CHALLENGES ENCOUNTERED BY NONTRADITIONAL STUDENTS IN SATISFACTION OF THEIR INFORMATION NEEDS WITH REFERENCE TO NAIROBI AND KENYATTA UNIVERSITYS' LIBRARIES

 \mathbf{BY}

FLORENCE AUMA ODENYO E55/OL/10893/2007

A Research Project submitted in partial fulfillment of the requirements for the award of the Degree of Master of Library and Information Science, Department of Library and Information Science, School of Education, Kenyatta University

© Kenyatta University
October 2012

DECLARATION

This research project is my original work and has not been presented for award of a degree in any other University.
Candidate: Date.
Florence Auma Odenyo
I confirm that the work reported in this project was carried out by the candidate under my supervision as University supervisor.
Supervisor:Date:
Mr. Ben Namande

Department of Library and Information Science, Kenyatta University

DEDICATION

To my late parents, Mama Jane and Mzee John Okoth who had been an indelible source of inspiration and encouragement in my academic endeavors; and to all people who are passionately concerned about satisfying information needs of the increasingly diverse calibre of library users.

ACKNOWLEDGEMENTS

I am truly grateful to the Almighty God for providing me with the strength, courage and wisdom I needed to keep the progress my Master of Library and Information Science (MLIS) programme intact, and soldier on even when times were rough and hope was fading. Several people walked with me through this journey and made contributions in different important ways. To all of them, *I am grateful*.

My deepest gratitude goes to my University Supervisor, Mr. Ben Namande. Ben was always available for discussions with me and I greatly cherished his invaluable insights, patience and encouragements toward this accomplishment. I am also thankful to all the lecturers especially M/S Milka Mathu at the Department of Library and Information Science, Kenyatta University, for their salutary training that prepared me to function effectively in the social research arena. Special tribute is further extended to Mr. Peter W. Ohon of Population Studies and Research Institute, University of Nairobi. Peter's mind spurring comments and exciting sense of logic was such an amazing asset. I also significantly benefitted from Mr. S. Macharia and Mr. E. Ogeto whose experiences in librarianship provided useful directions for delineating conceptual boundaries of this study.

Special thanks also goes to members of my family, especially to my loving husband George for his steadfast support and encouragement; and to my children, Maurice, Horace, Diana and Mickey for their moral support. I am particularly humbled by Mickey's rare readiness to bear the brunt of a busy mother who, on several occasions, was absent from home to provide parental care that he needed at that age.

Finally, I am thankful to my colleagues at the University of Nairobi Library for their support and readiness to bear with me on my study schedule.

ABSTRACT

Growing appeal for nontraditional mode of learning in the public universities of Kenya has placed academic libraries at the centre of attention. This is owed to the crucial role libraries play in supporting teaching, learning and research activities in the parent universities. Establishing strong empirical evidence is a necessary foundation stone for libraries to effectively meet this academic obligation. To this end, this study examined the challenges nontraditional university students face towards satisfying their information needs from their respective public university libraries. The study specifically assessed the nature of information needs of these students, the resource base and services capacity of libraries to satisfy their information needs and responsiveness of the libraries policy environment to satisfy these needs.

The study focused on the University of Nairobi and Kenyatta University. The choice of these universities for the study was informed by their dominance of the student population and experience in information services provision to students in the university landscape. The study adopted a combination of quantitative and qualitative research design, and its theoretical underpinning was the servqual theory of service quality, advanced by Parasuraman *et al.* (1988). The data required was obtained from 326 nontraditional students and 10 library staff with the aid of self-administered open ended questionnaires. In-depth interviews were also done with the respective university librarians.

The quantitative responses were analyzed with the aid of SPSS computer software and results summarized under frequency distribution tables and graphs. Analysis of the qualitative responses was grounded on thematic contents in which the emerging semantic and structural similarities were grouped together to create response typologies as posited by Glaser and Strauss (1967), and resultant summaries synchronized with the interpretations of quantitative attributes.

On the whole, the analysis indicated that while commendable steps in the direction of meeting user information requirements are notable on the part of libraries, namely extension of opening hours, automation of resources and expansion of access to online reading materials, nontraditional students still have diverse information needs. In their effort to satisfy these needs they are confronted by myriad challenges, ranging from inadequate and

inappropriate information resources of respective libraries to unfavourable policy frameworks for the library systems. In particular, the results show that lack of time, inadequate user information literacy especially about online sources and resources, unfriendly staff establishments and non conducive library opening hours are the major constraints facing nontraditional students towards satisfaction of their information needs.

On the library services and resources front, the findings indicated that libraries have inadequate number of staff, equipment and facilities in relation to the large population size and diverse information needs of nontraditional students. This situation is aggravated by insufficient financial resources for library operations. In addition, the policy environment within which libraries function toward satisfaction of information needs of nontraditional students is peripheral; largely embedded in the regular mode of learning.

These findings have led to the conclusion that nontraditional university students are exposed to several fundamental challenges relating to satisfaction of their information needs. These challenges border on their own circumstances, reluctance of the libraries to re-structure their resources and service and near-rigid library policy frameworks. Ultimately, it is recommended that measures toward reducing these should take the direction of developing policies and programmes whose strategies put emphasis on building intense information literacy of nontraditional students and intense interactive working relations among students, faculties, libraries management, university administrations and the government. Proposals for further research in this field and commensurate actions for staff and nontraditional students are also provided.

LIST OF ABREVIATIONS AND ACRONYMS

ALA American Library Association

ACRL Association of College and Research Libraries

AIM Articulated Instruction Media

CAS Current Awareness Services

CD-ROMS Compact Disc Read Only Memory

C H E Kenya Commission for Higher Education

EBSCO Online Data base of Journal Articles

ILL Inter Library Loan

ILS Information Literacy Skills

JKML Jomo Kenyatta Memorial Library

JKUAT Jomo Kenyatta University of Applied Technology

JSTOR Journal Storage

KU Kenyatta University

MBA Masters in Business Administration

MA Masters of Arts

NCCE National Commission for Colleges of Education

NTS Nontraditional students

OPAC Online Public Catalogue

SPSS Statistical Package for Social Science

SERVQUAL Service Quality

TAFE Technical and Further Education

UK United Kingdom

USA United States of America

UM University of Malaysia

UNESCO United Nations Educational, Scientific and Cultural Organization

UoN University of Nairobi

TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENTS	iv
ABSTRACT	V
LIST OF ABREVIATIONS AND ACRONYMS	vii
LIST OF TABLES	xi
LIST OF FIGURES	xii
LIST OF FIGURES	xii
CHAPTER ONE	1
INTRODUCTION	1
1.0 Introduction	1
1.1 Background of the study	1
1.2 Statement of the Problem	5
1.3 Purpose of the Study	7
1.4 Objectives of the Study	7
1.5 Research Questions	8
1.6 Significance of the Study	8
1.7 Delimitations of the Study	9
1.8 Limitations of the Study	9
1.9 Theoretical Framework	9
1.10 Definition of Working Terms	16
CHAPTER TWO	17
LITERATURE REVIEW	17
2.0 Introduction	17
2.1 Library Policies and Information Needs of Nontraditional Students	17
2.2 Library Resources and Services for Nontraditional Students	20
2.3 Nontraditional Students Information Needs in Academic Libraries	25

