

**INFORMATION SEEKING BEHAVIOUR OF POST GRADUATE STUDENTS IN
THE SCHOOL OF EDUCATION AND HUMANITIES (SEH), MIZORAM
UNIVERSITY: A STUDY**

*A Dissertation submitted in partial fulfillment of the requirement for the Degree of Master of
Philosophy in Library and Information Science*

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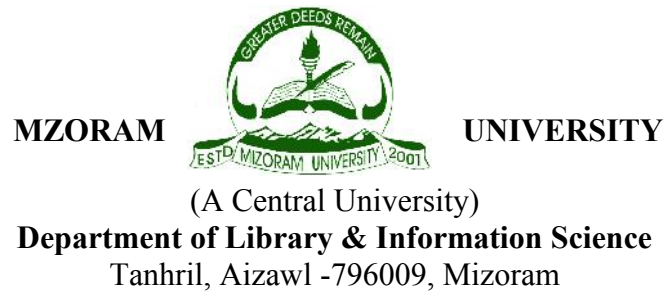
DECLARATION

I hereby declare that the dissertation entitled '**INFORMATION SEEKING BEHAVIOUR OF POST GRADUATE STUDENTS IN THE SCHOOL OF EDUCATION AND HUMANITIES (SEH), MIZORAM UNIVERSITY: A STUDY**' submitted by me has not previously formed the basis for the award of any Degree or Diploma or other similar title of this or to any other University or examining body.

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CERTIFICATE

This is to certify that the dissertation entitled **“INFORMATION SEEKING BEHAVIOUR OF POST GRADUATE STUDENT IN THE SCHOOL OF EDUCATION AND HUMANITIES (SEH), MIZORAM UNIVERSITY: A STUDY”** submitted by **Mr. T. Lalmuanawma** for the award of the degree of **Master of Philosophy in Library and Information Science** is carried out under my guidance and incorporate the student’s bonafide research. This is the candidate’s original work and is worthy of examination.

Aizawl, Mizoram
20.6.2013

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Supervisor

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CHAPTER- 1

INTRODUCTION

1.1 Introduction:

Information is a major component in 21st century development due to its pragmatic role in providing substantial resources. Information leads to transformation of the society and hence, the present century is coined as ‘information society’ or ‘information age’. Kemp (1979) said that “indeed, information has been described as fifth need of man ranking after air, water, food and shelter”. Information being one of the major components of the growth of the society, the people irrespective of the types in the society require from the personal level to organizational level for its application in managing their life. It further facilitate for decision making in multifarious levels such as, personal, educational, organizational, societal etc Persistent generation of information in 21st century in multidimensional ways have resulted to information explosion which however, serve the for the community, academic development. Information explosion has further precipitated to pollution, confusion regarding its application for various purposes along with its access. . In spite of the fact that there due to this information explosion or information pollution the people are confuses about the information need, information access and information sources. With the impact of new technologies such as information technologies most people are interested in accessing the information through these sources because of faster accessibility.

Basically, knowledge is the product of research and the information accumulated from such knowledge add value in transforming the society. Further, the citizens of the society require the information from a wide range of sources which, however, some of them complex or difficult for individuals to ascertain the source to acquire and use. In this complex stage, the roles of libraries become a vital in meeting the information needs of individuals and groups in the society. And as a result, libraries develop their collections, facilities and services to meet the information needs of their patrons. However, in order to accomplish this task effectively and efficiently, libraries must have a thorough understanding of the information need and information seeking behaviour of their users.

In any library and information center or system, Bidhan Chandra (2010) says that the user study plays a vital role in planning, designing and introducing new information services, and reorganizing existing services and to access the quality of services and their utilities. There are various factors that generally affect an individual’s information needs as well as optimal utilisation. Depending upon the nature of job, stage of research project, the urgency of access

to information or the availability of resources, information seeking behaviour also varies from person to person.

According to Nishat Fatima and Naved Ahmad (2008), Information seeking behaviour is a broad term, which involves a set of actions that an individual expresses his or her information needs. It further includes information seeking pattern, evaluation and selection of information and finally uses this information to satisfy his/her required information needs. Again, different factors may determine the information seeking behaviour of an individual or a group of individuals. It is, therefore, desirable to understand the purpose for which the information is required, the environment in which the users operate users' skills in identifying the needed information, channels and sources preferred for acquiring the information, and barriers to access the information.

Information plays a crucial role in the advancement of existing knowledge, decision making and transfer of technology. In fact, user study play a vital role in planning, designing and introducing new information services/ products and to assess the quality of services and their utilities. Therefore, there is an urgent need to know the information seeking behaviour of the user community for providing effective information services. However, there are not many study reported in the literature on information seeking behaviour of Post Graduate students in School of Education and Humanities (SEH) of Mizoram University.

1.2 School of Education and Humanities (SEH): An Overview

The School of Education and Humanities (SEH) of Mizoram University came into existence in 2001 with the establishment of University and the School has so far consisted of 4 (four) academic Departments namely Mizo (Estt. in 1977), Education (Estd in 1979), English (Estd in 1979), and Hindi (Estd in 2010) which are actively engaged in teaching, research and extension activities. Presently, the School of Education and Humanities (SEH) have 140 Students. A brief account of the Departments of SEH has been given below. (www.mzu.edu.in)

- **Department of Mizo:** The Mizo Department, established in 1997 under the NEHU is the 7th Depart under the Mizoram University in order of establishment. The intake capacity is restricted by the available infrastructure to 22 for MA. Now it has 45 post graduate students under this department. Thrust is given during this year on development of creative writing in Mizo under proper academic supervision.

➤ **Department of English:**

The Department of English was started in 1979 under NEHU Mizoram Campus. It was absorbed into Mizoram University on 2nd July 2001. The Department started its M.Phil Course-work in 2008 and also started running Pre-Ph.D Course-work from 2010. There are 41 students under this department.

➤ **Department of Education:**

The Department of Education is one of the oldest Departments that were established in 1979 under the erstwhile Mizoram Campus of NEHU at Aizawl. The Department was started with a one-year M.Ed programme in the year 1980, which was replaced by a two-year M.Ed. programme for one academic session in 1985-86. Since then, M.Ed. programme was replaced by M.A. Education Programme of four semesters. Presently, 50 post graduate students are admitted under this Department.

➤ **Department of Hindi:**

The department was established in July 2010. The Department is at present conducting M.A., M.Phil and Ph.D. courses in Hindi. Presently there are 7 post graduate students admitted under this department. The main thrust area of research in the Department is the development of Hindi literature and comparative studies with the existing literature in languages of the N.E. Region. The Department is also planning to offer Diploma courses in Hindi Translation, Hindi Journalism and Functional Hindi.

1.3 Significance and Scope of the study:

Significance of the study lies with the fact that, information seeking is central and crucial to the students in a higher state of learning and the role of library is to provide them with useful information along with the sources. The library acquires print and electronic sources so as to facilitate the students for using the resources. But due to multidimensional requirements of information by the students, the library still is not able to make out adequate measures to meet the requirements and this is due to the proliferation of information in different subjects. Therefore, measures need to be taken by the library to ascertain the need of the students to provide them with useful information resources. This is more cumbersome for the researchers especially in M.Phil stage. Hence, the study is crucial to determine the information seeking for both the students and the researchers of the school under study. Moreover, no such study

as yet has been undertaken by any scholar to influence the library with a direction to collect the resources. The outcome of the study shall help not only the students but also to the researchers and the faculties to access the resources. Further, this will also help the library to accumulate the user-centric collections for maximizing the use of resources.

The scope of the study is limited to the students of all four Academic Departments of the School of Education and Humanities (SEH) as already spelled out.

1.4 Review of Literature:

An extensive survey of literature available in the relevant area of the study to make update with information has been taken. The scholar also has take proper care to scan the available literature on information seeking behaviour and some of them are included here.

Bruce, Harry. "User satisfaction with information seeking on the internet". *JASIS* 49(6); 1998; 542-556.

The author in his study mentioned about the use of internet to seek information and derive satisfaction. He conducted this study in the Australian academies. 200 e-mail addressed were invited to take part in this research. The study found that Australian academic generally have high expectation of success when they engage in information seeking on the internet and are satisfied with the process regardless of how frequently they use the network or whether or not they have received formal training.

Dalgeish, Andrew and Hall, Robert. "Uses and perception of the world wide web in an information seeking environment". *JASIS* 32(3); 2000; 105-115.

This study was conducted with 12 participants who were students, all from University. A series of interviews with open-ended questions were conducted. The main findings of the students to use the web as an information resource is time, in the sense of obtaining information quickly and easily not experiencing difficulties in locating the required information and avoiding inherent delays in the computer system.

Folster, M.B. A Study of the use of information sources by Social Science Researchers. *The Journal of Academic Librarianship*, 15 (1);1989; 7-11.

The author made a comparative study of information use by faculty and students of the social sciences at the University of Wisconsin-Madison. The study shows that there are no distinct

differences in information utilization among the different sections of researchers; journal articles were the most favoured information source, while online tools ranked as the least-favoured.

Dewey, J. (1933). *How we think*. *Health Publishing: Lexington*.

This book provides a philosophical foundation for viewing information seeking as a constructive process. Further, he described that information seeking behaviour involved reflective thinking, which occurred in five phases: suggestion, intellectualization, guiding idea or hypothesis, reasoning and testing by action. The first phase involves a state of doubt due to an incomplete situation causes perplexity, confusion, uncertainty and hesitation. The second phase includes conceptualizing the problem, interpreting the given elements and anticipating possible situations. The third phase guiding idea is tentative interpretation of initial suggestion used as hypothesis to initiate and guide the collection of factual material. The fourth phase is more precise and more consistent by familiarity with wider range facts. An elaboration of the idea emerges through reasoning. The fifth phase involves taking stand on tentative hypothesis doing something to about results to test the hypothesis in order resolves the doubt and perplexity.

Dhawan, S.M and Sachdeval, D.L. "Users' Approach to information in Physical Sciences: an Overview". *ILA Bulletin*. 22(3); 1987; 103-111.

Dhawan and Sachdua gave an overview of user requirements in physical sciences. They described in detail about types of users, their information needs, motivating factors for seeking information, their information gathering habits and indicators used for measuring relative importance of communication media. They also discussed the links and communication chain which helps diffuse information from the originator to the end user.

Ellis, D. "Modelling the information seeking patterns of engineering and research scientist in an industrial environment". *Journal of Documentation*. 53;1997; 84-403.

Ellis employed grounded theory approach and derived six characteristics of the information seeking patterns of social scientists. This work extended to physicists and chemists in studies which found that the original model fits behavioural approach in these fields with very little modification the principle being the addition of the categories verifying and ending. Further she explored the role of information and information seeking in the research and development department of an international oil and gas company. It is found that although there were

differences in the features of the information seeking pattern of the research scientist and engineering, the behavioural characteristics were similar and the study observed identical or very similar categories of information seeking behaviour to those of previous studies of academic researcher.

Fatima, Nishat and Ahmad, Naved “Information seeking behaviour of the students at AKTC, Aligarh Muslim University: a survey”. *Annals of Library and Information Studies* 55; 2008;141-144.

The study indicated the guidance in using the library resources and services to meet their information requirement. It was found that, t textbook and journals are the most popular sources of information for the students course work. The literature on survey about the information seeking behaviour of the students is extensive. Many studies have been conducted to investigate the information seeking behaviour of library users based on their subject interest occupation information environment and geographical location.

Hsiesh-Yee “Research on web search behaviour”. *Library and Information Research* 22; 2001; 165-185.

The reports of the studies were both on children as well as on adults on their information seeking behaviour on the web. The findings were that the most of the studies on children described their interaction with the web and research on adult researchers focused on describing research pattern and many studies investigated effects of selected factor on search behaviour including information organization and presentation, type of search task, web experience, cognitive ability and effective’s states. It shows that as users gain more experience with the web, their need will expand the growth of the amount of information on the web has affected information seekers’ use of the web.

Nicholas “An assessment of the online- searching behaviour of practitioner and user”. *The Journal of Academic Librarianship*, 15 (1);1996; 5-8.

This book provides what were the searching characteristics of end user in a non- academic environment and explain it in the light of their information needs. The result shows that they did search with a limited range of commands and more of their searches produced no results and search statements were simply constructed. However there were variations between individuals and users and it was found that an end-users group that match an informational

professional group on one aspect of online searching or another. The online behaviour and to the fact that they were not trained.

Sangeeta, Keisham and Babychal, L (2008). "Information access pattern by the students of MIMS: A study of Manipur University Library. Changing role of LIS Professionals in Digital Era". 199-207.

This article provides how the MIMS students access their information, their purpose of visiting the university library, awareness about library services etc. It also studies about the various information needs and access pattern is very much needed. Also development of methods and techniques which facilitate the transfer of right information to the right person and encourage the use existing information is very important.

Korobil,S., Tilikidou, I. and Delistavrou, A. Factors that influence the use of library resources by faculty members. *Library Review*. 55 (2); 2006; 91-105.

The authors of the article pointed out that majority of the faculty of Technical Educational Institution, Thessalonica, Greece use less electronic resources than printed medium for accessing their informational needs. The study further indicated that the use of electronic resources is higher in the School of Business Administration and Economics among those who hold a Doctorate Degree.

1.5 Research Design:

Research design is a plan, structure and strategy of investigation so conceived to obtain answers to research problems. It is the complete scheme of the research work providing a base on which research is conducted. It is also regarded as a blueprint of the research on which the researcher Or investigator carried out his work. It is therefore, given as below:

1.5.1 Objectives of the Study:

The objectives of the present study are to:

- Study the information seeking approaches of the users.
- Find out information resources and services available in the library.
- Identify factors affecting information seeking behaviour of the user.
- Determine information barriers/constraints faced by the students.

1.5.2 Statement of the Problem:

In the present information society and information age, it has been increasingly felt that the users are to be served better with authentic and reliable information. Information needs and user categories have different needs depending upon their study, research, assignments etc. School of Education and Humanities (SEH) discipline in Mizoram University has 140 students spread over 4 (Four) academic departments i.e, Education, English, Mizo and Hindi. Role of students is very important in higher education where their reading interest, current awareness, subject knowledge has direct impact on their wisdom. Therefore it is necessary to know how the students of School of Education and Humanities (SEH) seek their information, how they access the information in order to meet the challenges of the changing information society.

Problem lies with the fact that, many students are still keen to use print sources of information even if multiple e-resources are available in the library. They are either not known to such resources or not conversant to the technology to retrieve the information. Therefore, the present research topic will also explore the possibilities of overcoming this problem. The present study is, therefore, essential for the university library and also for the students to know about the resources available in the library. Thus, the present study will abridge the gap of the information resources and the users while using the resources.

1.5.3 Research Methodology:

A total number of 140 students of four departments under the School of Education and Humanities (SEH) of Mizoram University were taken as total population for the present study. The methodology adopted for the study was based on questionnaire. The collected data through questionnaire were organized tabulated and interpreted and inferences were drawn. A total number of 140 questionnaires circulated among 140 Students under the School out of which, a total number of 118 filled-in questionnaires were received which constitute 84% leaving a non-response rate of 16%. Conclusions were drawn on the basis of findings from the analysis of the data.

1.6 Chapterisation:

The present study is divided into five chapters as below:

Chapter-1 of the study deals with the introduction, an overview of the School of School of Education and Humanities (SEH), Significance and Scope of the study, Review of Literature, Research Design, Objectives of the Study, Statement of the Problem, Research Methodology. Chapter-2 of the work focuses on an overview of the Mizoram University where the scholar has discussed a brief history of the Mizoram University including the general view of the aims and objectives of the Mizoram University and its central library. The chapter also includes the discussions on library activities, staff strengths and other relevant areas such as computer centre etc. Chapter- 3 of the study mainly is talked about the information seeking behaviour and different models. Chapter-4 of the work is dealt with the data analysis and findings with the help of tables and graphs. Chapter-5 is Suggestions and conclusions which concludes the study and draw suggestions on the basis of the study for future study and comply with. A comprehensive list of bibliography is attached at the end of the dissertation.

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Sangeeta, Keisham and Babychal, L (2008). Information access pattern by the students of MIMS: A study of Manipur University Library. In *Changing role of LIS Professionals in Digital Era*. 199-207.

