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INFORMATION SEEKING CHARACTERISTICS
OF A UNIVERSITY COMMUNITY
THE CASE OF POSTGRADUATE STUDENTS
AT KENYATTA UNIVERSITY

JULY, 1996

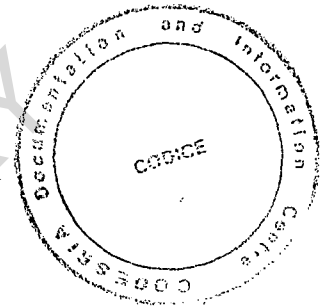


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**INFORMATION SEEKING CHARACTERISTICS OF A
UNIVERSITY COMMUNITY
THE CASE OF POSTGRADUATE STUDENTS AT
KENYATTA UNIVERSITY**



BY

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JULY, 1996

(ii)

**A PROJECT SUBMITTED IN PARTIAL FULFILMENT FOR THE DEGREE
OF
MASTER OF EDUCATION, INFORMATION AND LIBRARY STUDIES,
DEPARTMENT OF LIBRARY STUDIES,
KENYATTA UNIVERSITY**

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(iii)

DECLARATION

This project is my own original work. It has not been presented for a degree in any other university.

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This project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

This study is dedicated to my son, Rodney Asilla. At his tender age, he understood my reason for being away and exercised a lot of patience towards my absence, always making a simple but faithful prayer:

"God help mummy in her studies at Kenyatta University".

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ABSTRACT

This study on perceptions of resources and services, and information seeking characteristics of postgraduate students has a two-fold purpose:

- (i) to analyse their perceptions of resources and services at Kenyatta University
- (ii) to examine their information seeking characteristics.

The underlying theoretical framework of this study is that information seeking characteristics of a community are due to a number of interrelated actors within and without the information environment in which the community works.

This study had two hypotheses to test, namely:

- (a) There is no relationship between the postgraduate students' academic characteristics (i.e masters, Ph.D, first-year, second year etc.) and their knowledge, perception and rating of the resources and services available in Moi Library.
- (b) There is no relationship between the post-graduate students' academic characteristics and their information seeking characteristics.

Objectives of the Study were:-

1. To determine the academic characteristics of post-graduate students at Kenyatta University.
2. To identify the post-graduate students' frequency of use of available information resources and services at Kenyatta University library.
3. To describe the post-graduates' knowledge, perceptions and rating of the resources and services at Kenyatta University Library (Moi Library).
4. To find out if there is any relationship between post-graduate students' academic characteristics and information seeking characteristics.
5. To find out how the rating of resources and services in Moi Library influences the post-graduate students' information seeking characteristics.

Data were collected from both primary and secondary sources in order to address the issues above. Using random sampling, masters and Ph.D students were selected and a questionnaire was used to elicit data on academic characteristics, perception and rating of resources and services, and the information seeking characteristics of the students. A balanced view was sought by randomly sampling and administering a questionnaire to library staff who deal directly with the students. Interviews with the university librarian, the deputy university librarian and other library staff were arranged and carried out to elicit data to fill in the gaps. Secondary sources used were mainly university calendars and library files. Data processing and analysis used techniques such as frequencies, percentages, tables, graphs and diagrams.

The major findings of this study can be summarised as follows:

- (a) Post-graduate students possess a number of academic characteristics that should be used in designing an information system that can help them to collect information.
- (b) There is a consensus perception by post-graduate students that resources and services in Moi Library are insufficient and out-dated.
- (c) In their efforts to produce work measuring up to the required

- (d) The identified information seeking characteristics of the students are:
- (i) A high level use of inter-personal (informal) sources such as discussion with colleagues and lecturers/supervisors;
 - (ii) Making efforts to attend seminars and conferences whenever it is possible;
 - (iii) Less subscription to relevant journals due to lack of funds. Students make up for this by using libraries stocked with current journals.
 - (iv) Photocopying of relevant topics or chapters from texts in order to have the required information;
 - (v) More use of the institutional library as a study room;
 - (vi) Spending reasonable amount of time in collecting information;
 - (vii) Seeking membership in other libraries from where they can access current literature.
 - (viii) Using other libraries without necessarily being members; and
 - (xi) Buying the relevant information whenever necessary, and if funds are available.

From the results of the study, it is concluded that postgraduate students are aware of the academic demands in their programmes. The evident information seeking characteristics are as a result of the expectations in the programmes where the students are registered, and the information environment which they encounter at Kenyatta University.

It is recommended here that a relevant user-education programme, should be included in the university curriculum to equip students with the skills they need in seeking information. Secondly, it is recommended that post-graduate students should be more focused in their information seeking. First they need to identify early enough the relevant libraries and information centres that would be useful to them and seek assistance from library staff whenever they need it.

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1.0 CHAPTER ONE

1.1 INTRODUCTION

In recent years, Kenya has recorded significant growth in her university education. Starting with one public university, the University of Nairobi in the 1970s, Kenya now has five public universities. There are also private universities, colleges and professional schools that award university degrees in Kenya. In addition to all these institutions, Kenya has a number of students studying in foreign universities, constituting what is humorously referred to as "Kenya's foreign university".

The growth in the number of universities has given rise to the expansion of degree programmes both at undergraduate and post-graduate levels in the same institutions. Kenyatta University, the third public university in Kenya has experienced changes, both in its physical as well as academic set up.

The present Kenyatta University started in 1965 when the British government handed over the Templer Barracks to the Kenya government. The barracks was converted into an institution of higher learning known as Kenyatta College with two sections: Secondary Education Division (SED) and Teacher Education Division (TED). In 1970, by an Act of Parliament, the college became a constituent college of the University of Nairobi, with the name changing from Kenyatta College to Kenyatta University College.

In 1972 Kenyatta University College admitted the first two hundred students to pursue studies leading to the award of B.Ed. degree of the University of Nairobi.

On 23rd August, 1985, the institution received university status by an Act of Parliament, making it the third public university. These developments are reflected in the increase of student population and change of university programmes (Kenyatta University Calendar, 1995/96:1,5).

Currently, Kenyatta University has *five full fledged faculties with a total of twenty eight departments in which are registered both undergraduate and post-graduate students.

Post-graduate students have a double role to play in this institution: they consume and produce information. This role has certain implications for the university administration, library management as well as the students themselves. Thus specific academic characteristics of post-graduate students should be known to help the library and university administration meet the students' information needs.

In addition, the post-graduate students' perceptions of available resources and services on their campus, and their resultant information seeking characteristics need to be understood by the students themselves, library and university administration in order to create an enabling information environment for the post-graduate students to realise their goals.

This study explores the Kenyatta University post-graduate students' academic characteristics, their perceptions of resources and services available in Moi Library and their eventual information seeking characteristics.

***The sixth faculty, the Faculty of Home Economics was created on 2nd July, 1996 when this study was already in its final stages.**

1.2 STATEMENT OF THE PROBLEM

A university community is made up of staff and students. The latter can further be subdivided into undergraduates and post-graduates, with post-graduates studying more specialised areas/disciplines in which they are expected to contribute to the growth of knowledge, through submission of theses on thoroughly researched topics. This vital contribution requires efficient and effective use of information.

Kenyatta University is known to have grown not only in its physical size but also in academic programmes. Starting as an army barracks in 1965, and going through the stages of a teacher training college and constituent college of the University of Nairobi, this is now an autonomous university offering both undergraduate and post-graduate programmes (Kenyatta University Calendar, 1995/96:1-2). The central role played by a library in the expansion of such an institution cannot be over emphasized. Higham (1980) describes a university library as a special library but one which specialises in a large number of fields. Considering the stages through which Kenyatta University has grown and Higham's observation, the development of Moi Library services should reflect the information needs and user characteristics of her clients, among them post-graduate students. The library in Kenyatta University should therefore endeavour to serve a special group of users i.e post-graduates. It is vital for the library to be aware of the academic as well as information needs of this group of users. However, observations, personal experiences by this researcher, as well as comments made by fellow post-graduate students at Kenyatta University indicate that academic characteristics of post-graduates at this institution are less known by the library upon which students depend for services and resources. (This researcher talked with some post-graduate students at Kenyatta University). This raises the question of development of Kenyatta University library and the relevance of its services and resources in reflecting the post-graduate programmes offered by the institution.

Some of the postgraduate students in this institution have complained of inadequate resources, among other issues in the university library (Interview of Kenyatta University Postgraduate Students on Utilization of Information Services by Diana Rosenberg, 5th December, 1995). A report carried out earlier in one of the local dailies supports this complaint by describing the Kenyatta University library as a place in shambles (Ochieng, 1995). Two scholars from the same institution have also observed that poor library resources are one of the factors that have affected academic excellence at Kenyatta University (Darkoh and Wambari, 1995). Mkandawire (1995) confirms that the shameful collapse of libraries has contributed to lack of international exposure, a feature of what he calls the third generation of African academics. This is the generation to which the present Kenyatta University post-graduate students inevitably belong. The unanswered question is: How do these post-graduate students, at the centre of such observations, and with an academic responsibility of contributing to knowledge seek information? So far, no empirical study has been carried out to establish the information seeking characteristics of this "third generation" at Kenyatta University, an institution that is about to observe its eleventh anniversary of offering post-graduate degrees.

In a pilot study carried out to establish the research issues raised here about Kenyatta University post-graduate students, it was confirmed that there was need for deeper investigations into the same issues. Although the underlying issue is the need for provision of relevant resources as expressed by the users, it was felt important to establish the post-graduate students' perception of the available resources and services at Kenyatta University. The pilot study and literature reviewed so far reveal that little is known of the perceptions of post-graduates about the resources and services available to them at Kenyatta University for their studies; **Kenyatta University library (Moi) has for along time continued to serve users whose views and feelings about available resources have not been directly communicated to the library. This study therefore explores the perceptions of post-graduate students about the resources and services they receive at their institutional library. Post-graduate students' perceptions explain their decisions to seek relevant information that can make useful contributions by the students towards growth of knowledge in their areas of study.

This study specifically examines three aspects related to post-graduate students at Kenyatta University. Firstly, it looks into the academic characteristics of the Post-graduate students. This analysis is directed at answering the question: What categories of post-graduate students are found in Kenyatta University?

Secondly the study examines the post-graduate students' perceptions of resources and services available at Moi (Kenyatta University) library. The specific questions answered are: How do post-graduate students in Kenyatta University rate/assess the available information resources and services? How do they use the resources and services available at Kenyatta University?

Thirdly, the study examines the information seeking characteristics of post-graduate students. The questions answered are: What alternative measures do students take in seeking information? What reasons do students have for seeking information elsewhere? Where would students like to see improvements in Kenyatta University enhance their information seeking characteristics?

1.3 OBJECTIVES OF THE STUDY

1. To determine the academic characteristics of post-graduate students at Kenyatta University.
2. To identify the post-graduate students' frequency of use of available information resources and services available at Kenyatta University library.
3. To describe the post-graduates' knowledge, perceptions and rating of the resources and services at Kenyatta University Library (Moi Library).
4. To find out if there is any relationship between post-graduate students' academic characteristics and information seeking characteristics.

5. To find out how the rating of resources and services in Moi Library influence the post-graduate students' information seeking characteristics.

1.4 HYPOTHESIS

H0₁ There is no relationship between the post-graduate students' academic characteristics (e.g masters, Ph.D, first year, second year, etc) and their knowledge, perception and rating of the resources and services available in Moi Library.

H0₂ There is no relationship between the post-graduate students' academic characteristics and their information seeking characteristics.

1.5 JUSTIFICATION FOR THE STUDY

This study is justified on three main grounds. First, the past and current studies in library/information studies at Kenyatta University have focused on library management (Njuguna, 1981; Wamukoya, 1990), personnel training (Njuguna, 1969), publishing (Gakobo, 1984; Maina, 1992) and library user-education (Musisi, 1980; Bulogosi, 1990). More recent researches in the field of information at Kenyatta University have examined areas like information needs for blind workers (Wambua, 1995), library user-education in public and private universities (Muema, 1995) and information technology (Nyantika, 1995). The above literature indicates that very little empirical work has been done on post-graduates' academic and information seeking characteristics at the institution. There is need to address this area of user needs, with specific emphasis on the post-graduate students at Kenyatta University.

****Kenyatta University Library and Moi Library will be used in this study interchangeably.**

The second ground is that the study aims at unearthing information that could be useful in the planning and management of library resources and services at Kenyatta University in relation to post-graduate programmes. Of particular relevance will be data on the information seeking characteristics of Kenyatta University post-graduate community, access to and utilization of varying information sources, and post-graduate user perception of the quality of library services.

The third ground is that this study will apply a perception approach in the examination of resources and services at the institution. A library studies perception approach will help in the assessment of the range and limitations of users' knowledge of information sources, quality and quantity of information and how this perception influences their information seeking characteristics. This approach will add to an understanding of library methodology in the assessment of user-needs before the provision of resources and services is carried out. Library services will go astray if they ignore the perception, hence views of clients, the very people for whom the library services are developed. The proposed academic and post-graduate library at Kenyatta University will greatly benefit from the perception analysis carried out in this study.

1.6 SCOPE AND LIMITATIONS

The study focused on the analysis of Kenyatta University postgraduate students so as to enable the researcher carry out an indepth study of this group. The results, it is hoped, can be generalised to other similar situations.

The focus of the study is on postgraduate students characteristics, their perceptions of library sources and services and the resulting information seeking characteristics.

1.7 OPERATIONAL DEFINITIONS OF CONCEPTS AND TERMS

- 1.7.1 **Postgraduates' Students Characteristics:** Refers to categories in which the post-graduates can be slotted academically. These could be by status in the institution (Ph.D or Masters), year of study (first, second, third etc) and the faculty

a student is affiliated to (Science, Arts, Education, Commerce, Environmental Science). Other characteristics in this study are the mode of study (by thesis, examination, project etc) and level of registration (full-time or part-time student)

1.7.2 **Perception:** This is the way human beings look at an event, object or situation depending on the surrounding environment. The perception so conceived leads to the formation of a mental image on which basis human beings act. In this case, the mental image(s) in which the postgraduate students see sources and services in Moi Library precipitate(s) the students' decisions to look for information both on and off Kenyatta University campus.

1.7.3 **Library Services:** Discussed here as the various means through which a library avails information to its users.

1.7.4 **Library Resources:** The various collections (book and non-book media) available in a library and holding information that can be accessed by users.

1.7.5 **Postgraduate Students:** Legally registered university students undertaking courses at the level of diploma, masters, or Ph.D. In this study, the postgraduate students referred to are in Masters or Ph.D programmes.

Information Seeking Characteristics: Refer to identifiable methods, ways or patterns by which post-graduate students gather information.

Information Environment: Refers to the people one comes into contact with as they seek information. These include colleagues and other resourceful persons like lecturers. The library services and resources also form part of the information environment.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Theoretical Framework

The significance of relevant information in realizing efficient university teaching, learning and research activities cannot be overlooked (Maleche, 1973:2; Partifitt, 1975). It becomes necessary to avail this information to users through library and other related information services.

The underlying theoretical framework of this study is that information seek characteristics of a community are due to a number of interrelated factors identified as: user information needs, quality and quantity of available information, accessibility to the information, purchasing power of the users, currency of available information and the availability of other libraries and information centres.

Information needs differ or vary from user to user, depending on the purpose at hand. A university community needs information to realize its learning, teaching and research goals (Camble, 1974). The type, quality and quantity of information utilized at the university varies with the disciplines and individuals involved. For instance, students in the fields of Economics, Political Science, Engineering, Medicine, History, Literature and Library Studies will all have varying information needs as groups and individuals. The quality and quantity of information resources and services available within the institution will greatly determine the extent to which users' needs are satisfied.

Factors such as the ability to purchase and secure the required information packages, awareness of existing resources and services of information, the level and development of collections and user preferences or inclinations, among others, tend to influence the use or nonuse of an information system.

This results in identifiable information seeking characteristics among the users.

Bunch (1984:139) observes that an information service unit must not only be up to-date in its collection but also flexible in order to respond to the changing needs of the community it serves. This observation is further supported by Ifidon (1990:2) when he notes that the library, the fulcrum that supports academic programmes at the university, should have a collection that goes hand in hand with student population, post-graduate programmes as well as the basic and applied research needs.

A current concern in Library Studies is the need to study the perception of library resources and services by users in an attempt to unearth the underlying causes of observed information seeking characteristics. It is, therefore, necessary to examine the attitudes acknowledge of information users have with respect to the quality and quantity of existing information sources and services. The mental images that users hold of libraries will determine the extent to which they utilise these libraries (Gelfand, 1968:149).

Perception is based on the premise that human beings act and respond on the basis of the attitude and mental images they form of an event or situation. These images influence the resultant spatial behaviour (Walmsley and Lewis, 1984; Johnston, 1991). These factors include knowledge or awareness; individual and group interests; socio- personal characteristics and the total environment. Perception analysis has been utilized with great insights in the study of human response to floods (Burton, *et.al*, 1978), adjustment to drought (Oguntonyibo and Richards, 1978; Wanjiru, 1994), agricultural decision-making (Naulikha, 1991), recreational behaviour, residential mobility and industrial decision frameworks (Walmsley and Lewis, 1984; Kinyanjui, 1987; Darkoh, 1994).

In this study, the information space both within and outside Kenyatta University will be treated as the event to be perceived. The perceivers are the post-graduate students at Kenyatta

University. The perceptual filters consist of the user information needs, quality and quantity of library resources and services, users' purchasing power, accessibility to the information available and user inclinations.

These filters sieve the information received concerning the information environment creating either a "favourable" or "unfavourable" image of this environment. Hence, the resultant information seeking characteristics which are highlighted in this study. The conceptual framework is summarised in Figure1.

2.2 LITERATURE ON ACADEMIC CHARACTERISTICS OF POSTGRADUATES STUDENTS

A university community in general is made up of staff and students. In the category of students are undergraduate and post-graduate students.

Millet J. D. (196-) observed that there is specialization in techniques of study and research. Millet's statement points to the varying disciplines which characterise students in a university. While this statement is true of any university's student community, Millet made the statement without any empirical study that would have established the differences involved in the study techniques of disciplines at the university. Secondly, Millet's statement fails to make a difference between post-graduate and undergraduate students. It is therefore necessary to find out the areas of specialization to which post-graduate students like those at Kenyatta University belong, and the methods or techniques of study and research that the students use to seek information. The question here is whether or not these different faculties affect the manner in which a post-graduate student seeks information after perceiving the sources available to him/her on and off campus.

Jasper (quoted in Higham 1980:1) states that the university is a community of scholars and students engaged in the task of seeking truth. Once more, students here are mentioned in passing. This definition of students again lacks empirical evidence of the categories of this university community and how they seek the 'truth'. Like Millet's statement, Jaspers' definition of university in relation to truth seeking by students deserves an empirical study to expose the patterns used by

This definition of students again lacks empirical evidence of the categories of this university community and how they seek the 'truth'. Like Millet's statement, Jaspers' definition of university in relation to truth seeking by students deserves an empirical study to expose the patterns used by a particular category of students i.e post-graduates in seeking information. Kenyatta University post-graduate students provide a ground for verifying the statements about this user community and their information seeking behaviour.

Pack (1988) states that course units are designed to be student-centred. Pack makes no efforts to categorize the students he has in mind although he makes a relevant statement i.e learner-centred approach. It would be more relevant therefore to find out if the courses and students' participation in them determine students' academic characteristics.

Kenyatta University calendar (1995/6:2) shows that there are five faculties under which students in this university maybe grouped. These are:

- Faculty of Arts
- Faculty of Commerce
- Faculty of Education
- Faculty of Environmental Studies
- Faculty of Science

The calendar provides a list of the departments that fall under each and shows that at post graduate level the students are awarded degrees as shown below:

- Master of Arts (M.A)
- Master of Education (M.Ed.)
- Master of Education (Primary Teacher Education)
- Master of Science (M.Sc)
- Master of Environmental Studies (M.Env.S)

At the Ph.D level, the degrees are awarded as:

- Doctor of Education (Ed.D)
- Doctor of Philosophy (Ph.D)
- Doctor of Literature (D.Lit.)

Doctor of Science (D.Sc.)

Doctor of Humane Letters (DHL)

Other post-graduate levels are:

Post-graduate Diploma in Education (PGDE)

Post-graduate Diploma in Curriculum Development (PGDCD).

This useful information on categorization of post-graduate students and the degrees awarded is inadequate as it fails to show other academic characteristics that the students possess. These vital characteristics include the percentages of students registered as part or full-time and the years(s) of study and mode of study. Given that a calendar is a quick reference tool, the details of academic characteristics that a post-graduate student embodies would be least expected to be found here.

It is against this background of missing information that this study has been undertaken in order to provide empirical evidence of the academic characteristics of post-graduate students at Kenyatta University. In this study, the respondents are categorized using a number of factors (see Chapter Four) which explain the salient features about the information seeking patterns of the students.

2.3 LITERATURE ON POSTGRADUATE STUDENTS' PERCEPTION OF LIBRARY RESOURCES AND SERVICES

To perceive means to see. Perception used in this study refers to the ways in which post-graduate students at Kenyatta University see and rate the resources available for their use in the institutional library. The Kenyatta University postgraduate students' views or assessment of these resources and services are the salient features to be established in this study.

McBurney, D. and Collings, V. (1977) define perception as:

"The process by which an organism responds to features of the environment with regularities in its behaviour".