2.4 Challenges Facing Nontraditional Students in Meeting their Information Needs	29
2.5 Summary and Research Gap	32
CHAPTER THREE	34
RESEARCH METHODOLOGY	
3.0 Introduction	
3.1 Research Design	
3.2 Area of Study	
3.3 Target Population	
3.4 Sampling Technique and Sample Size	
3.5 Data Collection Instruments	
3.6 Piloting (pre-tests)	43
3.6.1 Reliability	
3.6.2 Validity	
3.7 Data Collection Procedure	
3.8 Data Analysis Techniques	46
3.9 Ethical Considerations	47
CHAPTER FOUR	48
DATA ANALYSIS, DISCUSSION AND PRESENTATION	48
4.0 Introduction	48
4.1 Background Characteristics of Respondents	48
4.1.1 Background Characteristics of Students	48
4.1.2 Background Characteristics of Library Staff	57
4.2.0 A Survey of Challenges Encountered by Nontraditional Students	58
4.2.1 Policy Issues	58
4.2.2 Challenges Relating to Dimensions of Students' Information Needs	61
4.2.1.2 User Information Literacy Skills for Nontraditional Students	64
4.2.3 Nontraditional Students' Information Needs, Library Resources and Services	69

CHAPTER FIVE	85
SUMMARY OF THE MAIN FINDINGS, CONCLUSION AND	
RECOMMENDATIONS	85
5.0 Introduction	85
5.1 Summary of the Main Findings	85
5.2 Conclusion	88
5.3 Recommendations	88
5.3.1 Policy and Programmes Development	88
5.3.2 Recommendations to Nontraditional Students and Staff	89
5.3.3 Recommendations for Further Studies	90
DEFENDANCES AND DIDLIG SDADING	0.2
REFERENCES AND BIBLIOGRAPHY	
Appendix I: Letter of Introduction	103
Appendix II: Questionnaire for Nontraditional Students	104
Appendix III: Questionnaire for the Library Staff	111
Appendix IV: Interview Schedule for University Librarians	117

LIST OF TABLES

Table 3.1: Distribution of Nontraditional Students' Sample Size by Universities and Degree
Category38
Table 3.2: Distribution of Target Students by School of Study and Degree Course40
Table 3.3: Sample Frame for Libraries' Staff
Table 4.1.1: Distribution of Students by Age, Sex, Degree Programme, Year of Study50
Table 4.1.2: Distribution of Students by Degree Course Pursued
Table 4.1.3 Frequency of Visits to the Library
Table 4.1.4 Distribution of Staff by Duration Served in Library
Table 4.2.1 Staff Rating of Library Management
Table 4.2.2 Students' Rating of Determinants of Information Seeking
Table 4.2.3 Students' Value Rating of Library Resources in Satisfying their Information needs63
Table 4.2.4 Staff Rating of Library Information Resources and Services 71
Table 4.2.5 Agreement with Statements about Library Resources and Services82

LIST OF FIGURES

Figure 1: Conceptual Framework on Challenges Facing Nontraditional University Students	.12
Figure 4.1.1 Distribution of Students by Occupation and University	.52
Figure 4.1.2 Distribution of Students by Occupation and University	.53
Figure 4.1.3 Schedule of Lessons for Nontraditional Students	.54
Figure 4.1.4 Distribution of Responses on Course Requirements	.55
Figure 4.1.5 Reasons for Not Visiting Library Regularly	57
Figure 4.2.1 Priority Students Attach to Library Information Sources	.64
Figure 4.2.2 Student ever Participated in User Education	.65
Figure 4.2.3 Effect of Non Participation in User Education on Library Use	.65
Figure 4.2.4 Students' Ability to Use Information Sources	.66
Figure 4.2.5 Students' Rating of Library Guides/Directional Signs	.68
Figure 4.2.6 Students' rating of Users Support Systems	.68
Figure 4.2.7 Students' Prioritization of Library Services	.70
Figure 4.2.8 Libraries and Satisfaction of Students' Information Needs	.72
Figure 4.2.9 Students' Views on Libraries' Satisfaction of Information Needs	.73
Figure 4.2.10 Reasons for Limited Access to Library Materials	.74
Figure 4.2.11 Students Access to Recommended Reading Materials	.75
Figure 4.2.12 Effect of Inadequate Library Attention on NTS	.76
Figure 4.2.13 Students' Rating of Library Collections	.77
Figure 4.2.14 Priority Accorded to Alternative Information Sources	.78
Figure 4.2.15 Students' Relative Judgment about Library Services	.79
Figure 4.2.16 Perceptions of Staff about Libraries' Management	.80

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter reviewed the background information to the study on challenges facing nontraditional students in satisfaction of their information needs in the University of Nairobi and Kenyatta University libraries. This is followed with a statement of the research problem, the purpose and objectives of the study, the research questions, study significance and the limitations and delimitations of the study. Finally, the theoretical perspectives in this field and conceptual framework for the study, including working definitions are provided.

1.1 Background of the study

Nontraditional setting of education system is not a recent phenomenon. Adults have learned outside of formal contexts for many years in apprenticeships, on the job training, self-study, and other forms where individuals studied primarily on their own. In 1878 some "Literary and Scientific Program" was initiated in New York. This provided "a four year program of home reading in history and literature carried on in connection with local reading circles" (Knowles 1960, 1975). This eventually led to adoption of correspondence learning. From that experience, several generations of correspondence courses and other nontraditional efforts were launched in the United States of America (USA). However, the most important historical link to today's' development in traditional learning is traceable to what happened in Britain about three decades ago.

In the 1960s, the Prime Minister Harold Wilson ordered the country's education officials to determine how opportunities for learning could be expanded to adults. In response to this requirement, the education officials reviewed various efforts around the world on this matter. They focused on the University of Wisconsin's Articulated Instruction Media (AIM) project which linked various teaching techniques with correspondence learning. The outcome was the British government's decision to establish an autonomous open university, (Moor, 1996). The success stories of the Open University system has been emulated in various countries, including Canada, Hong Kong, Costa Rica, Israel, Japan, Spain, Pakistan, and West Germany. From 1870-1970, most of the systems were proprietary and the field was known as

correspondence study or 'home study' or 'external studies', (Keegan, 1996). In the late 1990s, distance education was developed as another form of educational system. For example, the Open University system has proved worthy in areas where demand for the traditional education cannot be met.

In Africa, the University of South Africa has had to accommodate a large population of students in its largest programme of its kind in the world. Under the distance-learning programme, University of South Africa has trained more than 80,000 adults' basic education practitioners since mid 1980s (Macgregory, 2008). Public universities in Eastern and Southern Africa have for a long time depended largely on grants from national exchequer for most of their recurrent and fixed budget lines. Statutes of various universities also allow them to get external aids and donations mainly for capital development purposes, technical assistance and staff training. In the last decade, there has been pressure on public universities in the region to reduce their budget lines as a result of declining government grants, a scenario largely occasioned by political and economic structural changes.

This has prompted the universities in this region to respond by putting in place a wide range of programmes to generate their own income to augment the dwindling allocation from national governments (Mutula, 2002). Such programmes include the nontraditional modes of learning in public universities. The introduction of nontraditional learning, popularly referred to as parallel or module II degree programmes in public universities in Kenya was necessitated by three main factors: a steady reduction in the funding of public universities; The need to expand educational opportunities for the growing number of school leavers in the country; and dynamics of the labour market which created new requirements for lifelong learning.

In Kenya, there has been a continuous demand for education, and the university system has been forced to be more innovative to meet this increasing demand. Among other ways, public universities responded to this development by mounting privately sponsored module II programme, commonly referred to as parallel degree programme whereby apart from the regular students sponsored by the Government, universities are admitting students who are

self sponsored. These students take their lectures separately in the evenings and weekends, school vacations (Nyagotti-Chacha, 2004).