CHAPTER- 2

MIZORAM UNIVERSITY: AN OVERVIEW

2.1 Introduction

Mizoram University was established as a Central University by an Act of Parliament has its jurisdiction to the whole of Mizoram, the erstwhile jurisdiction of Mizoram Campus of North Eastern Hill University, Shillong, which functioned till 1st April 2001(MZU Annual Report 2011-12).

To promote education in the region and irrespective of the subjects the university took all out efforts and as such, the university education is spread over with 7 schools and 30 academic departments as mentioned below.

The objectives of the Mizoram University are to:

- ☞ Impart an advanced education and make provisions for research facilities;
- ☞ Promote innovations and trained man power in the state
- ☞ Making the society an information literate;
- ☞ Develop the society.

2.2 Function of Mizoram University

The function and duties of Mizoram University as enshrined in the Mizoram University Act 2000 is enumerated in Section 4 and 5 of the said Act and is reproduced below:

Section 4:

The objects of the University shall be to disseminate and advance knowledge by providing instructional and research facilities in such branches of learning as it may seem fit to make provisions for integrated courses in humanities, natural and physical sciences, social sciences, forestry and other allied disciplines in the educational programmes in the University; to take appropriate measures for promoting innovations in teaching learning process, inter-disciplinary studies and research; to educated and train manpower in the development of the State of Mizoram; and to pay special attention to the improvement of the social and economic conditions and welfare of the people of the State, their intellectual, academic and cultural development.

Section 5:

The University shall have the following powers namely:-

- To provide for instructions in such branches of learning as the University may, from time to time, determine and to make provision for research and for the advancement and dissemination of knowledge.
- To grant, subject to such condition as the University may determine, diplomas or certificates to, and confer degrees or other academic distinctions on the basis of examination, evaluation or any other method of testing, on persons, and to withdraw any such diplomas, certificates, degrees or other academic distinctions for good and sufficient cause.
- To organize and to undertake extramural studies, training and extension services.
- To confer honorary degree or other distinctions in the manner prescribed by the statutes,
- To provide facilities through the distance education to such persons as it may determine.
- To institute Principalship, Professorship, Readerships, Lectureships and other teaching or academic positions, required by the University and to appoint persons to such Principalships, Professorship, Readerships, Lectureships and other teaching or academic positions.
- To recognize an institute of higher learning for such purposes as the University may determine and to withdraw such recognition.
- To recognize persons for imparting instruction in any college or institution admitted to the privileges of the University.
- To appoint persons working in any other University or organization as teacher of the University for a specified period.
- To create administrative, ministerial and other posts and to make appointment thereto.
- To co-operate or collaborate or associate with any other University or authority or institution of higher learning in such manner and such purposes as the University may determine.
- To establish, with the prior approval of the Central Government, such center and specialized laboratories or other units for research and instruction as are, in the option of the University necessary for the furtherance of its objects.
- To institute and award fellowships, Scholarships, Medals and prizes.
- To establish and maintain Colleges, institutions and Halls.

- To make provisions for research and advisory services and for that purpose to enter into such arrangements with other institutions, industrial or other organizations, as the University may deem necessary.
- To organize and conduct refresher courses, workshops, seminars and other programmes for teachers, evaluators and other academic staff.
- To admit to its privileges college and institutions within the State of Mizoram not maintained by the university; to withdraw all or any of those privileges in accordance with such conditions as may be prescribed by the Statutes; to recognize, guide, supervise and control Halls not maintained by the University and other accommodation for students, and to withdraw and such recognition.
- To appoint on contract or otherwise visiting Professors, Emeritus Professors, Consultants, Scholars and such other persons who may contribute to the advancement of the objects of the University.
- To confer autonomous status on a College or an Institution or a Department, as the case may be, in accordance with the statutes.
- To determine standards of admission to the University, which may include examination, evaluation or any other method of testing.
- To demand and receive payment of fees and other charges.
- To supervise the residences of the students of ht University and to make arrangement for promoting their health and general welfare.
- To lay down conditions of service of all categories of employees, including their code of conduct.
- To regulate and enforce among the students and the employees and to take such disciplinary measures in this regard as may be deemed by the University to be necessary.
- To make arrangement for promoting the health and general welfare of the employees.
- To receive benefactions, donations and gifts and to acquire, hold manage and dispose of any property; moveable or immoveable, including trust endowment properties for the purposes of the universities.
- To borrow, with the approval of the Central Government, on the Security of the property of the University, money for the purposes of the university.
- To do all such other acts and things as may be necessary, incidental or conducive to the attainment of all or any of its kind.

2.3 Schools and Departments of Mizoram University

The 7 schools of the university and the academic departments attached to each school is shown below under Table -1.

Table -1: Academic Departments in Mizoram University

Sl.No.	Department	Estt. year
1. School of Earth Sciences & Natural Resources Management(SESNRM)		
1	Department of Environmental Sciences	2002
2	Department of Extension Education & Rural Development	2001
3	Department of Forestry	1990
4	Department of Geography & Resource Management	2003
5	Department of Geology	2002
6	Department of Horticulture, Aromatic & Medicinal Plants	2007
2. School of Economics, Management & Information Science(SEMIS)		
1	Department of Commerce	2002
2	Department of Economics	1978
3	Department of Library & Information Science	2002
4	Department of Management	2006
5	Department of Mass Communication	2011
3. School of Education and Humanities(SHE)		
1	Department of Education	1979
2	Department of English	1979
3	Department of Hindi	2010
4	Department of Mizo	1997
4. School of Engineering Technology(SET)		
1	Department of Computer Engineering	2011
2	Department of Electrical Engineering	2011
3	Department of Electronic & Communication Engineering	2007
4	Department of Information Technology	2007
5. School of Life Sciences(SLS)		
1	Department of Biotechnology	2007
2	Department of Botany	2005

3	Department of Zoology	2006
6. School of Physical Sciences(SPS)		
1	Department of Chemistry	2006
2	Department of Mathematics & Computer Science	2006
3	Department of Physics	2003
7. School of Social Sciences(SSS)		
1	Department of History & Ethnography	2002
2	Department of Political Science	2002
3	Department of Psychology	1983
4	Department of Public Administration	1985
5	Department of Social Work	2002

Source: Mizoram University Annual Report, 2011-12

2.4 Mizoram University: Central Library

Mizoram University, Central Library has been witnessing noteworthy development in various spheres during the last few years. Growth may be seen in its holdings, users and application of technology. The collection by March, 2012 included 86,517 numbers of books, 74 Thesis, 248 Dissertations and 8,026 numbers of Bound Volumes of Journals. The Library at present subscribes to 238 Journals, 42 General Periodicals and 21 Dailies (English:9, Mizo:11, Hindi:1). The total Library membership is 1,887 i.e. 174 UG and 1015 PG Students, 49 M.Phil, 342 Ph.D Scholars, 171 Teachers, 2 Departmental Libraries and 130 Non-teaching staff. During this year, 19,546 books were borrowed by the users and had 35,483 visitors.

The entire library holdings have been available in Machine Readable Catalogue since 2008; and the computerized bibliographic information of the library holdings have also been available for users' searching throughout the campus Network (intranet) using web OPAC. Automated circulation system using barcode technology has been used since 1st Dec, 2008 which provides easy and prompt service. Library has been providing lending and reprographic services, Orientation Programmes for newly admitted students of various Academic Departments.

Digitization of Mizoram university's own documents and publications for setting up of an 'Institution Repository' is an ongoing process. The repository will collect and provide free online access to all types of institutional research outputs initially within the campus network (Intranet).

Besides, library is currently working on implementation of advanced technology in the field of identification, security, tracking and automated handling of Library materials using Electro-magnetic and Radio Frequency Identification (RFID) Library management system in order to improve the efficiency of Library operations. The implementation work had been started from end of March, 2012 and the new system also allows users to check out books by themselves using a self check machine.

Computerized Braille system for blind students had been successfully installed and operated since 9th Dec, 2011 in the library. Library also initiated the process of implementing CD/DVD mirror server to store the contents of CDs and DVDs and provide accessibility of digital data archive throughout the campus network.

2.4.1 Library Activities:

The activities of the library are as follows.

- ➔ Providing lending services.
- ➔ Reprographic Services.
- ➔ Used to conduct Orientation programmes for newly admitted students.
- ➔ Library holdings have been automated since 2008 and are available for us searching throughout the campus network (intranet) using web OPAC.
- ➔ Automated circulation system using barcode technology has been used since 1st Dec 2008.
- ➔ Digitization of MZU's own documents and publications for setting up of an 'Institutional Repository' is an on-going process.
- ➔ Library is currently working on implementation of EM & RFID based library security and management system.
- ➔ Library is also in the process of implementing CD/DVD mirror server.

2.4.2 Staff Strength

The library under discussions has a good technical and non-technical staffs. The staff strength of the library is discussed below in Table-2.

Table-2: Staff Position (Designation wise)

Sl. No	Designation	No. of Incumbent				Out of Total Incumbent							
		Male		Female		SC		ST		General		OBC	
		R	C	R	C	R	C	R	C	R	C	R	C
1	Deputy Librarian	1	-	1	-	-	-	1	-	1	-	-	-
2	Assistant Librarian	-	-	1	-	-	-	1	-	-	-	-	-
3	Information Scientist	1	-	-	-	-	-	1	-	-	-	-	-
4	Professional Assistant	3	-	2	-	-	-	4	-	-	-	1	-
5	Semi-Prof Assistant	2	-	2	-	-	-	4	-	-	-	-	-
6	Jr. Library Assistant	2	-	1	-	-	-	3	-	-	-	-	-
7	Library Attendant	4	-	4	1	-	-	8	1	-	-	-	-
8	Gate Keeper	2	-	-	-	-	-	2	-	-	-	-	-
9	LDC	-	-	2	-	-	-	2	-	-	-	-	-
	Total	15	-	13	1	-	-	26	1	1	-	1	-

(Key: R=Regular; C=Contract)

Source: Library Records, Mizoram University

2.5 Computer Centre

Mizoram University Computer Centre provides computing facilities to students, teaching and non-teaching staff of the University as well as imparting technical knowledge to students and staff alike. There are at present, as many as 25 high end Computers available for the users.

Leased Line Internet connection with 1Gbps bandwidth under NME-ICT scheme is used for providing Internet Services within the Campus.

The Centre is monitoring University website (www.mzu.edu.in) and EDUSAT programme. The ongoing works of Examination Computerization is also supervised by the Centre. It had help various academic departments in setting up of Computer Laboratories.

The Computer Centre is Data Centre for Campus Networking, which has covered all existing Academic and Administrative buildings. The Campus Network runs on a robust optical fibre backbone with a number of Cisco IP Phones. The internet connection is shared over the campus LAN. As many as six high-configuration Windows and Linux servers are running presently.

The Centre had developed Intranet applications such as, Intranet Mail, Intranet Website, etc. LAN messenger software was installed in all computers and it is being extensively utilized by all employees for quick communications such as sharing of file, data and voice chat, etc.

The Centre has licensed copies of software such as Oracle 10g, SPSS 15.0, security packages along with a number of Microsoft products which are covered under Campus Licensing Agreement.

The library extends all its resources to the academic departments of the university. It also provides facilities to the faculties of the university links to the UGC-Infonet Digital Library Consortium through which the faculties and research scholars can access the resources. Moreover, it also provides OPAC services through intranet leading thereby the academic departments to know the resources and availability of the documents in the library.

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CHAPTER- 3

INFORMATION SEEKING BEHAVIOUR: NEEDS AND MODEL

3.1 Introduction

Information seeking is performed in relation to certain objectives. It has a significant role in all academic environments during the last decade and this is unique in the field of libraries due to the changing attitudes of the users for seeking of information for teaching, learning and research. In the process, the library adopts multiple mechanisms to provide the resources to the users using both traditional method and electronic. The increasing volume of literature both traditional and electronic precipitated the library for induction of Information and Communication Technology primarily to organize and dissemination of the resources to the users. Consequent upon the developing trends such as, (i) information and communication technologies (ICT) and (ii) increasing student-centered problem led the libraries to change the develop skills and competency to provide the user-based information services. The ability to critically seek, evaluate and use, the information and tools for information seeking within different communities is a development of competency which is gaining momentum in the present state of affairs. Therefore, information seeking has become crucial for both the educators and service providers and hence, this has become a major area of library studies. Information Seeking in Context (ISIC), a global issue explored new vistas about the use of information seeking practices. With some exceptions, information seeking and learning in educational settings has not been explored to a great extent, despite the size of the educational sector and the development of student centered problem-based teaching methods. Instead, these questions have been discussed in the field of information literacy, a field that has been developed primarily within academic librarianship, outside the information seeking research community.

3.2 Information its meaning

Information is recorded or communicated knowledge gained by man through experience, observations and experiments. Information is considered as the first element in the search for wisdom in a human chain process that arises from documentation produces information, which converts into documentation and again into information. The Webster's Third international Dictionary (1984) defined information as:

- ☞ Facts or figures ready for communication or use as distinguished from those incorporated in a formally organized branch of knowledge.

☞ The process by which the form of an object of knowledge is expressed upon the apprehending mind so as to bring about the state of knowing.

According to Oxford English Dictionary (1984) information is:

- ➔ The action of informing, formation or molding the mind or character, training, instruction, teaching, communication of instructive knowledge.
- ➔ The action of informing, communication of knowledge or new or some fact or occurrence, the action of telling or fact of being told of something: and
- ➔ Knowledge communication concerning some particular facts, subject or event; that of which one is apprised or told intelligence news.

In addition to the above, there are some definitions of information given by various personalities. Debons (1988) defined information as, “the cognitive stage of awareness (as being informed) of given representation and physical form (data). This physical representation facilitates the process of knowing”. Ching – Chih Chen and Peter Herron (1982) also define information as, “all knowledge, ideas, fact data and imaginative works of minds which are communicated formally and informally in any format”. Ford (1986) defined information as, “the structure of any text which is capable of changing the structure of recipient”. According to G. Bhattacharya (1975) information is “the message conveyed or intended to be conveyed by a systematized body of ideas or its acceptable substitutes”.

From, the above definitions, it can be clear that the three concepts – data, facts, knowledge and wisdom are interconnected to each other. The interrelationship can be clear from the following definition:

- | | |
|---------------|--|
| Facts | - Things known to have happened or to be true or to exist |
| Data | - This term refers to an individual fact or pieces of information or a group of facts. Thus data may be described as discrete and in organized pieces of information. |
| Knowledge | - Knowledge is an organized set of statement of facts or ideas presenting a reasoned judgment or an experimental result which is transmitted to others through communication medium in some systematic form. |
| <i>Wisdom</i> | - Implies the application of knowledge as contained in human judgment centered on certain criteria or values that are generally accepted by the culture or society. |

3.3 Types of information

Information can be categorized on the basis of its use and purpose for which it is used. J.H. Shura (1972) has categorized information into six (6) types as under:

- (i) Conceptual information
- (ii) Empirical information
- (iii) Procedural information
- (iv) Stimulation information
- (v) Policy information
- (vi) Directive information

The conceptual information relates to ideas, theories and hypothesis about the relationship which exists among the variables in the area of problems. Empirical information relates to data and experience of research which may be drawn from oneself or communication from others. Procedural information is the data of investigation which are obtained, manipulated and tested, it is essentially methodological and it is derived from scientific attitude. Stimulatory information is a type of information which is motivated by oneself as environmentally derived. That type of information which focused on the decision making process is known as policy information, whereas information which is used for coordination and for enabling effective grouped under directive information.

3.4 Studies in Information Needs and Seeking Behaviour

Both Information Needs and Seeking Behaviour are crucial for research in information studies. Purposive studies in the area have been conducted from the 1940s which resulted to obtain substantial knowledge to support organizational development and administrative decision-making. The methodical approach of the study due to lacking of insufficient theories, concepts could not bring consensus to ascertain the need of the information seeking researchers. Sporadic attempts were made by the scientists in the area to determine the information needs, seeking of the researchers and the students and it was first applied to the field of research cognitive science which speaks about the interdisciplinary scientific study of the mind and its processes. The cognition relates to establish the research on intelligence

and behavior, especially focusing on how information is represented, processed, and transformed. (http://en.wikipedia.org/wiki/Cognitive_science).

Information seeking behavior is the technique of the process of searching for the information. Information seeking behavior depends on the type of information need of the people. So information seeking behaviour arises when the person is able to recognize what type of information is needed, what are the goals or objectives and what kind of information resources to use.