Information Space

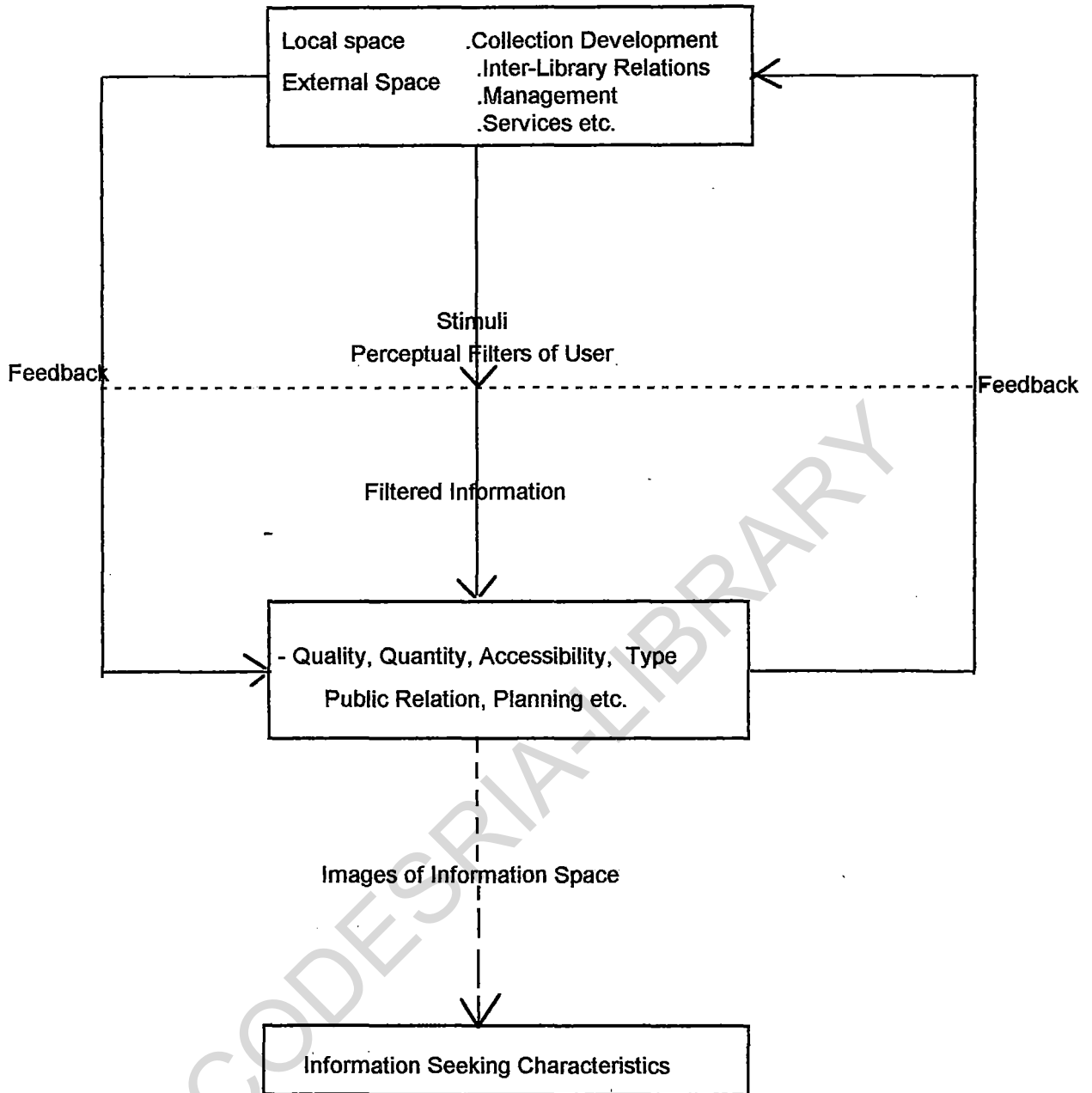


FIGURE: 1. A frame work of the Perception of and Behaviour in the Information Space.

SOURCE: (Developed by the author based on ideas in Walmsley and Lewis 1984 and Johnston 1991.)

Here is one of the key issues this study has examined among post-graduate students at Kenyatta University i.e What is their response to the availability and/or unavailability of resources in Moi Library.

Studies in the area of students' perceptions of resources and library services have been carried out with varying results. The Committee for New College (196-) carried out a study to determine college students' reaction to study space. The results indicated that the choice of study places was affected by the size of space and number of fellow students in the space. The strength of this study lies in its sampling method where balanced views are obtained from four different colleges on the basis of sex, residents and year of study. However, this study was based on undergraduates, a group of students whose information needs and perceptions are likely to be different from those of post-graduates faced with the same situation. If perceptions of library services and resources from a students' perspective are to be brought out, focus on a specific group of students becomes necessary in unearthing the specific user assessment and information needs. Broad sampling assumes the specific user needs that a user study should bring out, especially in institutions of higher learning in a developing country like Kenya. This study focuses on post-graduate students at Kenyatta University in order to have an indepth examination of how they perceive information resources and library services in their institution.

In another study, Wood (1982) used perception approach in her methodology to assess post-graduates' and academic staff views of the Australian National University (ANU). While her results are useful as they reveal weaknesses in both users and the library services, Wood uses the same approach as The Committee for New College i.e broad sampling and therefore lack of indepth assessment of views and characteristics of a specific group of students whose information needs, hence seeking characteristics are likely to be different, and need special attention.

McCarthy, (1995) studied both undergraduates and post-graduates of the University of Rhode Island and their perceived effectiveness, satisfaction, needs and expectations in the use

of library resources. McCarthy does make efforts to introduce the aspects of satisfaction and expectations in the study. Unfortunately, Mc-Carthy's sampling submits to the same criticisms like those of his predecessors i.e wide sampling and lack of indepth concentration on issues related to specific users of a university library.

Parker, (1979) introduced a new technique i.e budgetary games to study users (students) evaluation of library and information services at Southampton University. The results of this study show that interactive services were more highly valued than active services because of the latter's browsability factor. Parker's new term "budgetary-games' is not different from the use of such a technique such as rank ordering. Unfortunately, Parker's study was carried out in a community with a wide choice of services to select from i.e traditional and modern automated services. There have been changes in disciplines studied at Kenyatta University, without corresponding changes in the library's information storage and retrieval systems. A study of the students' perceptions of the information services and sources available to them in the 1990s helps to bring out a clear picture of the information environment in which post-graduates work in a university in a developing country like Kenya.

In the above studies have the setting has a foreign background where sophisticated tools like CD-ROMs, computers, on-line searching etc. are easily available to students wishing to retrieve information, probably at an affordable fee. However the findings in some of the studies concur with those in this study, and help to explain the general user behaviour when an information environment is less productibe Other studies that have focused on post-graduate students' perception of resources and library services include studies by Wood, Ford, and Walsh (1994), Bateyo (1979) and Waithaka (1994).

In their study of post-graduates' perception of postings information on searching behaviour, Wood, *et. al* (1994) found out that one of the responses from students at the Department of Information Studies of Library and Information Science Abstracts (LISA) expressed students' lack of confidence or uncertainty about what to do whenever the searches failed to show postings. Although the study is useful since it focused on post-graduates and provides detailed information

about the use of a specific search tool by the group, there are limitations in this study. Wood *et. al* (1994) limit their study to future professionals in the field of modern information technology. Their study group and results help to show how far behind some universities in developing countries are in the use of modern technology as a tool for information retrieval.

Given this contrasting information retrieval system, it is necessary to establish the approaches used by Kenyatta University post-graduate students in retrieving relevant information for their studies. It is therefore important to find out the students' reaction to their institutional information environment when it fails to provide the required information.

Bateyo (1979) dealt with the question of perception, at least closer home. Bateyo's results reveal that inadequate resources and lack of current journals contribute to the bleak picture that a university community in need of information in developing countries like Kenya, Uganda and Nigeria (University of Nairobi, Makerere and Ibadan, respectively) is likely to face. While Bateyo's study is commendable for addressing the information needs and perception of information resources by African scholars fairly across the continent, her sampling is broad. Bateyo used three African universities to deal with information issues of social scientists in Economics, Geography, Political Science, Psychology and Sociology. At the time of Bateyo's study, it can be said with certainty that it was an era when most universities stood in better financial positions unlike now (Ng'ang'a, 1992; Darkoh and Wambari, 1995). Therefore Bateyo's study of users' perception of resources and services in any African university would need to be replicated in order to bring out a better picture of the present information environment, especially when a university library is said to be in 'shambles' (Ochieng:195).

One of the studies carried out on students at Kenyatta University mainly dealt with undergraduates. Koech (1989) used self-report form to study some of the factors that influence undergraduate students to study for examinations. Koech's study does bring to light some common study patterns like the use of the library and groups among undergraduates. A study on how post-

graduate students perceive the library resources and services in the same institution will highlight how a section of the university community seeks relevant information for the various academic undertakings, among them the need to pass examinations.

Closely linked to information and post-graduates at Kenyatta University is a study by Waithaka (1994). Waithaka examined the problems faced by researchers who use Kenyatta University library, noting the major problems to be shortage of resources, lack of user-education and inadequate seating space.

Whereas Waithaka's results are valid and lay ground in information seeking experiences of researches at Kenyatta University, among them, post-graduate students, Waithaka limits her study to problems. Furthermore, the salient features of the researchers' perceptions of their information space are left out. This aspect needs to be addressed to ascertain the user centredness of library services and resources available to post-graduate students at Kenyatta University, and how the students eventually gather relevant information. These issues are examined in this study in order to fill in the gap in literature available in this area. Greater emphasis is put on the post-graduate students' approaches of gathering information for their studies, given the problems they face from using library services and resources in Moi Library. This study has endeavoured to find out if the students' assessment of their institutional library contributes to their information seeking behaviour.

This researcher's personal experiences in collecting literature for review at Kenyatta University has revealed that there exists very little information written on the users' perception of Kenyatta University library services and resources. While there is some literature on users' perception of the same aspects in information in other countries, accessibility to this literature through use of the retrieval systems currently available (and maybe affordable by a student) is not easy either. However, contacts with some of the information space outside Kenyatta University was made to avail literature for this topic as the research progressed.

2.4 LITERATURE ON INFORMATION SEEKING CHARACTERISTICS OF POSTGRADUATE STUDENTS

Information seeking is a behaviour like any other human activity, for example eating, making a telephone call, driving and the like. This activity has been addressed in a number of studies globally. However, the information environment in which a number of these studies were carried out has remarkable differences from the current information situation in which a post-graduate student in Kenyatta University may find her/himself.

McFadden and Hostetler (1995), generally discuss information issues that affect a university student. Among the issues is the need for relevant books, user-education for undergraduates, use of internet and other information retrieval approaches. The issues mentioned by the two editors do contribute to the debate about accessibility of information by any group of students at college or university. Unfortunately, McFadden and Hostetler's discussion leaves out post-graduate students. However, their observations are useful in understanding the general information needs of students in a university. A study on information gathering patterns of a specific group of university students would be useful in verifying issues like the ones above.

In a study by Dunn (1986), it was found out that undergraduate students have varying information needs. A question asking the undergraduate students how they gather information revealed that the students made considerable use of informal and interpersonal networks. Students ranked the use of library as a source second after the teacher (lecturer). The study also found out that only those students with needs for intellectual stimulation and professional success tended to use libraries and experts in a discipline as information sources. The patterns of seeking information as expressed by these undergraduates in a developed country suggest that in their search for information, students choose to use those approaches that suit them as individuals. The findings in Dunn's study point to the use of the invisible college, a common practice among information seekers. This study has examined the kind of informal channels

that post-graduate students use in an information environment that not only lacks modern information retrieval systems but is also said to be non-current in its collection by the clients.

Pellow and Wilson (1993) and Iwe (1994) have made general observations above information needs of university communities. In concluding their observations, they recommend the importance of identifying specific group needs, for example, information needs of students, staff and the like. They also emphasise the important role played by subject specialists in identifying information interests of different user groups. These are valuable recommendations that an information service needs to adopt. However, greater emphasis should have been put on specificity of user groups. For example, university students maybe undergraduates or post-graduates with varying academic characteristics like departmental affiliations, year of study and the like. Staff in a university maybe academic or subordinate.

Information seeking patterns of groups will definitely vary due to the information needs that are expressed either by individuals or the groups. In this study one group of students, post-graduates, is identified in order to offer an indepth analysis of their information seeking patterns. This offers a verification of the general statements like those of Pellow and Wilson, and Iwe. Secondly, the role of the subject specialist in a university library is examined by this study in relation to the contributions she/he would make to improve the information seeking patterns of post-graduate students.

Tadesse and Neelameghan (1995) addressed the importance of designing a programme that would provide a training ground where post-graduate students would be oriented and sensitised to the use of information and information systems. Reporting about a programme designed and conducted by the School of Information Studies for Africa (SISA) for medical sciences post-graduate students, the two scholars recommend dealing with a particular user group. Their recommendation points to the need for a user education programme in which post-graduates are introduced to library sources and services in their respective disciplines. However, their report fails to provide details on the information seeking characteristics of the

medical students either before or after the training. Specific activities of a user-education programme and how it would support efforts made by post-graduate students' to gather information are made in this study.

Bateyo (1979) studied the academic environment of academic social scientists in three African universities: Makerere, the University of Nairobi and the University of Ibadan. The study established that there are varying information needs by this group of scholars, as would be expected of any group of information seekers. As pointed out earlier, the study was carried out at a time when most African university libraries enjoyed comparatively better financial environments than now. A replication of Bateyo's study for present university financial experiences would be necessary. The present financial situation of academic libraries in Kenya maybe said to be a reflection of the entire economic state in which the country is. The present study examines information seeking patterns of students at a time when there is lack of enough funding for libraries and students in one of the five public universities of Kenya. The University of Nairobi used in Bateyo's study was then the only state university in Kenya. Kenya now boasts of five public universities with expanded university programmes that share limited government funds.

It is necessary to find out how participants in these programmes gather information in the phase of dwindling funds for universities. So far, only two information seeking related studies have been carried out on students in Kenyatta University, one on undergraduates (Koech, 1989) and the other on researchers (Waithaka, 1994).

Koech (1989) examined the factors that influence undergraduates' modes of study for examinations. The results revealed that most students are highly influenced by their own goals to do well. Other factors included personal interests in the subject, emotional/stress related problems, type of examination, availability of other students to study with, money for copying/buying books and so on. The results are useful in understanding some of the factors that are likely to surround post-graduates too in the same institution. However, Koech leaves out details on how the students gather information given their environment. Therefore, the present study examines in detail the specific factors that influence students to seek access to

relevant and up-to-date information. An understanding of these factors helps in understanding the specific information seeking patterns adopted by post-graduate students in Kenyatta University.

Waithaka (1994) studied the problems faced by researchers who use Kenyatta University library. The identified researchers were the academic staff and post-graduate students. Waithaka established that these researchers are faced with problems like shortage of resources, lack of user-education and inadequate seating space. Details of aspects such as the researchers' perceptions and information seeking behaviour are less addressed in the study. Her study, however, is useful in laying ground upon which to understand the information seeking behaviour discussed in detail by the current study. The problems that are revealed by Waithaka's study and solutions to them would best be understood if an examination of one group of the researchers i.e post-graduate students is made in detail. In the present study, an examination of students' efforts to solve problems related to their information needs is presented in detail. Herein lies the basis for understanding Kenyatta University post-graduate students' information seeking characteristics.

In an oral interview carried out by Diana Rosenberg at Kenyatta University on utilization of information services, it was learnt that some post-graduate students lacked knowledge services like reference and use of subject librarians in their institutional library. The students also expressed their general dissatisfaction with the resources available in the library. The interview which lasted about one hour, with very low representation of the post-graduate community in Kenyatta University could not have unearthed details of the information seeking characteristics of this group. A deeper analysis of post-graduate students' expressed dissatisfaction of library resources and services will help in understanding how they seek relevant information for their work.

In another oral interview with Kenyatta University Librarian, (17th January, 1996), this researcher learnt that the post-graduate students are assumed to have known how to use the library, therefore seek information on their own. On the other hand, certain unorthodox

unorthodox information seeking patterns among these students have been noticed by the library staff. Despite these observations from a senior information manager in this university, no studies are available to confirm the magnitude of the observations. This study has endeavoured to find out how post-graduates rate their own information seeking skills and the kind of help they need to improve these skills. The study offers suggestions that may help in improving the students' information seeking patterns.

While Kenyatta University has continued to expand its post-graduate programmes, the question of information seeking characteristics of the post-graduate students, a group expected to contribute to growth of knowledge without recycling or duplicating studies, has not been addressed. This study therefore examines the information seeking characteristics of the current post-graduate students at Kenyatta University to fill up the existing gap on how this group of scholars gathers information for expanding frontiers of knowledge in their disciplines. It is hoped that the results of the study will be an indicator to Kenyatta University library management, administration and other related parties on one hand, on the importance of having relevant and current information on who post-graduate students are, their specific information needs, and how their information interests can be met.

On the other hand it is hoped that the post-graduate students will see the need to take personal initiatives to supplement efforts made by the administration and library management in Kenyatta University in providing the necessary information resources and services for their academic programmes. That all the parties should work together towards equipping post-graduates with the most current and relevant information seeking skills cannot be overemphasised.

Post-graduates should see the need to cultivate relevant information seeking characteristics for the world of work they soon join after university. It has been observed in information searching that a field-independent person is capable of a more analytical functioning than a field-dependent person, who uses a more global approach (Witkin *et. al*, 1971)

3.0 CHAPTER THREE

RESEARCH METHODOLOGY

3.1 STUDY AREA

The study was conducted in the postgraduate community, thus masters and doctoral students at Kenyatta University. This institution represents a common approach in the provision of university education in Kenya's public universities. Kenyatta University has witnessed an increased library user population, having undergone a number of changes in her academic programmes. These changes have implications on the provision of library resources and services, and modes of seeking information by its users. Kenyatta University therefore provides a useful setting in which to formulate and test hypotheses on information seeking characteristics and perception of resources and services by post-graduate students.

3.2 DATA TYPES AND METHODS OF COLLECTION

Data utilized in this study were collected from both primary and secondary sources. The data covered three main areas: academic characteristics of post-graduate students, their perceptions of library services and resources at Kenyatta University and their information seeking characteristics both on and off Kenyatta University campus.

3.2.1 DATA ON ACADEMIC CHARACTERISTICS OF POSTGRADUATE STUDENTS

Data were collected using a questionnaire and covered the following aspects: status in the institution, mode of registration and year of study, registration by faculty and mode of study. Status in the institution referred to the level of study i.e Ph.D or Masters student. Mode of registration catered for part- time or full-time student, whereas year of study focused on first and second year of study, especially for masters students. Unfortunately most Ph.D respondents in third, fourth or fifth year were not used in this study as the university administration was unable to avail lists of their names.

Registration by faculty was based on the five faculties currently at Kenyatta University: Arts, Commerce, Education, Environmental Studies and Science. Mode of study was based on three aspects: study by thesis alone; coursework, examination and thesis or coursework examination and project.

3.2.3 DATA ON POSTGRADUATE STUDENTS PERCEPTION OF LIBRARY RESOURCES AND SERVICES AT KENYATTA UNIVERSITY

These data were collected from the sample population using a questionnaire. Two students, a first and a second year, were randomly sampled from each department to represent the rest of the students. Lists of registered students were provided by Kenyatta University administration. The selection was done as shown in Figure 2.

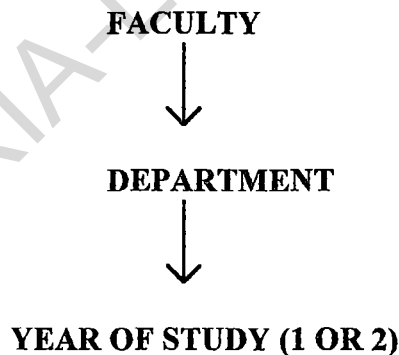


Figure 2.

The data covered the following areas: students awareness and frequency of use of resources, and their assessment of resources and services.

3.2.3 DATA ON POST-GRADUATE STUDENTS' INFORMATION SEEKING CHARACTERISTICS

The data collected covered the various approaches used by students to gather information both on and off campus.

3.3.1 DATA ANALYSIS

(i) Coding and Tabulation

The questionnaires were edited to ensure that entries and/or recordings were properly done. Data were extracted to indicate for each group of students their academic characteristics, perception of resources and services, information seeking characteristics and other related information areas. Tables were prepared to show the above features.

(ii) Statistical Analysis

Computations were done to show the frequencies and percentages of responses to each item in the questionnaire.

3.3.2 Data Presentation

The collected and analysed data are summarized and presented in form of tables, graphs and charts. These forms of data presentation are found in the relevant chapters of the study and a list showing them is in the introductory part.

3.3.4 Problems of Data Collection

1. Only lists of both first and second year masters as well as doctoral students were availed by the university administration. This greatly limited the population, and responses, especially for Ph.D students.
2. Some of the sampled Ph.D candidates had either left the country or never started their programmes, thus limiting the responses further.
3. Use was made of the remaining Ph.D students. One student refused to respond the questionnaire because he regards himself as a lecturer more than a student. Generally, there was low response from Ph.D students.

3.5 ORGANIZATIONAL OF THESIS CHAPTERS

This study has six chapters devoted to various aspects. Chapter One (Introduction), is devoted to the discussion of research problem, objectives, hypotheses, justification for the study, scope and limitations and operational definitions of concepts and terms.

Chapter Two focuses on literature review, theoretical framework, academic characteristics of post-graduate students, post-graduate students' perception of resources and services and information seeking characteristics.

Chapter Three deals with research methodology, giving details of study area, data collection, processing, analysis and presentation.

Chapter Four is focused on academic characteristics of post-graduate students and their perception, and rating of library resources and services.

Chapter Five deals with information seeking characteristics of post-graduate students, their views on effects of unavailability of information and their recommendations on areas of improvement in availability of information.

Chapter Six gives the summary and conclusions. References and appendices are found at the end of the study.