The rapid expansion of universities' education has led to a number of challenges. According to UNESCO World Conference on Higher Education (1998), low funding from the exchequer, increased enrolment, limited access compared to the population level, increased enrolment without commensurate improvement in available facilities for example, library services, are the major problems facing universities in the region. Customarily, public universities in Kenya have retained traditional system to teach and educate traditional students. Such systems include offering lectures, seminars and tutorials. Thus, university education in Kenya revolved around regular degree programmes which involved the admission of students continuing from high schools. The majority of students in this category are usually young, study full time and follow the traditional pattern of higher education that is built around lectures and tutorials based on conventional teaching and learning methods. University libraries, like other structures of higher education institutions, have always been based on this model. Services, refectories, libraries services, administration and academic life were largely designed to support this traditional form of higher education.

The Nigerian guidelines for distance learning library services developed by the Association of College and Research Libraries (ACRL 2007) reiterated that distance learning community are entitled to library resources and services equivalent to those provided for students and faculty in traditional campus setting. Distance education, popularly known as adult education, was the first such nontraditional system of learning to be introduced in Kenya through an Act of Parliament in 1966. However, progress remained slow until 1990s when the module II degree programmes were introduced in public universities (Nyagotti-chacha, 2004 Information science scholars like Nicholas (1998) have emphasized the view that it is essential to determine the quality of the library services and its contribution to the mission and objectives of the parent organization, taking into account the various user groups and their particular needs. In addition, the Kenya Commission for Higher Education (CHE, 2007) recommends that universities provide adequate resources to support distance and open learning students who are part of the nontraditional category of students. To this end,

Librarians are expected to assess existing library support services for nontraditional modes of learning, its availability, appropriateness, and effectiveness, using qualitative, quantitative and outcome measures as well as keeping a database of every student category. Revision of existing collection development and acquisitions policies to reflect the profile of needs of nontraditional students is yet another essential area of concern. Marketing and promotion of library support services to the nontraditional community of students require to be put in place. Regular survey of nontraditional students' library usage is important to monitor and assess both the appropriateness of their use of library services, resources, and the degree to which needs are being met and the skills required. If university libraries endeavour to accomplish these perspectives of their services delivery mandates, they need to be prepared to provide a facilitating environment in support of teaching and learning, and in the acquisition of lifelong learning skills to their patrons, including the nontraditional students.

However, it is not known the extent to which Kenyan public university libraries have achieved in carrying out perspective user studies on nontraditional students. This would be important in establishing the characteristics of the nontraditional students, their information seeking behaviour, what information sources and formats they prefer, the challenges they encounter when seeking information to satisfy their needs and the degree of responsiveness of the policy frameworks to requirements of these students. This raises the possibility that the information resources and services of the libraries are not in harmony with information needs and seeking behaviour of nontraditional students. Against this background, and as contained in the University of Nairobi (UoN) Library Customer Service Feedback for the January-April 2010 period, nontraditional students are unlikely to have access to library resources which are vital to their learning just as it is to their counterparts in the traditional or regular modes of studies in the universities.

It is observed that nontraditional students could be getting a raw deal when it comes to accessing the expected support from their libraries. Lack of this support from libraries could as well have negative impact on this category of students' grades and subsequent academic qualifications. A sense of hopelessness, being isolated and not catered for by these libraries is

likely to make nontraditional students feel disadvantaged compared to their counterparts in the regular schedule of the university learning calendars (Mwangi, 2006).

While a number of studies relating to library users and services have been carried out in Kenya, they have tended to focus on different subjects of the library but remained inexplicit about challenges facing nontraditional students in the process satisfying their information needs. Chacha (1990), analyzed user problems in academic libraries but did not cover the parallel students. Ogeto (2005), discussed parallel students in relation to user education programmes among the undergraduates but not their information needs. Mwangi (2006), assessed library user education programmes for undergraduate students at both UoN and Kenyatta University (KU) but did not address the nontraditional students' dimension. Kanori (2009) equally researched on information seeking behaviour of graduate students in the College of Agriculture and Veterinary Science of the UoN but did not consider nontraditional students in the study.

The purpose of this study is to make a contribution toward narrowing this intellectual discrepancy with a view to gather evidence necessary for pointing to the achievable systems for provision of services to satisfy the contemporary and future information needs of the nontraditional students in the university libraries.

1.2 Statement of the Problem

Nontraditional students complain that library systems are not responsive to their needs because they have no access to relevant information resources whenever their information needs arises (UoN library customer service feedback, Jan-April 2010). There is an assumption that the existing services are inherently appropriate for all users including the nontraditional students without initiating a mechanism to find out whether the current set-up satisfies all users' needs (Luzius, 2002). Evidence to the effect that elaborate systems have been put in place for the purpose of finding out if users are catered for and what challenges they face in the process of needs satisfaction are insufficient or lacking (Wilson, 2005). The Process of satisfying customers by creating goods and services that they want, require to be based on known customer needs. Library services which focuses on needs of users and which

embrace not only the satisfaction of demands but also creation, awakening and increasing the existing demand by users should be the models in present times.

The number of nontraditional students has been steadily increasing in all the public universities without corresponding resources required to meet their needs and expectations (National Consultative Forum on the Policy for open learning and distance education (2004). Reading materials are few, outdated, torn and irrelevant (UoN library customer service feedback, Jan-April 2010). Library users mainly visit the library in search of information materials to satisfy their respective needs. For that reason, a library is of no service to its users if it does not have suitable information materials

The existing library policies are quite about orientation program for nontraditional students. Without elaborate information literacy education, nontraditional students remain disadvantaged with unenhanced and unsharpened skills on how to access and retrieve information resources effectively and efficiently. It is possible that due to lack of Information Literacy skills (ILS) which are learnt during orientation, the nontraditional students miss the opportunity to be exposed to library's physical facilities, materials and the skills necessary for maximum exploitation of library services.

Nontraditional students are associated with learning which is scheduled to take place after 5.00 pm, weekends and schools' holidays. Many of them leave their places of work at 5.00 pm after a day's work and rush to class for lectures or to read on their own. By the time the lectures are over, the libraries have already closed loaning out of reading materials and most of the books on demand have been borrowed by the on-campus students. Some of the library services that are very important to students' research activities are not available to nontraditional students because the respective sections of libraries remain closed in the evenings and weekends or the services are offered only during normal library working hours, for example reference services which are very important to students' research activities. The part time students find it a challenge to fit into the library operational schedules given that they have other responsibilities of adult life apart from being students.

Inadequate personnel in the libraries are also an issue that has an effect on the nontraditional students. The population of nontraditional students has been steadily rising in the public universities against the dwindling number of staff who are serving both regular and part time students alike. The staff are few, overworked and many lack motivation which in turn leads to provision of non-satisfactory services to unique needs of nontraditional students. Given the nontraditional students' characteristics and population, adequate, competent and responsive staff is an asset to them especially at this time that the new technologies, data bases, and more innovative open access systems for accessing information have made the library more complicated and challenging.

Studies so far carried out on university libraries particularly in Kenya have not focused on any of the above challenges facing nontraditional students in satisfying their information needs. Furthermore, no research has been done to this end. To achieve the organizational goal, there is need to understand the user needs and the challenges encountered in the process of satisfying their needs, hence the need for this study.

1.3 Purpose of the Study

The purpose of this study was to investigate the challenges encountered by nontraditional students in satisfaction of information needs with particular reference to the University of Nairobi and Kenyatta University libraries.

1.4 Objectives of the Study

The specific objectives of this study were to:

- i. Establish if the libraries have policies regarding nontraditional students information needs in both university libraries.
- ii.Determine information resources and services available for meeting the information needs of nontraditional students at the two Universities' libraries.
- iii.Determine the dimensions of information needs of nontraditional students in both university of Nairobi and Kenyatta university libraries.

1.5 Research Questions

- i.Do the two university libraries have policies relating to non-traditional students' information services?
- ii. Which are the information resources and services available in the two libraries for meeting the information needs of the nontraditional students?
- iii.What are the dimensions of information needs of nontraditional students in the two university libraries?