Information seeking behaviour is defined as any activity of an individual that is undertaken to identify a message that satisfied a perceived need. Information seeking behaviour begins when someone perceives that the current state of possess knowledge is needed to deal with some issue problem. The process ends when that perception no longer exists. People seek information in a variety of circumstances and from a variety of resources.

Ching- Chih Chen (1982) had defined information seeking as, “information seeking patterns are the paths pursued by the individual in the attempt to resolve a need”. According to Girja Kumar (1990) , “information seeking behaviour is mainly concern with who needs what kind information for what reasons; how information is found, evaluated and used”. T.D.Wilson (1981) defines what he calls information behaviour as, “those activities a person may engage in when identifying his or her own needs of information, searching for such information in any way and using transferring that information”.

3.4.1 Information Need

Information is one of several basic resources that are needed and utilized by human beings for their development and prosperity. According to Prasad, the exact nature of information is not easy to describe. Perhaps the most explicit definition in the literature defines information as ‘recorded experience in the literature decision making’ (1992). In the present age of information, it has been increasingly felt that to serve readers better, information needs and users must become the central focus of attention. It is beyond doubt that the success of information services is more likely to be achieved by adjusting the services to meet the specific needs of an individual rather than trying to adopt the individual user to adopt the individual user to match with the output of the information system. Information is an

aggregation or processing of data to provide knowledge and intelligence. Information is power which plays a vital role in the development and progress. It is, therefore necessary that the information generated at any point be procured, organised and disseminated expeditiously to its users for its optimum use.

Information need is often understood in information science as evolving from a vague awareness of something missing and as culminating in locating information that contributes to understanding and meaning (Kuhlthau 1993). Information need is described as an anomalous state of knowledge (ASK) (Belkin et al. 1982) or a gap in individual's knowledge in sense-making situations (Dervin & Nilan 1986). Wilson points out that there must be an attendant motive when a person experiences an information need (Wilson 1997b).

Information is needed in every field of life. Everybody need information in everyday life like education, research etc. the information need is difficult from one person to another which means that it will not be the same though it might be similar. M.B. Line (1974) defined information need as, “what an individual ought to have for his work, his research, his education, his creation” etc. Ching- Chih Chen and Peter Hernon (1982) defined information need as, “information need occurs whenever people find themselves in situations that required some form of knowledge for resolution”. N.Ford and Krikelas (1983) defined information need as, “an awareness or recognition of not knowing or existence of uncertainty”.

3.5 Identification of information need

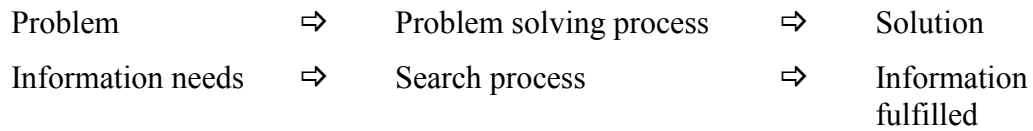
According to Girja Kumar (1990), the information need may be expressed as input- process-output model. The basic components of the system are:

- a) Problem
- b) Problem solving process and
- c) Solution.

The problem is analyzed to determine information needs. It is indicative of the uncertainty in knowledge. Solution results in resolving of the situation by filling the gap in the knowledge.

The model set forth by him can be illustrated as below:





Need of Information can be divided into the following categories:

- i) Social or Pragmatic Information Needs - Information required coping with day to day life.
- ii) Recreation information Needs - Information satisfying and recreational and cultural interest of an individual.
- iii) Professional information Needs - Information required operating competently within a business or professional environment.
- iv) Information Needs - Information required satisfying academic requirement at an institution.

Britain (1970) pointed out the information needs as follows.

- a) Need expressed by the user
- b) Need that a user cannot express
- c) Present or immediate need
- d) Future or deferred or potential need.

Information needs as Paisley (1968) observed are affected by a variety of factors, which are as under:

- a) The range of information services available.
- b) The uses to which information will be put to use.
- c) The background, motivation and professional orientation and other individual characteristics of the user.
- d) The social, political and economic systems surrounding the user.
- e) The consequences of information use.

According to him information need is not a psychological state of mind rather it is an objective need oriented towards particulars tasks, problem etc.

3.6 Models of information seeking behaviour

The importance of information as a vital resource in today's society cannot be overemphasized. When we consider the increasing number of information generators and users, we can visualize to a certain extent the magnitude of the problem of collection, organization and dissemination of information. Information centers are playing a vital role in this direction. However, with the growth of information, very often there are delays in providing service to the end users.

In every country, from the less developed to the most advanced, a large amount of scientific and technological information locally produced full of international origin is stored in any form of benefit of users. Information has become a very important commodity required at all levels of the process. The generation and regeneration of information based on they used of knowledge which is procured and organized for the purpose of retrieval to user by libraries in the form of documents and other reading materials. In an information system the potential users are connected with the required information and keep the information generation cycle on the move. Information centers such as libraries, documentation centers and data banks, etc., have no reason to exit unless they are utilized addictively by the user.

Many models have been framed in order to explain the information seeking process. A model is a framework for thinking about a problem and many evolve into a statement of the relationship among the theoretical prepositions or put more simply models are statements often in the forms of diagrams, that attempt to describe an information seeking activity, the causes and consequences of that activity or the relationship among stages in informing seeking behaviour.

J.David Johnson (1997) defined “theoretical models of information seeking must three keys issues. First, models should provide a sound theoretical basis for predicting changes in information seeking behaviour. Second, models should provide guidance for designing effective strategies for enhancing information seeking. Third, models should explicitly conceptualize information seeking behaviour, developing rich description for it. Finally models should answer the “why” question; they should explicitly address the underlying forces that impel particular types of information.

Wilson point out that models of information seeking as a framework for thinking about a problem and may evolve into a statement of the relationship among the theoretical proposition. Most models in the general fields of information behaviour of the former variety; they are statement often in the form of diagrams, that attempt to describe an information seeking activity, the causes and consequences of that activity or the relationships among stages in information seeking behaviour. Many models of information seeking behaviour exist and some of the most important and popular models that have been developed so far are given below:

3.6.1 Ellis (1989) and Ellis, Cox and Hall (1993)

Ellis and Co. uses the term ‘features’ rather than ‘stages’ in information seeking. The features according to them are:

- ☞ Starting : It relates to employment of the user who obtains information seeking, for example, asking a knowledgeable.

- ☞ Chaining: : Following footnotes and citations is known material or ‘forward’ chaining from known items citation indexes.

- ☞ Browsing : Semi-directed or semi-structured searching
- ☞ Differentiating : Using known differences in information resource as a way of filtering

- ☞ Monitoring : Keeping up to-date or current awareness searching
- ☞ Extracting : Selectively identifying relevant material in an information source

- ☞ Verifying : Checking the accuracy and authenticity of information
- ☞ Ending : Deriving consensus through a final search

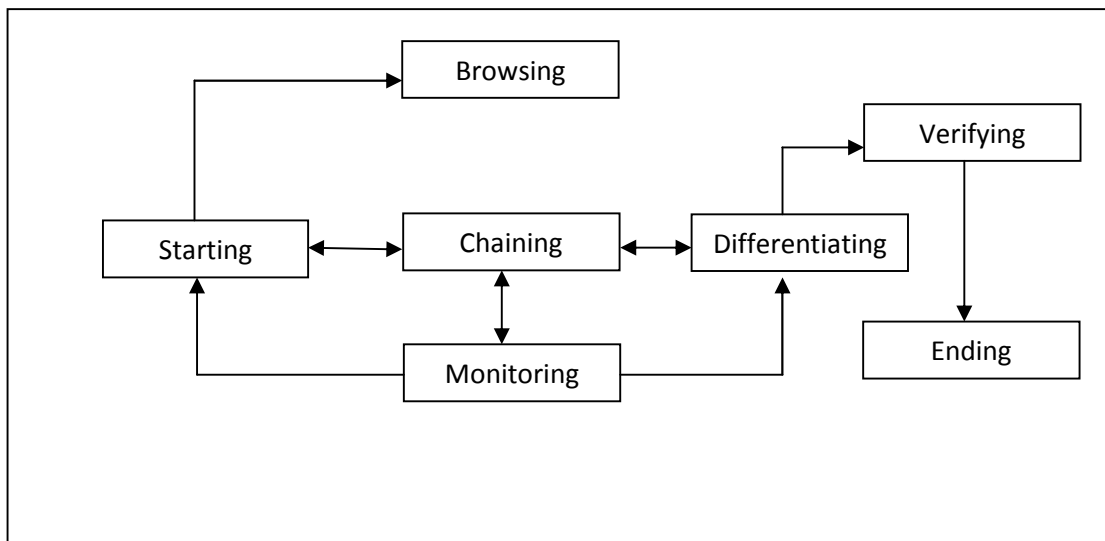


Fig.1: A stage of process version of Ellis' behavioural framework.

3.6.2 Wilson Models

A series of models by Wilson (1981 and 1999) reflects trends in the theory and practice of information seeking research. Their evolution makes them particularly interesting to analyze and compare with those of other researchers.

Wilson models suggest that information seeking behaviour arises as a consequence of a need perceived by an information user, who in order to satisfy that need, makes demands upon formal or informal information sources or services, which results in success or failure to find relevant information. If successful, the individual then makes use of the information found and may either fully or partially satisfy the perceived need – if he fails to satisfy the need, he will have to start searching again. The models also shows that part of the information seeking behaviour may involve other people through information exchange and the information perceived as useful may be passed to other people as well as being used by the person himself or herself.

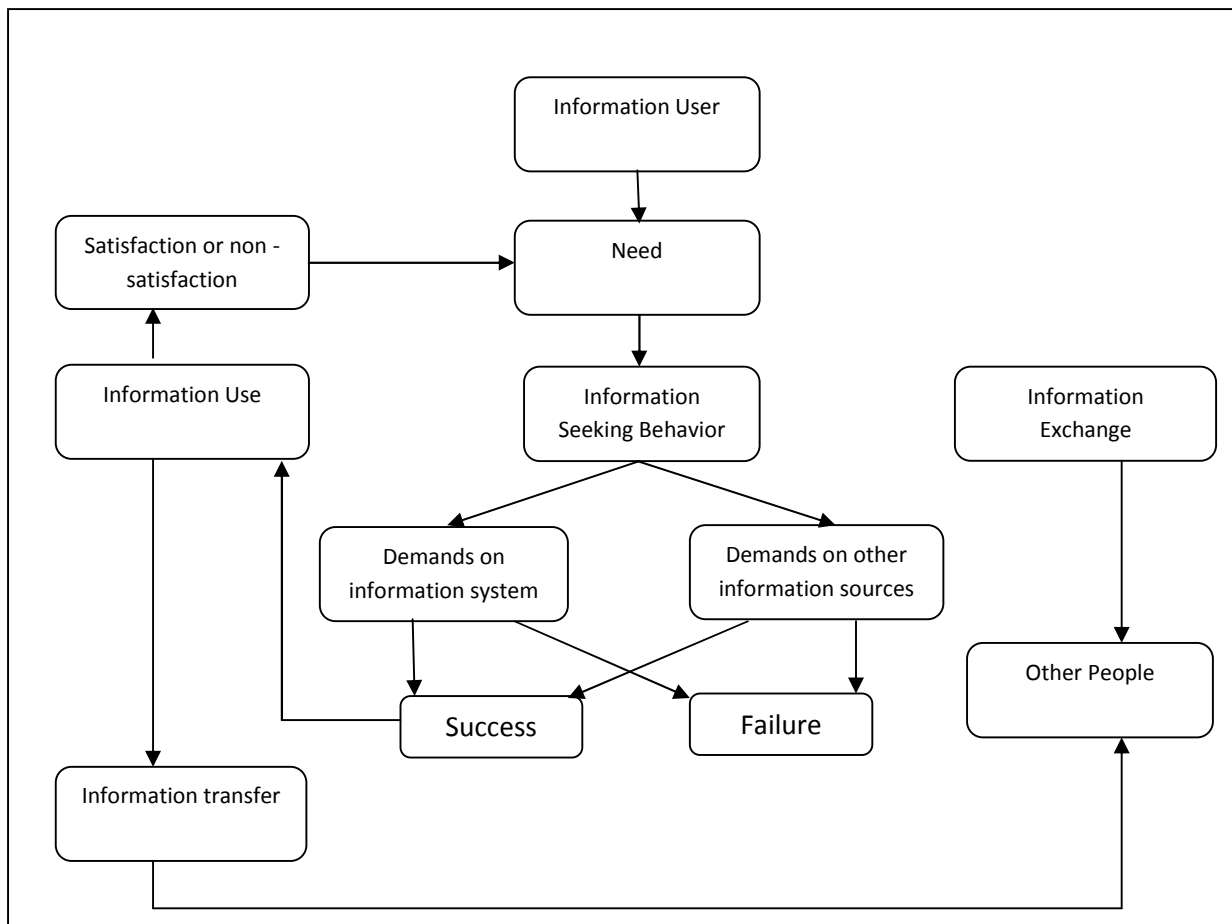


Fig.2: Wilson 1981 first model of Information Behaviour.

3.8.3 Wilson second model

William (1996) revised his earlier model after drawing upon research from a variety of fields other than information science, including decision making, psychology, innovation, health communication and customer research. While the basic framework of the 1981 model remains, the revised model had a few additions as follows:

The term used in the new models are explained as follows – ‘intervening variables’ represent the ‘barriers’ whose impact may be supportive of information use as well as preventive, information seeking behaviour is known to consist of more types than previously, information processing and use is shown to be necessary part of the feedback loop if information needs are to be satisfied; the stress/coping theory tries to explain why some needs do not invoke information seeking behaviour; the risk/reward tries to explain which sources of information may be used more than others by a given individual and the social learning

theory embodies the concept of ‘self-efficacy’ i.e. the conviction thus one can successfully execute the behaviour required to produce the [desired] outcome.

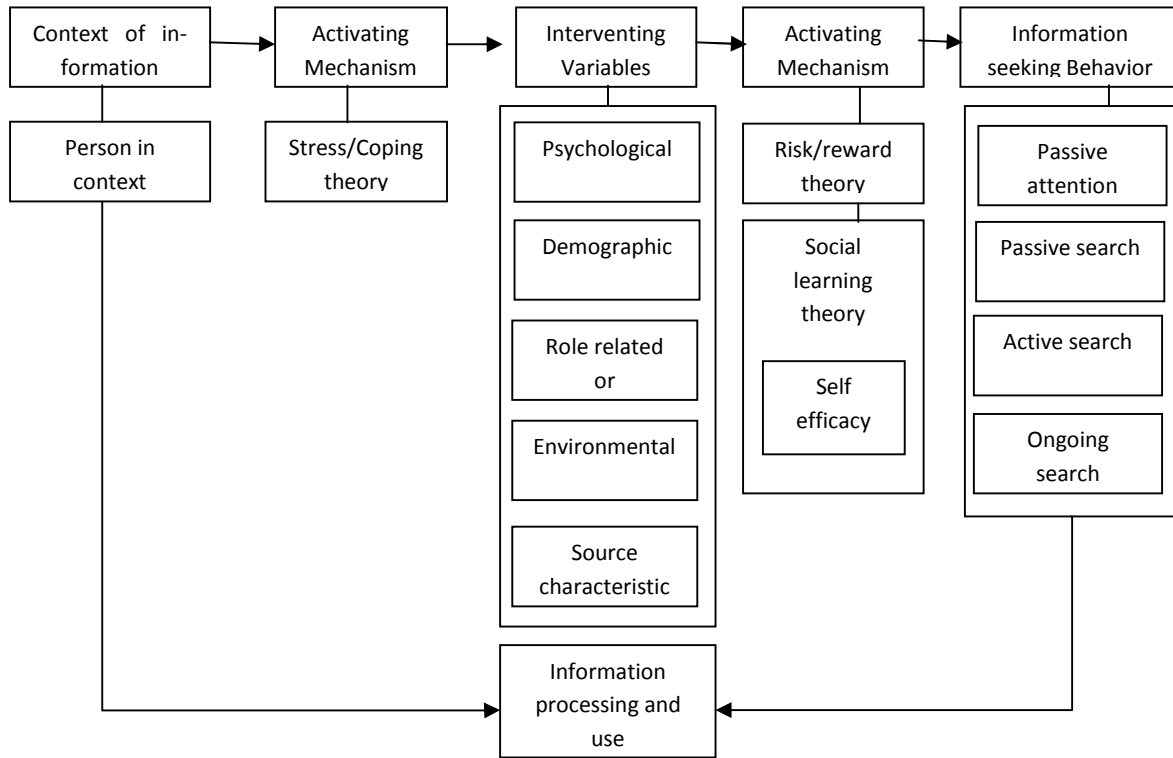


Fig.3: Wilson’s 1996 second model of information seeking behaviour.