CHAPTER FOUR

4.0 ACADEMIC CHARACTERISTICS OF KENYATTA UNIVERSITY STUDENTS, AND THEIR PERCEPTIONS OF RESOURCES AND SERVICES IN MOI LIBRARY

4.1 INTRODUCTION

Information is an important factor in any society, more so in a university community where learning, teaching and research are the main activities. Various factors may affect a person's interest in the type of information she/he seeks, and the methods used in obtaining the information. In an academic environment, the factors that are likely to influence the search for information are related to the academic activities associated with an institution and individuals. The basis upon which academic characteristics of students are assessed is found in these activities,

The main objective of this chapter is to discuss the academic characteristics of post-graduate students at Kenyatta University, and their perception of resources and services at their institutional library, Moi Library. The implications of the characteristics and perceptions to post-graduate students as information seekers and the library as an information centre are also discussed. Thus the chapter addresses the first and third objectives of the study and, subsequently, the second hypothesis, namely:

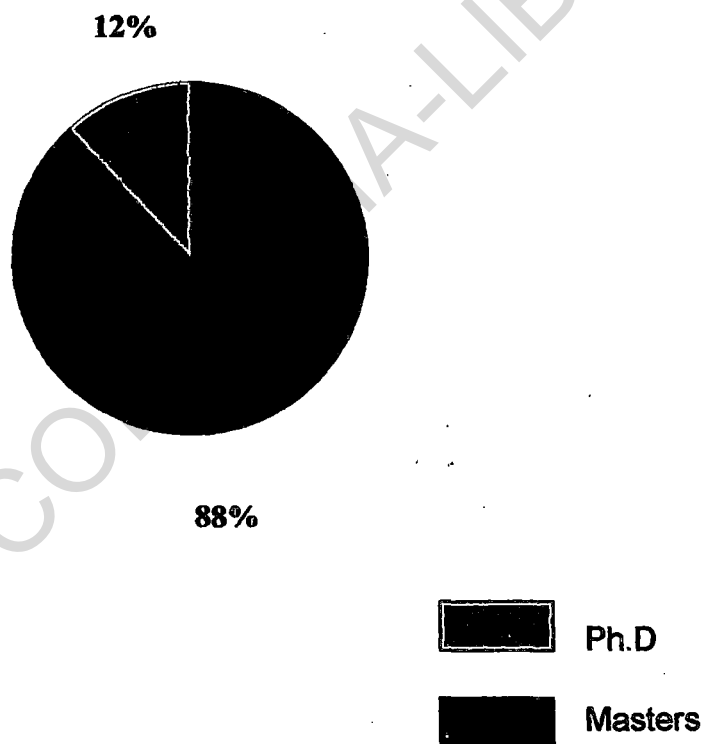
There is no relationship between postgraduates' academic characteristics and their knowledge, perception and rating of the quality of available resources and services in Moi Library.

4.2 ACADEMIC CHARACTERISTICS

The analysis that follows is based on five broad characteristics into which question I (Section A) of the questionnaire was divided. Although deliberate efforts were made to sample equal numbers of female and male student representatives, this category is not analyzed here since the study deals with all post-graduate respondents here as people with equal opportunities. Unfortunately, department as an academic characteristic is also not analyzed due to low representation of Ph.D students in most departments. However, views related to this characteristic are expressed throughout the study.

Thus question I (Section A) sought to explore the academic characteristics of post-graduate students at Kenyatta University. The analysis revealed the following characteristics shown in Figure 3.

4.2.1 **FIGURE 3: Status in the Institution.**



SOURCE: KHAYESI, 1996

Figure 3 summarises the first broad academic characteristic by which postgraduates are known. An overwhelming proportion: 88 per cent (36 of 41) are at masters level while the minority: 12 per cent (5 of 41) are at Ph.D. level.

The data confirms the Kenyatta University students' admission/enrolment pillar. The pillar narrows as it goes up from undergraduates, through masters to doctoral levels.

In the light of such a pillar of university student enrolment, an information system is likely to incline its services to the higher percentage of students, undergraduates who are not the focus of this study. Although the information service is aware of the minority patrons, the information needs of the majority, who are not addressed in this study, tend to dictate the nature of resources and services that are offered at Kenyatta University library.

At the post-graduate level, it is likely that a library will be more aware of the information needs of masters students than doctoral. A library or information service should endeavour to know the various information interests of the users that it is designed for. Maleche (1973), Camble (1973), Partifitt (1975) and Waithaka (1994) echo this observation: that a university library needs to provide information to meet the goals of the institution it serves. The identified goals are learning, teaching and research, typified by the information needs of lecturers, students and researchers.

The results imply that post-graduate students, operating in an information environment inclined towards meeting the needs of a majority group like the undergraduates, should identify their information interests and personally express them to library staff. Failure to take personal initiatives contributes to general categorization needs by a library (Millet, 1963), Jasper (quoted in Higham, 1980:1) and Pack (1988). This seems to be the case between post-graduates and the library at Kenyatta University.

4.2.2 Table 1. By Mode of Registration and Year of Study.

| Year of Study | Ph.D | | | | Masters | | | |
|---------------|-------|---|-------|---|---------|----|-------|----|
| | 1 | | 2 | | 1 | | 2 | |
| | Freq. | % | Freq. | % | Freq. | % | Freq. | % |
| Part Time | 1 | 2 | 2 | 5 | 0 | 0 | 1 | 2 |
| Full Time | 2 | 5 | 0 | 0 | 19 | 46 | 16 | 39 |

SOURCE: KHAYESI, 1996

The data in Table 1 reveal that postgraduate students maybe part or full-time students, in first, second or other year of study. As already pointed out, only lists of both first and second year students in both masters and doctoral courses were availed by the University administration at the time of sampling. Records with names of Ph.D students in third, fourth and/or fifth and sixth years could not be traced as they were being handled by a different officer who was said to be away.

The responses show that at Ph.D level, 2 per cent (1 of 41) and 5 per cent (2 of 41) are full time first year students.

At masters level, there is only 2 per cent (1 of 41) part-time students, while the majority, 46 per cent (19 of 41) and 39 per cent (16 of 41) are full time first or second year students.

Further investigations during the study revealed that part-time students, either at the masters or Ph.D level are also members of the academic staff at Kenyatta University. So far, all full-time students at both levels come from different firms and organisations. Full-time students maybe on government or institutional scholarship, or privately sponsored for studies at Kenyatta University.

The implications of the data are:

- (a) Part-time postgraduate students have an extra information seeking activity: to gather information to help them realise their teaching goals.
- (b) Full-time postgraduate students have more time to seek information unlike their colleagues.
- (c) By second year of masters and throughout the Ph.D courses, the library is likely to experience more demands from students for such resources as current journals and thesis/dissertations. Both groups of students are at their research level at this time.
- (d) Post-graduate students who have limited financial support (especially those without scholarships) are likely to experience problems in purchasing extra information resources for their studies.
- (e) The library resources and services should be made flexible to meet the increasing demands from postgraduate students as they progress in their studies and related academic assignments.
- (f) Possession of appropriate information seeking skills by postgraduate students will greatly help them in attending to their varying and more demanding academic activities realised at this level than when they were undergraduates.

Making similar observations, Bunch (1984) and Ifidon (1990) hold the views that an information system must be up to date in its collection, and flexible in order to respond to the changing needs of the community it serves.

The information needs of postgraduates are dictated by the mode of registration (full or part-time), year of study, mode of study and other academic related characteristics.

Cowley and Hammond (1987:34), Budd (1982:193) and Okocha (1994:162) hold the view that library instruction for college students is an essential component that should be included in their education curricular. Unfortunately, this area has been least addressed in postgraduate studies at Kenyatta University. In an interview with the university librarian (19th January, 1996), it was learnt that post-graduates are assumed to be able to search information on their own. However, they can ask for help if they wish to. The assumption here is that this user group possesses the relevant information seeking skills.

The dwindling of funds for higher education in developing countries does affect students' ability to secure relevant information (see Table 7, Chapter Five). Commenting on this state generally, Court (1994), Wield (1993), Mbajorgu (199-), Salmi (1991) and Blair (1991) suggest that universities in Africa should take on various income generating projects. If post-graduate students with relevant skills would be involved in such projects, their financial needs may be alleviated. Suggested projects maybe carrying out searches at a fee for library users both within and outside the university, running photocopying and any other services that maybe deemed necessary. Post-graduate students who have the relevant skills required could be incorporated in such projects. Ph.D students on scholarships, and academic staff members carrying out funded research projects could also enlist the help of masters students in their respective departments and pay them for services rendered. Besides providing for students' financial needs, some of the projects are likely to contribute towards better information seeking skills among the masters students, as they will apply their knowledge in real information seeking situations.

4.2.3 Table 2: Registration by Faculty

| | Ph.D | | Masters | |
|---------------|-------|---------|---------|---------|
| | Freq. | Perc. % | Freq. | Perc. % |
| Faculty | | | | |
| Arts | 1 | 20 | 12 | 33 |
| Commerce | 0 | 0 | 1 | 3 |
| Education | 1 | 20 | 12 | 33 |
| Envi. Studies | 0 | 0 | 1 | 3 |
| Science | 3 | 60 | 10 | 28 |

SOURCE: KHAYESI, 1996

Another broad characteristic of postgraduate students was identification by faculties to which students are affiliated (Table 2).

The above results indicate that at the Ph.D level, the Faculty of Science has the highest number of students: 60 per cent (3 of 5). Equal numbers of registration were realised at the Faculties of Arts and Education; 20 per cent (1 of 5) each. There were no responses from the Faculty of Commerce largely due to the fact that it received faculty status recently and is yet to admit Ph.D students. Questionnaires given to Ph.D students in the Faculty of Environmental Studies were unavailable by the time the analysis was done.

At the masters level, the Faculties of Arts and Education had the highest numbers of registered students: 33 per cent (12 of 36) each, followed by the Faculty of Science, 28 per cent (10 of 36), the Faculty of Commerce and Environmental Studies, 3 per cent (1 of 36) each.

The study realised that categorization of postgraduate students by faculty is too broad a characteristic i.e it only points to the type of degree that a student is finally awarded, but fails to focus on the fine details of academic characteristics found at the departmental level. This level was not analyzed by this study due to lack of full representation of Ph.D students in all the current twenty eight departments in Kenyatta University. Secondly, a number of the Ph.D students who had been sampled had either left Kenyatta University for studies elsewhere or not yet started their programmes by the time the questionnaires were given out. Attempts made to use some of the remaining Ph.D students were unfruitful as all of them failed to return the completed questionnaires.

In the light of the foregoing observation, it is recommended here that study of information seeking behaviour (characteristics) of postgraduate students per department be carried out. Sayers and Wood (1991) and Wiggins and Wahlquist (1985) focusing their studies on use of resources and user education in the Departments of Information Studies (Sheffield) and English (Brigham Young University), respectively, concluded that students found dissertations and projects very useful as they resulted in new lines of research. Similarly, a search strategy added to the freshman English Composition Course at Brigham Young University had resulted in significant improvement of research papers (Wiggins and Wahlquist, 1985:296). Thus similar specific observations can only be reached if a specific characteristic: department or subject is used to identify postgraduate students at Kenyatta University.

4.2.4 Table 3: By Mode of Study:

| Year of Study. | Ph. D | | | | Masters | | | |
|------------------------------------|-------|---|------|---|---------|----|------|----|
| | 1 | | 2 | | 1 | | 2 | |
| Mode of Study. | Freq | % | Freq | % | Freq | % | Freq | % |
| Thesis alone. | 3 | 7 | 2 | 5 | 0 | 0 | 0 | 0 |
| Coursework, Examination & thesis. | 0 | 0 | 0 | 0 | 14 | 34 | 15 | 37 |
| Coursework, Examination & Project. | 0 | 0 | 0 | 0 | 7 | 17 | 0 | 0 |

SOURCE: KHAYESI, 1996.

Three modes of study were identified as other forms of academic characteristics of postgraduate students. Table 3 summarises these characteristics as: study by thesis alone, 7 per cent (3 of 41) first year and 5 per cent (2 of 41) second year Ph.D students; study by coursework, examination and thesis, 34 per cent (14 of 41) first year and 37 per cent (15 of 41) second year masters students. The third characteristic under this broad category are those who study by coursework, examination and project, 17 per cent (7 of 41) first year students. There were no responses from second year masters students who study by this mode by the time the data were analyzed.

Results in Table 3 show that only a smaller percentage of the postgraduate community study by research and thesis alone throughout their course. The group comprises of Ph.D students: 7 per cent (3 of 41) first years and 5 per cent (2 of 41) second years. By their second year, all masters students carry out research, some by coursework, examination and project: 17 per cent (7 of 41), others as full time research students after coursework and examinations in first year: 34 per cent (14 of 41) first years, and 37 per cent (15 of 41) second years. Questionnaires given to second year students studying by coursework, examination and project were unavailable by the time of the analysis.

The data imply that throughout its operation, a university library is faced with a group of students carrying out research in various disciplines. The library should therefore be aware of the different information needs of the research students at the levels of masters and Ph.D within the university community. This calls for the need for subject based librarians and active reference services through which postgraduate students can delegate their searches (Iwe, 1994:64-65).

Secondly, the results show that a library is likely to experience demands for current literature collections. Availability of current literature will help postgraduate students, whether writing a project or thesis/dissertation to fill up the existing gaps in research areas, and push the frontiers of knowledge in their disciplines.

Such current literature may be abstracts, journals, thesis/dissertations. Sayers and Wood (1991:310) found out that 80 per cent MSc Information Studies dissertations in Sheffield University were used by other students and helped them identify researchable areas.

Where such current resources, especially journals may not be easily available there is need for resource sharing among university libraries and other information centres. Matanji (1989:7-8) and Bozimo (1983) realise the predominance of journals as needed items or resources among academics, and suggest a co-operate programme for journal acquisition. They also suggest use of reprographic services as means of availing current information among academic libraries.

This study recommends that postgraduate students should take their own initiatives, and with guidance from their supervisors and library staff, subscribe to one or two relevant journals in their areas of interests. A move of this type, will help in availing current information which the students need, and hopefully inculcate an academic information seeking practice among the post-graduate students.

Summary

The findings so far reveal that the academic characteristics of postgraduate students at Kenyatta University are in the following categories:

- (i) Masters or Ph.D (Doctoral)
- (ii) Year of Study i.e first, second, third etc.
- (iii) Full time student i.e has no other academic responsibilities.
- (iv) Part-time student i.e is a member of the teaching staff.
- (v) *Faculty affiliation e.g Commerce, Education, Arts, Environmental Studies and Science.
- (vi) Mode of study i.e by thesis alone (Ph.D students) by coursework, examination and thesis or by coursework, examination and project (Master students).

***There is need for analysis at the level of departments.**

The academic characteristics so far identified are a basis for understanding postgraduate students' perceptions of resources and services, and their responses to the same.

Prudence, therefore, dictates that Moi Library management will consider these characteristics in planning for a service to meet the information needs of this user group. On the other hand, postgraduate students at Kenyatta University need to understand the immense academic characteristics they possess, and much more, in order to plan for their information seeking programmes, both on and off campus.

4.3 PERCEPTION OF LIBRARY RESOURCES AND SERVICES AT KENYATTA UNIVERSITY

4.3.1 INTRODUCTION

Perception refers to the process by which users, in this case, Kenyatta University postgraduate students, are aware of, select, organise and interpret sensory situations connected with information environment.

Section B of the questionnaire was devoted to postgraduate students' perception of library resources and services at their institution. The data collected were based on the identified academic characteristics of students, namely, mode of study, year of registration and status in the institution.

Students' knowledge of the services and resources was first established before carrying out an analysis of their perception of the same. The results are presented in this chapter.

Table 4 (a) Awareness of Library Resources

| Resources | CET | | | | CEP | | | | THES | | | | TOTALS | |
|--------------------|------|----|------|----|------|----|------|---|------|---|------|---|--------|-----|
| | 1 | | 2 | | 1 | | 2 | | 1 | | 2 | | Freq | % |
| | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | | |
| Textbooks | 14 | 34 | 14 | 34 | 7 | 17 | 1 | 2 | 3 | 7 | 2 | 5 | 41 | 100 |
| Disset/Thesis | 13 | 24 | 14 | 34 | 6 | 15 | 1 | 2 | 3 | 7 | 2 | 5 | 39 | 95 |
| Journals | 13 | 32 | 14 | 34 | 7 | 17 | 1 | 2 | 3 | 7 | 2 | 5 | 40 | 97 |
| N.Paper/Cutting | 13 | 32 | 14 | 34 | 7 | 17 | 1 | 2 | 3 | 7 | 2 | 5 | 40 | 97 |
| Abstracts | 10 | 24 | 12 | 29 | 4 | 10 | 1 | 2 | 2 | 5 | 2 | 5 | 31 | 75 |
| Indexes | 7 | 17 | 13 | 32 | 2 | 5 | 1 | 2 | 3 | 7 | 1 | 2 | 27 | 65 |
| Year Books | 7 | 17 | 11 | 27 | 4 | 10 | 0 | 0 | 1 | 2 | 2 | 5 | 25 | 61 |
| Directories | 11 | 27 | 9 | 22 | 4 | 10 | 1 | 2 | 2 | 5 | 2 | 5 | 29 | 71 |
| Maps/Atlases | 12 | 29 | 13 | 32 | 7 | 17 | 1 | 2 | 2 | 5 | 2 | 5 | 37 | 90 |
| Dictionaries | 13 | 32 | 13 | 32 | 7 | 17 | 1 | 2 | 3 | 7 | 2 | 5 | 39 | 95 |
| Encyclopedias | 14 | 34 | 14 | 34 | 7 | 17 | 1 | 2 | 3 | 7 | 2 | 5 | 41 | 100 |
| Patents | 2 | 5 | 1 | 2 | 2 | 5 | 0 | 0 | 0 | 0 | 1 | 2 | 6 | 13 |
| Films/stlt. images | 5 | 12 | 5 | 12 | 4 | 10 | 1 | 2 | 2 | 5 | 2 | 5 | 19 | 46 |
| Micro-films | 5 | 12 | 6 | 15 | 3 | 7 | 1 | 2 | 2 | 5 | 2 | 5 | 19 | 46 |
| Cassettes | 11 | 27 | 9 | 22 | 4 | 10 | 1 | 2 | 1 | 2 | 2 | 5 | 28 | 68 |
| Videos | 10 | 24 | 8 | 20 | 5 | 12 | 1 | 2 | 2 | 5 | 2 | 5 | 28 | 68 |
| CD-Rom dt-base | 3 | 7 | 5 | 12 | 2 | 5 | 0 | 0 | 1 | 2 | 2 | 5 | 16 | 31 |
| Bibliographies | 9 | 22 | 7 | 17 | 6 | 15 | 0 | 0 | 3 | 7 | 2 | 5 | 27 | 66 |
| Pamphlets | 14 | 34 | 12 | 29 | 4 | 10 | 1 | 2 | 3 | 7 | 2 | 5 | 36 | 87 |
| Pre-Prints | 9 | 22 | 5 | 12 | 2 | 5 | 0 | 0 | 2 | 5 | 2 | 5 | 20 | 49 |
| Accession lists | 3 | 7 | 3 | 7 | 1 | 2 | 0 | 0 | 0 | 0 | 2 | 5 | 9 | 22 |
| Short loan | 14 | 34 | 13 | 32 | 8 | 20 | 1 | 2 | 3 | 7 | 2 | 5 | 41 | 100 |
| Africana | 14 | 34 | 12 | 29 | 8 | 20 | 1 | 2 | 3 | 7 | 2 | 5 | 40 | 97 |
| Catalogues | 14 | 34 | 13 | 32 | 8 | 20 | 1 | 2 | 3 | 7 | 2 | 5 | 41 | 100 |

CET = Coursework, Examination and thesis CEP = Coursework, Examination and Project

N. Paper = Newspaper Stlt = Satellite dt.base = database THES = Thesis alone

Source: KHAYESI, 1996.

The above table gives a summary of students' awareness of resources. Both first and second year students studying by coursework, examination and thesis generally have the same levels of awareness of resources. Comparable results are found from the other two groups i.e first and second years studying by coursework, examination and project, and those studying by thesis alone. Results show that the well known resources are text books, short-loan materials, encyclopedias and catalogues, 100 per cent (41 of 41). These are followed by materials in Africana section, journals and newspaper cuttings, 97 per cent (40 of 41). Thesis/dissertations are also well known, 95 per cent (39 of 41), followed by maps and atlases, 90 per cent (37 of 41) and pamphlets, 87 per cent (36 of 41). Abstracts, 75 per cent (31 of 41) and directories, 71 per cent (29 of 41) come next.

The rest of the resources are known as follows:

- : CD - ROM data base, 31 per cent (16 of 41).
- : Accession lists, 22 per cent (09 of 41).
- : Films/satellite images, 46 per cent (19 of 41).
- : Microfilms, 46 per cent (19 of 41)

The results show that the majority of post-graduate students have enough knowledge about the holdings of their institutional library, a basis upon which they can judge the resources. Dunn (1986) studied the psychological needs and source linkages of undergraduates. Her findings confirm the above results that there is a psychological context in which students pursue their studies (Dunn, 1986:480).

For the library management and/or staff, the results indicate the need for a comprehensive user-education programme for post-graduate students. This is a recurring fact in this study. The results also show that resources held in the audio-visual section of the library seem to have received little publicity among post-graduate students. Unawareness of library resources contributes to less use of the same (see Table 6). There is a CD-ROM player recently installed in the library, but most of the post-graduate students are unaware of its existence.