1.6 Significance of the Study

This study on challenges facing nontraditional students in satisfying their information needs is significant in several ways.

This being an area that has so far not been adequately researched, the study has broadened the knowledge base of the subject thus benefiting the researchers and also offer literature base to build on by the researchers in the subject area. Study findings and recommendations have the potential of generating information aimed at improving the libraries' information services to nontraditional students in UoN and KU libraries as well as other similar institutions. Implementations of the recommendations made in this study are likely to improve the quality and relevance of information service provision. To the University library staff, this study offers an insight into the challenges nontraditional category of users face as they satisfy their information needs so that they can appropriately be addressed. To the University administration, this study acts as a road map when it comes to collection development and staffing of the libraries. The insights from this study have the potential to create awareness among higher education practitioners and policy makers about nontraditional students information needs in the libraries. Thus, the study findings can help the universities administrators and government policy makers identify new models and effective practices in meeting the information needs of nontraditional students in the universities.

This would market the two Universities thus attracting more students. To the government policy makers, this study would provide a panacea for policies that would regulate information provision for the expanded University education.

1.7 Delimitations of the Study

The two university libraries have a wide range of students taking different programmes. This study focused on the challenges facing nontraditional students in the process of satisfying their information needs at the UoN and KU libraries and not any other category of students. Nontraditional students are mature students who apart from education responsibilities have other responsibilities of adult life. For example they have family responsibilities, employed fulltime and at the same time studying. The study was based at the UoN and KU main campus libraries only. The study did not focus on satellite campuses libraries. The libraries at the main campuses were selected for this study because they show the totality of the outlook of library based information provision services of the universities in question. To this end, the responses received were likely to be representative of the picture for all the library functional systems for the universities in focus.

1.8 Limitations of the Study

The study limited itself to one social group, the post and undergraduate students admitted for studies in non conventional modes of studying (distance learning, evening classes, open learning, weekend intensive and school based) in both UoN and KU. There was lack of adequate relevant literature on the topic, given that nontraditional system of learning is a new phenomenon in majority of the developing countries education systems. Another limitation of the study was financial and time constraints. A study of this nature required a lot of financial resources and time allocated to it. However, the time was not enough, and given that the researcher was a part time student who was struggling to balance between work, study and family responsibilities. Another issue was of corporation from the concerned offices where important data could not be easily accessed.

The NTS were selected because there is a perception that the current set-up of university library services may not be offering adequate support as far as their learning in the university is concerned. Therefore, the researcher narrowed to this category of users and classified them to be the key participants' in the research study.

1.9 Theoretical Framework

The theoretical frame work selected for this study was based on SERVEQUAL model (1988) which is one of the marketing theories. The theory of SERVQUAL is a multi-item scale

quality measure developed to assess customer perceptions of service quality in service and retail businesses (Parasuraman *et aI.*, 1988). The theory clarifies the notion of service quality into five constructs as follows:

- (a) Tangibles; Physical appearance of the library, library staff, facilities, and communication materials (equipments, printed and visual materials).
- (b) Reliability; The ability of library staff to perform the promised services dependably and accurately;
- (c) Responsiveness; The willingness of the library staff to help users and provide prompt services to meet their needs;
- (d) Assurance; The Knowledge and courtesy of library staff and their ability to inspire confidence and trust;
- (e) Empathy; Caring, individualized attention that library staff provide to the users (Parasuraman et., al., 1988).

Library's resources are critical to user satisfaction. However, no library can satisfy all its users all the time. Some libraries have very limited resources and clearly are unable to satisfy their users, whereas others are large in size, have substantial holdings, and can provide a variety of services. Obviously, those libraries that are able to provide users with whatever they want will achieve higher levels of user satisfaction. Thus, the availability of resources can have a significant influence on user satisfaction. It is important to note, however, that the *quality* of the resources may be judged from an overall perception as to whether the library can provide access to materials (example, through interlibrary loans or other document delivery services) when and where needed. It is this overall perception of a library's resources that contributes to user satisfaction.

SERVEQUAL provides detailed information about;

- Library user perceptions of service (a benchmark established by your own users);
- Performance levels as perceived by library users;
- Customer comments and suggestions and;
- Impressions from employees with respect to users' expectations and satisfaction.

SERVQUAL theory can be described as a model that suggests how information needs dissatisfaction arise, and subsequent interaction with information resources resulting into user needs satisfaction. The interaction options available may prevent (and, by implication, aid) the actual needs dissatisfaction among the nontraditional students. Most of the times, students' information needs emerge as a result of the need to complete assignment, prepare for class discussions, seminars, or write final year research papers. Parasuraman (1994) model notes in the process of seeking information, the nontraditional students may face challenges that may not allow their information needs to be satisfied

SERVQUAL theory takes into account the users perceptions on the relative importance of the service attributes. This allows the library to prioritize and to use its resources to improve the most critical service attributes so that the nontraditional students' needs are satisfied. Secondly, the usefulness of the theory is also noted in the sense that it orientates the research towards specific sets of research questions, provides a working strategy and acts as a guide to this research (Parasuraman et al. 1994). It is viewed by the library researchers as a basic analytical framework for understanding nontraditional students' needs satisfaction/dissatisfaction (Garrison, 2000). Most users would agree that a comprehensive and thorough examination of service needs and service quality provides an invaluable approach to improving service quality.

The limitations of SERVQUAL theory in this study is that it is a service quality assessment tool originated in and for the commercial sector and not the world of information. Another limitation of the theory is that some demeanor constructs are irrelevant in the library situation. For example, two items of the assurance dimension in the original scale did not seem to be critical to the library setting. These items included feeling safe in the transaction with library staff and the extent to which library staff instilled confidence in library users. Finally the theory's general applicability to all service sectors is a limitation in this study in the sense that libraries and information centres are nonprofit making organizations.

The advantage of applying SERVQUAL theory in this study is that the customer based approach for conceptualizing and measuring service quality offers an alternative for defining

the quality of library services. It emphasizes the service nature of the libraries, in which the traditional collection-based criteria of quality contributes to value experienced by library users. Value becomes an outcome of excellent services. Secondly, the theory is a marketing service quality measure that helps in explaining this study in terms of level of students' satisfaction/dissatisfaction with library services thus identifying the challenges that the nontraditional students face as they meet their library needs.

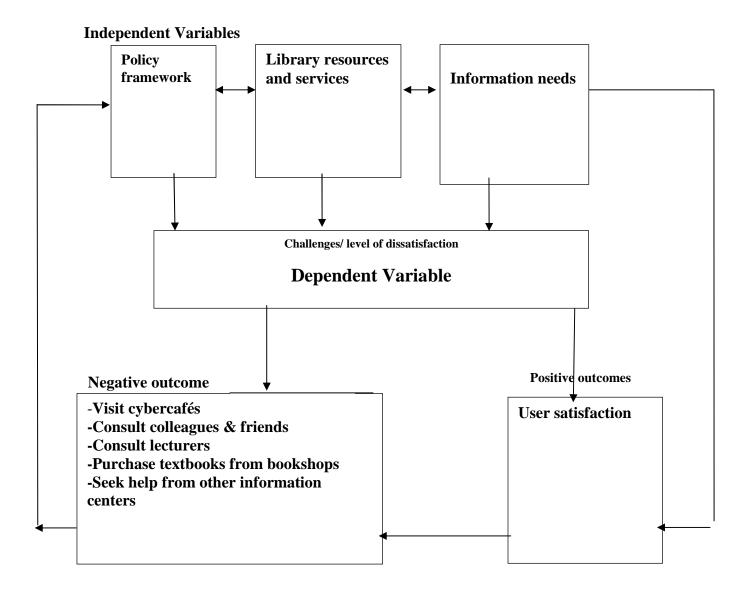


Figure 1: Conceptual framework on challenges facing nontraditional university students.

