relatively poor understanding of the information environment and that the "digital library" exaggerates and magnifies these problems.

Vagiswari and Louis (1998)\(^7\) proposed networking of astronomy libraries and resource sharing in India. The study has identified three models such as inter-connecting all astronomy library homepages, creating an integrated library database and establishing connectivity using search-engine architecture. The study also identified the sources to share in the networking of astronomy libraries.

Subba Rao (2001)\(^7\) identified the changes that libraries and information centres need to undergo for networking and lists the existing communication networks (INDONET, ERNET, NICNET, INET and so on) and library and information networks (INFLIBNET, DELNET, SIRNET, BONET, MYLIBNET, CALIBNET, MALIBNET and so on) in India. It also discusses the various governmental policies that led to the development of national information infrastructure, the inadequacies of the infrastructure, the status of IT application in government and the challenges in converting library contents into computer readable form.

Herman (2001)\(^7\) examined the transition to the electronic information era in academia and seeks to establish from the published literature, as to what extent university researchers have accepted, and adapted to the changes in
information activity by seemingly endless technological developments. Within the wider context of the impact of the changing information environment on each of three clearly discernible components of academic research (the creation of knowledge and standards, the preservation of information, and the communication of knowledge and information to others) disciplinary rooted differences in the conduct of research and their influence on information needs are identified and the resulting inter and intra individual variations in researchers' information seeking behaviour are explored. Reviewing a large number of studies investigating the integration of electronic media into academic work, an attempt is made to paint the picture of academics progressively harnessing the new technologies to scholarly information gathering endeavours, with the expressed hope of affording some insight into the directions and basic rends characterising the information activity of university faculty in an increasingly electronic environment.

Mahapatra; Swain and Senapati (2001)\textsuperscript{76} have discussed the developments in the digital information environment which broadens the dimensions of information needs and shapes the behavioural approaches of information seeking in the new emerging digital environment.

Detlor and Arsenault (2002)\textsuperscript{79} proposed a model on the role of intelligent agents in facilitating the seeking and retrieval of information in Web-based library environments. The model suggests that Web-based information seeking and retrieval in library contexts could be enhanced through a collaborating network of interface and information agents.
Giannini (2002)\textsuperscript{80} conducted a comparative study on information seeking behaviour in real and virtual environment and measured quantitatively and qualitatively the ways in which user's online search strategies and outcomes are impacted by differences in information environments, and is designed to compare a user's information seeking behaviour in the real (library) and virtual (home or work).

Heidorn; Mehra and Lokhaiser (2002)\textsuperscript{81} developed complimentary, socially grounded, user-centred methodology for information seeking and designed information system to support bio-diversity informatics in the Biological Information Browsing Environment (BIBE).

Martey (2002)\textsuperscript{82} discusses the management issues involved in library networking, using GILLDDNET, the DANIDA/IFLA sponsored Ghana Inter-library Lending and Document Delivery Trial Project as a reference point in the discussion.

Msuya (2002)\textsuperscript{83} has examined the information seeking behaviour of faculty of Law in the University of Dar Es Salaam, Africa with an objective to find out how the faculty seek information in the light of changes introduced in the library, particularly the introduction of Information and Communication Technology (ICT) and reorganisation of library. This study recommends an increased sensitisation of library users on the range of new services offered by the library and intensification of user training, including out-reach programs.
Ng (2002)\textsuperscript{84} designed a model for information seeking behaviour with Human Computer Interaction (HCI). It was found that when the searcher’s situation changed from problematic to non-problematic, the degree of plan deviation decreased significantly and treats information seeking behaviour as a special type of social action.

Pettigrew; Durrance and Unruh (2002)\textsuperscript{85} conducted a study of how public libraries are using online community networks to facilitate the public’s information seeking and use in everyday situations. These networks have been lauded for their potential to strengthen physical communities through increasing information flow about local services and events, and through facilitating civic interaction. The authors further discussed 1. how the public is using networked community information systems and the Internet for daily problem solving, 2. the types of barriers users encounter, and 3. the benefits for individuals and physical communities from public library-community networking initiatives and the emergence of “information communities”.

Spink; Ozmutlu and Ozmutlu (2002)\textsuperscript{86} conducted studies, which reveal that humans engage in multitasking behaviours as they seek and search Information Retrieval (IR) systems for information on more than one topic at the same time. Incidence of multitasking identified in the four different studies included: 1. users of the Excite Web search engine who completed a survey form, 2. Excite Web search engine users filtered from an Excite transaction log from 20 December, 1999, 3. mediated on-line databases searches, and 4. academic library users. Findings include multi-tasking
information seeking and searching is a common human behaviour; users may conduct information seeking and searching on related or unrelated topics. Web or IR multitasking search sessions are longer than single topic sessions; mean number of topics per Web search ranged of 1 to more than 10 topics with a mean of 2.11 topic changes per search session; and many Web Search topic changes were from hobbies to shopping and vice versa. A more complex model of human seeking and searching levels that incorporates multitasking information behaviours is presented, and a theoretical framework for Human Information Coordinating Behaviour (HICB) is proposed.

Cunningham; Reeves and Britland (2003) conducted an ethnographic study of music information seeking strategy and identified the implications for the design of a music digital library. The authors argued that the insights provided by this type of study can inform the development of searching / browsing support for music digital library.

2.4 INFERENCES

From the Review of literature, the following inferences are drawn:

i. The research studies reported in this chapter do represent the recent decades work on information needs and information seeking behaviour.

ii. The review of literature have been grouped for the sake of conveniences and logical presentations into number of groups such as information seeking behaviour models; studies conducted at national level, institutional level and various
professionals and network & IT environment relating to Information Seeking Behaviour.

iii. There are research review studies on this subject has been covered.

iv. The studies covering Information Seeking Behaviour model and modification of earlier model.

v. The studies conducted at national level mostly drawn from USA, UK, European countries and India.

vi. substantial amount of research on Information Seeking Behaviour has been reported in India.

vii. Studies were also identified the use of information in the networks and IT environment.

viii. The studies covered under professions includes medicine, teaching, journalism and humanities. It is significant to note that there were no studies of Information Seeking Behaviour in the field of Sanskrit and allied subjects.

ix. From the review, it is evident that no study on Information Seeking Behaviour of faculty, student and researchers in the field of Sanskrit study has been conducted.

Therefore, the researcher has taken the present topic keeping in view of the current developments of Information Seeking Behaviour.
REFERENCES


84. Ng, Kwong Bor (2002). Toward a theoretical framework for understanding the relationship between situated action and planned action models of behaviour in information retrieval contexts: contributions from phenomenology. *Information Processing and Management*, 38(5): 613-626.