Table 4 (b) Unawareness of Library Resources

| Mode of Study----- Year of Study----- | CET | | | | CEP | | | | THES | | | | TOTALS | |
|--|------|----|------|----|------|----|------|---|------|---|------|---|--------|---------|
| | 1 | | 2 | | 1 | | 2 | | 1 | | 2 | | Freq | % |
| | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | | |
| Resources | | | | | | | | | | | | | | |
| Textbooks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Disset/Thesis | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | '02 '04 |
| Journals | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| N.Paper/Cutting | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Abstracts | 4 | 10 | 1 | 2 | 3 | 7 | 0 | 0 | 1 | 2 | 1 | 2 | 10 | 23 |
| Indexes | 7 | 17 | 1 | 2 | 5 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 31 |
| Year Books | 6 | 15 | 4 | 10 | 3 | 7 | 1 | 2 | 2 | 5 | 0 | 0 | 16 | 39 |
| Directories | 2 | 5 | 6 | 15 | 3 | 7 | 0 | 0 | 1 | 2 | 0 | 0 | 12 | 29 |
| Maps/Atlases | 1 | 2 | 2 | 5 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 4 | 9 |
| Dictionaries | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Encyclopedias | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Films/stlt. images | 8 | 20 | 10 | 24 | 3 | 7 | 0 | 0 | 2 | 5 | 0 | 0 | 23 | 56 |
| Micro-films | 9 | 22 | 9 | 22 | 4 | 10 | 0 | 0 | 1 | 2 | 0 | 0 | 23 | 56 |
| Cassettes | 3 | 7 | 5 | 12 | 3 | 7 | 0 | 0 | 2 | 5 | 0 | 0 | 13 | 31 |
| Videos | 5 | 12 | 6 | 15 | 2 | 5 | 0 | 0 | 1 | 2 | 0 | 0 | 14 | 34 |
| CD-Rom dt-base | 10 | 24 | 9 | 22 | 5 | 12 | 1 | 2 | 2 | 5 | 0 | 0 | 27 | 65 |
| Bibliographies | 5 | 12 | 8 | 20 | 1 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 15 | 36 |
| Pamphlets | 0 | 0 | 0 | 3 | 7 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 5 | 12 |
| Pre-Prints | 4 | 10 | 8 | 20 | 5 | 12 | 1 | 2 | 1 | 2 | 0 | 0 | 19 | 46 |
| Accession lists | 11 | 27 | 12 | 29 | 0 | 12 | 1 | 2 | 1 | 2 | 0 | 0 | 33 | 80 |
| Short loan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Africana | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 |
| Catalogues | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

CET = Coursework, Examination and thesis CEP = Coursework, Examination and Project

N. Paper = Newspaper Stlt = Satellite dt.base = database THES = Thesis alone

SOURCE: KHAYESI, 1996

Table 4(b) gives a summary of unawareness of resources by post-graduate students. The data in this table confirm the results of table 4(a), thus there is a high level of unawareness of such resources as accession lists, 80 per cent (33 of 41), CD-ROM database, 65 per cent (27 of 41), microfilms, 56 per cent (23 of 41) and films by post-graduate students. Here lies the irony of having information services that are less known among the users they are meant to serve.

The library should make known early enough any newly introduced services and resources meant for the benefit of its patrons. In discussing the role of the university library in the twenty first century, Hendrick (1986:130) suggests that the library should develop a strong role towards new forms of information systems. Such systems include the use of CD-ROM database and any other new information bases that maybe developed.

Library services and resources that will benefit users should be publicised through library bulletins put on the notice boards or given to users at the gate/entrance. Kenyatta University has a weekly newsletter through which the library can make known new developments in the services rendered. Departmental and faculty notice boards can also be used to inform users of new developments in the library. The established Post-graduate Board offices would be another avenue of informing, post-graduate community of recently introduced services and newly acquired resources in the library.

Users of any information system or service have been known to express varied information interests. When interviewed, users are likely to express satisfaction or dissatisfaction with an information system. Assessment of resources by users illuminates their (users) actions in seeking information.

Question 2 of this section asked the respondents to indicate their assessment of the resources held in Moi Library. The perceived specification about the resources were categorized into three: sufficient, insufficient, outdated.

The emerging results in Table 5 show the students' assessment of the resources in their institutional library.

Table 5: Assessment of Resources

| | Category of Students. | | | |
|---------------------|-----------------------|-----|---------|-----|
| | Ph.D | | Masters | |
| Level of Assessment | Freq | % | Freq | % |
| Sufficient | 0 | 0 | 0 | 0 |
| Insufficient | 3 | 60 | 33 | 92 |
| Outdated | 5 | 100 | 36 | 100 |

SOURCE: KHAYESI, 1996

All the respondents indicated that the resources fall far short of their expectations of sufficiency. Majority of respondents, 60 per cent Ph.D (3 of 5) and 92 per cent masters (33 of 36) assessed the resources as insufficient. The respondents' feelings about the resources are strongly expressed in the third specification: outdated, 100 per cent (5 of 5) Ph.D and 100 per cent (36 of 36) masters students.

These results imply a number of things about post-graduates and the library at Kenyatta University. The generally accepted library statement that no library is sufficient in itself is confirmed here. No library will be able to acquire all the materials it needs. Kenyatta University library is no exception but should consider the resources that are available in other libraries, both academic and non-academic, and which and could be borrowed for use. The solution to this problem lies in resource sharing (Ngang'a 1992; Ndegwa, 1985; Ahmad (1984). For example, the already existing inter-library loan services should be strengthened between Kenyatta University and the University of Nairobi.

This could be done by each party honouring the agreements made between them. Many post-graduate students from Kenyatta University are known to be users of the libraries various at the University of Nairobi, officially or unofficially, due to ineffective inter-library loan services in Moi Library.

Secondly co-operation with non-academic libraries is necessary. Reprographic services in such libraries should be exploited to avail current materials in Kenyatta University library where there is a shortage of current literature.

Co-operation in resource sharing should be established between public and some of the upcoming private universities in and around Nairobi. A University like United States International University (USIU), a neighbour of Kenyatta University, is known to have some of the most current literature, besides using modern technology in information retrieval. These views of co-operation are supported by similar suggestions made by Bozimo, (1983:134), Ahmad (1984:177), Ndegwa (1985a:44) and Ifidon (1990:29).

Responding to the question about the presence of out dated material in the university library, all library staff interviewed (100 per cent) stated that the situation has been caused by decline in the acquisitions due to lack of enough funds. Ng'anga (1992) confirms that one of the problems faced by university libraries is lack of funds for new acquisitions.

Students' perception of the resources lay a basis for understanding their information seeking patterns discussed in the next chapter. Information packaged using modern technology would contribute positively to students' seeking patterns: Forexample, if the library could install modern technology in retrieving information from international databases, postgraduate students are likely to learn the skills needed for accessing information stored in these databases. It is also probable that the students will give more thought to

4.3.3 USE OF RESOURCES

Respondents were required to indicate their use of resources under four main specifications: frequently, sometimes, rarely and never. Table 6 provides a summary of the responses.

Under Frequently, text-books ranked highest, 7 per cent (3 of 41) representatives Ph.D and 80 per cent (33 of 41) representation at masters level. This was followed by use of public catalogues, 10 per cent representation at Ph.D (4 of 41) and 66 per cent at masters (27 of 41) represented at masters level. Short loan collections are also frequently used by students: 5 per cent Ph.D (2 of 41) and 44 per cent masters (18 of 41). Although journals were indicated to be a frequently used resource by majority of Ph.D students, 3 of 5 (7 per cent of total sampled population), less than half of the masters students frequently use the same source 34 per cent (14 of 41). The frequency of use of the rest of the resources ranges between zero per cent and 36 per cent. The most notable resources in this category are microfilms and videos (0 per cent each).

The data reveal that the total number of resources frequently used by postgraduate students is low compared to the total number of resources housed in the library. Data in Table 4(a) reveal that post-graduate students are aware of the availability of these resources in their library. The level of unawareness of resources (Table 4b) is fairly low except in the cases of accession lists and most of the audio visual materials.

There is a possibility that students fail to use some of the resources, for example, accession lists and bibliographies due to lack of knowledge on how to use them.

The results also imply that students assessment of the information environment in Moi Library determines their use of the resources. Earlier results (Table 5) show that students' assessment of Moi Library holdings indicate insufficiency and out-datedness of the material.

Table 6: Frequency of use of Resources

| Resources | Frequently | | | | Sometimes | | | | Rarely | | | | Never | | | |
|--------------------|------------|----|---------|----|-----------|---|---------|----|--------|---|---------|----|-------|----|---------|----|
| | Ph.D | | Masters | | Ph.D | | Masters | | Ph.D | | Masters | | Ph.D | | Masters | |
| | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % |
| Textbooks | 3 | 7 | 33 | 80 | 1 | 2 | 3 | 7 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Disset/Thesis | 2 | 5 | 7 | 17 | 1 | 2 | 17 | 41 | 2 | 5 | 8 | 20 | 0 | 0 | 4 | 10 |
| Journals | 3 | 7 | 14 | 34 | 0 | 0 | 13 | 32 | 2 | 5 | 7 | 17 | 0 | 0 | 2 | 5 |
| N.Paper/Cutting | 2 | 5 | 8 | 20 | 2 | 5 | 15 | 37 | 1 | 2 | 10 | 24 | 0 | 0 | 0 | 7 |
| Abstracts | 1 | 2 | 4 | 10 | 2 | 5 | 10 | 24 | 2 | 5 | 10 | 24 | 0 | 0 | 0 | 29 |
| Indexes | 1 | 2 | 3 | 7 | 0 | 0 | 8 | 20 | 2 | 5 | 6 | 15 | 2 | 5 | 19 | 48 |
| Year Books | 0 | 0 | 1 | 2 | 0 | 0 | 6 | 15 | 1 | 2 | 5 | 12 | 3 | 7 | 25 | 61 |
| Directories | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 32 | 0 | 0 | 14 | 34 | 4 | 10 | 10 | 24 |
| Maps/Atlases | 0 | 0 | 3 | 7 | 1 | 2 | 0 | 0 | 1 | 2 | 10 | 24 | 3 | 7 | 23 | 58 |
| Dictionaries | 1 | 2 | 11 | 27 | 1 | 2 | 10 | 24 | 2 | 5 | 8 | 20 | 1 | 2 | 7 | 17 |
| Encyclopedias | 1 | 2 | 14 | 34 | 2 | 5 | 15 | 37 | 1 | 2 | 5 | 12 | 0 | 0 | 3 | 7 |
| Films/stlt. images | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 0 | 1 | 2 | 5 | 12 | 33 | 80 |
| Micro-films | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 2 | 0 | 0 | 3 | 7 | 4 | 10 | 32 | 78 |
| Cassettes | 0 | 0 | 2 | 5 | 0 | 0 | 3 | 7 | 0 | 0 | 3 | 7 | 5 | 12 | 28 | 68 |
| Videos | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 2 | 5 | 5 | 12 | 33 | 80 |
| CD-Rom dt-base | 1 | 2 | 0 | 0 | 1 | 2 | 1 | 2 | 0 | 0 | 1 | 2 | 4 | 10 | 33 | 80 |
| Bibliographies | 0 | 0 | 1 | 2 | 1 | 2 | 5 | 12 | 3 | 7 | 8 | 20 | 1 | 2 | 22 | 54 |
| Pamphlets | 1 | 2 | 5 | 12 | 2 | 5 | 11 | 27 | 0 | 0 | 8 | 20 | 3 | 7 | 11 | 27 |
| Pre-Prints | 0 | 0 | 2 | 5 | 0 | 0 | 4 | 10 | 1 | 2 | 10 | 24 | 4 | 10 | 20 | 49 |
| Accession lists | 0 | 0 | 3 | 7 | 1 | 2 | 1 | 2 | 0 | 0 | 1 | 2 | 4 | 10 | 31 | 76 |
| Short loan | 2 | 5 | 15 | 44 | 1 | 2 | 15 | 37 | 0 | 0 | 3 | 7 | 1 | 2 | 1 | 62 |
| Africana | 3 | 7 | 15 | 37 | 1 | 2 | 12 | 29 | 1 | 2 | 4 | 10 | 0 | 0 | 5 | 12 |
| Catalogues | 4 | 10 | 27 | 66 | 1 | 2 | 5 | 12 | 0 | 0 | 4 | 10 | 0 | 0 | 0 | 0 |

N.Paper * Newspaper Stlt * satellite

Source: KHAYESI, 1996.

Frequent use of such resources will require very careful selection, possibly of fairly current sources, or materials that will provide background information to issues students deal with.

Under the specification sometimes, dissertations/thesis ranked highest with 2 per cent (1 of 41) representation at Ph.D and 41 per cent (17 of 41) representation at masters level. Following were newspaper cuttings and encyclopedias, 5 per cent (2 of 41) Ph.D and 37 per cent (15 of 41) representation at masters level. Use of the rest of the resources fell below 40 per cent.

Again, the results imply that students' use of resources is determined by their perception of the library holdings. Emdad and Rodgers (1978:451) studying students' use of the library at Pahlavi University found that over a third of the students had no books on loan. Although they went to the library, the students did spent most of the time reading their notes. This study supports the above data: it is possible that the majority of post-graduate students seen in Moi Library use the it as a study room due to the quiet environment that the library provides

Responses for Rarely used resources indicate that abstracts rank highest: 5 per cent (2 of 41) representation at Ph.D and 29 per cent (12 of 41) representation at masters. Newspaper cuttings, maps/atlasses and pre-prints follow with 2 per cent (1 of 41) representation at Ph.D and 24 per cent (10 of 41) re[resentation at levelmasters. Frequency of use of resources is thus moving towards the negative side. The picture brought out by the data reveals that resources less used under frequently and sometimes seem to pick up high percentages, negatively though, under rarely and never.

The possible reasons for the above trend could be due to lack of materials in the library, or the fact that the materials available are outdated as stated by library staff and students, respectively. The length of time taken to process some of the materials would also render them out-dated by the time they reach the shelves for use.

Bozimo(1983:126) found that lecturers and post-graduate students in Nigerian universities complained of delay in availability of resources; most books and journals arrived much too long after publication to satisfy a scholar's needs for up-to-date information. Postgraduate students at Kenyatta University have often complained of delays in availing thesis and projects of students one year a head of the others for use, even after the students would have graduated. Increased speed in processing the few available relevant materials will avail material in time and probably improve students' perception of the resources and services in Moi Library.

In some of the areas, for example, where lack of recent journals has been cited, Kenyatta University library should put into practice earlier suggestions i.e go for project proposals through which provision of resources maybe made in areas lacking them. Proposals sent to some donors may be well received and willing donors would be glad to fund the provision of some.

Abstracting services may be expensive as they require qualified personnel, enough funds and time to make them be realised. However, the library would be of great service to post-graduate students if annotations of articles from the few available journals were periodically produced in the course of the year.

The fourth specification of responses, Never sheds more light on the status of most resources so far arrayed with low percentages under the other three specifications. A broad cluster of these resources are those stored in or associated with the audio-visual section of the library.

A constellation of similar responses is for resources commonly referred to as quick reference sources. These results confirm students' assessment of the resources: that they are outdated and insufficient (Table 5). Perceptions have great influence on users use and non-use of resources (Wood, 1982; Urquhart and Crane, 1994; Emdad and Rogers, 1978).

The results also suggest lack of user-education through which students would be aware of the value of resources in the audio-visual section. The audio-visual resources in Moi Library are less "interactive" sources of information among the post-graduate students. Other than being aware of the availability of the audio visual resources in the library, post-graduate students seem to make less use of them. Emdad and Rogers (1978;45) in their study on library use found that graduate students were most critical of the library collections, with 50 per cent of respondents stating that there was no need to use library resources on their campus. Twenty-four per cent unfamiliarity with the card catalogue and other parts of the library. The audio-visual materials are less used by post-graduates in Kenyatta University possibly for the same reason: unfamiliarity with the collections.

User-education programme structured to fit in post-graduate academic programmes has a solution to the current situation, besides other suggested solutions. The user-education programme should be tied to the specific subjects where qualified subject- oriented library staff should be used to give instructions on resources available for each discipline, and how they can be used. A practical lesson and examinable assignments should follow. Wiggins and Wahlquist (1985:296) found that the background research strategy unit included in undergraduates English composition course at Brigham Young University helped students to find better research materials more quickly. Students need to be aware of library resources, their value and where they were located if they should consider every academic activity that requires library use an opportunity to learn what they need to learn. These observations are supported by the results of a study by Leader and Klein (1996) in which they found that the field independent learners were more actively engaged when searching the database than were the field-dependent learners. User-education programmes will help post-graduates in acquiring information seeking skills and being more involved in searching. It is possible that due to lack of adequate publicity of some of the resources in Moi Library, students have under-raled the usefulness of such resources in addition to assessing them outdated. Some students lack the necessary skills that would help them search every possible source in the library before making assessment of the resources.

TABLE 7: Assessment of Services

Level of Assessment

| | Very Satisfied | | Satisfied | | Fairly Satisfied. | | Not Satisfied | | Non - existent | | | | | | | | | | | |
|----------------------------|----------------|----|-----------|----|-------------------|----|---------------|----|----------------|----|---------|----|---|-----|----|----|---|----|----|----|
| | Ph.D | | Masters | | Ph.D | | Masters | | Ph.D | | Masters | | | | | | | | | |
| | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | | | | | | | | |
| Library Services | | | | | | | | | | | | | | | | | | | | |
| Lending | 1 | 20 | 13 | 36 | 4 | 80 | 19 | 53 | 0 | 0 | 4 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Audio-Visual | 0 | 0 | 4 | 11 | 1 | 20 | 7 | 19 | 2 | 40 | 6 | 17 | 2 | 40 | 12 | 33 | 0 | 0 | 11 | 31 |
| Handicapped services | 0 | 0 | 2 | 6 | 2 | 40 | 5 | 14 | 2 | 40 | 12 | 33 | 1 | 20 | 8 | 22 | 0 | 0 | 7 | 19 |
| Inter-library loan | 0 | 0 | 1 | 3 | 2 | 40 | 0 | 0 | 0 | 0 | 5 | 14 | 2 | 40 | 15 | 42 | 1 | 20 | 14 | 39 |
| Reference/ Lit. searches | 0 | 0 | 0 | 0 | 2 | 40 | 8 | 22 | 0 | 0 | 10 | 28 | 3 | 60 | 10 | 28 | 0 | 0 | 7 | 19 |
| Photocopying | 0 | 0 | 1 | 3 | 0 | 0 | 1 | 3 | 0 | 0 | 1 | 3 | 5 | 100 | 13 | 36 | 1 | 20 | 20 | 56 |
| Indexing | 0 | 0 | 1 | 3 | 1 | 20 | 4 | 11 | 3 | 60 | 10 | 28 | 0 | 0 | 10 | 28 | 1 | 20 | 11 | 31 |
| Abstracting | 0 | 0 | 1 | 3 | 1 | 20 | 2 | 6 | 2 | 40 | 7 | 19 | 1 | 20 | 15 | 42 | 1 | 20 | 11 | 31 |
| Current-awareness | 0 | 0 | 1 | 3 | 0 | 0 | 4 | 11 | 1 | 20 | 10 | 28 | 4 | 80 | 15 | 42 | 0 | 0 | 6 | 17 |
| User-education | 0 | 0 | 1 | 3 | 1 | 20 | 7 | 19 | 2 | 40 | 8 | 22 | 1 | 20 | 10 | 28 | 1 | 20 | 10 | 28 |
| Using CD-ROM | 0 | 0 | 0 | 0 | 1 | 20 | 1 | 3 | 1 | 20 | 2 | 6 | 1 | 20 | 12 | 33 | 2 | 40 | 21 | 58 |
| The Catalogues | 0 | 0 | 8 | 22 | 1 | 20 | 17 | 47 | 4 | 80 | 10 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| Discussion with librarians | 0 | 0 | 0 | 0 | 4 | 80 | 9 | 25 | 1 | 20 | 7 | 19 | 0 | 0 | 11 | 31 | 0 | 0 | 9 | 25 |

SOURCE: KHAYESI , 1996.

4.3.4 ASSESSMENT OF SERVICES

Question 3 (section B of the questionnaire) sought to determine students' responses to satisfaction of services found in Moi Library. The quantitative assessment of the services shows that post-graduate students are less satisfied' with most of the services.

Only lending/borrowing services were considered satisfactory (satisfied), 80 per cent Ph.D (4 of 5) and 53 per cent masters (19 of 36). 80 per cent (4 of 5) of Ph.D students were also satisfied with discussion with librarians.

Indexing as a service was ranked 'fairly satisfied' by majority of Ph.D students only, 60 per cent (3 of 5). Another service that Ph.D students were 'fairly satisfied' with was the use of catalogues, 80 per cent (4 of 5). Up to this level of satisfaction, only four services can be said to be most appealing to post-graduate students.

Respondents ranked other services as follows: photocopying, 100 per cent Ph.D (5 of 5), current awareness, 80 per cent Ph.D (4 of 5) and reference, 60 per cent Ph.D (3 of 5) indicating that they are 'not satisfied with the services. Rankings for the rest of the services were evenly spread between "not satisfied" and "non-existent."

The general picture derived from the data is that most services in Moi Library are fairly inactive, less satisfactory and less interactive.

Secondly, the data point out that the continued lack of user-education and active interaction between library staff and majority of the post-graduate students inhibits students' knowledge of some of the services that are available in Moi Library. Interviews with two heads of sections (29th March, 1996) acquisitions and circulation, respectively, revealed that current awareness as a service is given by sending book jackets and journal up-date lists to relevant departments. Since academic staff were not interviewed, it is not possible to ascertain effectiveness of faculties and departments in the chain of passing on current awareness education to students.

A deeper concern is the need to involve departmental staff (academic) and post-graduate representatives on committees planning for library services. The teaching staff have a role to play: encourage students in the use of libraries. The presence of academic staff and post-graduate representatives on library boards will be a source of information for the library about the services that the user community needs. The services suggested, it is hoped, will be those that will make post-graduate students better information seekers.

Library staff too need to participate on academic meetings at all levels of the university i.e departmental, faculty and senate. Their involvement will help staff from both ends realise what each one of them can do to better the services offered to users. Library staff are members of the academic or teaching team who are able to see ahead of the teaching programmes and plan for the information needs that will arise.

The above findings concur with what Waithaka (1994) found out in a study on the problems faced by researchers using Moi Library i.e inadequate services. This implies less use of most of the services in the library. It also explains a predominant information seeking characteristic among post-graduate students: a search for an alternative information source that will meet the students' needs.

SUMMARY

The data so far reveal that:

- (i) Kenyatta University post-graduate students are aware of most of the resources available in their institutional library (Moi Library).
- (ii) Post-graduate students perceive the resources as insufficient and outdated for use.
- (iii) Most post-graduate students make less frequent use of the resources as a result of (i) and (ii).
- (iv) Post-graduate students are less satisfied with most of the services in Moi Library.

The foregoing analysis confirms the guiding premise of this chapter which reads:

"There is no relationship between post-graduate students academic characteristics and their knowledge, perception, use and rating of the quality of available resources and services." The differences in frequencies and percentages between Ph.D and masters students' perceptions of resources and services are largely due to lack of equal numbers of respondents from each group.