Source: Researcher (2012)

The Dependent Variable (DV) in this study was the 'challenges/level of dissatisfaction of nontraditional students'. The level of dissatisfaction among the nontraditional students were determined by various factors (independent variables) which included: the library policy framework which gives guidelines on nontraditional students' information services, the library information resources and services, and the dimensions of the information needs which need to be satisfied.

Policy framework: Policies are mechanisms for ensuring that individuals are treated fairly and equitably and that individuals interests are managed for the greater good (Bryson, 1999). The policy guidelines are very important, they give direction on what services and resources the library should offer to the nontraditional students and the standards to be met in order for the library to meet its objectives. For the library to offer resources and services appropriate to the academic level and institutions' programmes such as the nontraditional learning programmes, policies and procedures should be planned and effectively followed. Policy guidelines act as a fallback for the library staff at the service points in situations that require urgent decisions to be made concerning service delivery.

Library resources and services: The information resources are a very important factor to nontraditional students. A library which is adequately stocked with relevant good quality materials will appeal or attract the users. When the collection is outdated, torn and few compared to the students population, the students will avoid using that library. They will look for alternative sources of information. For example the students will go to other libraries, consult their friends and colleagues, cybercafés, lecturers or buy books from the bookshops so that they meet their academic requirements. The information resources include both the print and electronic sources of information. These are: textbooks, print journals, thesis and dissertations, indexes and abstracts, reference works. Electronic sources are; CD-ROMs, Audio-Visual materials, E-Journals, E-Books, Electronic data bases, Commercial data bases, Search engines (Google, Ebsco, Jstor, Yahoo), Web based databases. Basic library services such as reference assistance, bibliographic instructions, Inter library loan (III) and document delivery, reserve readings and special collection, online tutorials and web pages for distant learners are important in the process of user needs satisfaction.

The calibre of staff in the library is also an important factor for attracting and retaining library users in a particular library. When the library is understaffed, the users will not get prompt quality services. There will always be long queues at the service points and some sections of the library remain closed especially in the evenings week-ends when the nontraditional students need the services most. This will force nontraditional students to go to other libraries where services are prompt and up-to-date. When the staff are overworked and feel burn out, they become unfriendly and rude to the users. This will keep away the library users. The staff should have relevant qualifications and skills in handling library users especially the mature students who have unique library needs. Staff motivation is key to successful information provision in the library.

Information needs: The importance of knowing the information needs of nontraditional students arises from the necessity of libraries to satisfy such needs and to equally give effective assistance to the students as regards information retrieval. Otike and Omboi (2010), described the need to study information needs as means of improving existing services or creating new agencies to cope with all the information needs which may not be satisfied. The nontraditional students information needs are actually the same as those of the regular students as all need information based on subjects or courses offered. However, access to this vital tool may vary with each category of students (Kabede, 2002).

The importance of this model in this study relates to how it outlines the various areas covered by situation which create barriers/challenges in the process of need satisfaction. Here, students' perception in information-seeking behaviours in university environment, which revolves around the print resources, human resources and electronic resources, will be the key focus areas. It is the need to investigate the level of satisfaction/ challenges experienced by the nontraditional students as they satisfy their information needs that make SERVQUAL's model fit in this study.

The risks of non-satisfaction are reduced by assembling information sources in the best way in which users can have unlimited access and support. Better systems such as modern libraries are likely to be better designed if the librarians acknowledge the now popular nontraditional modes of studies are here to stay and unique information needs of nontraditional patrons need to be catered for.

Challenges: The nontraditional students encounter a lot of challenges in the process of meeting their information needs. These include inadequate support from library staff that happens to be fewer especially during hours after 4pm and the weekend's rotations (UON library customer service feedback, Jan-April 2010). Caliber of staff is an important factor that will determine the frequency of nontraditional students in the library. The success of library operations hinges on the skills and capabilities of the human resources recruited.

The libraries operation schedule is another challenge to the nontraditional students who have other responsibilities of life apart from being students. For example nontraditional students who work during day-time and attends lectures between 5.30 pm to 8.30 pm and from 8 am to 5 pm on Saturdays. No matter how well stocked a library is, if operational hours do not conform to the hours a student can access and use the services, then the frequency of visiting such a library will be limited.

The library rules and regulations are such that they favor the full time students. The loaning period of reserve collection is a big challenge to the part time students who may not be able to return books to the library in the morning before reporting to their places of work.

Inadequate information searching skills contribute to the parallel students frustrations of finding their ways in the massive volumes of books and journals available in the two libraries (Mwangi, 2006). The fact that they are not scheduled in the two universities' calendars for orientation programmes usually make them look like they are forgotten (University of Nairobi calendar 2009/10). This makes them disadvantaged as far as learning how to search and retrieve information resources skillfully in their libraries is concerned. Libraries are seen as learning physical space offering a range of individual and group learning environment with staff and technology to support the students learning and information needs. There should be flexible and adaptable space for accommodation of the nontraditional students unique needs.

1.10 Definition of Working Terms

ABI/inform: Database which provides abstracts of articles from international peer reviewed publications and trade magazines.

Demand: In this study, a demand is what an individual asks of a library. People normally believe they want the thing they ask for, but may subsequently find that the requested item is valueless.

Distance education: This is a system in which students learn but do not have to be in regular face-to-face interaction with the teacher. Under this education model, students do not attend lectures parse but they are provided with guidebooks and reference materials, together with other recommended course units reading materials. They sit for written examinations at their various campuses on designated days of the academic year.

Information: This denotes a physical entity or phenomenon in this study (as in the case of questions relating to the number. of books, journals etc.).

Information access: Methods and means by which information seekers get the information the y need.

Information literacy: Is the set of skills needed to find, retrieve, analyze, and use information.

Information needs: This is treated in this study as lack, deficit, gap or difference between knowledge required and knowledge possessed.

Information seeking behaviour: study of how people need, seek, give information in different contexts, including the workplace, everyday life (and academic environment).

Nontraditional students: In this study, this refers to students enrolled under the nontraditional programmes of learning. They are also referred to in this study as parallel, non regular, module 11 and part time students. They can be adults who return to school part time while maintaining responsibilities such as employment, family and other responsibilities of adult life; or young people who opt to pursue their studies at the university on a part time basis and may not necessarily be employed or involved with adult life.

Traditional students: This refers to students enrolled under the regular programmes of learning in which students take lessons during day time, basically do not have other responsibilities of adult life, are in college full time, and are not employed fulltime.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviewed primary and secondary literature relevant to the study on challenges encountered by nontraditional students in the process of needs satisfaction. It is organized thematically according to the objectives of the study starting from Policy frameworks on nontraditional learners, followed by the information resources and services, information needs of nontraditional students and lastly, challenges encountered in satisfaction of information needs of nontraditional students which was the main purpose of the study.

2.1 Library Policies and Information Needs of Nontraditional Students

A policy is a governing principle, plan or course of action which guides the operations of a given entity. It can also be termed as a framework that provides information with operational guideline for development of resources such as data, information technology, and collection development and also outlines issues concerning the users and consumers of the products or services being offered (Nicholas, 2001). In libraries, a service charter or library guide outlines its operations and guide the users on what to expect and on how to interact with the library services.

With developments related to nontraditional modes of learning which have become integral part of studies in most of both local public and private universities, attention has now been directed at libraries to assess if existing policies accommodate the interest of nontraditional students. This is important because just like their counterparts, nontraditional students require libraries to source for information as the need arise during their studies. The existing libraries' policies appear to be biased towards the interest of traditional students and such being the case, nontraditional students are compelled to fit in, making their situation vulnerable as far as optimum use of the libraries is concerned (UoN library customer service feedback survey, Jan- April 2010).