3.6.4 Krikelas model

The Krikelas (1983) model contains 13 components. The causal process generally flows downward with some provision for feedback loops. At the top of the model (implying a beginning) are the twin actions of “information gathering” and “information giving”. The activities of information gathering come about in response to deferred needs, which in turn have been stimulated by an event or the general environment of the seeker. Information giving is defined as “the act of disseminating messages (which) may be communicated in written (graphic), verbal, visual, or tactile forms”. About information seeking Krikelas says little, except to point out that individual are typically both senders and receivers of information and that neither role is independent of the other. To meet the information need, the researcher is assumed to consciously select a source. As Krikelas described in his scenario, the source could be internal (i.e. oneself) or external (other people – communicated with through same kind of medium).

Although Krikelas make a hard distinction between “direct (interpersonal) contact” and “recorded (literature),” it is important to realize that today’s expanded media environment blurs such boundaries. Although the main and preferred source of information for people is still likely to be face to face conversation, “direct contact” could occur over a telephone or a videophone or by way of e-mail, voice mail, or a videotape as well. Krikelas undoubtedly had in mind the main kind of “recorded” material one found in libraries two decades ago (books and journals) but the increased case of asynchronous interpersonal communication makes the distinction between “recorded” and “live” difficult.

One appealing aspects of the Krikelas model is its simplicity. The model is a simple, one-dimensional flow-chart in which all of the arrows travel in one direction (i.e. there are no two- way influences among the boxes) and no one part of the process encompasses another.

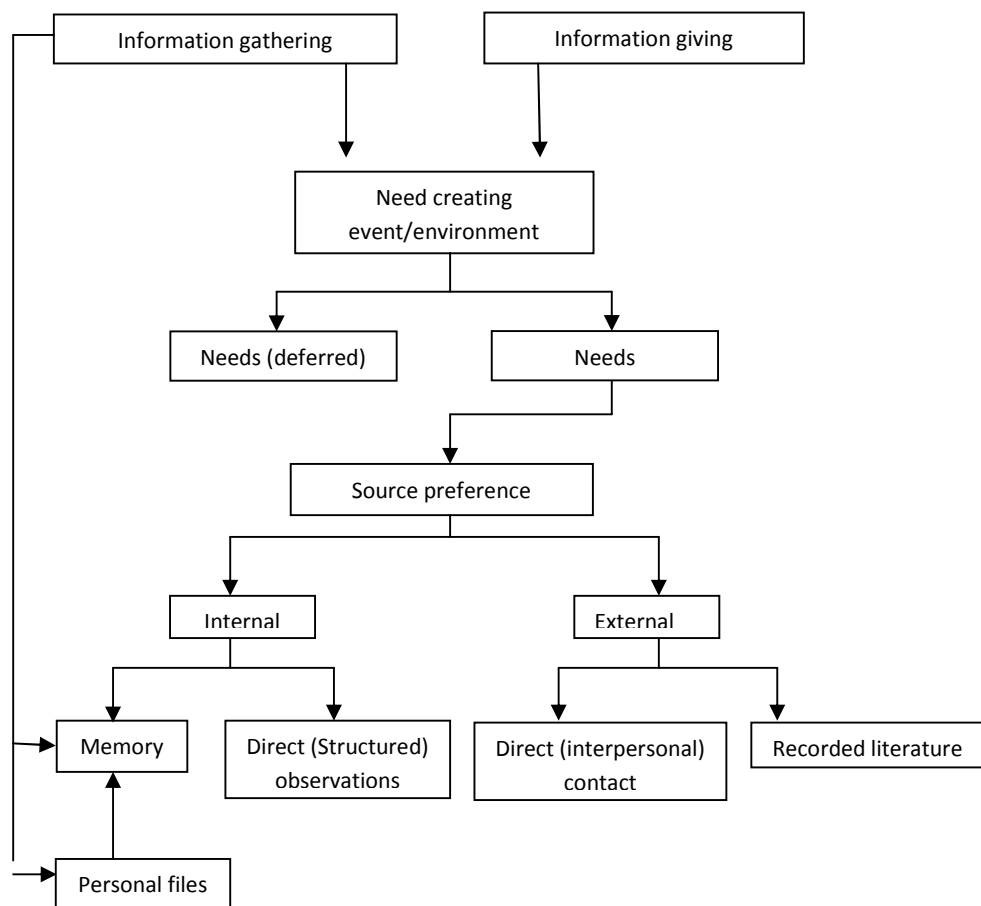


Fig.4: The Krikelas model of information seeking behaviour.

3.8.5 Johnson Model

Johnson model contains seven factors under three headings. It is pictured as a causal process that flows from left to right (fig 5), beginning with four “antecedent” factors under two categories. The significance of Johnson’s model component is not obvious in its depiction, but rather is explained in depth in his writings (eg. 1997). Therefore, I will need to say something more about this model than the others.

In Johnson’s model, it is the antecedent factors that motivate a person to seek information. The first two are grouped together under the label of background factors. One factor is demographics: one’s age, gender and ethnicity, along with socioeconomic variables like education, occupation and wealth. Historically, such demographics variables are the main stay of social research, which tries to find pattern among the behaviour, beliefs, and attitude of populations based on correlation with such demographic variables. In any consumers-oriented research dividing a population by such variables is referred to as audience segmentation.

A background factor for more difficult to characterize is one’s direct experience in relation to the domain of interest. The concept of experience bring us into issues of knowledge representation and memory that are two complex to consider here; suffice it to say that typically one starts out knowing something- perhaps little or a great deal about the phenomenon of interest, as well as the way about in which one can find out information about it. Thus a key concept under the heading of experience is the social network of the individual with an information need.

Just as the first and second factors are grouped together, the third and fourth fall include belief about the topic and the salience of information about the topic. Both are dependent on a person’s degree of knowledge or, conversely, on their state of ignorance- about the topic. The concept of salience implies that information is not only perceived to be relevant to a need, but that it is also applicable. In Dervin’s terms, information that is salient is that which could be used be to dredge a gap, solve a problem or resolve a troublesome ambiguity. Thus salience is the key motivator in deciding to look for information.

Beliefs are important in information seeking because they constrain the individuals thinking and level of motivation regarding information seeking. The beliefs that people have about the world and their selves determine the answer to questions like: “Is there a problem?” “Is there a solution?” and “Can I change my situation?” Beliefs are not only about facts but also about our relation to the current situation: Our degree of control over events, our self-efficacy.

The second column of Johnson’s model, information’s carrier factors, encompasses the factors that have preoccupied many older studies of information seeking: the characteristics and utility of the information channel selected and used by seekers. As Johnson highlights what information seekers are concerned about is the content of the information, not the channel through which it arrives. So the academic preoccupation with the nature of sources and why people select them has been criticized by Dervin (1989) and others as distracting attention from the uses of information and their particular needs, which typically do not map neatly onto individual channels or sources. To make matters more complicated, channels (in a narrow sense of the term) have proliferated greatly due to application of Computers and telecommunications to older media.

Johnson says relatively little about the utility of channels are selected on the basis of their match with the seekers needs, and with expectations regarding likely satisfaction to be obtained. For research on the choice of the print media, potential utility is equated with “interest, usefulness and importance for achieving one’s goals”.

The final component of Johnson’s model is information seeking actions, searches for information involve conscious choices among channels and sources, but also imply processes, feelings and a whole lot of other behavioural and cognitive elements. Even simple choices among channels and sources may be characterized by the number chosen and the depth to which they were examined. Thus the study of actions taken by any individual in quest of information likely to be involved and result in a unique case study from which generalizations is difficult.

Johnson concludes that his model may be improved through the inclusion of feedback loops between actions and antecedent. Antecedent factors continue to shape the searching actions as they proceed, while actions may simultaneously modify the non-demographic antecedent

factors of experience, belief and salience. That is information seeking is clearly a dynamic process, with individual's level of knowledge changing as it goes on along with the perception of the gap.

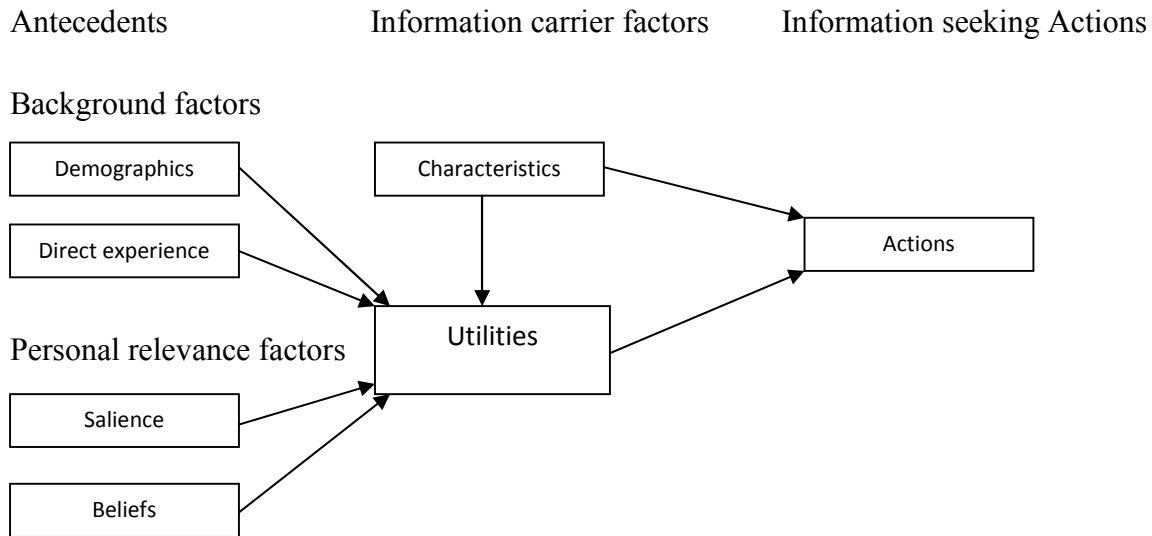


Fig.5: Johnson's Model of Information Seeking.

3.7 Factor affecting information seeking behaviour

This means that an individual resorts to in order to satisfy information need will depend on certain factors. Certain points will have to be considered when an individual decides on a certain course of action, they include:

1. Whether the source is within reach
2. Whether money will be involved, if so, how much money
3. Whether time will be involved, if so, how much time
4. Whether the source have. The answer to their problem.
5. Whether they will understand what the source provides as answer.

Other factors including social, political, geographical and educational may be stated as below:

Social factor- For example, a desire for information on such topics or sex education, fashion, music, (openly available in other societies), may not be looked upon kindly in certain societies (read. "close" societies) as a result of

which an individual may have to resort to stealthy means for acquiring the information.

Political factors- the political system (particularly those under dictatorship) may define certain types of information (defense, freedom of speech, of expression, rights, etc) as forbidden to particular groups or to the public as a whole, consequently, the non availability of such information may motivate a person to resort to underground (in the government opinions) means.

Geographical factors- the geographical location of an individual also decides how he goes about seeking information. Geographical isolation may lead a person to resort to uncommon means of seeking information.

Educational factors- the educated and uneducated may have differing methods of seeking information, the educated person resorting to more formal means (information systems) while uneducated one depending more on informal methods. (i.e. other people).

3.8 User study: concept and scope

‘User study’ is the means for systematic examination of the characteristics and behaviour of the users of the system and services. The ‘user study’ is directly linked with the effectiveness (performance) of library and information services as they aimed at satisfaction of user needs. The key concepts in the user studies are ‘information needs’ and ‘information seeking behaviour’.

User studies imply a willingness to relate product or system design to the perceived needs of system design to the perceived needs of those for whom the product or system design is intended. The user study with research on users aims to further understanding of the processes of information transfer. The research may be expected to lead to an improvement in information transfer systems of all types and to have implication for the organization of communication, the distribution of resources and the relationship between systems. Any services should be based on the information needs of the users, and in order to determine the

systematic user study has received considerable attention in recent years in the library and information field. The user study is similar to market survey in order to correlated products with the demand and satisfaction.

The term 'user study' is mainly concerned with studying information processing activities of user. It essentially implies the study of the use of, the demand or need of information. A study which mainly focuses on 'users' to measures the information needs, use behaviour and use pattern.

3.9 Classification of user study

The user studies may be either descriptive or prescriptive. A descriptive study describes how information transfer takes place in relation to a particular user population. The prescriptive study will suggest ways in which prevailing system or product could be modified or upgraded to ensure a greater degree of satisfaction. The prescriptive study will suggest ways in which prevailing system or product could be modified or upgraded to ensure a greater degree of satisfaction. The prescriptive survey may be reactive or proactive. A reactive survey will be occasioned by the customer or client complaints, a proactive survey by way of contrast would attempt to anticipated future difficulties or suggest new directions for products or system development. Menzel (1981) has categorized the user studies broadly into three categories as under :

- (1) Behaviour Studies
- (2) Use studies
- (3) Information flow studies

Studies which are carried out to fine out the pattern of overall interaction of the user community with the communication system, without reference to any specific information receiving event are call information behaviour studies. Studies which are conducted to find out the use of any communication medium such as primary periodical, secondary periodical, other sources are called use studies. Menzel has also given another classification of user study as under:

- 1) Channel studies
- 2) Critical incident studies; and

3) Dissemination studies.

Channel studies concentrate intensively on one communication channel, using a multitude of methods to investigate scientist's use of it. The focus in most channel studies is on archival journals, books, secondary (abstracting) journals; many other do not concentrate on a particular channel, but attempt to characterize scientist information gathering experience, no matter what channels or facilities are involved.

The critical incident studies seeks to sample information gathering episodes from scientists experience, and to associate with each episode detailed description of how it came about, the communication function served, the scientists satisfaction with the information obtained, or other matters.

The dissemination studies look at the communication process from the point of view of the scientific author as the disseminator of information. Most of the literature on user studies has dealt with particular groups of people chiefly scientists and researchers in an effort to design system and services to provide information products that will answer perceived needs of potential users.

3.10 Origin and development of user studies

Users' ability to select and use information is the most important problem of concern to the libraries and information centres. The review of user studies show a strong interest in analyzing the information needs and channels of information flow. The origin of user studies can be traced back to Royal Society's conference on scientific information in 1948 in London and the Washington conference of 1958. A study entitled 'pilot study on the use of scientific literature by scientists' conducted by Ralph R Shaw (1956) is considered another pioneer study in this direction.

An attempt to understand the scientific communication system, its function and channels, a study was carried out by Glock, Menzel, Glessner and Sowers in which 77 scientists were interviewed in order to define problems; categories and procedures for more systematic investigation. The objective of the study was to: (1) discover types of information needs; (2) the means and occasions of scientific information exchange; and (3) characteristics of the

scientists specialty, institution and personal outlook as they influence his information gathering habits and felt satisfaction.

In 1959 to 1960, Voigt did a study to determine scientists' approach to information and to relate these approaches to the purpose for which information was sought. Voigt (1961) pointed that a scientists' use of information arises from three fundamental needs: (1) the need to know what others scientist have recently done in both specific broader fields, called the current approach; (2) the need specific piece of information necessary in his experimental work or to an understanding of his work, called the everyday approach; and, (3) the need to find out and look through all relevant information existing on a given subject, called exhaustive approach.

During 1950's there were comparatively a limited number of studies. A comprehensive bibliography on user studies compiled by Davis and Bailey (1961) in 1964 contains only 438 studies. It is reported by Crawford (1978) that by 1977 more than 1000 important studies were conducted on user studies. Large number of user surveys of deferent types of varying quality has been carried out falling into two broad groups:

(1) Library Oriented Studies

The investigation of how individual libraries or information centres are used

(2) User Oriented Studies

How a particular user group obtains the information needed for the conduct of their work.