CHAPTER FIVE

5.0 INFORMATION SEEKING CHARACTERISTICS OF POSTGRADUATE STUDENTS

5.1 INTRODUCTION:

In the words of Dunn (1980:475), information seeking is a behaviour, a human activity like writing a memo, driving a car, or talking on phone.

Certain factors may influence displayed behaviour of an information seeker. Thus the need and search for information may arise from various aspects of a person's interests and the information environment in which she/he operates.

Section C of the questionnaire forms the major discussions in this chapter: information seeking characteristics of postgraduate students at Kenyatta University. The purpose of this chapter was to establish whether the users' perceptions of the services and resources in Moi Library have any influence on their information seeking patterns. There was also the concern to find out if the academic characteristics of the post-graduate influence their information seeking behaviour.

5.2 SPECIFIC INFORMATION SEEKING CHARACTERISTICS

Fourteen items were used in this section to determine specific information seeking characteristics of all students. The analysis that follows is based on these items.

5.2.1 TABLE 8: USE OF OTHER POSSIBLE RESOURCES

In Chapter Four of this study, use of available resources in Moi Library by the students was discussed. The findings showed that most of the resources are less frequently used by most post-graduate students. Table 8 below gives a summary of the general approach used by post-graduate students in Kenyatta University in gathering information.

The results show that all Ph.D students, 100 per cent (5 of 5) **frequently** attend conferences and seminars to gather information for their academic activities. This source is less used by masters students, 14 per cent (5 of 36). Although the masters students **sometimes** attend conferences and seminars, 39 per cent (14 of 36), in a number of cases, they **rarely**, 19 per cent (7 of 36) or **never**, 28 per cent (10 of 36) use this source.

Turning to subscription to relevant journals, the data reveal that the practice is low among both groups of post-graduate students. Only 40 per cent (2 of 5) Ph.D and 8 per cent (3 of 36) masters students **frequently** subscribe to journals. There are indications that about 20 per cent (1 of 5) Ph.D and 17 per cent (6 of 36) masters students **sometimes** take the initiative to subscribe to journals.

The reflection is that 17 per cent (6 of 36) masters students **rarely** subscribe to journals, while 40 per cent (2 of 5) Ph.D and 58 per cent (21 of 36) masters students **never** practise this vital academic exercise of accessing up-to-date information. The study assumed that students who subscribe to journals, especially among the masters group have sponsorship either from the university or other sponsoring agencies. Investigations carried out during this study revealed that majority of the masters students are self sponsored and can hardly afford both university fees as well as the soaring prices of journals. All Ph.D students have sponsorship. It was not possible in this study to establish the failure by some of these students to subscribe to journals.

Table 8: Use of Other Possible Sources

| Source of Material. | LEVEL OF USE | | | | | | | | | | | | | | | |
|--------------------------------------|--------------|-----|--------|----|-----------|----|------|----|--------|----|------|----|-------|----|--------|----|
| | Frequently | | | | | | | | | | | | Never | | | |
| | Ph.D | | Mastes | | Sometimes | | | | Rarely | | | | Ph.D | | Mastes | |
| | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % |
| Conference/Seminar attendance | 5 | 100 | 5 | 14 | 0 | 0 | 14 | 39 | 0 | 0 | 7 | 19 | 0 | 0 | 10 | 28 |
| Subscription to relevant journals | 2 | 40 | 3 | 8 | 1 | 20 | 6 | 17 | 0 | 0 | 6 | 17 | 2 | 40 | 21 | 58 |
| Interviews | 1 | 20 | 0 | 0 | 2 | 40 | 7 | 19 | 0 | 0 | 10 | 28 | 2 | 40 | 19 | 53 |
| Discussion with colleagues | 3 | 60 | 29 | 81 | 1 | 20 | 6 | 17 | 1 | 20 | 1 | 3 | 0 | 0 | 0 | 0 |
| Discussion with lectures/Supervisors | 4 | 80 | 28 | 78 | 0 | 0 | 7 | 19 | 1 | 20 | 0 | 0 | 0 | 0 | 1 | 3 |
| Consulting government publication | 1 | 20 | 3 | 8 | 2 | 40 | 9 | 25 | 2 | 40 | 14 | 39 | 0 | 0 | 10 | 28 |

Source: KHAYESI , 1996.

The percentage of students who use interviews **frequently** or **sometimes** is fairly low among both groups. Only 20 per cent (1 of 5) Ph.D students **frequently** use this source. Masters students indicated that 19 per cent (7 of 36) **sometimes** use interviews compared to 40 per cent (2 of 5) Ph.D students who use the same source at this level. The data reveal that 28 per cent (10 of 36) masters students **rarely** interview people as sources of information. About 40 per cent (2 of 5) Ph.D students and 53 per cent (19 of 36) masters students **never** use interviews as an alternative source of information.

Notably, a high percentage of students rely on discussions. Discussion with colleagues, 60 per cent Ph.D (3 of 5) and 81 per cent masters (29 of 36), and with lecturers, 80 per cent (4 of 5) Ph.D and 78 per cent (28 of 36) masters is **frequently** used as a channel of collecting information.

A less apparent use of government documents/publications is demonstrated by the students. The results are evenly spread over the four levels of responses indicating that there may be some barriers to the use of information from these sources.

The above analysis implies a number of things:

One, there is general lack of exposure to conferences and seminars, especially among the masters students. It is possible that those who frequently or sometimes attend the seminars, 14 per cent (5 of 36) and 39 per cent (14 of 36) mainly do so in their departments, and rarely at the national or international level. Although the study left out the establishment of the specific categories of seminars attended, the results so far are supported by Mkandawire's observations that the third generation of academicians in Africa is less exposed to regional and international academic conferences (Mkandawire, 1994). The academic staff and university administration may have to address this issue in the light of information gathering habits for this generation of scholars.

Some of the approaches would be for the departments to invite researchers from within and without to discuss their research findings with students in related departments. The Library should avail information on forthcoming conferences or seminars both locally and internationally. The results show the importance which students attach to this source of information. This implies that Library staff should be assigned to collect papers presented at these seminars, process and avail them to students. Students should be encouraged and allowed days off by departments to participate in seminars in the institution or within the country.

Secondly, there are indications that post-graduate students are faced with funding problems. The low levels of journal subscription by post-graduate students is an indicator of the financial constraints experienced by these students. Although journals are known to carry current research findings in various disciplines, their soaring prices hinder users from subscribing to them. Confirming this experience for Kenyan academic libraries and researchers, Matanji (1989:5) suggests that this helpless situation could be handled through co-operative journal acquisition programmes. Both Kenyatta University library staff and teaching faculties need to come together to help identify areas through which such co-operation can be realised for academic purposes. Post-graduate students need to take a step and subscribe at least to one or two relevant journals, either as individuals or a class, with the guidance of both academic and library staff. With the availability of publishing facilities on campus, departments should be able to start departmental, if not faculty journals through which current research findings are reported. Such a move will offer students a chance to interact with current information in their disciplines.

Evidence from the analysis proves that there is heavy use of the invisible college. The results are confirmed by similar studies by Dunn (1986) and Okocha (1994). Although carried out among undergraduate and diploma students, these studies found out that students make use of inter-personal sources to gather information. Kenyatta University post-graduate students have taken the same approach in gathering information.

The responses for less contact with government publications point to the possibilities that either there are barriers in accessing these documents, or that post-graduate students' researches are less geared towards government issues. The first assumption made here is consistent with Wandera's findings that official restriction, few copies published, pricing of government publications, regulations, change of names of ministries and departments and the like are some of the obstacles in accessing these documents (Wandera, 1991:52 - 53). Although the current study was not specifically tailored towards finding the effects of lack of information from such sources on post-graduates' work, the general picture here implies the need for an identification document from the university administration to enable students gain access to these vital documents. As suggested by Wandera, there is also need for up-to-date bibliographic control of these documents.

The results also show that post-graduate students should make efforts to consult other relevant libraries within the country. These libraries may offer the resources lacking in the university library and help the students acquire better techniques in searching information. There is also a likelihood of students getting a wider link with the information environment outside their own institution. A number of libraries in Kenya are now linked to international databases, as sources that avails current information that would be useful for any researcher.

5.2.2 OTHER PERSONAL EFFORTS USED TO RESOLVE INFORMATION NEEDS.

The study sought to find out decisions made by post-graduate students in resolving their needs for information. Question 2 in this section required respondents to indicate what they normally do when they encounter problems in their attempts to use sources so far discussed. The results are shown in Table 9 and discussed below.

Table 9: Resolving Information Needs Personally.

| Alternative Solution | LEVEL OF USE. | | | | | | | | | | | | | | | |
|---|---------------|------|---------|------|-------|------|---------|------|-----------|------|---------|------|-------|------|---------|----|
| | Very often | | | | Often | | | | Sometimes | | | | Never | | | |
| | Ph.D | | Masters | | Ph.D | | Masters | | Ph.D | | Masters | | Ph.D | | Masters | |
| Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | |
| Use Personal network on & off Kenyatta University | 5 | 100 | 21 | 58 | 0 | 0 | 7 | 19 | 0 | 0 | 6 | 17 | 0 | 0 | 2 | 6 |
| Are content to use lecture notes and resources Available At Kenyatta University | 0 | 0 | 1 | 3 | 2 | 40 | 9 | 25 | 3 | 60 | 18 | 50 | 0 | 9 | 0 | 0 |
| Seek Further help from the library staff at K.U. | 0 | 0 | 2 | 6 | 1 | 20 | 7 | 19 | 4 | 80 | 23 | 64 | 0 | 0 | 4 | 11 |
| Buy the relevant Information Source | 1 | 20 | 2 | 6 | 1 | 20 | 12 | 33 | 3 | 60 | 22 | 61 | 0 | 0 | 0 | 0 |

SOURCE: KHAYESI, 1996.

The data in Table 9 show that **very often**, post-graduate students resort to the use of personal network on and off campus, 80 per cent Ph.D (4 of 5) and 58 per cent masters (21 of 36). **Sometimes**, students are content to use lecture notes and resources available in Kenyatta University library, 60 per cent Ph.D (3 of 5) and 50 per cent masters (18 of 36). They may also go to the library staff for further assistance, 80 per cent (4 of 5) Ph.D and 64 per cent (23 of 36) masters, or buy the relevant information sources, 60 per cent Ph.D (3 of 5) and 61 per cent masters (22 of 61).

These responses are a reflection of post-graduate students' efforts to secure the right information for their work. Supporting this view, Mkandawire (1995: 9 - 12) states that although the third generation of academicians in Africa exhibits little familiarity with major theoretical debates abroad descriptive, this generation is aware of its terrible legacy, and makes opportunity for self-improvement.

The endeavours by students to search for information are also supported by a similar observations, Bozimo (1983), Edem (1993) and Dunn, 1986) that information seeking behaviour results from the recognition of some need perceived by the user.

Continued requests by students for help from library staff indicate the need for the development of post-graduate user profiles and an active subject based service in the library. Active involvement in library services by subject librarians will be an added advantage to students' search strategies. The subject specialist would be most useful to the students in assisting by instructing them on how to search for information or make use of bibliographic tools (Iwe, 1994:65; Fjallbrant, 1984:180 - 182; Bulogosi, 1990 and Musisi, 1980).

The study results further suggest that university libraries should go into networking. This service will make easy identification of existence of resources in various disciplines, and if possible availability of the resources. Interaction with a network system will also be a channel through which post-graduate students will learn and acquire skills needed in information seeking.

Academic staff (it is assumed that they are aware of the inadequacy of resources in Moi Library), should strive to give students challenging academic assignments. The staff attitudes towards the library and the efforts they make towards use of relevant and current resources by students would encourage the latter in using current resources from elsewhere. Emdad and Rogers (1978):452) studying library use at Pahlavi University, Iran, concluded that students preferred to take notes to reading books because examination questions were usually chosen from a certain text or lecture notes.

The situation seems to have changed less by mid 1990s for university students in a developing country where 60 per cent Ph.D; and 50 per cent masters indicate that **sometimes**, they are content to rely on lecture notes. Little is known about the currency of some of the notes they rely on. Mkandawire (1995:11) commending on the use of outdated literature by the third generation states that under such conditions, intellectual reflection is bound to be hampered by a sense of being engaged in what is embarrassingly demode intellectual life.

Some students indicated that they **never** use some of the approaches given. There were 6 per cent (2 of 36) masters students who never use personal network, whether on or off Kenyatta University campus. About 11 per cent (4 of 36) masters students also stated that they never seek further help from the library staff. Further investigations about this behaviour (Table 10 below) revealed that lack of funds to facilitate students' movement and acquisition of resource has **very high influence** 50 per cent (3 of 6) or **high influence**, 50 per cent (3 of 6) on this group. Funding of university education for post-graduates has already been highlighted in this study (see Chapter 4).

Table 10: Reasons Where Never is Indicated a Response as an Alternative Solution

| Reasons | Level of Magnitude | | | | | |
|--|---------------------|-------|----------------|-------|---------------|-------|
| | Very high influence | | High influence | | Low influence | |
| | Freq. | Perc. | Freq. | Perc. | Freq. | Perc. |
| My predecessors have gone through the course without the measure | 0 | 0 | 0 | 0 | 6 | 100 |
| Lack of funds to facilitate my movement and acquisition of other resources | 3 | 50 | 3 | 50 | 0 | 0 |
| Due to shortage of time | 2 | 33 | 0 | 0 | 0 | 0 |
| My lecturers/supervisors are not keen about the currency of literature I use | 0 | 0 | 0 | 0 | 6 | 100 |

SOURCE: KHAYESI, 1996

Another factor with relatively **high influence** on students' behaviour is lack of time. The results show that 33 per cent (2 of 6) students lack adequate time to gather information.

All the respondents for this question, 100 per cent (6 of 6) indicated that "couching" from their predecessors and/or lack of keen interest about the currency of literature used by lecturers have very little or **low influence** on students' decisions as indicated in question 2.

In these circumstances, post-graduate students need to be aware of proper time budgeting techniques in order to allocate adequate time for all their academic and non-academic activities.

Academic staff should plan and give post-graduate students all the semester assignments within the first two weeks of opening to enable students work out individual time schedules for their activities. Emdad and Rogers (1978:450) found out from their study of use of university libraries that the amount of time spent in a library by a student increased from 47 per cent in the first year to 72 per cent in the fifth year and beyond (mostly medical and graduate students). The time increase could largely be due to corresponding increase in academic activities as students advanced in their studies. These findings indicate the need for more time in information seeking as students go into higher levels of academic work. This explains the responses of the Kenyatta University post-graduate students' complain about shortage of time. (A time budget question was included in this study. The results are discussed at the end of this chapter).

The need for more time to seek information also indicates that post-graduate brochures for programmes in Kenyatta University should be prepared and given to students as soon as they report. There should be detailed departmental information in the brochures about the demands a student is likely to experience. In some departments, post-graduate students rarely have copies of their syllabuses and are caught unaware, especially when the demands for proposal writing and research dawn to them.

Other unquantified data on reasons given by respondents to this question were that they are influenced by availability of membership in other libraries around Nairobi. Lack of knowledge of what to do next when an information search fails, and that Kenyatta university library staff are unwilling to help, and when they do, the process takes too long are also factors that were stated to influence students' behaviour in information seeking.

The views of this minority group seem to contrast those of the rest of the students who seek further help from library staff, and the library staff themselves (Question 4a and b of Librarians' Questionnaire). About 60 per cent of the library staff indicated that they give help to students, by locating materials for them. Another 60 per cent pointed out that post-graduate students are informed/introduced to other relevant libraries and information centres by the staff. Individual help and user-education was also cited by 10 per cent of the respondents as a service that library staff extend to post-graduate students.

The above situation is a further pointer to the need for long overdue user-education programme to inform post-graduates of the resources and services available in Moi Library. At this level of learning, post-graduate students should also be free to exploit the available help from library staff. In an interview with the head of Education Unit (29th July, 1996) it was revealed that very few post-graduate students make use of staff in this area. Literature searching, the function of this area and other related areas, has so far been mainly requested by lecturers and some keen undergraduate students. The number of post-graduate students who request for this service is indeed minimal.

5.2.3 ENROLMENT IN OTHER LIBRARIES

Post-graduate students search for information on and off campus would inevitably lead them to the use of other libraries. This study endeavoured to find out efforts made by students in seeking membership in other libraries. Table 11 gives a summary of the responses.

Table 11: ENROLLMENT IN OTHER LIBRARIES

| Year of Study | YES | | | | NO | | | |
|----------------------|------|----|------|----|------|----|------|----|
| | 1 | | 2 | | 1 | | 2 | |
| Category of students | Freq | % | Freq | % | Freq | % | Freq | % |
| Ph.D | 1 | 20 | 2 | 40 | 2 | 40 | 0 | 0 |
| Masters. | 10 | 28 | 8 | 22 | 10 | 28 | 8 | 22 |

SOURCE: KHAYESI,1996.

Responses to question 4 show that slightly over half of the Ph.D students are enrolled in other libraries: 20 per cent first years (1 of 5), and 40 per cent second years (2 of 5). An interesting feature is about the enrolment among masters students: exactly half of the total population is enrolled, 28 per cent (10 of 36) first years and 22 per cent (8 of 36) second years. The other half of the population showed lack of membership in alternative libraries: 28 per cent first years (10 of 36) and 22 per cent second years (8 of 36). Among the Ph.D students, 40 per cent (2 of 5) lack membership in other libraries.

The findings further confirm the students' perceptions of the holdings in their library insufficient and outdated, and their subsequent need for alternative information outlets.

There are signs that post-graduate students, with or without the assistance from library staff, have a determination to have their information needs met elsewhere. These findings concur with those of Bozimo (1983:12) in which it was established that Nigerian university students turned to other libraries when their own university libraries failed to meet the students' information needs.

In spite of the preceding observations, this study established that more than half of the total number of post-graduate population in Kenyatta University lacks membership in other libraries. It is possible that a number of the libraries in which students seek membership have introduced a fee for services rendered. This could be the underlying cause for lack of

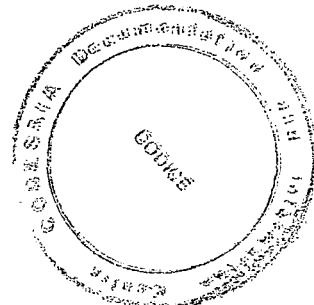
Here, unfortunately, was a situation in which one was left wondering how this group of students go about gathering information.

Table 12 is a summary of other factors that this group regards necessary in their information seeking exercise.

Table 12: Gathering of information for no Responses.

| Means of Gathering Information | LEVEL OF IMPORTANCE. | | | | | | | |
|--|----------------------|----|-----------|----|------------------|----|----------------------|----|
| | Very important | | Important | | Fairly Important | | Not important at all | |
| | Freq. | % | Freq. | % | Freq. | % | Freq. | % |
| Continue to rely on resources found in Library & Lecture notes | 2 | 10 | 6 | 30 | 5 | 25 | 7 | 35 |
| Go to other libraries &/or information & use their facilities / resources. | 10 | 50 | 5 | 25 | 3 | 15 | 2 | 10 |
| Ask patrons of other libraries to borrow materials for me. | 1 | 5 | 1 | 5 | 5 | 25 | 12 | 60 |
| Photocopy the necessary information fro text in other libraries. | 5 | 25 | 4 | 20 | 5 | 25 | 5 | 25 |
| Rely on other personal collections. | 4 | 20 | 4 | 20 | 4 | 20 | 7 | 35 |

SOURCE : KHAYESI, 1996.



Responses indicate that there are varying levels of dependence on lecture notes: 10 per cent (2 of 20) regard it as **very important**, 30 per cent (6 of 20) see this as **important** while 25 per cent (5 of 20) and 35 per cent (7 of 20) categorize this alternative approach as **fairly important** and **not important at all**, respectively.

An impressive 50 per cent (10 of 20) and 25 per cent (5 of 20) consider it **very important** and **important** respectively, going to other libraries and information centres to make use of the available resources and other information facilities. Only 15 per cent (3 of 20) regard this step in information seeking as **fairly important**. Another 10 per cent (2 of 20) seem to attach **less importance** to this method.

Asking patrons of other libraries to borrow material for students is not regarded highly by the students; only 5 per cent (1 of 20) ranked it **very important** and **important** in both cases. Some students ranked it as a **fairly important** approach 25 per cent (5 of 20) while the majority, 60 per cent (12 of 20) considered it **not important** at all.

Responses for photocopying are almost evenly spread among the students. While only 20 per cent (4 of 20) students ranked this as an **important** service they use, responses show that 25 per cent (5 of 20) felt that the approach is either **very important**, **fairly important** or **not important** at all to them.

Relying on personal collection is an approach that only 35 per cent (7 of 20) students would hesitate to use; it was ranked **not important** at all. However, the even spread of responses among masters students: 20 per cent (4 of 20), for **very important**, **important** and, **fairly important** indicate that it is an approach that works well with some of the students.

The analysis shows that whether students are enrolled as members of another library or not, they continue to use other libraries as a source for information. This further points to the need for networks in academic libraries in Kenya to help students get to the most appropriate libraries or make use of inter-library loans. Ahmad (1984:170 - 171) Ndegwa (1989) and Nzioki (1990) recommend this practice for universities especially those in developing countries.

It is a practice that is universally accepted as a means of augmenting the resources found in one library.

So far, it is known that Kenyatta University is on an inter-library loan network with sister academic libraries like the university of Nairobi, Moi University and Egerton University. This laudable association however, seems to offer little satisfaction for post-graduate students seeking information. Unquantified data revealed that the problems of this service are failure to meet users' deadlines on one hand, and lack of funds or transport for staff going to collect the required materials on the other hand.

Post-graduate students gain very little experience in using this service. Students prefer to go for the materials, especially from the University of Nairobi, on their own. It is assumed that in the process of collecting materials personally, students will be able to find and make use of other related materials than if they relied on the current inter-library loan system.