The Kenya Commission for Higher Education (CHE, 2007), has spelled the standards and guidelines for universities libraries in Kenya. The document captures details such as information resources, organization and access, and library services for all without giving undue favors to selected category of library users amongst the students' population. This is supported by Association of College and Research Libraries of Nigeria (ACRL) Guidelines (2000), which stated that nontraditional learning community, are entitled to library services and resources equivalent to those provided for students and faculty in traditional campus settings. Effective and appropriate services for the nontraditional learners may differ from, but must be equivalent to, those services offered to traditional on-campus students.

Policies are mechanisms for ensuring that individuals are treated fairly and equitably and that individual's interests are managed for the greater good (Bryson, 1999). In the absence of proactive policy frame work, streamlining activities such as acquisition, information storage and dissemination to the nontraditional students' expectations remains a mirage. Ndungu (2007), stressed the need to develop a comprehensive collection development policy in JKML and make it available to all library users. This would streamline all its acquisition activities to satisfy the information needs of the different categories of students.

Policies are guides to decision-making that ensure that organizational decisions are kept in line with organizational philosophy (Clarke, 1999). Nwalo (2002), notes that policies are common in all industrial and service organization. For consistency of services, high productivity, and efficiency, organizations provide guidelines to be followed by those involved in the service or production process. When the policies which are in place are not effective regarding the nontraditional students' information needs satisfaction, the service providers may use their own judgment on what services to offer since there are no guidelines to refer to. This results in giving services haphazardly.

Montuiloff (2003), observed that libraries should formulate policies to ensure effective and efficient use of their information resources. Policy statements are the regulations, principles, and strategies that help realize the needs of libraries. Since policies are guides to decision-making, they ensure that decisions of an organization or institution are kept in line with their

philosophies (Clarke, 1999). A library policy is a document that guides the management of the library from the present to the future (National Commission for Colleges of Education (NCCE), 2000). Nontraditional programme of education is a new phenomenon in the Kenyan system of higher learning, development of formal policy is needed to ensure its success now and in times to come. Rodriguez (2001), has similarly points out that for a library to offer resources and services appropriate to the academic level and scope of an institution's programmes, policies and procedures must be planned and followed. Weaver and Shaffer (2001), stress the need for written policies governing standards of service, particularly, where agreements between institutions exist. Such policy documents should also include a mission statement and an account of the goals and objectives of the services.

Lebowitz (2000) suggests that following an extensive needs assessment, where aims and objective are identified, libraries should plan for six crucial elements of a service policy namely, staffing, programme format, services, document delivery, use of technology, and publicity/ public relations. According to Udoumoh and Okoro (2007), policies are practices that are established and implemented by libraries regarding the creation, organization, use, and dissemination of knowledge are themselves information policies, which have tremendous impact on patron's access to information. He outlined library policies under the following headings: organization of materials and collection development policies, service policies, preservation, and intellectual freedom.

Library services in Kenyan universities will continue being perceived as biased and unfavorable if the information needs of nontraditional students are not anchored in their policy documents and service charters. In this case, the nontraditional students' needs must be known through survey and thereafter they get factored in the policy framework which will guide how such interests require to be catered for. User-centered approach will work better than the current design in our libraries which appears to be more of service-centered orientation. In support of this observation, Odini (1993), argued that the prevalence in Kenya of information services which have been designed without the needs of users in mind is one of the factors which have hindered the use of information. It is possible that nontraditional students may not be accessing optimum information services in their library for the simple

reason that there are no policies in place regarding satisfaction of their unique information needs. This exposes a gap for policy makers to modify or come up with new policies that are inclusive of needs of nontraditional students.

From the above findings in the literature, it is apparent that library policies are the pillars on which the library should build for the realization of the library needs. Policies are the regulations, principles, and strategies that are important for effective provision of library services and resources. However, the researches that have been carried out in the universities in Kenya have not focused on policy frameworks pertaining to challenges encountered by the nontraditional students as they meet their information needs in the libraries. It is the intention of this study to investigate this issue further.

2.2 Library Resources and Services for Nontraditional Students.

Information seeking is a basic activity indulged in by all people and manifested through a particular behavior. It is also an aspect of scholarly work of most interest to academic librarians who strive to develop collections' services, and organizational structures that facilitate information seeking. Ssendikadiwa (1996), observed about Makerere University that although the catalogue was the most essential library tool in accessing collections, it was the most avoided and least consulted by undergraduates. Considering the rapid changes in information provision in the twenty first century with computerized access, digitized information formats, and the plethora of resources on the Internet, the information needs, and the access and retrieval capabilities of users particularly of those studying in universities through nontraditional modes of learning is worth subject for study.

The library users mainly visit the library in search of information materials to use for their respective needs. For that reason, a library is of no service to its users if it does not have suitable information materials. It follows therefore that for the university library to be able to support the mission of its parent organization and the university effectively, it is required to selectively acquire on regular basis, current and relevant information materials in sufficient quantities (Otike and Omboi, 2010). According to Nwalo (2009), information is at present believed to be a fifth factor of production, which is by no means inferior to land, labor,

capital and the entrepreneur. It should always be remembered that university libraries has been established to support learning, teaching and research activities of the universities. Consequently;

- (i) The library collection must support every curriculum and research activities;
- (ii) The collection must be organized in a manner that facilitates easy access to their contents;
- (iii) Users should be informed about the library collections, services available, and be empowered with skills to use the resources;
- (iv) Competent library staff is required to give direction and vitality to the services provided.

This underlines the fact that the development of university library collection is a multifaceted and complex process that involves strategic planning, identification, acquisition and management of the information materials. Hence the design and implementation of automated systems, building of efficient staff teams and the overall management of economic considerations (Nwalo, 2009).

Bolton *et al.* (1998), undertook extensive research into the experiences of postgraduates with library services in UK, and found many stories of frustrations caused by lack of communication and planning. The key to providing effective support to nontraditional learners undoubtedly lies in forward planning involving all stakeholders. Too often a part-time learning course is launched with the unwritten expectations that students will be able to find their own library support (Brophy, 2000). The nontraditional students are admitted in the universities and expected to visit the library for the class assignments without prior arrangements on how they would access the reading materials.

Branch (2003), carried out a study on information seeking behavior of nontraditional Undergraduates' students at New York State University in Albany to survey their use of Information resources and impact of information literacy instruction on the usage of these resources. Participants reported that the most information sources and channels for home, work and study were as follows: Internet, friends, co-workers, family and professionals. It was found that if they could not meet their information needs through the above channels,

then they would turn to other sources of information such as newspapers, magazines, television, reports, databases, and libraries. Based on these findings, Branch concluded that all students needed skills to help them be efficient and effective in using the Information resources.

Koss (1996), studied the information needs and research skills of MBA students in the first summer session of 1996 in order to find out the types of information resources used when researching business topics for class assignments, research, and individual projects. The results of the study showed that despite numerous resources available to the MBA students, they primarily used current periodicals and ABI/Inform. The most prominent finding was related to the fact that the MBA students took their professors' advice regarding access to business research tools. However, few academics were aware of the wide variety of research tools, such as Compaq Disclosure, Lexis/Nexis, and information resources which were provided in KSU library. As a result they were not able to recommend them to the students. Based on the findings of the study, Koss made two important recommendations: librarians should promote MBA students' information searching and seeking behavior skills through library instruction class so that they would be able to better utilize library resources and, librarians should work with professors in creating and giving instructional sessions.