Price (1970) from the study of references approaching in scientific and non scientific journals have concluded with suggestion that:

‘... How science, soft science, technology, and non science may be all different social system, and each systems must have its own special machinery for handling the process of publication and communication among people at the research fronts and behind those fronts too....’

According to him the information needs and uses in the basic science are different from those in the science and the technology and are different again from those in the humanities. Shinebourne (1980) writing about user needs and the new technology as opposed to

traditional approaches to the library, referred to the user's ability to select and use information, when he said that the most important feature of libraries is their systematic organization, 'in which someone can choose what to take notice of from innumerable messages'. Shinebourne believed that generalization about user needs are not helpful when dealing with the stated requirements of an individual user which are often superficially presented. Librarians then need sensitivity to the statement of the user, and knowledge of the bibliographic tools and skills in their use. He noted that this tool represents existing attempts to meet user needs. But such need have had little influence other than that evidenced by the existence of such tools and certain common approaches to location of information. Taylor (1968) has written about the relationships of the library to the user from the standpoint of question negotiation which usually occurs by working with a human intermediary or by using self help. Taylor found four levels of question formulation which correspond to four levels of need:

- (1) The actual but on expressed need
- (2) The conscious need
- (3) The formalized need
- (4) The question as presented to information system.

The librarians function, then is to help him decided what it is he wants based on five filters through which the question passes:

- (1) Determination of subject
- (2) Objective and Motivation
- (3) Personal characteristics of inquiry description to file organization
- (4) Anticipated or acceptable answers

Paisley (1968) did provide a review of the research literature on the flow of behavioural science information. His study covered literature dealing with information gathering and dissemination behaviour of scientists and excluded studies on technical aspects of information retrieval, information system.

Hensley and Nelson (1979) in their review focused on factor associated with user success in educational settings, and dressed the question 'whether new information, products, and programs are being utilized by potential users'. The study was process was oriented evaluation made to study the effectiveness of the dissemination process used within specific

programmes & factors relating to success or failures of the process. A consensus opinion of the researcher was that there is an under utilization of the available information.

In defining users, the author noted that an individual may be a user of the service providing the information, of the information itself, or of both. Potential users were defined as those who would provide a high volume and reasonable frequency of use; non users were considered to be those who do not use the available information due to lack of awareness or motivation. An individual user was considered to be one who used information passed on to him/her after being disseminated to the direct user.

Cronin (1981) in assessing user needs has stated that in the past five years the emphasis has shifted from systems or service oriented research to user oriented to search. The review of user study show a strong interest in analyzing the information needs and channels of information flow among scientists, who needs for current material were considered most important to understand and support.

3.11 Scope of user study

The user study maybe either system oriented or user oriented. The user study encompasses the study of 'users' in its totality i.e. overall aspect of the user, which are likely to have some interface value between the system and the user. The user study maybe either library specific or discipline specific. There may be several dimension of the user study, like behaviour, studies, use studies, information flow studies. The study of information seeking and retrieving behaviour may be another dimension of user study.

The user population selected for the purpose of user study may be the user of the library (public, academic, and or special) or belong to a particular discipline/profession. The user study may focus on the use of library collection, tools, equipment and services. The user study may also explore the pattern of information flow in a communication system or concentrate on the user's cognitive processes. The study of the variable characteristics is of primary concern in user study. The user study may also adopt interdisciplinary approach to the study of the user. There may be psychological as well as sociological approach. The aim of the user study is to develop dynamic interface between the system and the user. Hence the

scope of user study is quite an ever increasing in its dimension i.e. new dimensions are being added to it.

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CHAPTER-4

DATA ANALYSIS AND FINDINGS

4.1 Introduction

Analysis refers to the computation of certain measures along with searching for patterns of relationship that exist among data groups. The analysis of data in a general way involves a number of closely related operations which are performed with the purpose of summarizing the collected data and organizing these in such a manner that they answer the research questions. Analysis is the product of insight into the total situation, paying upon the assembled facts and giving them a general significance. Its validity depends more upon common sense. Experience, background knowledge and intelligent honesty of the interpreter than upon conformity to any set rules that might be formulated. The data relating to the present study obtained through the questionnaire have been analyzed below to draw the inferences.

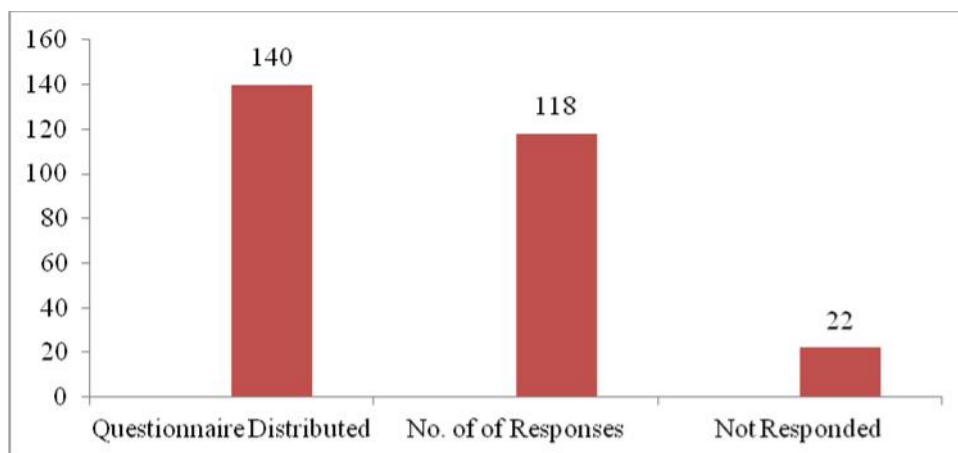
4.2 Analysis by Responses

The data placed in Table-3 reflects the total responses of the questionnaire where out of 140 questionnaires distributed to the Post Graduate Students under the School of Education and Humanities (SEH), Mizoram University, 118 questionnaires were received which comes to 84% responses. The table is also supplemented with Graph-1 for clear understanding.

Table 3: Analysis by Responses

Sl. No	Designation	Questionnaire Distributed	No. of Response	Not Responded	% of Response
1	Students	140	118	22	84

Graph 1: Analysis by Responses



It shows that, the students of the Departments attached to SEH express their eagerness to respond the questionnaire which is a healthy sign for both the researcher and the students as in the process they could be acquainted with the information requirements and about the library.

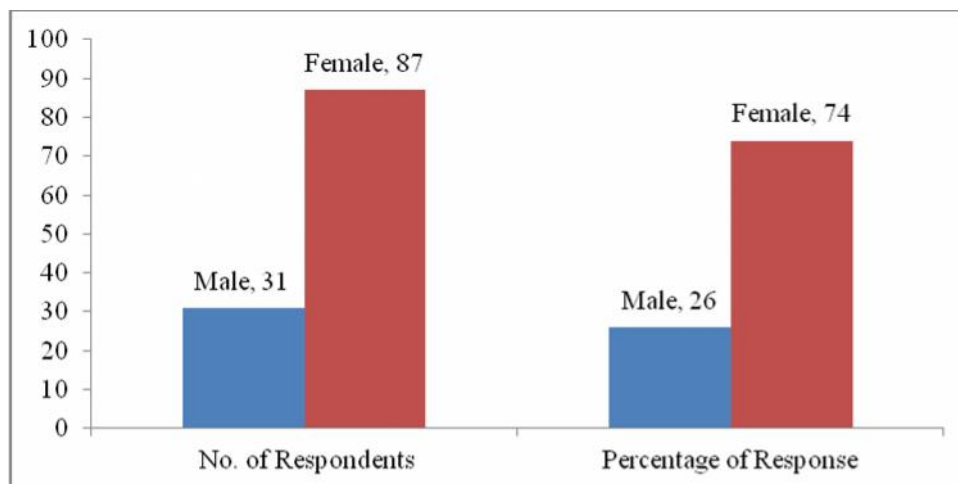
4.3 Analysis of Responses by Gender

Data relating to the responses by gender under the study has been placed in Table-4 supported with Graph-2 for analysis. The analysis reveals that, female constitute highest number i.e, 87 (74%) while male constitute 31 (26%). This shows the awareness of the female students compared to the male students.

Table 4: Analysis by Gender

Sl. No	Gender	No. of Respondents	% of Response
1	Male	31	26
2	Female	87	74
3	Total	118	84

Graph 2: Analysis by Gender



Analysis depicts that the respondents which constitute two groups i. e male and female, the female has respondent more that is 87 out of 118 which comes to 74 % compare to male that constitute 31 in total(26%). It could be further revealed that from both the categories the female are more prone to submit the questionnaire than the male. This also shows their eagerness and the female especially want to expose their feelings quickly the questionnaire.

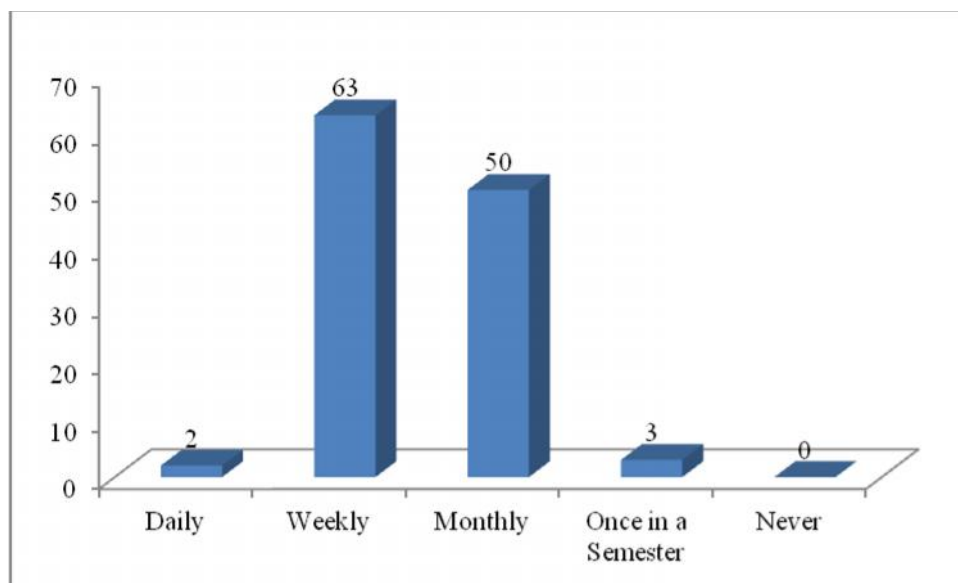
4.4 Analysis by Frequency of visit to University Library

The frequency of visits to the library helps to know the use of the library and is an index to judge the utilization of the library resources. An analysis of periodicity of visit to the library under survey, has been classified into 4 (four) time gap as shown in Table- 5 and is supported with Graph-3.

Table 5: Analysis by Frequency of visit to University Library

Sl. No	Periodicity	No. of Students	% of Response
1	Daily	2	2
2	Weekly	63	53
3	Monthly	50	42
4	Once in a Semester	3	3
5	Never	0	0
	Total	118	100

Graph-3: Analysis by Periodicity of visit to University Library



Analysis shows that, the students irrespective of the types visit the library weekly once for their assignments, use of library resources, consultation of the reading materials etc. which constitute 63 (53%) followed by 50 (42%) who visit the library once. This is due to the engagements in teaching in the Department. However, very few students visit the library daily.

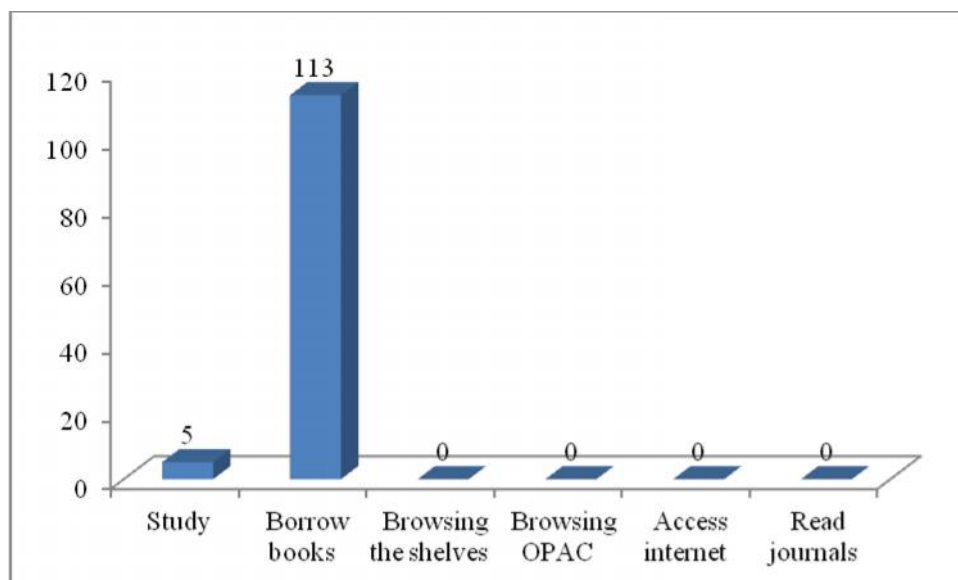
4.5 Analysis by purpose of visiting University Library

Purpose of library visits gives essential information about the library resources and information services that are required for the users. This helps the librarian to develop the library collection as well as improve the library services. Data relating to the purpose of visit to the library has been indicated in Table- 6 supplemented with Graph- 4.

Table -6: Purpose of visiting University Library

Sl. No	Purpose	Student	% of response
1	Study	5	4
2	Borrow books	113	96
3	Browsing the shelves	0	0
4	Browsing OPAC	0	0
5	Access internet	0	0
6	Read journals	0	0
	Total	118	100

Graph 4 : Purpose of visiting University Library



Analysis of the above table reflects that, the students covered under the study visit the library primarily for borrowing the books which comprises 113 (96%) followed by 5 (4%) of the total respondents. It is surprising to note that, the students do not visit the library either for browsing the shelves nor any other purposes as indicated in the table. However the researcher

could ascertain from the students that, they select their books through browsing OPAC and by browsing the shelves.

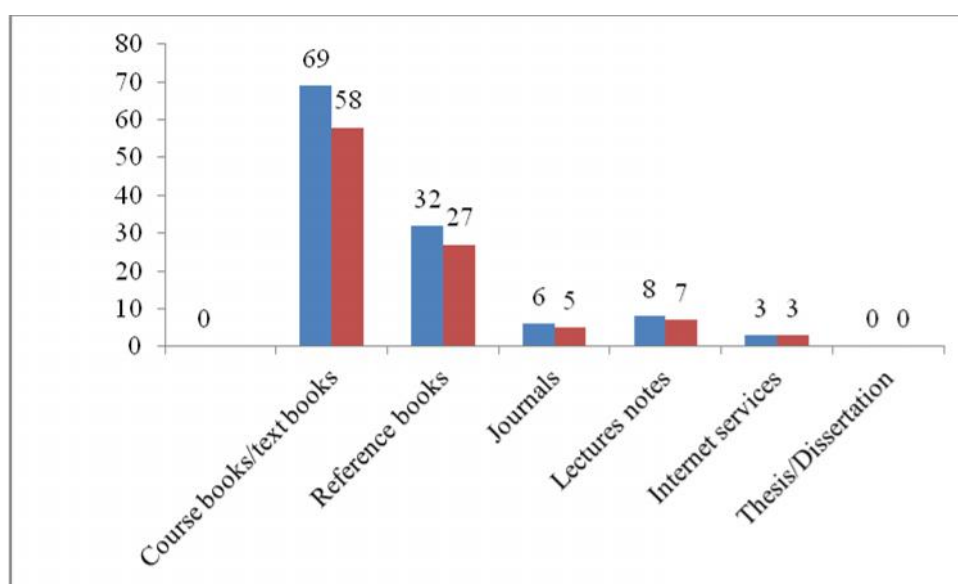
4.6 Analysis by used of sources of information

The students require a plethora of information to complete their assignments, reading, consultations and other academic works. The scholar obtained the information regarding the option for choosing the information sources from the students of the school covered under study through the questionnaire which happens to be one of the major components of the study. Data relating to the use of information sources of Post Graduate Students of School of Education and Humanities has been reflected in Table- 7 supplemented with Graph- 5 for clear vision.