Use of reprographic services in university libraries is a handy solution to students in areas where there are shortages of resources. Efforts by students to photocopy relevant topics from texts serve two purposes: one, students end up making their own collections of relevant information, and as long as libraries always keep this service active, the cost of buying information by students is reduced. Reprographic service maybe a cheaper method for students to get texts which they are unable to get in original form, for one reason or the other. Moi Library charges three shillings per page; making students opt for services from the university's shopping centre or Nairobi town where charges are as low as two shillings and fifty cents or one shilling and fifty cents. Reduced rates in reprographic services may raise the number of students in need of the service from Moi Library. In this era of cost-sharing in university education, post-graduate students will seek out services offered at fair charges. Moi Library should also automate its reprographic services and provide

5.2.4 STUDENTS' AWARENESS OF OTHER LIBRARIES

The study sought to ascertain the methods of obtaining information by students who had enrolment in other libraries.

The results are presented in Table 13.

Table 13: Awareness of Other Libraries.

| Means of Awareness | LEVEL OF IMPORTANCE. | | | | | | | | | | | | | | | |
|--|----------------------|----|---------|----|-----------|----|---------|----|------------------|----|---------|---|----------------------|----|---------|----|
| | Very important | | | | Important | | | | Fairly Important | | | | Not important at all | | | |
| | Ph.D | | Masters | | Ph.D | | Masters | | Ph.D | | Masters | | Ph.D | | Masters | |
| | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % |
| Personal initiative/ Network. | 1 | 20 | 12 | 33 | 2 | 40 | 5 | 14 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 |
| Library staff of Kenyatta University. | 0 | 0 | 4 | 11 | 0 | 0 | 2 | 6 | 1 | 20 | 3 | 8 | 1 | 20 | 8 | 22 |
| Had prior knowledge about the libraries/information centres. | 1 | 20 | 5 | 14 | 1 | 20 | 8 | 22 | 1 | 20 | 3 | 8 | 0 | 0 | 1 | 3 |
| By sheer coincidence as I sought information. | 1 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 20 | 2 | 6 | 1 | 20 | 7 | 19 |

SOURCE: KHAYESI, 1996.

Results from the study show that post-graduate students attach a lot of importance to personal initiatives in identifying and enrolling in alternative libraries: **very important**, Ph.D, 33 per cent (1 of 3), masters, 66 per cent (12 of 18). Although library staff had earlier stated that they gave assistance to post-graduate students, the students' responses contradict what the staff said. Students regard such efforts by staff less important: **not important at all**, Ph.D, 33 per cent (1 of 3) and masters, 44 per cent (8 of 18). Prior knowledge about the libraries/information centres was held in high regard by the students: **very important**, 33 per cent Ph.D (1 of 3) and 42 per cent masters (5 of 18); **important**, 33 per cent Ph.D (1 of 3) and 44 per cent masters (8 of 18). Sheer coincidence fails as means of creating awareness of other libraries among post-graduate students; **not important at all**, 33 per cent Ph.D (1 of 3) and 39 per cent (7 masters (7 of 18)). The results indicate deliberate efforts by post-graduate students in identifying and enrolling in libraries other than the institutional one in order to meet their information needs.

Secondly, the results suggest that the role played by Kenyatta University library staff in creating awareness of other libraries/information centres among post-graduates is minimal. This confirms lack of active user education programmes geared towards post-graduates as a user group in Kenyatta University. Library staff who responded to the questionnaire seemed to be less sure of post-graduates' enrolment in other libraries. Only 40 per cent of the staff were sure that enrolment by post-graduates in alternative libraries was a fairly dominant practice.

It is also apparent from the data, as already observed in Chapter 4 in this study that the library staff lack proper and adequate information about the post-graduates' academic characteristics in order to guide them to appropriate alternative libraries.

The data reveal that while about half of the post-graduate population are officially enrolled in alternative libraries, the other half continue to use libraries and information centres outside the institutional one despite their failure to get official membership. It is hoped that the results will reveal to the library staff, as well as post-graduates the kind of practices students use in collecting information from elsewhere.

Post-graduate students should be encouraged to seek official membership in other libraries to guarantee them full use of resources and services found there.

The data also imply the need for close working relationship between Moi Library staff and post-graduates in Kenyatta University. Post-graduate students should provide details of their information needs to library staff who may help them to identify alternative libraries and information centres which the students may not be aware of.

Students and library staff who maybe aware of other relevant information centres around and outside Nairobi should avail such information to the library management, who will make known such information facilities to other students in need of information that is not available in Moi Library.

Where possible, the library management should give assistance to students wishing to enrol in such libraries and information centres. This could be in form of providing information about the location of the library and an official letter introducing the intending users to the management of the new library. Post-graduate students should make efforts to seek this assistance from Moi library management.

5.2.5 FACTORS INFLUENCING STUDENTS' SEARCH FOR INFORMATION BOTH ON AND OFF KENYATTA UNIVERSITY CAMPUS

Certain factors were also found to have influence on decisions by students to search for information, both on and off Kenyatta university campus.

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Table 14: Factors influencing students' Search for Information both on and off K.U. Campus.

| Factor | Level of importance. | | | | | | | | | | | |
|--|----------------------|----|---------|----|------------|----|---------|----|----------------------|----|---------|----|
| | Very important. | | | | Important. | | | | Not important at all | | | |
| | Ph.D | | Masters | | Ph.D | | Masters | | Ph.D | | Masters | |
| | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % |
| My financial ability to secure/ purchase the information. | 2 | 40 | 24 | 67 | 1 | 20 | 9 | 25 | 2 | 40 | 3 | 8 |
| Availability of current & relevant resources in the library/ information centre. | 4 | 80 | 25 | 69 | 1 | 20 | 9 | 25 | 0 | 0 | 2 | 6 |
| The distance I cover to secure the information. | 1 | 20 | 8 | 22 | 2 | 40 | 17 | 47 | 2 | 40 | 11 | 31 |
| The quality of the service provided by the library. | 1 | 20 | 15 | 42 | 4 | 80 | 19 | 53 | 0 | 0 | 2 | 6 |
| Availability of the information among lecturers and colleagues. | 1 | 20 | 10 | 28 | 3 | 60 | 23 | 64 | 1 | 20 | 3 | 8 |
| Up - to - dateness of the materials. | 4 | 80 | 24 | 67 | 1 | 20 | 11 | 31 | 0 | 0 | 1 | 3 |

SOURCE: KHAYESI, 1996.

In Table 14, these factors are presented with the following results:

Availability of current and relevant information sources in the libraries/information centres is a **very important** factor among both Ph.D, 80 per cent (4 of 5) and masters, 69 per cent (25 of 36) students. Students financial ability to secure/purchase the information is equally **very important**, 40 per cent Ph.D (2 of 5) and 67 per cent masters (24 of 36).

Next in rank is the alternative source through which students can access the information: availability of the information among lecturers and colleagues, which was rated as an **important** factor, 60 per cent Ph.D (3 of 5) and 64 per cent masters (23 of 36). At the same level of importance is the quality of services provided by a library, 80 per cent Ph.D (4 of 5) and 53 per cent masters, (19 of 36).

The results show that the distance a post-graduate student may have to cover in order to secure relevant information could have some influence on how students gather information. Apart from the research time when most students go outside Nairobi to collect data, the rest of their study time is spent in and around Nairobi where most libraries: public, academic, special and private are situated. It is possible that post-graduate students have no strenuous experiences in gathering information from centres hundreds of kilometres away from their study station. However, if information networks are established between Moi Library and other libraries, students will be saved the trouble of travelling long distances to gather information.

Efforts by post-graduate students to acquire current and relevant literature are reaffirmed by responses to this question. The results go along with those of Osiobe (1986:760), Bozimo (1983:12a) and Edem (1993:170), in which they established that their respondents: researchers, university students and journalists, respectively, preferred the use of current literature for their work, and sought to find it elsewhere. At this level, post-graduate students are researchers in their own capacities and would

The data prove that the use of informal sources (invisible college) as practised elsewhere is a very important factor that determines the students' patterns of collecting information. Dunn (1986), Osiobe (1986) and Okocha (1994) found this to be a common practice among students and researchers.

A close working relationship among library acquisitions staff and academic staff becomes a necessity according to the results in this analysis. Academic staff, designers of academic programmes, would be useful in providing advice in the selection of resources relevant for studies. Although this is the practice by Moi Library, the head of the acquisitions section stated that acquisition of all recommended sources is not possible due to limited funds. However, if and when the library's objectives expressed in the collection development policy are realised through various means of acquisitions; i.e buying, gifts and donations, students are relieved of flights to other libraries.

5.2.6 POSSIBLE EFFECTS OF UNAVAILABILITY OF CURRENT AND RELEVANT INFORMATION

Respondents were required to rate the possible effects of lack of current and relevant information on their work generally. The results collected show that lack of current and relevant information could have a **very high** effect on the kind of work students produce i.e it may lead to the presentation of sub-standard work in certain areas of students' academic work, 60 per cent Ph.D, (3 of 5) and 53 per cent masters, (19 of 36). Another area where the effects are felt to be **very high** is the cost of looking for resources. About 40 per cent Ph.D (2 of 5) and 61 per cent (22 of 36) masters students indicated that lack of current and relevant information increases costs in looking for resources that have the required information. The issue of costs/funding of university reduction has been raised in Chapter Four of this study.

Table 15: Effects of Unavailability of Current and Relevant Information.

| Nature of effect | Level of effect. | | | | | | | | | | | | | | | |
|---|------------------|----|---------|----|------|----|---------|----|-------------|----|---------|----|-----------------|----|---------|----|
| | Very high | | | | High | | | | Fairly high | | | | Not high at all | | | |
| | Ph.D | | Masters | | Ph.D | | Masters | | Ph.D | | Masters | | Ph.D | | Masters | |
| | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % |
| Presentation of Sub-standard work. | 3 | 60 | 19 | 53 | 1 | 20 | 8 | 22 | 0 | 0 | 5 | 14 | 1 | 20 | 4 | 11 |
| Increased cost in looking for resources | 2 | 40 | 22 | 61 | 2 | 40 | 13 | 36 | 1 | 20 | 1 | 3 | 0 | 0 | 0 | 0 |
| Duplication of research | 1 | 20 | 6 | 17 | 2 | 40 | 12 | 33 | 1 | 20 | 8 | 22 | 1 | 20 | 10 | 28 |
| Delay in completion of my course. | 1 | 20 | 12 | 33 | 3 | 60 | 9 | 25 | 1 | 20 | 9 | 25 | 1 | 20 | 6 | 17 |

SOURCE: KHAYESI, 1996.

An effect that students felt is **high** due to unavailability of current and relevant information is delay in completion of courses, especially among the Ph.D candidates, 60 per cent (3 of 5). Among the masters students, the highest responses about the same effect was 36 per cent (13 of 36).

Except for responses about duplication of research, responses from students indicated that some of the effects could be said to be **fairly high** or **not high at all**. Results about duplication of research as a possible effect due to lack of current and relevant information are almost evenly distributed among the levels of effects. This indicates that students maybe or not be very sure of the magnitude of this effect on their work. Kenyatta University has a rigorous procedure through which proposals by students go before they are accepted as researchable topics in various departments. A research topic must first be presented and accepted at the department before one starts to write a proposal. The proposal is then presented, approved of, and corrections made before preparations are made for the same at the faculty level. Representatives from different departments within the faculty, and sometimes from other faculties are invited to attend proposal presentations, make suggestions for correction(s) and either accept or reject the proposal on academic/research grounds. This eliminates high possibilities of duplicating researches.

Going back to the possibilities of presenting sub-standard work, this can be understood in the light of observations made by Mkandawire (1995:11) about poor exposure to information sources by Africa's third generation of academicians. Work by students could be sub-standard if students fail to refer to content and new techniques that are found useful in their disciplines. Sayer's and Wood (1990:13) concluded from their study of the use and value of Msc Information Studies dissertations in the University of Sheffield that these sources have a strong impact to students, supervisors and external organisations. Although there was lack of quantified data, these researchers established that some of the dissertations and projects had led to the development of new lines of research in the department, take up of new techniques or methods and resulted in new products (for example, software) or increased the efficiency of organisations, services or systems.

The latest and relevant publications, normally in form of dissertations, journal articles, abstracts and indexes can not be ruled out as positive contributors to works of high standards in research. The above observations and research results, although supporting the students' response about fears of presenting sub-standard work also explain the 'quiet struggle' (Sturges:1985) by students to look for current and relevant resources, both on and off Kenyatta University campus, and to avoid duplicating research topics. Efforts in collecting up to date information by the students indicate their awareness of credible scholarship that helps to refute what Mkandawire (1995:11) sums up as the almost routine rejection by international journals of articles written by these scholars on the grounds that their bibliographical references are hopelessly dated.

According to Kenyatta University, (Kenyatta University Calender, 1995/96:79) a masters course should take between eighteen months to two years depending on the mode of study i.e coursework, examination and thesis or coursework, examination and project. The data show that some of the delays experienced by post-graduate students in this institution have been caused, among others, by lack of relevant and current information for their work. It is possible that as students spend time looking up or waiting for relevant resources, the time officially allocated for their studies expires before a course is completed. When he met the post-graduate students, on February 15, 1996 the Vice-Chancellor of Kenyatta University, Prof. George Eshiwani confirmed that post-graduate students at masters level are expected to stay not longer than eighteen academic months in the institution. The data reveal that some post-graduate students take longer periods in their programmes, contributing to what are now humorously known among students as "third" and "fourth" year masters students in some of the departments. In a study by Okocha (1994:162) about the role of information and academic performance of college students, it was established that the mean accomplishment rates of projects for students exposed to, and who relied on current literature were 4.2 days, while the control group in the study took a longer period, completing the work in 18.2 days. Although the study was carried out among diploma students, the findings concur with the results shown in Table 15 about possible, effects of lack of current and relevant information on completion of academic programmes by Kenyatta University post-graduate students.

The data further indicate that some post-graduate students spend a lot of time on the exercise collecting information.

Unquantified data show that other effects due to lack of relevant and current information were total failure to carry out intended research topics/projects, as well as taking little participation and contribution in seminars. Some students felt that apart from feeling frustrated and abandoning study topics altogether, intellectual/full academic growth in one's field may be hampered by lack of current and relevant information.

Moi Library management should help students get current literature by introducing them to libraries and information centres that are up to date in their acquisition. This suggestion has already been made in this chapter.

Efforts by students to acquire current literature should be supported by academic staff who maybe in possession of some of the literature, or are aware of places where students could acquire the literature from.

5.2.7 TIME LOST DUE TO LACK OF CURRENT AND RELEVANT INFORMATION

In response to Question 9: "How much time would you estimate is lost in your study period due to lack of relevant information?," most of the respondents indicated that they could not estimate the loss of time since they were still pursuing studies. Only one (1) Ph.D and twelve (12) masters students, less than half the population, responded to this question. However, all those who responded indicated that estimated time could range from six months to one year.

The responses for Question 9 were so low that the following observations are made in relation to the results:

- (i) The question should have been left out for this study.

(ii) Contacts should be made immediately with post-graduates who have gone through Kenyatta University in the last two to three years, and a study on time lost due to lack of relevant information be carried out. The findings of such a study would help verify complaints by students that a lot of time is lost during their academic programmes due to unavailability of current and relevant information.

5.2.8 Rating of Personal Information Seeking Skills

In a pilot study to this project, library staff (80 per cent) stated that some post-graduate students at Kenyatta University lack the relevant skills in searching for resources/information. It was therefore found necessary to include a general question asking post-graduate students to assess and rate their information seeking skills under four categories: **Very high, High, Average or Low.**

Table 16: Rating of Personal information Seeking Skills.

| Category of Students | Year of Study | Level of skill | | | | | | | |
|----------------------|---------------|----------------|----|------|----|---------|----|------|---|
| | | Very high | | High | | Average | | Low | |
| | | Freq | % | Freq | % | Freq | % | Freq | % |
| Ph.D | 1 | 1 | 20 | 2 | 40 | 0 | 0 | 0 | 0 |
| Ph.D | 2 | 0 | 0 | 2 | 40 | 0 | 0 | 0 | 0 |
| Masters | 1 | 1 | 3 | 8 | 22 | 11 | 31 | 0 | 0 |
| Masters | 2 | 1 | 3 | 9 | 25 | 6 | 17 | 0 | 0 |

SOURCE: KHAYESI, 1996.

The data collected show that students possess skills at varying levels. All Ph.D candidates possess either **Very high** or **High** information seeking skills. As shown in Table 16, first year Ph.D students rated themselves **Very high**, 20 per cent (1 of 5) and **High**, 40 per cent. Among the second year Ph.D students, 40 per cent (2 of 5) rated themselves **High**. All Ph.D students possess **Average** or **Low** information seeking skills.

Results for masters students ranged between **Average** and **Very high**. **Very high** skills were indicated by masters, first year, 3 per cent (1 of 36) and second year, 3 per cent (1 of 36). **High** skills among masters were indicated as follows: first year, 22 per cent (9 of 36) and second year, 25 per cent (9 of 36).

At the same levels of masters, there were also indications of possessing **average** skills: first year, 11(31 per cent) and second year, 6(17 per cent) of the population. The **average** group was targeted for one more question (Table 17) to indicate the kind of help they need.

Specific information seeking skills were not the major concern in this study. However, the data obtained indicate that all students do possess some information seeking skills. Lack of **very high** or **high** information seeking skills is detected in about half of the total population of masters students, especially first years with 11(31 per cent) rating their skills **average**.

In the final study, all library staff who responded, (100 per cent, Question 6 - Librarians' Questionnaire), rated the post-graduate students as average users of the library. It should be noted here that post-graduate students' assessment of the library resources and services and their subsequent decision to get information could be a factor contributing to this observation by the library staff. It is also possible that the varying levels at which students possess information seeking skills contribute to the staff assessment of this user group.

The same library staff stated that among the problems faced by postgraduates in locating resources (Question 2, Librarians' Questionnaire) are first and foremost, inability by students to consult or seek help from the library staff (80 per cent).

Other problems are inability by the students to locate materials using quick reference sources (60 per cent) and take a systematic library search (60 per cent). Most of the staff (80 per cent - Question 3, Librarian' Questionnaire) stated that a major cause of the above problems could be as a result of post-graduate students having been poor users of the library while in undergraduate courses. Yet one other reason given by staff (60 per cent) is lack of user-education, hence information seeking skills at post-graduate level.

There is evidence that Kenyatta University Library started offering a library user-education in 1976 (Nganga, 1984:16). Although this service has been offered at different levels of academic programmes in the institution, reports indicate that the service is given to undergraduates during the orientation programme that lasts one week, and as a unit in Communication Skills Department since 1990, when the of 8:4:4 system of education was introduced in Kenya (Kenyatta University Calendar, 1996/96).

The results reveal the following:

- (i) All Ph.D candidates, may be through wide exposure in information seeking, possess relevant skills and would therefore be regarded as confident users of a library.
- (ii) About half of the masters students, especially first years, seem to lack most of the relevant information seeking skills which would make them better and confident users of a library/information system.
- (iii) There is need for user-education at masters level for students in Kenyatta University. Kenyatta University library management and the academic staff need to address this issue as they draw up library and academic programs for masters students.

The observations raised here about information skills are consistent with the observations of Fjallbrant (1984:12-23) that the earlier a person acquires library and information skills, the better. A study by Wiggins and Wahlquist (1985:293-297) confirms the importance of possessing the relevant information seeking skills by students. In their study, they found out that freshmen in the English Faculty, Brigham Young University, presented improved research papers after a background research strategy unit was added to their course. The students were able to find more quickly a topic where they had no idea of one, and better research materials were more quickly and efficiently found. Although the study was based on undergraduates' experiences, the results confirm the present need for user-education in order to equip post-graduate students at Kenyatta University with relevant information skills which would contribute positively to their information seeking behaviour.

5.2.9 Help Needed by Students to Improve Upon Their Information Seeking Skills

The seventeen masters students with **Low** or **Average** information seeking skills were asked to indicate the kind of help they needed in order to improve upon their information seeking patterns.

Table 17 shows that students would appreciate the introduction of automated services in Kenyatta University. This is regarded as **very important** assistance, 88 per cent (15 of 17) followed by the need for better organisation and availability of library materials, 82 per cent (14 of 17). A number of students, 47 per cent (8 of 17) were of the view that more individual help from Kenyatta University library staff would help improve their skills.

An interesting observation is the responses for the need for library user-education before starting on postgraduate courses. The responses are evenly spread among **"very important"**, **"important"** and **"fairly important"**. Only 6 per cent (2 of 17) of the students stated that this help would not be **"important at all"**.

Table 17: Help Needed by Students to Improve Their Information Seeking Skills.

| Type of help. | Level of importance | | | | | | | | | | | | | | | |
|--|---------------------|---|---------|----|-----------|---|---------|----|------------------|---|---------|----|----------------------|---|---------|----|
| | Very important | | | | Important | | | | Fairly important | | | | Not Important at all | | | |
| | Ph.D | | Masters | | Ph.D | | Masters | | Ph.D | | Masters | | Ph.D | | Masters | |
| | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % |
| Be given library user-education before starting on postgraduate course | 0 | 0 | 5 | 29 | 0 | 0 | 5 | 29 | 0 | 0 | 5 | 29 | 0 | 0 | 2 | 12 |
| Better organization and availability of library materials. | 0 | 0 | 14 | 82 | 0 | 0 | 3 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| More individual help from the Kenyatta University library staff | 0 | 0 | 8 | 47 | 0 | 0 | 5 | 29 | 0 | 0 | 3 | 18 | 0 | 0 | 1 | 6 |
| Introduction of automated services in Kenyatta University library. | 0 | 0 | 15 | 88 | 0 | 0 | 3 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

SOURCE : KHAYESI, 1996.

The results imply that in their search for information elsewhere, students have encountered automated library services that they (students) might not have been able to use in retrieving information. Kenyatta University post-graduate students have been known to visit special and private libraries the like American Cultural Centre, The British Council, Unicef, Unesco, ILRI, and ICRAF among others in and around Nairobi. All these organisations have automated library services at different levels. One such level is the catalogue to which all information seekers turn to confirm the availability of resources in a library collection. The request for automated services by students confirms their likely encounter with such facilities. Thuku (1992) gave some suggestions about the need to automate the Kenyatta university library services by writing a dBase programme for the library.