Chikonzo and Aina (2001) conducted a study to determine the information needs and Information resources that were used by veterinary students at University of Zimbabwe. The findings revealed that writing assignments and studying for tests or examinations were the primary tasks for which they required information. In descending order, the major sources used to meet these information needs were: books, videos, lecture notes, the Internet, CD-ROM databases and journals. One unexpected finding was that the students made little use of indexes, abstracts and dissertations. The authors suggested that the library needs to employ a more proactive approach in teaching students how to fully exploit the resources available to them.

At university of Nairobi, the MBA section has been in operation since 1998.it was created to cater for the unique needs of the nontraditional students. It is stocked with textbooks

conveniently selected to suit students and lecturers in Business Administration courses. It is also fitted with ideal reading desks and sufficient chairs. The rationale behind this collection was to set aside books for the nontraditional students enrolled for MBA courses whose classes are always offered in the evenings and weekends. The idea was to seclude books for these students such that every time they would arrive usually in the evenings, they would always find them. Equally, minimizing scramble for the same books with other students enrolled for regular modes of studies was also another ideal reason for this special collection, which works well so far. The collection is accessible only to the nontraditional graduate students and the lecturers within the faculty of business.

In order to serve nontraditional students better, identification of their information needs is of essence. Granger and Benke (1998) asserted that the first step in identifying nontraditional information needs is to know 'who they are, where they are, what is available to them, their needs and limitations..." in relation to the program of study. The reason behind this is to understand enough about their circumstances and learning needs such that some elements of the program do not appear as barriers to successful study.

With the number of nontraditional education programmes and courses being offered growing at an exponential rate, academic libraries need to redesign their library support structures to accommodate the needs of remote learners. Satellite libraries are being developed by most of the public universities in areas where they have opened regional campuses. Enhancing the existing services through extending opening schedules to include sundays as well as subscription to electronic databases is other measures that could diversify library services. Librarians are doing well by advocating for subscription to electronic journals as a means of overcoming geographical barriers which would otherwise reduce or limit library resources to just the physical building. The librarians have embraced the idea of forming consortiums in order to overcome the persistent problem of funds in public university libraries Brophy (2000). According to Wood and Walther (2000), reference, bibliographic instruction, Internet training, full-text database searching and OPAC interface are some of the services that are increasingly being offered to distance learners via the Internet.

In UK for example, a number of academic libraries have developed new services that are in favour of parallel students. Effective library services to such students include:-

- (a)Opening hours have been extended in the evenings and libraries are opened during weekends.
- (b)Collections of materials are developed for use only by part time students. This prevents fulltime students (who have better access to the library) taking all the copies of a book.
- (c)Assign designated librarian task of using electronic communication avenues such as phone and fax facilities to reach out students who are unable to get to the library.
- (d)Interlibrary loans and reservation request by part time students are taken by post, fax or phone, to save them a journey to the library. Books can be renewed in the same way.
- (e)Articles from journals are requested from home or work. The library then sends photocopies to the students. Likewise, books can be posted to students. In this way, the library is allowing the students to use the libraries resources without (f) having to be physically present in the libraries.
- (f)Heavily used services which are bookable, such as CD-ROM databases, present a real problem to part time students. Because they find it difficult to spend time in the library, they are unable to compete with full time students who can book sessions easily. Library staff can offer to take bookings for part timers by phone, again saving them time and giving them equality of opportunity.
- (g)Part time students phone or fax to request that books be taken from the shelves and put behind the issue desk for them to be collected in between classes. This service would save the nontraditional students' time it takes to search for books and instead, merely have to wait for the reserved books to be issued. Such arrangements enables the designated member of staff to form close contact with nontraditional students and allow them to develop a very good relationship with the students, and to attain a sound understanding of their study and library needs (Heery, 1996).

Library services like what has been described above if in place in the public university libraries such as UoN and KU, the library staff in charge of the collections would be able to

form close links with the nontraditional students. The day to-day contacts by telephone, will allow the library staff to develop a good relationship with the students, and so attain a sound understanding of their study and library needs.

This body of literature points to the existence of the need for an exploratory research to determine the extent to which non regular students constitute unique user group with unique information needs. Moreover, a better understanding of their information needs has the potential of making an important contribution to provision of appropriate information services and resources and design of information literacy programme.

2.3 Nontraditional Students Information Needs in Academic Libraries

Information is knowledge acquired through experience or study. Information needs is therefore ever present since people cannot ask for things of which they are not aware of or have not experienced. There are significant differences in what information people need and how they gain access to it. There is as well, diversity of sources of information that people turn to in order to satisfy their information needs.

Information is needed because it affects peoples' lives. People need information to obtain answers to specific questions (Nicholas, 2001). Information needs arise when a person recognizes a gap in his/her state of knowledge and wishes to resolve that anomaly- an anomalous state of knowledge, (Belkin and Vickery, 1989). Information represents an ordered reality about nature of the world people live in. It is a cognitive experience that represents gaps in current knowledge of information users (Devadason and Lingam, 1997). An information need is inherently subjective and occurs only in the mind of a seeker, making all the approaches problematic. A need is a psychological construct, closely related to other constructs such as motivations, beliefs and values. Needs cannot be observable by a researcher or librarian much less by an automated 'Intelligent agent'. Only indicators or signs of needs are observable (Borgman, 2000).

People essentially need information for five broad functions and these functions are:

- i. The fact finding function, which provides answer to specific questions;
- ii. The current awareness functions, which keeps information up to date;

- iii. The research function, which investigates a new field in-depth;
- iv. The briefing function, which obtains a background understanding of issues;
- v. The stimulus functions, which provides ideas to obtain stimulus (Nicholas, 2001).

Interest in studying library services to meet the information needs of part time students has developed in the developed countries especially in United Kingdom (UK) over the last decades. Partly due to the increase in numbers of mature students attending colleges and universities part time (Abdoulay, 2003). The scenario is the opposite in Kenyan public universities, there is a big increase in the population of nontraditional students enrolling in colleges but few if any studies have been carried out on library services to meet their information needs. For example Mwangi (2006), did a study on "User education on undergraduate students in both UoN and KU libraries but failed to mention the nontraditional students in both libraries. Kanori (2009), studied information seeking behavior of graduate students" in the college of Agriculture and Veterinary science, university of Nairobi. He concluded that 36.1% of graduate students have low information seeking skills that cannot help them locate relevant information to solve urgent problems. He did not mention anything about the nontraditional students. Similarly, Chacha (1990), analyzed "User problems in academic libraries" in Jomo Kenyatta Memorial Library (JKML) and concluded that one of the major problems of academic library users is inadequate information seeking skills and she failed to focus on the nontraditional users information needs in academic libraries.

Available literature on university libraries in Kenya lack adequate information related to information needs of nontraditional students. Researchers in this area of interest have not if any focused on the nontraditional students. This situation justify this study which attempts to shade light on issues which have been omitted or being given less prominence by the researchers in this profession.

For accessibility purposes, the information should exist in an accessible format; it should be reliable and relevant in meeting the individual's needs. Hence, for libraries to play a key role in information dissemination, librarians must develop comprehensive and effective formal information management strategies and procedures of their own. There is need for

information to be effectively managed and it is important for it to be accessible to those who need it wherever they require it. Hence, the concept of information need, forces us to recognize the critical importance of equality of access to information (Unwin, 2009).

Users interact with information communication systems. The value of an information system such as academic library need to be seen in terms of the uses that are made of the information and the subsequent impact of the information on users' activities. Information needs influence the user behaviour pattern in seeking and exchanging information. Students' needs vary depending on the ease with which they can identify, locate and gain access to information. Information needs and information use are quite related to an individual's learning purposes. An individual seeks information in order to use it immediately or later on. Researches conducted by Sheppard (1983); Ajiboye and Adeyinka (2007); Kakai *et al.*, (2004), revealed that students seek information mainly in the library to satisfy their immediate academic use. They seek information from the library in order to do assignments, write term papers, prepare for exams, and carry out researches. The researches revealed that information needs are driven by the need to satisfy a particular need at a particular time.