Table -7: Use of information sources

Sl. No	Sources of Information	Category Student	% of Response
1	Course books/text books	69	58
2	Reference books	32	27
3	Journals	6	5
4	Lectures notes	8	7
5	Internet services	3	3
6	Thesis/Dissertation	0	0
	Total	118	100

Graph 5: Use of information sources



Analysis of the Table as mention reveals the use of various information resources by the Post Graduate Student of SHE Schools. Analysis reveals that the students are more prone to use the course book/text book which comes to 69 students (58%) followed by the reference book 32 (27%) and lectures note 8(7%) out of 110 responses it is surprising to note that the journals being the primary vehicle sources of information. The students are not using much. It is due to the fact that the print journals are subscribed by the library less compared to electronic resources. Therefore, they required to get proper acquaintance about the way of journals both print & electronics. Further the thesis and dissertation are not at all being used by the student which is due to the fact that the students are not aware of the thesis and dissertation. Overall, the students of the school under the study required a proper guide to use the various information resources such as journals, thesis and dissertation, internet etc. to facilitate then with much information for study and research.

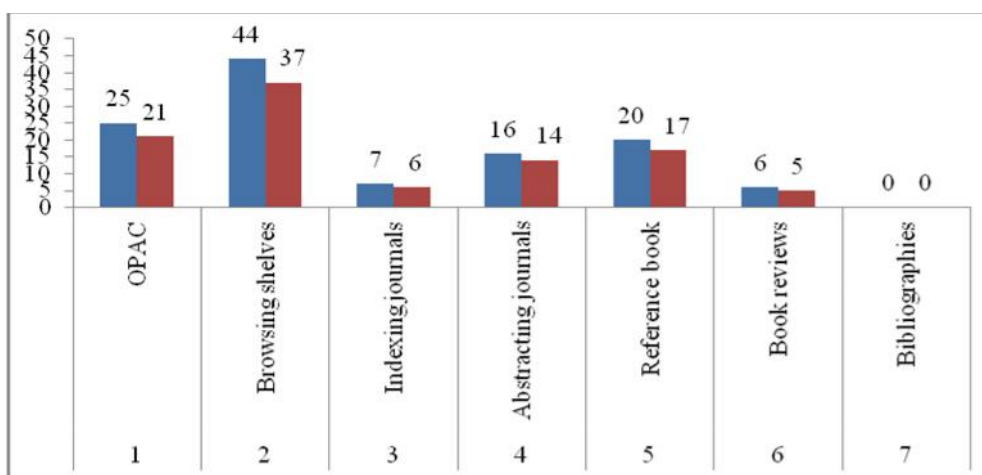
4.7 Use of tools to access the document

Tools in the library facilitate the users especially the students to locate the required information and or documents. Data relating to this facet has been collected and placed in Tables-8 supported with Graph-6 which shows that the use of tools that satisfy requirements of the students in getting information and or document. The respondents were asked to indicate the use of tools to get the documents which differ from one user to another.

Tables -8: Use of tools to access the documents

Sl. No	Tools to access documents	Category	% of response
1	OPAC	25	21
2	Browsing shelves	44	37
3	Indexing journals	7	6
4	Abstracting journals	16	14
5	Reference book	20	17
6	Book reviews	6	5
7	Bibliographies	0	0
	Total	118	100

Graph 6: Use of tools to access the documents



Analysis of the Tables-8 reveals that a major portion of the students i.e, 44 (37%) access the documents directly from the shelves as library adopts open system followed by 25 (21%) students who access/locate the documents by using OPAC while 20 (17%) students prefer the reference books as major source of information. This, however, differ from student to student as they go by the subject. As most of the students prefer the book as chief source of information, they prefer to search the documents conveniently.

4.8 Types of library services used by students

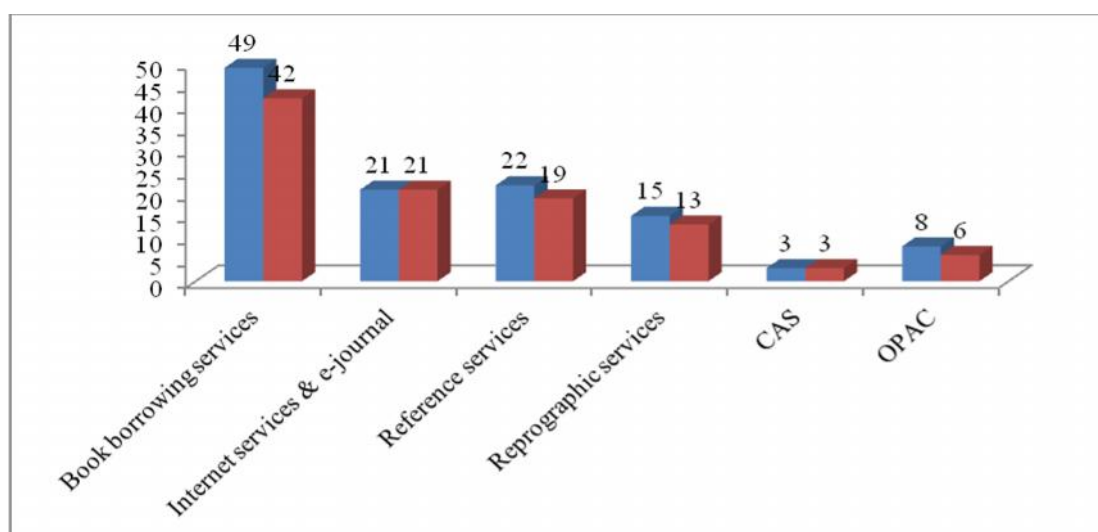
Library irrespective of the types facilitate services to the users. However, it depends upon the type library. Mention may be made that while, academic library provides services to the students, research scholars, and the teachers primarily, the special library fulfils the interest of

the special group of researchers and the public library facilitates services to the society as a whole. Data relating to the library services used by the students of the school under study has been tabulated in Tables-9. The table further reflects the different services being provided by the library. The Table is also supplemented with Graph- 7 for clear understanding.

Tables-9: Types of library services used by students

Sl. No	Types of library services	No. of Students	% of response
1	Book borrowing services	49	42
2	Internet services & e-journal	21	18
3	Reference services	22	19
4	Reprographic services	15	13
5	CAS	3	3
6	OPAC	8	7
	Total	118	100

Graph-7: Types of library services used by students



Analysis of the Table- 9 visualizes that, among varieties of library services provided by the university library, good number of students i.e, 49 (42%) prefer book borrowing service followed by 22 students (19%) who opt for reference service and 21 (18%) prefer internet service and e-journal service. Basically, the students need printed books for their study. For information requirements, the students need other internet and e-journal service which seems

to be in the pioneer stage and measures requires initiation for more using of the internet and e-journal service which however, shown interest by a small group of students.

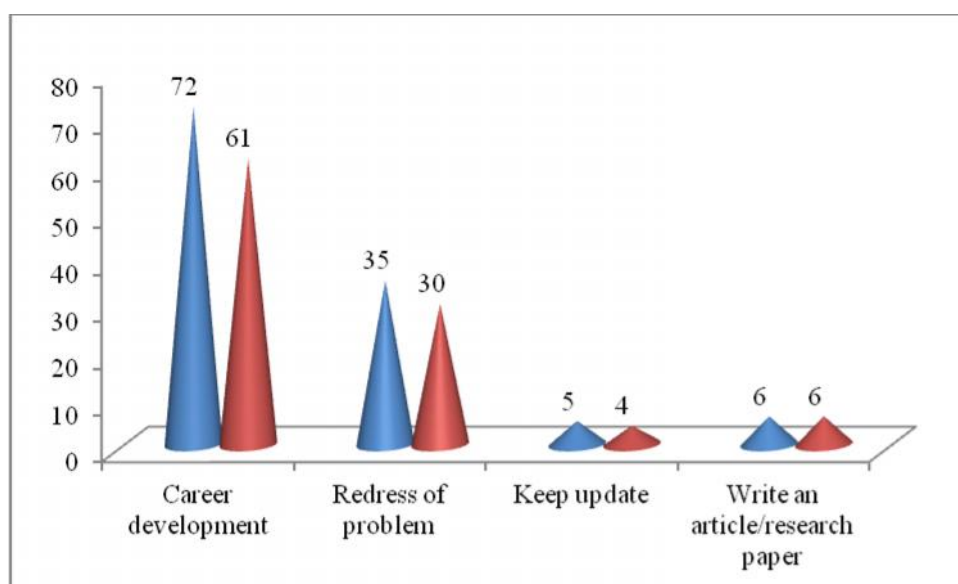
4.9 Purpose of seeking information

Information seeking is one of the major components for sustainable research including teaching. The data relating to the purpose of information seeking by the students of the Departments under the school has been tabulated in Table-10 supported with Graph-8 for analysis.

Tables-10: Purpose of seeking information

Sl. No	Purpose	Category Students	% of Response
1	Career development	72	61
2	Redress of problem	35	30
3	Keep update	5	4
4	Write an article/research paper	6	6
	Total	118	100

Graph-8: Purpose of seeking information



Analysis of the Table-10 indicates that the students are more concerned for their career development as while, 72 (61%) out of 118 respondents preferred the same, 35 (30%) wish information for immediate problem followed by only few i.e, 6 (6%) who prefer information to write an article and or research paper. This is however, a sign among the students that, they

show interest in producing article. Further, more initiation requires among the students so that they inculcate the habit of update with latest information which will help them in learning.

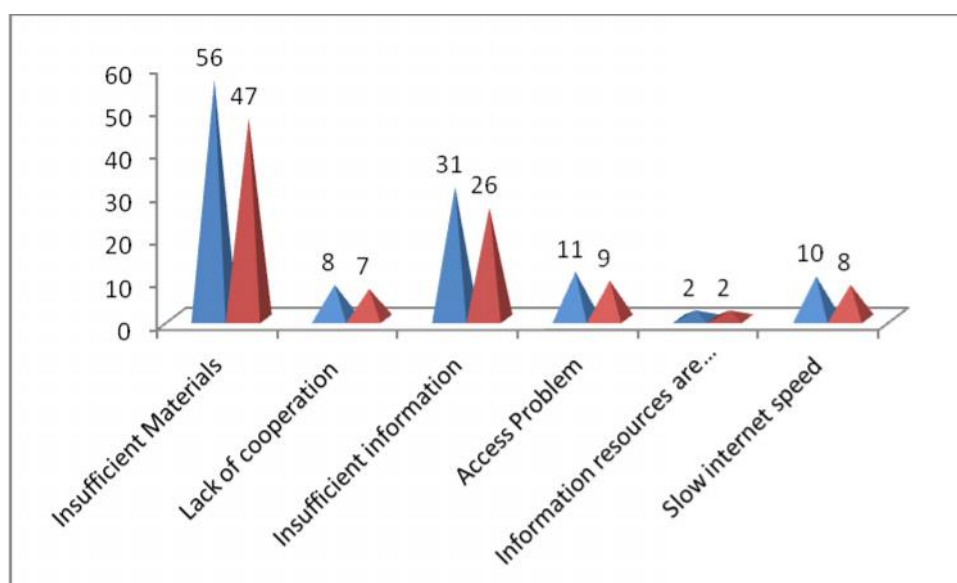
4.10 Problems/constraint face while searching information

The students encounter may prominent problems while searching the information from the library. The data relating to the study has been placed in Table-11 supplemented with Graph-9 for analysis.

Table -11: Problems/constraint face while searching information

Sl. No	Problem faced	Students	% of response
1	Insufficient Materials	56	47
2	Lack of cooperation	8	7
3	Insufficient information	31	26
4	Access Problem	11	9
5	Information resources are not up to date	2	2
6	Slow internet speed	10	8
7	Use of OPAC	0	0
	Total	118	100

Graph-9: Problems/constraint face while searching information



Among the numerous problems the scholar divides the problem into seven (7) components. The analysis reflects that major students i.e. 56 students (47%) have a viewed that they encounter with insufficient materials in the library to pursue their studies followed by 31

students (26%) who opined that there are insufficient information and 11 students (9%) revealed that they encounter accessing the information. It is due to the fact that the students who are new to the library system request sufficient support from the library staff. Moreover they should also be provided with sufficient materials in view of the interdisciplinary course curriculum. Further, in the library staff request to generate the skills and competency to provide adequate information in a multidisciplinary form. Analysis also reveals that the library request to take adequate measures to short out the accessing problem so as to facilitate the students with update information.

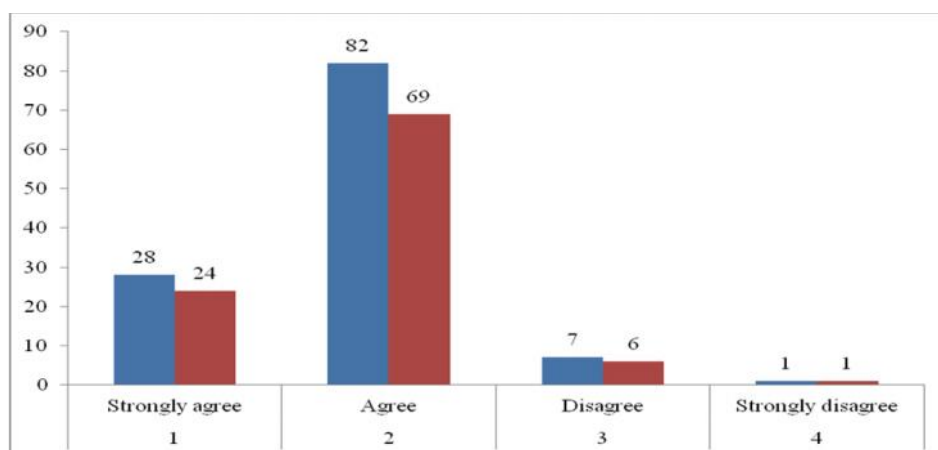
4.11 Need of Library Orientation Programme

Orientation programme for the new users is essential to get a breast to it the functions of the library. This is a method through which the students get insight to the library resources, use of technology, accessing the information etc. which help the student to pursue their learning. The library conducts the library orientation programme for the new users every year. The scholars wanted to know about the feelings of the students regarding the use of library orientation programme and divided the question into four (4) components. The data relating to this component has been placed in table-12 supported with graph-10 for clear understanding.

Table-12: Need of Library Orientation Programme

Sl. No	Library Orientation Programme	Student	% of response
1	Strongly agree	28	24
2	Agree	82	69
3	Disagree	7	6
4	Strongly disagree	1	1
	Total	118	100

Graph 10: Need of Library Orientation Programme



Analysis of the table-12 indicated that major chunk of student i.e. 82 students (69%) out of a total number of 118 students agree to such library orientation programme while 28 students (24%) strongly for such programme followed by 7 students (6%) disagree to such programme. It is a complement to the library that the students are in favour of using the library resources and they want to get acquainted with the technology operation. This is a healthy sign for both students and the library. However, the library in the event of changing technology in library operations requires imparting more orientation programme and or works of in a time bound of manner so as to make effectives use of library resources.

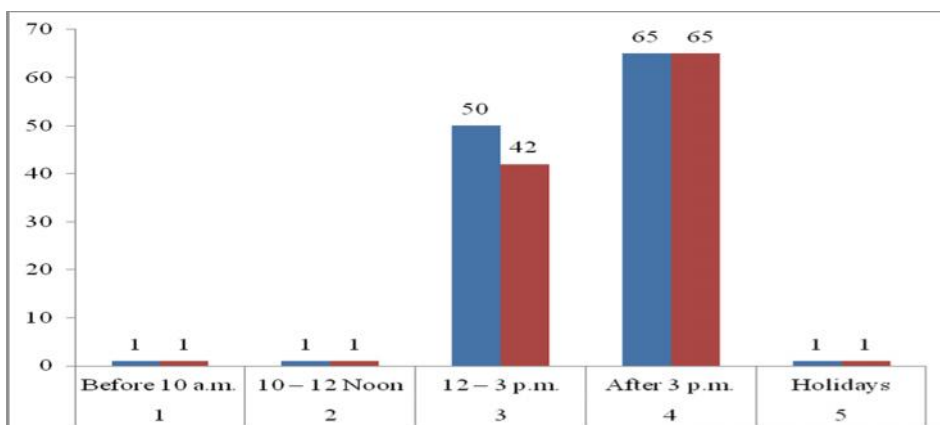
4.12 Suitable time to Access Library

Times happen to be major criteria for the students to access the library. The scholar wanted to ascertain the suitable time for the student to use the library. The data relating to this compound has been grouped into five (5) headings which have been reflected in table -13 supplemented with graph- 11 for better understanding.