Other implications are that at some stage of using their institutional library, students find the resources disorganised, making it difficult for students to access materials. This study was not geared towards examining in detail the library seasons when this does happen. However, there are possibilities of this occurrence during peak hours, especially when continuous assessment tests are about to be taken by undergraduate students, or term papers have to be attended to. Shelving of materials in Kenyatta University library takes place only once in a day, mornings only. Due to shortage of staff (reason given by 100 per cent library staff used in the study (Question 8(b)(i) as one of the causes of poor library services), it is not possible for the library to engage in continuous shelving.

Iwe (1994:63) points out that there has to be proper organisation of library materials before there can be adequate accessibility. In the communication about responding to information needs of Nigeria's university communities in the 1990s, Iwe further notes that the University has been undergoing steady growth in all sectors: departments, student enrolments and library stock. Such growth does have effects on organisation and accessibility of resources to meet users' needs.

In their study on user-education given in universities, polytechnic and colleges, Cowley and Hammond (1987:17) state that user-education ideally must be integrated with both the curriculum and the library's user services if it should succeed.

The greatest relevance of this service lies in the contribution it makes towards the support and success of academic programmes undertaken by students. Kenyatta University post-graduate students in possession of inadequate information seeking skills admittedly want help from the library to assist them in their search for information. It can only be hoped that given this help, post-graduate students will improve upon their present information seeking patterns.

5.2.10 ACQUISITION OF INFORMATION SEEKING SKILLS

Respondents who ranked themselves 'high' or 'very high' in the possession of information seeking skills were asked to indicate how they acquired the skills.

Table 18 gives a summary of the importance of the sources of the skills as perceived by respondents. Frequent use of libraries or information centres' by students was ranked **very important** 71 per cent of the respondents. Seeking for help personally from library staff was **regarded an important** approach by 42 per cent of the respondents. Library user-education given in undergraduate courses was categorized as **fairly important**, by 54 per cent of the respondents. Response for lectures given in class (mostly during the research methods unit) was ranked as **not important at all** 50 per cent of the respondents students. The data reveal the following:

- (i) Students in possession of relatively "high" or "very high" information skills have acquired them through personal initiatives and the continued use of other libraries.
- (ii) The level of library-user education currently given either in undergraduate courses or post-graduate in Kenyatta University has so far made minimal contributions in equipping students with relevant information seeking skills. Making his recommendations about user-education for college students, Okocha (1994:102) rightfully observes that this essential component of higher education curricular has not been adequately analyzed.

Table 18: Acquisition of Information Seeking Skills for High and Very High Responses.

| Source of skill | Category of students and the level of importance of sources | | | | | | | |
|--|---|----|-----------|----|------------------|----|----------------------|----|
| | Very Important | | Important | | Fairly Important | | Not Important at all | |
| | Freq | % | Freq | % | Freq | % | Freq | % |
| Through library user-education while in undergraduate course | 3 | 13 | 7 | 29 | 13 | 54 | 1 | 4 |
| Through frequent use of libraries and information centres | 17 | 71 | 5 | 21 | 0 | 0 | 1 | 4 |
| Through seeking for help personally from library staff. | 1 | 4 | 10 | 42 | 6 | 25 | 6 | 25 |
| Through lectures given in class | 2 | 8 | 5 | 21 | 4 | 17 | 12 | 50 |

SOURCE: KHAYESI, 1996.

The concept of user-education has received strong support; especially in polytechnics as opposed to universities where academic administrators have shown use eagerness to time-table for such courses at post-graduate level (Cowley and Hammond, 1987).

5.1.11 TIME SPENT IN SEARCH FOR INFORMATION BY STUDENTS

Time allocation for daily activities influences the amount of time one may give to an activity like information searching among other issues. Over a period of time, the number of hours one allocates to an activity reflect the importance placed on the activity.

In the time budget question used in this study, all activities undertaken by a respondent right from the time she/he wakes up to the time of going to bed were recorded in detail on forms provided in the questionnaire. Respondents recorded only a week's activities, ranging from domestic, leisure, information seeking, religious and other academic activities (See appendix A, B and C).

FIGURE 4: AVERAGE TIME SPENT BY STUDENTS SEEKING FOR INFORMATION.

Hours per Week

Hours per Day.

Data were extracted for only information seeking activities. Figure 4 shows the average time spent by each student in looking for information. The time spent directly on information seeking activities by Ph.D students averaged 37 hours per week, 5.3 hours per day. Among the masters students, the average time is 50 hours per week, 7.1 hours per day. Information seeking activities included travelling to look for information, reading in libraries/information centres, discussing with colleagues and lecturers, buying materials, attending workshops/seminars, reading personal notes and attending lectures. There were variations in time allocation among various respondents.

The results analysed therefore, suggest that post-graduate students have many activities to attend to besides gathering information relevant for their academic work. The allocation of an average of 7.1 hours per day by masters students and 5.3 hours by Ph.D students would indicate the need for possession of high and relevant information seeking skills by the students on one hand, and better organisation, availability of up-to-date literature and effective services by a library on the other hand, if one should retrieve information within a short period. For illustration purposes, snapshots of daily activities by both masters and Ph.D students are provided in appendix A,B and C.

In seeking to establish the users of university libraries in Kenya, Muruli (1990:56) found that post-graduate students were among them. Muruli paid less attention to the specific number of hours spent by students in gathering information. The study concluded that the frequency of using a university library by students was three to five times a week. Students mainly used the library as a place of study. The results in this study reveal that if left to tend for himself, a user cannot escape from having to give an appreciable amount of his time to:

- (a) finding out the most appropriate services to use for any specific purpose,
- (b) compiling and modifying search questions or interest profiles,
- (c) assessing the output from various sources and selecting relevant items which should be acquired, and

- (d) examining the documents supplied by the library and extracting pertinent information from them.

The data in Figure 4 and the observations made by these studies point to the need for conscious time allocation in any information seeking activity by post-graduate students. The results also confirm that post-graduate students do spend a reasonable amount of time seeking for information, be it on or off Kenyatta University campus. That the students regard time as a crucial element in information seeking is seen through their daily schedules (see Appendix A - C). Some students indicated that they wake up as early as four a.m. in order to start on their academic activities like reading to gather relevant information. The schedules drawn by respondents also show that information seeking behaviour of post-graduate students is also influenced by activities other than academic ones alone. It becomes necessary for a student surrounded by both academic and non-academic activities to be equipped with the relevant and up-to-date information seeking skills in order to save and use his time appropriately. This will be a sure tool for one to search for information with a more focused approach. Information seeking skills must be introduced and reinforced across the curriculum to help students create planned activities within the time they have, and develop better information seeking practices (Okocha, 1994; Cowley and Hammod, 1987 and Bulogosi, 1990).

Table 19 gives a general summary of views by post-graduate students about areas that their institutional library should improve upon. These views show the importance which post-graduate students attach to these areas as factors that influence their information seeking characteristics.

5.2.12 Table 19: PRIORITY AREAS FOR IMPROVEMENT

| Suggested Areas | Category of students and the level of importance of each area. | | | | | | | | | | | |
|--|--|-----|---------|----|-----------|----|---------|----|----------------------|----|---------|----|
| | Very Important | | | | Important | | | | Not Important at all | | | |
| | Ph.D | | Masters | | Ph.D | | Masters | | Ph.D | | Masters | |
| | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % |
| Involve post-graduate students in the selection of resources | 4 | 80 | 23 | 64 | 0 | 0 | 11 | 31 | 1 | 20 | 3 | 8 |
| Establish a channel of communication among students, library and academic staff and university administration. | 5 | 100 | 28 | 78 | 0 | 0 | 9 | 25 | 0 | 0 | 1 | 3 |
| Acquisition of current and relevant resources by K.U. Library. | 5 | 100 | 32 | 89 | 0 | 0 | 3 | 8 | 0 | 0 | 1 | 3 |
| Establishment of a post-graduate library at Kenyatta University | 2 | 40 | 21 | 58 | 1 | 20 | 5 | 14 | 2 | 40 | 8 | 22 |
| Establishment of a network between K.U. library and other libraries in and outside Kenya. | 5 | 100 | 30 | 83 | 0 | 0 | 4 | 11 | 0 | 0 | 1 | 3 |

SOURCE: KHAYESI, 1996.

The general feelings of students were that all areas raised in the study deserve priority attention either by the library or university administration. The greatest concern of the respondents is in the area of acquisitions: that the library should acquire current and relevant literature is a **Very important** factor as expressed by, 100 per cent (5 of 5) Ph.D and 89 per cent (32 of 36) masters students. Under the same level of assessment came the following responses by students: the establishment of a network between Kenyatta University library and other libraries in and outside Kenya, 100 per cent (5 of 5) Ph.D, and 83 per cent (30 of 36) masters students; the need for a channel of communication among students, library and academic staff, and university administration, 100 per cent (5 of 5) Ph.D, 78 per cent (28 of 36) masters responses. Involvement of post-graduate students in the selection of resources ranked high by, 80 per cent (4 of 5) Ph.D and 64 per cent (23 of 36) masters students. The much talked about plan to establish a post-graduate and academic staff library at Kenyatta University was ranked **very important** by 40 per cent (2 of 5) Ph.D and 58 per cent (21 of 36) masters students.

The frequencies and percentages of responses for the same suggestions under the levels **important** and/or **not important at all** fell between zero (0) and 40 per cent.

Implications of these data are that the currently established channels of communication between post-graduate students on one hand, library, academic staff and university administration on the other hand are ineffective in meeting the information needs of the students. The present Post-graduate Board is one such channel that students have been unable to use in expressing their information needs.

Secondly, the establishment of a separate academic staff and post-graduate library in Kenyatta University is likely to be faced with similar problems like those experienced by the current main library (Waithaka, 1994). Waithaka pointed out that researchers (post-graduates and academic staff) using Moi library are faced with problems like lack of current literature and poor inter-library loan system. This kind of information environment in which post-graduate students work would therefore influence their information seeking patterns. Students are forced to look for alternative information sources if they should produce quality work.

Unquantified data from respondents suggested the need for improvement in the following areas of Moi Library:

- (i) **User-staff relationship:** There seems to be a pretence about the existence of a healthy relationship between some post-graduate students and the library staff. This may explain reluctance by some students to seek further help from the library staff in seeking information.
- (ii) **Shelving:** Some students stated that mis-shelving in some subject areas discouraged them from visiting the library or the shelves.
- (iii) **Establishment of departmental libraries and availability of current literature for those already established:** More departmental libraries should be established and links made with universities both in and outside the country to support libraries. They cited English Language Resource Centre and Home Economics Library so far as resourceful libraries on the compound.
- (iv) **Better literature search facilities:** The current manual system causes delays and discouragement among users. Moi Library should use modern technology in information retrieval to enable users save time spent on searching.

- (v) Africana section of the library should be open up to the time the library closes on all working days. This section has been known to close at five in the evening during week days and on Saturdays. Students who need services here after classes in the evening and over the weekend (Saturday) are often forced to make with what is available on the open shelves or look for resources elsewhere.

The preceding analysis thus rejects the guiding premise of this chapter: "there is no relationship between post-graduate students' academic characteristics and their information seeking characteristics." The data provides evidence that the academic characteristics which students possess are at the root of information seeking characteristics of the students. However the analysis partly confirms the premise. This study has established that the information environment which the students encounter at Kenyatta University also determines the information seeking patterns of the students. Thus the academic commitments and the information environment at Kenyatta University are so far the main factors that shape the information seeking characteristics of the students.

SUMMARY OF POST-GRADUATE STUDENTS' INFORMATION SEEKING BEHAVIOUR

From the analysis in this chapter, information seeking characteristics of post-graduate students at Kenyatta University could be summed up in one phrase: "quiet struggle" (Sturges, 1985). Specifically, the data reveal the following information seeking characteristics among the students:

- (i) There is high level use of inter-personal sources in acquiring information. Students discuss alot among themselves, consult with lecturers/supervisors and look for information from sources other than Moi Library.

- (ii) Some efforts have been made by students to attend seminars and conferences. However, this is not a very common practice among masters students due to lack of time and funds that would enable students to participate in these information dissemination forums.
- (iii) There is low level of subscription to relevant journals by students. Although lack of funds could be a major cause of this, the availability of current journals in other libraries/information centres within and around Nairobi could also be a contributory factor. Students who know where to get current journals in and around Nairobi may least subscribe to their own journals.
- (iv) Students use libraries other than Moi Library alot more to gather current literature. This practice also explains students' perception and assessment of their own institutional library.
- (v) Since they may still need to use the institutional library, mainly as a study place, post-graduate students seem to maintain a "good public relations" with the library staff. Almost little or no complaints are raised by the students openly to the staff about the resources, services or the need to be taught relevant information seeking skills.
- (vi) Whenever relevant and current information is found, students prefer to photocopy the documents. Such are the personal libraries/resources that students eventually turn to when the university library yields unsatisfactory results in the availing of current information.
- (vii) Reasonable amount of time is spent by students in collecting information, whether by formal or informal means.

- (viii) There is a strong desire for library user-education programme by the students. Students hope that through this programme, they would improve their information seeking skills, hence information seeking characteristics.

CODESRIA-LIBRARY

6.0 CHAPTER SIX

6.1 SUMMARY AND CONCLUSIONS

A. INTRODUCTION

This study was devoted to a two-fold line of investigation on post-graduate students at Kenyatta University: an analysis of their perception of resources and services in Moi Library and an examination of their information seeking characteristics, both on and off the campus. The specific study objectives were:

1. To determine the academic characteristics of post-graduate students at Kenyatta University.
2. To examine the frequency of use of available information resources and services at Kenyatta University by post-graduate students.
3. To describe the knowledge, perceptions and rating of the resources and services at Kenyatta University Library (Moi Library) by post-graduate students.
4. To find out if there is any relationship between the academic characteristics and information seeking characteristics of the post-graduate students.
5. To find out how the rating of resources and services in Moi Library influence the post-graduate students' information seeking characteristics.

This study had two hypotheses to test:

1. There is no relationship between the post-graduate students' academic characteristics (i.e masters, Ph.D, first year, second year etc) of post-graduate students and their knowledge, perception and rating of the resources and services available in Moi Library.
2. There is no relationship between the academic characteristics of post-graduate students and their information seeking characteristics.

Data for this study were collected from two sources: primary (questionnaires) and secondary (published and unpublished documents). Data were processed, analysed and presented using frequencies, percentages, charts and graphs.

This chapter gives a summary of the major findings, highlights the contributions of the study, gives some recommendations and suggests possible areas for further research.

A. MAJOR FINDINGS

An analysis of the academic characteristics of post-graduate students reveals that students have a number of characteristics that should be considered in providing for their information needs. They include status in the institution (Ph.D or Masters), year of study (first, second, third, fourth etc) and departments to which students are affiliated (e.g. History, Geography, Library studies, Literature, Kiswahili, French, Psychology etc). Other academic characteristics are the faculties to which students belong (Education, Science, Arts, Commerce, Environmental Studies and the newly created Faculty of Home Economics), mode of study (by thesis alone, by coursework, examination and thesis and by coursework, examination and project). Post-graduate students may also be part-time or full-time scholars.

An examination of perception of resources and services at Moi library by students reveals that students have assessed these facilities as insufficient and out-dated. Most of the resources fail to measure to the required standards of currency in information provision. All the services are manual and slow in providing information. Majority of the students opt for alternative ways of gathering information due to the assessment they already hold of their institutional library.

An analysis of information seeking characteristics of students shows that in their endeavour to acquire up-to-date information for their studies, students seek information from alternative libraries and information centres outside Kenyatta University either, by enrolling as members or freely using the facilities. The use of informal sources like discussion with colleagues and lecturers is a notably predominant characteristic of this group. Whenever they can, the students buy the relevant sources or photocopy chapters/topics from texts. There is low level of subscription to journals by students, mainly due to lack of funds. Students spend a lot of time collecting relevant information for various academic activities that they are involved in. Although all students possess skills required for gathering information at varying levels, a number of students would prefer to be given user-education to make them better equipped information seekers and to improve their information seeking patterns.

C. CONTRIBUTIONS OF THE STUDY

This study adds knowledge to the concerns in user studies in institutions of higher learning. It has been possible to show variation in academic characteristics of post-graduate students using indicators like their year of study, mode of study, faculties affiliated to and whether one is a part-time or full-time student. These are important characteristics that an information service needs to have as it designs information dissemination channels for its users. Other detailed characteristics, though not discussed in this study are the specific departments and research topics that students participate in. Knowledge of these characteristics will build a better picture of post-graduate students as a specific user-group of an information system in a university.

The study has also identified key information seeking characteristics that post-graduate students have. Post-graduate students are involved daily in various information seeking activities, using various approaches and covering different amounts of time. It is hoped that the results of the study will be used by Kenyatta University library, administration and post-graduate students to foster active co-operations in information accessibility.

A significant contribution of the study is in the area of academic programmes at the university. Data show that a major component of these programmes has been left out: a user-education programme that would make post-graduate students better users of the available information retrieval facilities, both on and off campus. The study goes along way to add to other studies dealing with user-education in institutions of high learning in Kenya (Musisi, 1980; Bulogosi, 1990 and Minishi, 1987).

D. RECOMMENDATIONS

The following are the policy implications of the research findings:

- (i) Firstly, it is observed that an analysis of the academic characteristics of post-graduate students identified five major categories, namely, masters or Ph.D, year of study, full or part-time students, faculty affiliations and mode of study. As a matter of fact, the departments and possible areas of research are other important characteristics of post-graduate students. These two aspects need to be addressed in designing an information service as well as a user-education programme. Subject librarians should be involved in academic programmes in departments in order to lay ground for selection of resources, designing of user services and education.

- (ii) Secondly, it was found that post-graduate students rate the available information resources and services in Kenyatta University as insufficient and out-dated. It is therefore necessary for the library, through subject librarians, to provide information about the state and kind of resources and services a post-graduate student is likely to find in Kenyatta University before students embark on their academic programmes. But more importantly will be the assistance the library will give the students in using information facilities elsewhere. This maybe in the form of giving students lists of other libraries within Nairobi, and the country at large, and the special information areas handled in these libraries. If the inter-library loan would be made more active, it would go along way in helping students retrieve information and improve their information gathering patterns. For example, specific days should be set aside when students can put in their requests for materials from other libraries in the same network with Moi Library, especially Jomo Kenyatta University of Agriculture and Technology and the University of Nairobi, the closest sister institutions. Students who may not be in urgent need of the material could be asked to check for the availability of the material at a certain time, maybe after two days. However, if a student is able to collect the material on his/her own the University administration, working together with the library should provide letters introducing such students to other libraries.

Credibility on the part of the students will be an essential factor in this business. Libraries that will have loaned their materials to Kenyatta University post-graduate students should make a list showing the particulars of students: name, registration number, faculty and department the student belongs to and other relevant details. Against the borrowers' names should be particulars of materials borrowed: title of text, accession and class numbers, author, date loaned and date due.

The lists should immediately be forwarded to Moi Library who will hold them against the students, and only clear them at the end of their courses on receipt of a clearance letter signed by the librarian from the lending library. The same should be done to students borrowing from Kenyatta University Library. However, better suggestions in this area are welcome.

- (iii) Thirdly, it was found out that post-graduate students need user-education to make them better users of information resources and services available on and off Kenyatta University campus. This is an intervening factor in retrieving information, and it is therefore important for this programme to be well planned a head of time by the library administration and the relevant departments. It can only be hoped that future revisions of university syllabuses will include this aspect of training in detail, either at undergraduate level or the first semester of post-graduate. In the mean time, heads of departments in Kenyatta University should plan with the library management and provide the instruction for students in each department. Where there is need for use of modern technology in retrieving information, the post-graduate students should seek assistance from the university librarian, who will introduce them to libraries with such facilities and ask them to give students training in the use of such facilities. Alternatively, students should enrol in such libraries and exploit the benefits given to members, among them instruction in using modern technology in information retrieval.
- (iv) Fourthly, it was found that a general problem encountered by post-graduate students is lack of enough funds to purchase the relevant information. The admission letters sent out to post-graduate students by the university administration should be more detailed about the information requirements of respective departments. A list of possible text-books students need to buy for the courses they will be studying should be included in these letters to help students get a bearing of the information needs in their disciplines. This should be done early enough to allow students make arrangements for funds for personal texts.

- (v) Fifthly, it was also found that students have less exposure to current information obtained through seminars, conferences, and to some extent, journals. Lecturers should share their research findings with students through regularly organised seminars, especially at the departmental level. Researchers from outside Kenyatta University should also be invited to share their rich information with students. At least each department should set aside one week per semester when papers are presented at seminars. Former graduates of the various departments of the institution should be encouraged to come back and present papers during this week. Post-graduate students undergoing studies should also be encouraged to present papers, hopefully prepared under the guidance of a lecturer during the first such presentation. All parties: students, academic staff and library staff should work together in making known to the community any forthcoming seminars that are relevant to academic programmes. Students, library staff (subject librarians) and lecturers should make efforts to attend such seminars especially those held in and around Nairobi. Contacts should be made with institutions carrying out research and presenting seminar papers to avail their publications either to the library or departments for students to use.
- (vi) Data also show that students spend a good part of their time searching for information. Post-graduate students should go through their course requirements with the lecturers as soon as they arrive to help them lay strategies for searching for information. A schedule of the academic activities one has before him/her (outside other activities) will help students to avoid wastage of time in searching for information. Early familiarization with libraries and information centres outside Kenyatta University will lay a better base for students when they want to refer to materials elsewhere. Post-graduate students should be free to ask for help from the library staff in Moi Library.