Table -13: Suitable time to Access Library

Sl. No	Time	Student	% of response
1	Before 10 a.m.	1	1
2	10 – 12 Noon	1	1
3	12 – 3 p.m.	50	42
4	After 3 p.m.	65	55
5	Holidays	1	1
	Total	118	100

Graph -11: Suitable time to Access Library



The library starts operation during the week days from 10-5 p.m. and also opens during the holidays to cater the needs of the students and other users. Out of 118 students 65 students (55%) prefer to go to the library to quench the thirst of information with various library resources while 50 students (42%) viewed that they prefer to go to the library in between 12-3 p.m.. one student each in other 3 group viewed different opinion. It implies the fact that the student prefer to visit the library especially when they are free from the classes. It is a healthy sign for the students that they visit the library for leaving and complete the assignment. It would be more effective if the library could provide 24/7 services and through intranet so that the students can visit the library during the odd hours including physical present during the holidays. All option required to be provided by the library to the students and other users for more use of library resources.

4.13 Locating of Resources

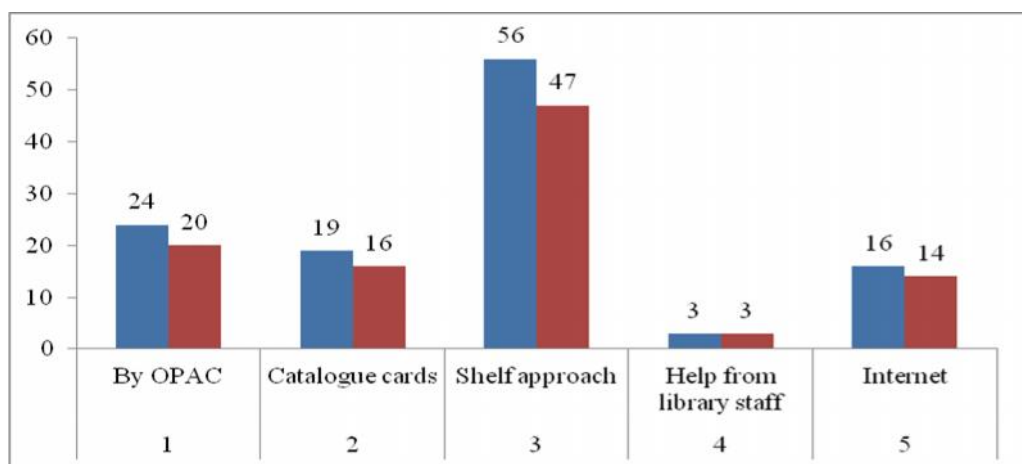
Locating of resources happen to be a major criteria for the students because the student get confused in locating the required information and or documents as the library adopts some technical parameters to arrange the books according to the scheduled. The students in a general are not known to this technique and they confuse in locating required resources in the library. The scholar obtained the views of the student through five (5) different components and the data relating to this has been placed to it table-14 supported with graph-12 for a clear understanding.

Table -14: Locating of Resources

Sl. No	Resources	Student	% of response
1	OPAC	24	20
2	Catalogue cards	19	16

3	Shelf approach	56	47
4	Help from library staff	3	3
5	Internet	16	14
	Total	118	100

Graph -12 Locating of Resources



Analysis of the table-14 reflects that the students want to be independent and prefer to locate the document from the shelf. 56 students (47%) prefer to find the resources from the shelf while 24 students (20%) use the OPAC to locate the resources and followed by 19(16%) who viewed that they prefer to locate the resources through catalogue card. This shows that the student are yet to know about the use of OPAC in locating the resources and they still prefer the traditional way in finding the resources. This is anyway helps the students to get the resources but simultaneously measure initiatives should be taken by library to make known about the use of OPAC by the student and accordingly orientation requires to be given to the students.

4.14 Use of internet

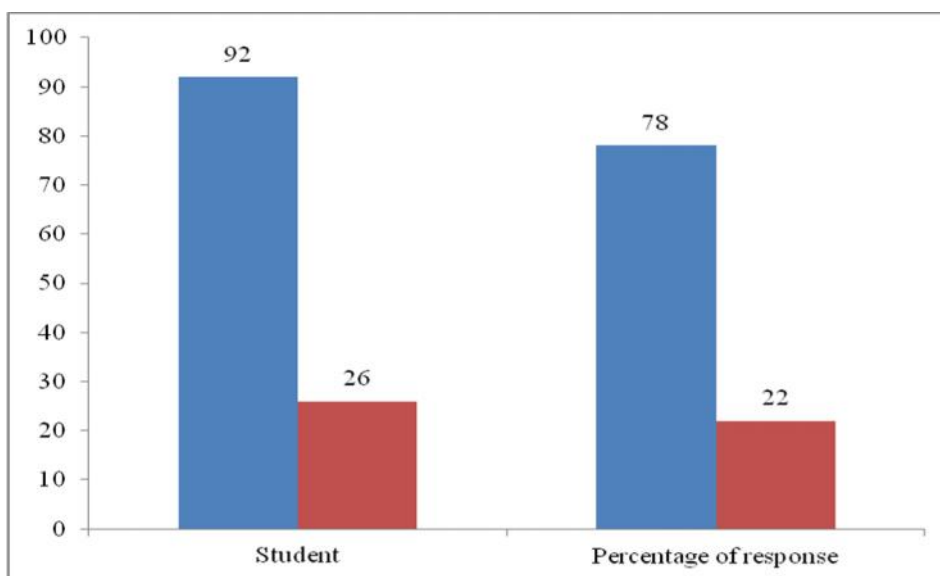
The internet happens to be a viable platform for accessing the multidimensional resources. This has been proved as an important tool for the students especially in their learning and getting adequate resources in electric form. Therefore, the scholar wanted to get a feedback from the student of the department covered under the study to ascertain the use of internet in

their learning procedure the data obtained through the questionnaire is placed in table-15 collaborated with graph-13 for clear understanding.

Table-15: Use of internet

Sl. No	Use of internet	Student	% of response
1	Yes	92	78
2	No	26	22
	Total	118	100

Graph -13: Use of internet



The analysis reveals that 92 students (78%) out of 118 prefer the use of internet while 26 (22%) do not take the option of internet in accessing the information resources. This however, is a healthy sign for the students and reveals their skill in using the internet and computer technology. More initiatives should be giving to the students for computer literacy and internet literacy so that all the students can take benefits of the internet in finding their resources.

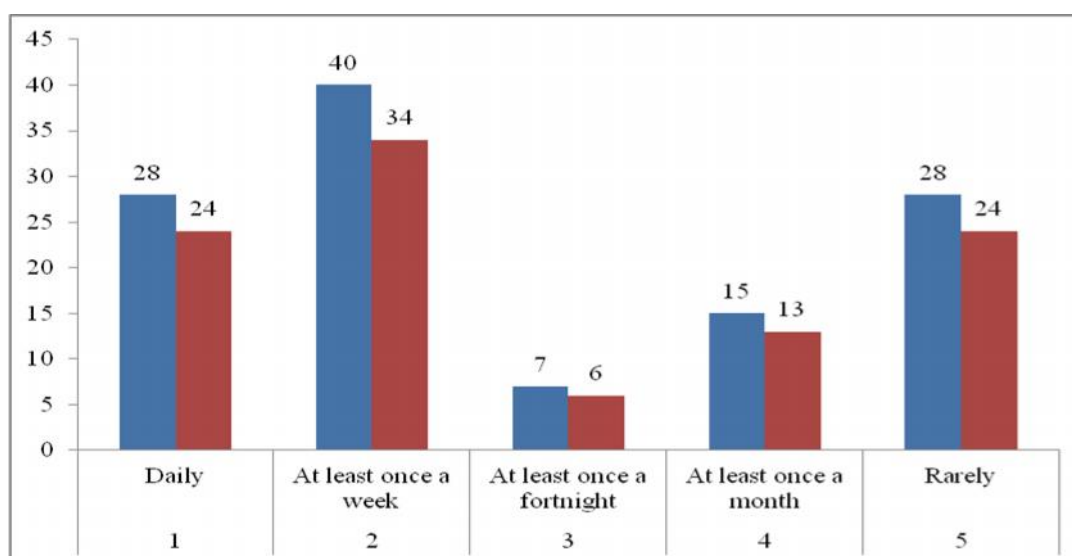
4.15 Frequency of Internet Use

The frequency of the internet use reveals the times spend by the student in accessing the information. The scholar tried to ascertain the time spend by the student of the department under study. It has been divided into five (5) different categories. The data relating to the component is place here with table-16 for analysis which is also supported with the graph-14.

Table -16: Frequency of Internet Use

Sl. No	Frequency of internet use	Students	% of response
1	Daily	28	24
2	At least once a week	40	34
3	At least once a fortnight	7	6
4	At least once a month	15	13
5	Rarely	28	24
	Total	118	100

Graph- 14: Frequency of Internet Use



Analysis reveals that out of 118 students, 40 student (34%) access internet once in a week while 28 students (24%) access daily followed by 15 students (13%) who access once in a month. It is surprising to note that 28 students (24%) reveal that they used internet rarely. This is due to the fact that the student hardly find any spare time to access the internet as they are busy in academic works of the department. Even if this is the better sign for the student in using the internet still afford required to be initiates by the student to use the internet for academic development.

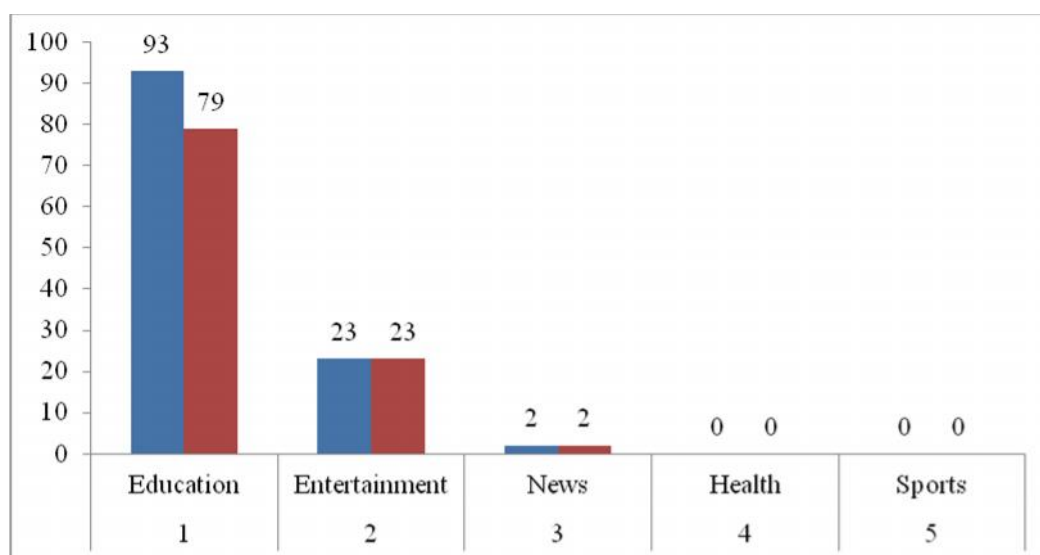
4.16 Purpose of Internet use

There are many purposes of the internet use. The purpose of internet use in the study is group into five (5) different headings which is reflected in table-17 which also reflects the data relating to this study. The table is supported with the graph-15 for clear understanding.

Table- 17: Purpose of Internet use

Sl. No	Purpose of internet use	Student	% of response
1	Education	93	79
2	Entertainment	23	23
3	News	2	2
4	Health	0	0
5	Sports	0	0
	Total	118	100

Graph- 15: Purpose of Internet use



It is from the analysis that 93 students (79%) of the use of internet for education purpose followed by 23 (19%) who use the internet for entertainment purposes followed by 2 students (2%) who used to get the news. The analysis further shoes that the students are literate with regard to computer and internet and this is a positive sign for the student in academic development.

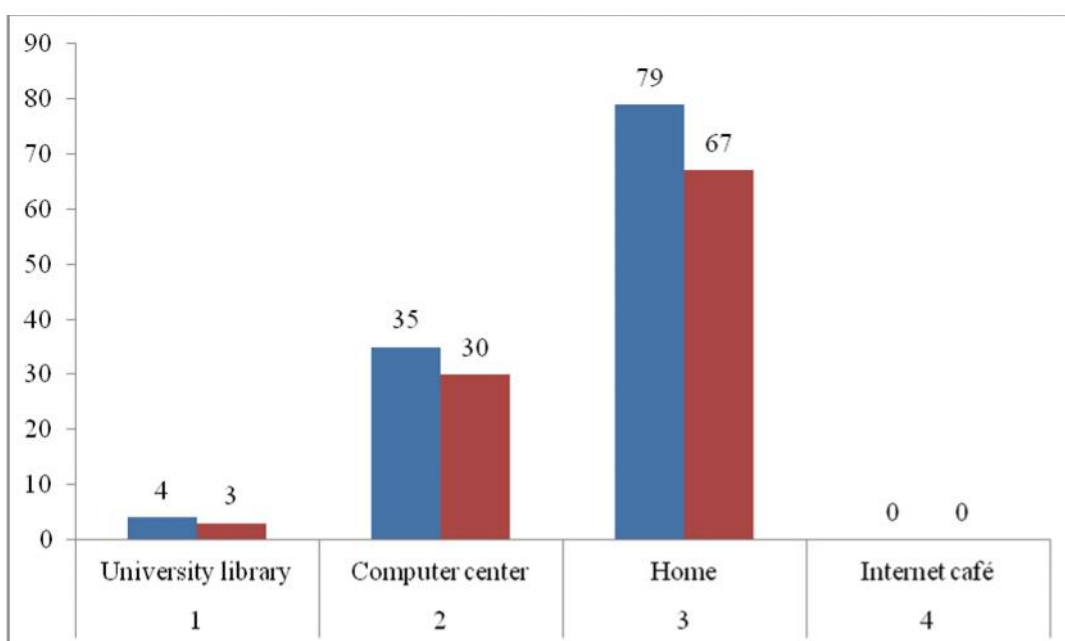
4.17 Place of Internet use

Internet can be use in many more. It can be through dial up, broadband, wi-fi etc. to know the place of internet use by the students, the scholar divided the platform into four (4) group and the data relating to this facet is place herewith in table-18 for analysis along with the supported graph in graph-16.

Table -18: Place of Internet use

Sl. No	Place of Internet use	Student	% of response
1	University library	4	3
2	Computer center	35	30
3	Home	79	67
4	Internet café	0	0
	Total	118	100

Graph -16: Place of Internet use



The analysis finds that the students are busy in the department for different type of academic works. They do not find to access the internet in the university. Therefore, 79 students (67%) viewed that they access internet in home using broadband and data card while using 35 students (30%) opined that they access internet in computer center at the university because the university provides scope for the internet in use in the computer center only. 4 students (3%) viewed that they access internet in the university library. As a whole this is a positive sign for the students who use the internet for various purposes.

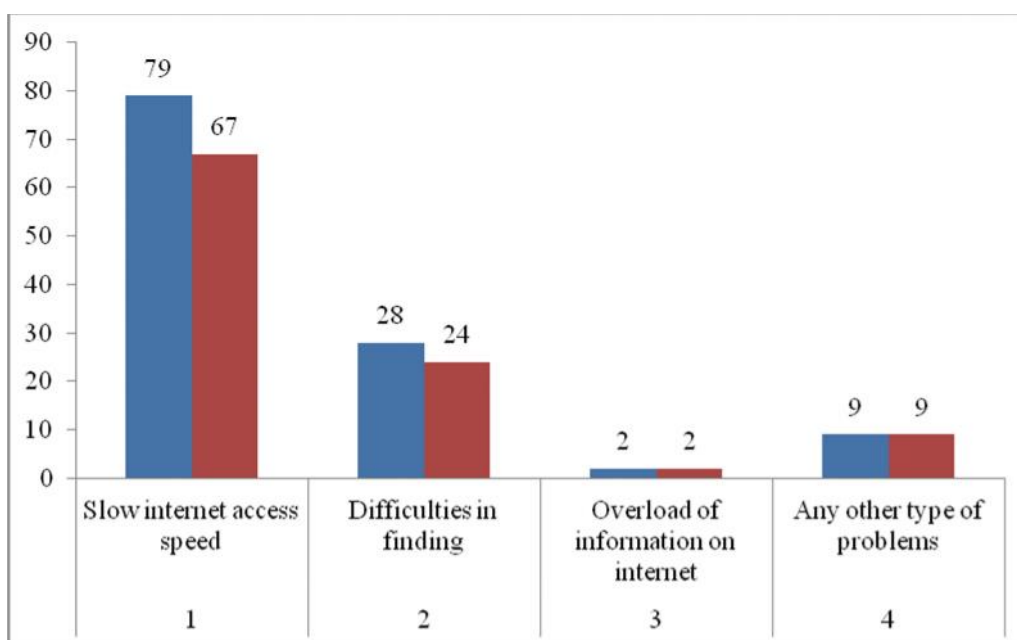
4.18 Problems of internet use

While using the internet the student encounter with many problems. The problems of the internet use have been grouped into four (4) headings which have shown in table- 19 along with the data relating to the study. The table is also supported with graph-17 for clear vision.