E. SUGGESTIONS FOR FURTHER RESEARCH

- (a) An analysis of information needs of post-graduates at the departmental level to identify the unique characteristics of students in each department.
- (b) An analysis of time lost due to lack of relevant information during post-graduate studies. This will help to establish further the relationship between time and information accessibility.
- (c) A model of a user-education programme for post-graduate students to help academic departments and library management to incorporate this service in the post-graduate programmes.
- (d) A further analysis of the contributions that the programme will have made on post-graduate students' information seeking characteristics to establish its importance in university curricular.
- (e) An examination of particular libraries and information centres used by post-graduate students in order to ascertain their effectiveness in providing relevant information to post-graduate students..
- (f) The possibilities of establishing and running departmental libraries in the university as a means of providing alternative information centres to improve channels of accessing information in universities in developing countries.

APPENDIX A:**A Day In The Life Of Masters Student: Second Year and Member of Academic Staff****Day: Tuesday**

| Serial | Time | Activities | Time Taken |
|--------|---------------|---------------------------------|--------------|
| 1. | 6.00 a.m. | Waking up | 1 min. |
| 2. | 6.02-6.22a.m | Bathing and dressing | 20 min. |
| 3. | 6.22-6.30a.m | Taking Breakfast | 8 min. |
| 4. | 6.30-8.00a.m | Travelling to K.U. | 1 hours |
| 5. | 8.00-1.00p.m | Reading in Library | 5 hours |
| 6. | 1.00-5.00p.m | Teaching undergraduate students | 4 hours |
| 7. | 5.00 -7.00p.m | Travelling back home | 2 hours |
| 8. | 5.00-7.15p.m | Bathing | 15 min. |
| 9. | 7.20-8.30p.m. | Cooking supper | 1 hr. 10 min |
| 10. | 8.30-9.00p.m | Eating supper | 30 min. |
| 11. | 9.00-11.00p.m | Reading or Writing | 2 hours |
| 12. | 11.00-6.00a.m | Sleeping | 7 hours |

* I rarely have time for resting, please!!
(except when I'm asleep of course).

APPENDIX B:**A Day In The Life Of A Ph.D Student: First Year and Member of Academic Staff****Day: Tuesday**

| Serial No. | Time | Activities | Time Taken |
|-------------------|-------------|----------------------------|-------------------|
| 1. | 5.45a.m | Waking up | 2 min |
| 2. | 5.47a.m | Bible reading & Praying | 15 min |
| 3 | 6.00a.m | Shower | 10 min |
| 4. | 6.10a.m | Personal hygiene | 15 min |
| 5. | 6.25a.m | Prepare children | 20 min |
| 6. | 6.45a.m | Breakfast | 25 min |
| 7. | 7.10a.m | Escort children to school | 20 min |
| 8. | 7.30a.m | Travel to campus | 30 min |
| 9. | 8.00a.m. | Morning studies/teaching | 1 hr. 50 min |
| 10. | 10.30a.m | Administrative/heavy tasks | 1 hr. 20 min |
| 11. | 12.00noon | Teaching | 1 hr. 20 min |
| 12. | 2.00p.m | Studies/data collection | 1 hr. 80 min |
| 13. | 5.00p.m | Exercise | 1 hr. 20 min |
| 14. | 7.30p.m | Supper | 30 min |
| 15. | 8.00p.m | Home-work supervision | 60 min |
| 16. | 9.00p.m | Listen to news | 30 min |
| 17. | 9.45p.m | Evening reading | 75 min |
| 18. | 11.00p.m | Sleeping | 4.05 min |

APPENDIX C:

A Day In The Life Of A Masters Student: Full-time Second Year Student

Day: Wednesday

| Serial No. | Time | Activities | Time Taken |
|------------|----------|---------------------------|---------------|
| 1. | 4.00a.m | Waking up | 15 min |
| 2. | 4.15a.m | Private study | 2 hrs |
| 3. | 6.15a.m | Breakfast & refreshing | 1 hr |
| 4. | 7.15a.m | Lecture | 1 hr 30min |
| 5. | 8.45a.m | Break | 15 min |
| 6. | 9.00a.m | Lecture | 2 hrs |
| 7. | 11.00a.m | Break & Newspaper reading | 30 min |
| 8. | 12.30p.m | Lunch | 1 hr 30 min |
| 9. | 2.00p.m. | Lecture | 2 hrs. 30 min |
| 10. | 4.30p.m | Games & exercise | 1 hr. |
| 11 | 5.30p.m | Showering | 30min |
| 12 | 6.00p.m | Supper | 1 hr. |
| 13 | 7.00p.m | Private studies | 2 hrs. 30 min |
| 14 | 9.30p.m | Bible Study | 30 min |
| 15 | 10.00p.m | Sleep | 6 hrs |

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Kenyatta University,
Department of Library Studies,
P.O. Box 43844,
Nairobi.

5/2/96.

Dear Sir/Madam,

**RE: INFORMATION SEEKING CHARACTERISTICS OF A UNIVERSITY COMMUNITY:
THE CASE STUDY OF POSTGRADUATE STUDENTS AT KENYATTA UNIVERSITY:**

I am a postgraduate student taking Library Studies at Kenyatta University , and undertaking a research study on the above mentioned topic.

The significance of the study is to assess the postgraduate students' perceptions of Kenyatta University Library resources and it's services, and by logical extension, their information seeking behaviour.

I will be grateful if you would kindly complete the attached questionnaire and either give it back to me personally or through the department of Library Studies , Kenyatta University as soon as possible. The information gathered is purely for academic purposes.

I thank you in advance for your co-operation.

Yours Faithfully,

Marie Khanyanji Khayesi.

APPENDIX DQUESTIONNAIRE FOR POST GRADUATE STUDENTS.A Background information of Respondent/ characteristics of postgraduate students at Kenyatta University.

I. Status in the institution. (Tick where applicable).

- i) Post graduate: Masters.....
Ph.D.....
- ii) Sex: E/M.....
- iii) Registration: Part-time student.....
Full-time student.....
Any other (specify).....
- iv) Faculty affiliated to:
Faculty of Arts.....
Faculty of Commerce.....
Faculty of Education.....
Faculty of environmental studies.....
Faculty of Science.....
Any other (specify).....
- v) Department (specify).....
- vi) Year of Study: First.....
Second.....
Third.....
Fourth.....
Fifth.....
Sixth.....
Any other (specify).....
- viii) Mode of study: By thesis alone.....
By course work, examinations and thesis.....
.....
By course work alone.....
By course work, examination and project.....
.....
Any other (specify).....
.....
.....
-

B: Perception of Postgraduate Students on Resources and Services Offered by the Kenyatta University (Moi) Library

1. Below is a list of resources that are available at Kenyatta University (Moi) Library. Please indicate your knowledge of the resources and the frequency of use by ticking in the columns provided.

| | Know | Don't know | Frequency of use | | | |
|-----------------------------------|------|------------|------------------|-----------|--------|-------|
| | | | Frequency | Sometimes | Rarely | Never |
| Textbooks | | | | | | |
| Dissertation or Theses | | | | | | |
| Newspapers or Newspapers Cuttings | | | | | | |
| Abstracts | | | | | | |
| Indexes / Indexes | | | | | | |
| Yearbooks | | | | | | |
| Directories | | | | | | |
| Maps/Atlases | | | | | | |
| Dictionaries | | | | | | |
| Encyclopaedias | | | | | | |
| Films/Satellite Images | | | | | | |
| Microfilms | | | | | | |
| Cassettes/Tapes | | | | | | |
| Videos | | | | | | |
| CD-ROM databases | | | | | | |
| Bibliographies | | | | | | |
| Pamphlets | | | | | | |
| Publishers' notices or preprints | | | | | | |
| Accession lists | | | | | | |
| Short loan collection | | | | | | |

| | | | | | | |
|---------------------|--|--|--|--|--|--|
| Africana Collection | | | | | | |
| Catalogues | | | | | | |
| Any other (specify) | | | | | | |

2. What is your assessment of the resources you use in Kenyatta University (Moi) library?

Tick against the most appropriate responses.

- i) Have sufficient information for postgraduate studies [].
- ii) Have insufficient information for postgraduate studies [].
- iii) Have outdated information for postgraduate studies [].
- iv) Any other (specify).....
.....
.....

CODESRIA-LIBRARY

3. Below is a list of services found in Kenyatta University (Moi) library. Give your assessment of each of the services by ticking in the space provided:

| | Very Satisfied | Satisfied | Fairly Satisfied | Not satisfied at all | Non Existent |
|---|----------------|-----------|------------------|----------------------|--------------|
| Lending/borrowing | | | | | |
| Audio-visual | | | | | |
| Services for the Handicapped | | | | | |
| Inter-library Loan | | | | | |
| Reference/literature searches | | | | | |
| Photocopying | | | | | |
| Indexing | | | | | |
| Abstracting | | | | | |
| User Education | | | | | |
| Current awareness | | | | | |
| Using CD-ROM to search (CD-ROM = Compact Disk Read Only Memory) | | | | | |
| The Catalogue(s) | | | | | |
| Discussion(s) with Librarians | | | | | |

C. Information Seeking Characteristics of Postgraduate Students at Kenyatta University

1. Below is a list of other possible sources of information. Please indicate the ones you use and the frequency of use by ticking in the columns provided below.

| | Frequently | Sometimes | Rarely | Never |
|--|------------|-----------|--------|-------|
| Conferences/seminar Attendance | | | | |
| Subscription to relevant journals | | | | |
| Interviews | | | | |
| Discussion with Lecturers or Supervisors | | | | |
| Government Documents | | | | |
| Any other (specify) | | | | |

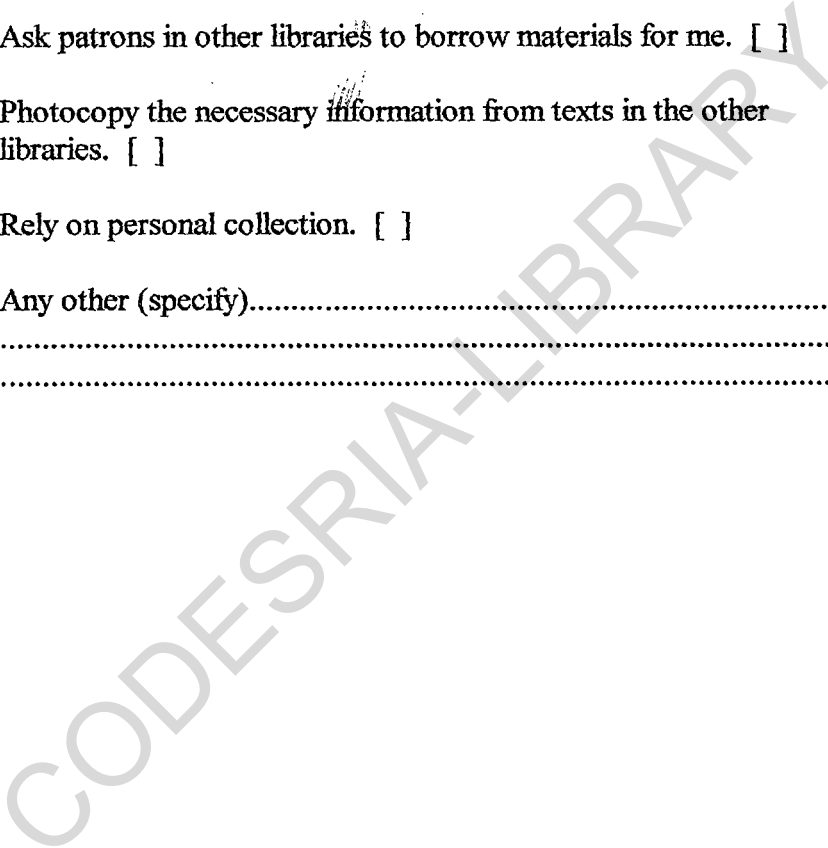
2. What do you normally do to resolve your information needs in some of the areas where you have encountered problems? Rank your responses using 1,2,3 and 4. (1=very often, 2=often, 3=sometimes, 4=never)
- Use personal network both on and off Kenyatta University Campus. []
 - Are content to use lecture notes and resources available at Kenyatta University library. []
 - Seek further help from the library staff at Kenyatta University (Moi) library. []
 - Buy the relevant information sources.
 - Any other (specify).....
3. If any of your responses in Question 2 is 4 (never), what reasons do you have?
- Because my colleagues have gone through the course without measure [].
 - Lack of funds to facilitate my movement and acquisition of other resources. []
 - Due to shortage of time [].
 - My lecturers/supervisor(s) do not mind the currency of the literature I use. []
 - Any other (specify).....
.....
.....
4. Are you enrolled in any other library? Yes []
No []
5. If your answer in no.4 is YES , how did you come to know and make use of the other library (ies) and information centre(s)? Rank your responses using 1,2,3 and 4 (1=very high, 2=high, 3=fairly high, 4=low).
- Through personal initiatives/network.[]
 - Through staff of Kenyatta University.[]
 - Had prior knowledge about the library(ies)/information centres. []
 - By pure coincidence as I sought information. []

e) Any other (specify).....
.....
.....

6. If your answer in number 4 is NO , how do you gather information for your studies? Rank your responses using 1,2,3 and 4 (1=very high, 2=high, 3=fairly high, 4=low).

- a) Continue to rely on resources found in Kenyatta University library and my lecture notes. []
- b) Go into other libraries and information centres and ask to be allowed to use their facilities. []
- c) Ask patrons in other libraries to borrow materials for me. []
- d) Photocopy the necessary information from texts in the other libraries. []
- e) Rely on personal collection. []

Any other (specify).....
.....
.....



7. Below is a list of some of the factors that could be of influence to your search for information both in Kenyatta University library and other information centres. Look at each factor carefully and rate it using the levels given.

| Factor | Level of Importance | | |
|---|---------------------|-----------|---------------|
| | Very Important | Important | Not Important |
| My financial ability to secure or purchase the information | | | |
| Availability of current and relevant resources in the library | | | |
| The distance I have to cover to secure the information | | | |
| The quality of services provided by the library | | | |
| Availability among friends, lecturers, colleagues. | | | |
| Any other (specify) | | | |

8. What effect does unavailability of the current and relevant information have on your studies and/or thesis/project? Rank your responses using 1,2,3 and 4 (1=very high, 2=high, 3=fairly high, 4=low).

- a) Presentation of sub-standard work. []
- b) Increased expenditure in looking up of resources. []
- c) Duplication of research. []
- d) Delay in completion of my entire course. []
- e) Any other (specify).....
.....

9. How much time would you estimate is lost in your study period due to lack of relevant information?

- a) 6 months []
- b) 1 year []
- c) 1.5 years []
- d) 2 years []
- e) Any other (specify).....
.....
.....

10. How would you rate your information seeking skill?

- a) Low []
- b) Average []
- c) High []
- d) Very high []

11. If your answer in no. 10 is either Low or Average, what help do you need as an individual to improve your skills in seeking information? Give your responses using the following scale 1,2,3,4 (1=very important, 2=important, 3=fairly important, 4=not important).

- a) Be given library user-education before starting postgraduate work. []
- b) Better organisation and availability of materials. []

- c) More individualised help from library staff. []
- d) Introduce automated reference services in the library. []
- e) Any other (specify).....

12. If you rated yourself High or Very high, in question 10, how did you acquire the information seeking skills you possess? Rank your responses using scale 1,2,3 and 4 (1=very important, 2=important, 3=fairly important).

- a) Through library user-education given in undergraduate course. []
- b) Through frequent use of other libraries/information centres. []
- c) Through seeking for help personally from the library staff. []
- d) Through lectures given in class during research methodology unit. []
- e) Any other (specify).....

13. What do you see as a priority areas for improvement of availability of resources and services to suit postgraduate students at Kenyatta University? Use the scale 1,2 and 3 to rate your responses (1=very important, 2=important, 3=not important).

- a) Involve postgraduate students in selection of resources. []
- b) Establish a channel of communication among the postgraduate students, academic departments, library and university administration for students to air their information needs. []
- c) The Kenyatta University should acquire current and relevant resources. []
- d) Establish a postgraduate library at Kenyatta University. []
- e) Kenyatta University library should form a network with other libraries in Nairobi, Kenya and outside Kenya. []
- Any other (specify).....

14. Use the table below to show the activities you are involved in as a postgraduate student from the time you wake up to the time you go to sleep, for ONE WEEK ONLY. Please be as specific as possible about each activity.

For example:

| | | | |
|----|--------------|------------------|------------|
| 1. | 6.00 am | wake up from bed | 2 minutes |
| 2. | 6.02-5.15 am | personal hygiene | 13 minutes |

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Day-----

| Serial No. | Time | Activities | Time taken |
|------------|------|------------|------------|
| 1 | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| 9. | | | |
| 10. | | | |
| 11. | | | |
| 12. | | | |
| 13. | | | |
| 14. | | | |
| 15. | | | |
| 16. | | | |
| 17. | | | |
| 18. | | | |
| 19. | | | |

*NOTE: Seven such forms were prepared for activities of one week.

APPENDIX E

QUESTIONNAIRE FOR LIBRARIANS

A. PERSONAL INFORMATION

1. Respondent's position/rank.....

2. For how long have you worked in Kenyatta university library ? Tick as applicable.

- | | | |
|------|-------------------|-----|
| i) | 1 - 2 years | [] |
| ii) | 3 - 4 years | [] |
| iii) | 5 - 6 years | [] |
| iv) | 6 years and above | [] |

B. LIBRARY STAFF PERCEPTION OF RESOURCES, SERVICES AND POST GRADUATE STUDENTS' INFORMATION SEEKING CHARACTERISTICS

1. What categories of postgraduate students have you noticed seek assistance from the library staff in locating resources for information? Rank their levels of seeking using 1,2,3 and 4. (1=very regular, 2= regular, 3=fairly regular, 4=never).

- | | | |
|------|----------------------------------|-----|
| i) | Faculty of Arts | [] |
| ii) | Faculty of Environmental Studies | [] |
| iii) | Education | [] |
| iv) | Faculty of Science | [] |
| v) | Faculty of Commerce | [] |

2. What procedures have you noticed beset the postgraduate students as they seek information? Use the scale 1,2,3 and 4 to rate your responses. (1=very important, 2=important, 3=not important, 4=not aware of).

- | | | |
|----|--|-----|
| a) | They are unable to locate the material or make use of reference sources. | [] |
| b) | They do not consult to get help from the library staff. | [] |
| c) | They are unable to undertake a systematic library search. | [] |
| d) | Any other (specify)..... | |

.....

3. What reasons can account for the above problems? Use the scale 1,2,3 and 4 to rate them. (1=most common, 2=common, 3=less common).

a) They seem to have been poor users of the library while in undergraduate courses. []

b) They despise/underate library staff. []

c) They lack user-education hence information seeking skills of postgraduate level. []

d) Any other (specify).....

4. a) Have any of postgraduate students approached you or other library staff for assistance in locating information for their courses?

b) If your answer is **yes**, what assistance have you given as an individual for library staff? Use the scale 1,2,3 and 4 to rate them. (1=most commonly used, 2=commonly used, 3=less commonly used, 4=never used).

i) Locate materials for them through a variety of services offered by the Moi library. []

ii) Introduce(d)/informed them of other relevant libraries and information centres within and outside Nairobi. []

iii) Provide individualised user-education to help them search for information independently. []

iv) Any other (specify).....

5. What other observations have you made about the information seeking characteristics of Kenyatta University postgraduate students? Rate your answers using scale 1,2,3 and 4.

a) They are content with the use of their notes, library resources and services at the Kenyatta university. []

b) They do not give the library administration challenges to avail current information copy relevant topics from and buy their own texts. []

b) They do not give the library administration challenges to avail current information copy relevant topics from and buy their own texts. []

c) They register in other libraries with the assistance from Moi library. []

d) Any other (specify).....

6. How would you generally rate postgraduate students as users of Kenyatta University (Moi) Library?

a) Poor []

b) Good []

c) Average []

d) Very good []

7. How would you generally describe the current library resources and services at Kenyatta University library and their relevance to postgraduate studies?

Tick in the column below.

| | Very Satisfactory | Satisfactory | Fairly Satisfactory | Not Satisfactory |
|-----------|-------------------|--------------|---------------------|------------------|
| Resources | | | | |
| Services | | | | |

Any other observations (specify).....

8. What reasons do you have for your answer No. 7 ?

a) Resources:

i) Due to decline in acquisitions []

ii) Due to poor organisation of resources []

iii) There are no acquisitions at all in some subject areas. []

iv) Any other (specify).....

b) Services:

- i) Due to shortage of staff []
- ii) Due to lack of qualified staff in subject areas []
- iii) As a result of lack of staff commitment to work []
- iv) Due to failure to use modern technology []
- v) Any other (specify).....
.....
.....

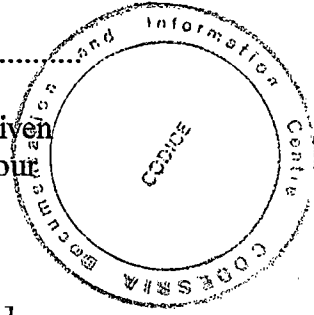
9. If your answer in No. 7 is fairly satisfactory or not satisfactory, what recommendations would you make for the improvement of the resources and services to suit postgraduate students?

a) Library services.....
.....
.....
.....

b) Library resources.....
.....
.....
.....

10. What are your views on the quality of library user-education offered at Kenyatta University? Use 1,2,3 and 4 to rate your responses. (1=very high effect, 2=high effect, 3=not high effect).

- a) It lacks the right manpower []
- b) It should be given before and soon after students settle in their academic programmes. []
- c) It presupposes/presumes postgraduate students' knowledge and possession of skills for seeking information. []
- d) Fails to use relevant methodology as most of the teaching has a lot of technical library terms and lacks practical approach of the subject. []
- e) Fails to link with the respective academic programmes offered by the University. []
- f) Any other (specify).....
.....
.....



11. What are your views on the quality of user-education that should be given to postgraduate students at Kenyatta University? Use 1,2,3 to rate your responses. (1=very important, 2=important, 3=not important).

- a) Qualified subject based library staff should give this service to specific groups of postgraduate students. []
- b) Should be given to postgraduate on request by individual students. []
- c) Academic departments should liaise with the library administration/staff in the provision of this service. []
- d) The programme should introduce postgraduate students to current practices in information storage and retrieval. []
- e) Any other (specify).....

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