Table- 19: Problems of internet use

Sl. No	Problems	Student	% Of response
1	Bandwidth	79	67
2	Difficulties in finding	28	24
3	Overload of information on internet	2	2
4	Others	9	9
	Total	118	100

Graph -17: Problems face while using the internet



The analysis finds that 79 students (67%) encounter bandwidth problem which leads to slow access followed by 28 students (24%) viewed that they find difficulties in locating resources. However, 9 students (9%) viewed other problems while accessing the internet. It reveals that the students are not aware with locating the relevant URL addresses to find the sources which require continuous search and guides. Due to the strategic location of the state there is always bandwidth problem leading their way slow access to the internet.

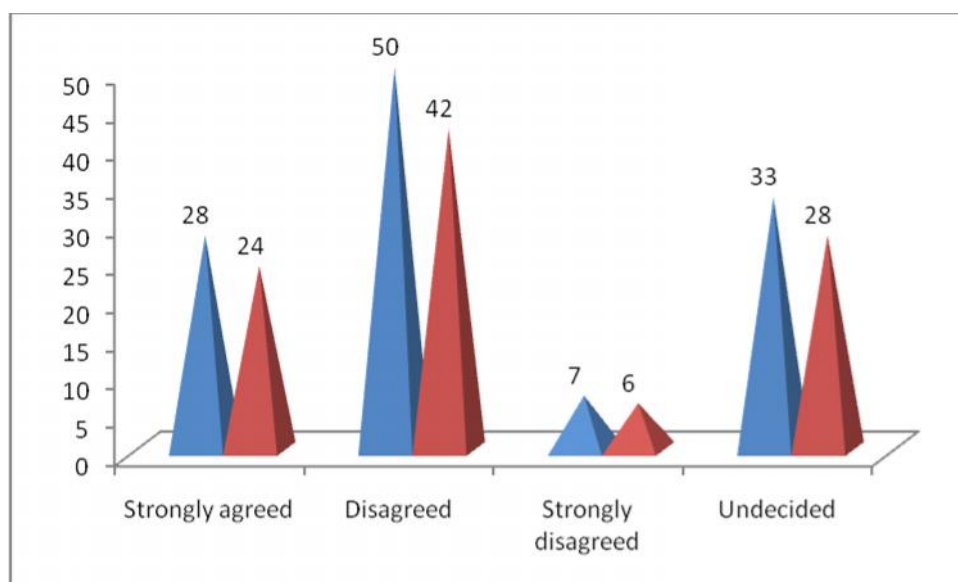
4.19 Satisfaction with Internet Facilities and Library services

The primary aim of the library is to satisfy the user and therefore the library provides internet facilities and adequate library services. Data relating to this component is place with table-20 along with graph-18 for analysis.

Table -20: Satisfaction with Internet Facilities and Library services

Sl. No	Satisfaction	Student	% of response
1	Strongly agreed	28	24
2	Disagreed	50	42
3	Strongly disagreed	7	6
4	Undecided	33	28
	Total	118	100

Graph- 18: Satisfaction with Internet Facilities and Library services



The component of satisfaction is divided into four (4) grouped as reflected in table-20. Analysis finds that 50 students (42%) expressed that they are disagreed i.e. dissatisfied followed by 28 students (24%) who viewed that they are strongly agree which otherwise mean that they are satisfied followed by 7 students (6%) who are not at all satisfied. However 33 students (28%) reserved their comments. As a whole the analysis reveals that there is a serious gap among satisfied and dissatisfied group of students and therefore the library take required measures to provide optimum services both in the library and internet to enhance the satisfaction rate of the student.

4.2 Findings

The study was sought to examine the “Information Seeking Behaviour of Post Graduate Students in the School of Education and Humanities (SEH), Mizoram University”. The results of this study show the differences in information seeking behavior among the Post Graduate Students. These include the usage of library resources and services, overall importance and satisfaction. Based on the analysis the following findings could be drawn.

1. The overall response of the questionnaire placed in table-3 reveals that 118 filled-in questionnaire were received by the scholar out of 140 circulated questionnaires which comes to 84 %. This is a good response rate of the respondent.
2. Most of the respondent constitute female group compared to male group as 87 (74%) female responded the questionnaire while 31 (26%) submitted the filled-in questionnaire. This is clearly visible from table-4. Further it could be revealed that from both the categories the female are more prone to submit the questionnaire than the male. This also shows their eagerness and the female especially want to expose their feelings quickly the questionnaire.
3. Library visit for seeking information is one of major criteria for the Post Graduate Student. If the present study could be revealed that 63 students (53%) visit the library once in a week followed by 50 students (42%) who visit once in a month. It is surprising to note the regular visits to the library are very less. This is due to the engagements in teaching in the Department. However, very few students visit the library daily.
4. While determining the purpose of visit of the students it could be ascertain that a major group of students i.e. 113 (96%) visit the library to borrow the books even if the library is having adequate other library resources. This is due to the fact that the students are more concern for their subject and therefore they access the books. This is further due to the fact that the student rarely find any time to consult other library resources due to constraint of time.
5. Table-7 reveals about the use of information sources by the students taken under study. The students primarily concentrate on course books and other type of information sources. The library along with the academic department requires promoting among the student about the use of other library resources.

6. Library provides all means to the users to access the resources in the ICT environment. The library is providing OPAC services including the traditional catalogue services from the analysis of the table-8. It could be found that more student prefer to access the resources directly by moving to the shelf. It shows that they are acquainted in the practice and due to the open system they retrieve more documents. The students who are new to the library system however take the help of OPAC to locate the resources.
7. The library provides a wide range of services as depicted in table-9 supplemented with the graph-7. It could be found from the analysis that 49 (42%) take use of book borrowing services followed by 22 students (19%) who take use of reference services. Further 21 students (18%) prefer to take the internet services including e-journals. This reveals that the students are not fully aware of the other services provided the library.
8. Information seeking is a major component for the student academic progress. From the table-10 after analysis, it could be reveals that most of the students are concern with their carrier development which comes to 72 (61%) followed by 35 (30%) who seek information to reduce various associate it academic problems. This is however, a sign among the students that, they show interest in producing article. Further, more initiation requires among the students so that they inculcate the habit of update with latest information which will help them in learning.
9. Problems are inevitable. Table-11 reflects various problems encounter by the student while seeking information. It could be deduce from the analysis that a good number of students 56(47%) express the problems of insufficient materials in the library followed by 31 (26%) students who viewed the problem of insufficient information. This shows that the students encounter problems while accessing information/resources which needs to be squeeze and plethora information and resources must be available to the students.
10. Getting acquaintance with the library resources request training, workshop, orientation etc. to make the students aware of the availability and use of resources while analysis the table-12 most of the students 82 (69%) students agree to this

venture while 28 (24%) students have given a positive remark to technology addition of resources and use of including the usage of descent.

11. Timing is a major factor for the student to access the library. This could be revealed from the analysis of the table-13 that most of the student prefer to use the library after 3 p.m. whereas 50 students prefer to use the library between 12-3 p.m. This is due to the various academic assignments and the students during their free time prefer to access the library.
12. Regarding location of resources placed in table-14, it could be known that most of the students prefer the mode of shelf approach compared to locate the resources through OPAC. However, the students also make use of the internet to find the resources.
13. Use of internet is essential in the ICT era to retrieve the information pertaining to the study. Therefore, while making an attempt to ascertain the use of internet by the student, the scholar could know that 92 (78%) make use of internet while 26(22%) decline the use of internet. It is however an encouraging strata among the student.
14. While making an analysis of table-16 about the frequency of internet use it could be found that 40 (34%) students access the internet once in a week followed by 28 (24%) daily. This shows that the students are aware of ICT & they make use of internet mostly for education purpose as 93 students (79%) as reflected in table-17. Further the table also shows that 23 students (23%) make use of internet for entertainment purpose.
15. The scholar wanted to ascertain the place of internet access which has been placed in table-18 and the table reveals that a good chunk of students i.e. 79 (67%) prefer their house to access internet compared to 35(30%) who access the internet from the university computer centre. This is also due to paucity of time among the student who accesses the internet from the computer center.
16. The scholar wanted to know the view of the student regarding the problem face by them for using the internet. Most of the students viewed of the slow internet access speed followed by other group of student who opined of difficulties locating the resources.

17. Satisfaction and dissatisfaction is primary component of library study which has been reflected in table- 20 for analysis. The analysis reveals that there is a serious gap among satisfied and dissatisfied group of students and therefore the library take required measures to provide optimum services both in the library and internet to enhance the satisfaction rate of the student.

CHAPTER-5

SUGGESTIONS AND CONCLUSION

5.1 Suggestions

Information Seeking Behaviour is one of the primary research areas to know the lively requirements of the student's communities in the present changing information scenario. The current study investigated information seeking behavior of the Post Graduate Students of School of Education and Humanities (SEH), Mizoram University. The findings provided data on the extent to which Mizoram University students seek information and use library services and the effect of the library on the students.

The scholar after obtaining various suggestions from the respondents has enlisted the important suggestion.

1. The University Library take steps to purchase latest book and journal. It will help to the users to enrich their up-to-date knowledge.
2. The usage of the Mizoram University Library, its resources and services to be increased.
3. Student require orientation for use of information resources such as text book, reference material, journals and internet facility.
4. Inter library loan facilities should be provided.
5. Internet access speed should be upgraded so that downloading and browsing of information can be performed in a better way.
6. While seeking the information from the internet the Post Graduate Students of SEH should use more than one search engines.

7. The library staff who have acquired a good deal of efficiency in the collection, organization and retrieval of information should provide the information on the website in such a way that the users are able to find easily the information.
8. All departments should function department library effectively and independently.

5.2 Conclusion

Information has become the most important element for progress in society. Information plays a significant role in our professional and personal lives. People need information to work properly in their fields. Knowledge of the information needs and information seeking pattern of users is vital in developing library collections, upgrading facilities and improving services to meet the information needs of users effectively. Information needs are becoming ever more complex and central to our present day working.

The present study has highlighted Information Seeking Behaviour of Post Graduate Students in the School of Education and Humanities (SEH), Mizoram University. After reviewing the above studies the researcher has found out that the data collected through questionnaire was distributed 140 to Post Graduate Students under the School of Education and Humanities (SEH), Mizoram University. Out of which, a total number of 118 filled-in questionnaire were received which constitute 84.25 % which mean maximum number of the Post Graduates Students under the School of Education and Humanity (SEH), had responded the questionnaire. Out of 118 respondent female constitute highest number covering 87 (74%) while male constitute 31 (26.27%) i.e. female students are higher in number than that of the male students under the School of Education and Humanity.

The purpose of library visits gives essential information about the library resources and information services that are required for the users. The analysis reveals that majority of the students 113 (96%) visited the library to borrow books other than to read journals and access internet. The study reveals that most of the Post Graduate Students of School of Education and Humanities depend upon Course book/text books i.e. 69 (58%) and the students 44 (37%) basically search their needed information by using the traditional or conventional method to get access documents. This study also clearly reveals that most of the students 72 (61%) out of 118 respondents seek information not only to solve immediate problem but also career development for their study.

This study also found out that majority of the students i.e., 56 (47%) face problems of unavailability of material, 31 (26%) face insufficient time to search information and do not know how to use OPAC. Therefore the library needs to upgrade their collection and to provide initial orientation programme and ongoing seminars and workshop to train them in using resources so that utilization of resources and services is maximized. It also reveals that majority of the students 65 (55%) access the library after 3 pm, followed by 50 (42%) access library at 12-3 pm. while 1(1%) student by before 10 am, 1(1%) at 10-12 Noon and 1 (1%) student at holidays. Therefore separate library hours should be allotted in time table for student.

The internet facility has enabled the students to enhance their academic excellence by providing them the latest information and access to worldwide information. Though some users agreed that using internet is not difficulty but these difficulties and problems depends on slow internet access speed difficult to locate the required information, because of excessive information.

Lastly, the researcher after undertaking this study would like to conclude that the Information Seeking Behaviour of Post Graduate Students in the School of Education and Humanities (SEH) has made to highlight selected, significant and direct implication of the findings. It is believed that the present study will contribute to add knowledge to the existing knowledge domain.

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APPENDIX

QUESTIONNAIRE

On

INFORMATION SEEKING BEHAVIOUR OF POST- GRADUATE STUDENTS IN THE SCHOOL OF EDUCATION AND HUMANITIES (SEH), MIZORAM UNIVERSITY: A STUDY

(This questionnaire is prepared by Mr. T.Lalmuanawma, M.Phil Scholar, Dept. of Library and Information Science, MZU to determine the information seeking behavior of Post-Graduate students in the school of Education and Humanities (SHE), MZU).

The respondent is requested to put one tick (√) mark in the space provided in each question wherever applicable.

1. Name of your Department : _____
2. Semester : _____
3. Gender : Male Female
4. What is your frequency of visiting University Library?
 - a) Daily
 - b) Weekly
 - c) Monthly
 - d) Once in Semester
 - e) Never
5. What is your Purpose of visiting the University Library?

- a) To study
- b) To borrow books
- c) Browsing the shelves
- d) Browsing Online Public Access Catalogue (OPAC)
- e) To access internet
- f) To read journals

6. Which sources of information do you most rely upon for your studies?

- a) Course books / text books
- b) Reference books
- c) Journals
- d) Lecture notes
- e) Internet services
- f) Thesis/ Dissertation

7. Which tools do you use to get access to the documents you need?

- a) OPAC
- b) Library card catalogue
- c) Indexing journals
- d) Abstracting journals
- e) Reference book
- f) Book reviews
- g) Bibliographies

8. Which types of library services do you use for your studies?

- a) Book loaning service
- b) Internet service & e-journal
- c) Reference service
- d) Reprographic service
- e) Current Awareness Service (CAS)
- f) OPAC

9. For what purpose do you seek information in your studies?

- a) For career development
- b) To solve immediate problem
- c) To keep up to date
- d) To write an article/ research paper

10. What is your most problem/constraint while searching information?

- a) Insufficient Material
- b) Lack of co-operation
- c) Insufficient information
- d) Accessing problem
- e) Information resources are not up to date
- f) Slow internet speed
- g) Use of OPAC

11. Do you agree that for more effective and efficient use of the library, users need library orientation programme?

- a) Strongly Agree
- b) Agree
- c) Disagree
- d) Strongly disagree

12. What is your most suitable time to access library?

- a) Before 10 am
- b) 10-12noon
- c) 12-3pm
- d) After 3pm
- e) Holidays

13. How do you locate your resources?

- a) Through OPAC
- b) Through Catalogue Cards
- c) Shelf approach

- d) Help from Library staff
- e) Internet

14. Do you use the Internet?

- a) Yes
- b) No

15. How often you use the Internet?

- a) Daily
- b) At least once a week
- c) At least once a fortnight
- d) At least once a month
- e) Rarely

16. For what purpose do you use the Internet?

- a) Education
- b) Entertainment
- c) News
- d) Health
- e) Sports

17. Where do you avail the facility of Internet?

- a) University Library
- b) Computer Center
- c) Home
- d) Internet cafe

18. Do you face any problem/constraint while using the internet?

- a) Bandwidth
- b) Difficulties in finding
- c) Overload of information on internet
- d) Others

19. Do you agree that internet facilities and library resources provided by the University are enough for academic information at present?

a) Strongly agreed

b) Disagreed

c) Strongly disagreed

d) Undecided