It is possible that even the best system are not used to their full potential especially if there is lack of awareness of the system and invalid perception of the system. The nontraditional students may not be aware of what is valuable for them in terms of information resources and instead turn to other sources of information. There could be misperception on their part concerning the library system due to the fact that they do not go through library orientation. Librarians tend to focus on disseminating information that they think their students need, while they should first understand who their students are and what they want (Dew, 2000). To provide appropriate services for the nontraditional students, the librarians need to carry out needs assessment survey so that they know what services would be relevant. The librarians should not make assumption that services that have been beneficial to the traditional students would also be as well relevant to the part time students. The nontraditional students' characteristics may not allow their unique information needs to be satisfied in the same way as those of on-campus students. For example, some of the

nontraditional students are in fulltime employment and may not be able to visit the library building during the normal library working hours.

To provide adequate services, librarians really need to know the nature of programmes and classes and location, learning characteristics and expectations of all potential users of the service. Libraries need to identify and understand groupings of library constituents (Cooper, 2001). For example, open learners, distance, and evening groups. This can be done by assessing the needs of the nontraditional learning community for both electronic and traditional library resources, the existing library support, and surveying regularly distance learning library users, to monitor both the appropriateness of their use of services and resources and the degree to which needs are being met.

Motivation for obtaining information, an aspect, which triggers information needs and subsequent information-seeking patterns in university education, are of great interest in this study. Most of the times, students' information seeking behaviour involves active or purposeful information seeking as a result of the need to complete assignment, prepare for class discussions, seminars, or write final year research papers (Abdoulay, 2003).

Requirement to prepare and write theses and proposals equally generate need for information and many students (nontraditional and traditional) reach out to the libraries as a place they rely on and trust to access quality information. Making notes to prepare for and supplement lectures also create need for searching for information among the university students regardless of their modes of learning.

Preparation for examinations and other forms of academic assessment tests in the university are yet other activities, which generate need for information. Students visit the libraries in mass to contact the available sources in order to revise for examinations. Need to prepare and rehearse for tutorial preparations is yet another activity within the university learning procedures which creates need for information hence triggers information seeking activities particularly within the libraries. Students are usually assigned topical issues, which they are expected to research on and prepare in the lecture rooms either as a group or as individual

students. In such circumstances, the lecturers guide the presentations process and awards scores accordingly. Among the lecturers and researchers within the Universities, keeping up to date with new ideas and stimulation are equally other activities, which trigger need for information. Information required for instructing, training or informing others are other dynamics, which create information seeking activities. To solve practical everyday problems would also lead to seeking for information.

Information sources used to satisfy needs vary according to the nature of needs. For instance, journals are more effective in providing some kind of up to date information in areas of specialization. Similarly, Pelzer *et al.* (2000) conducted a study in Lowe state university and found out that library resources, such as indexes, abstracts, were used more by students seeking advanced degrees than the general body of students in satisfying their specific information needs, reflecting this group's prior exposure to information sources.

All the studies reviewed emphasized that information is not sought for its own sake, but is sought to satisfy a particular need which should be identified especially in learning related areas or development related concerns. For learning purposes, seeking information is quite necessary and the information sought is put into immediate use. This brings in the issue of how nontraditional students seek for information and which information seeking tools are available to them.

2.4 Challenges Facing Nontraditional Students in Meeting their Information Needs

This was not one of the objectives of this study but the main purpose of carrying out this study.

In the process of information seeking there are various factors that may interfere in the process and create challenges to meeting the information needs by nontraditional students. These factors could be personal like ability of the user, organizational like priorities, or situational like lack of time on the part of the user (Ikoja-Odongo and Ocholla, 2003).

Information needs of nontraditional students are generally the same as those of students undergoing studies through the regular mode of learning. The point of departure is time and styles of accessing libraries' and their resources, which are highly desired by students undertaking learning in traditional and nontraditional modes of learning alike. According to

Heery (1996), problems facing nontraditional students are not caused by their reluctance to adopt to the traditional system, but rather by the inability of educational institutions to provide appropriate support to meet the needs of a significant group of students. However, nontraditional students have common problems such as; shortage of time affects many part time students. For example, distance learners, evening groups, open learning groups as well as school holiday groups. The shortage of time is attributed to their modes of learning, which are detached, from regular systems of learning. Many of them leave their offices at 5.00 pm after a days' work and rush to class for lectures or to read on their own. Therefore time management poses real challenge for nontraditional students in fulfilling their academic needs because other responsibilities and commitments can cause difficulties. Such students also find it difficult to access library materials due to inadequate study skills. This means that nontraditional students need support and encouragement. They need to be able to explain their circumstances and to meet with empathetic response that is prepared, when necessary to bend rules and regulations (Heery, 1996).

Most public university libraries in Kenya still follow the traditional ways of operations, despite a growing number of nontraditional students currently outnumbering traditional students in such institutions (Robert, 2000). This category of students face a lot of challenges in accessing library services as library managements do not take them into consideration as they come up with library policies on use and access to information services. Few libraries if any in Kenya have come up with means of meeting needs of nontraditional students.

At the University of Nairobi, school of business library extended its hours of operations to cater for the needs of nontraditional students. Recently new development concerning hours of operation are being extended to other sub-libraries of UoN on experimental basis. The libraries open on Sundays from 12noon to 5pm and Saturdays 8am to 5pm. On sundays some of the UoN libraries open their doors to the students for the use of reading space but no other library services are offered. All sections remain closed apart from the issue desk, which operates with a skeleton staff. Kenyatta University main campus library operates during week-ends and holidays from 8 am up to 5 pm with a skeleton staff who are normally not the senior librarians, which means some of the sections remain closed. The problem is therefore

the failure of academic libraries to adapt their services to the needs of an increasingly diverse students' population. The nontraditional students are expected to fit into the system that was meant for the regular students who are on-campus. The problem is not the students but the academic libraries which are reluctant to adapt to the changing profiles of students in higher learning (Heery, 1996).

Researches done by Kakai *et al.* (2004), Ariyapal and Edzan (2002) and Fidzani (1998), suggested that the nontraditional students face challenges in utilizing their libraries for meeting their information needs. Barriers and difficulties may be due to lack of skills in using various information technologies, shortage of time, given that majority of them are in fulltime employment, lack of information literacy, lack of contact with reference librarians as a result of failure to fit into the library working schedules, reluctance on the library staffs due to incompetence and poor public relations, shortage of up-to-date relevant information materials, and inability to seek, obtain and evaluate information (Wang and Frank, 2002).

At University of Malaya (UM), another user survey was carried out by Ariyapala and Edzan (2002). The findings indicated that some of the students do find difficulties in using the online catalogues due to never having used OPAC facilities before, unclear instruction in the OPAC, no guidance given before use and lack of library policy on use. The authors recommended that librarians must teach the library systems and services through instruction programmes and provide printed instructions. Thus the major issues libraries face are how to effectively help the nontraditional students with these challenges while increasing the comfort levels in the library and reducing library anxiety among the students.

Boadi and Letsolo (2004), in a survey on information needs and information seeking behavior of part time students at the Institute of Extra-Mural studies in Lesotho" came to the conclusion that information provided for part time learners must be relevant, timely, easily available and up to date. Findings revealed that a large majority of respondents don't use the library. The most common reason noted for not using the library was lack of times.

From the studies that have been reviewed, it is coming out clearly that the nontraditional students are facing a number of challenges/barriers in meeting their information needs. This is as a result of their unique characteristics. This calls for different approaches from the traditional ones by the library in meeting their unique information needs. The academic libraries are challenged to identify the challenges that the nontraditional students encounter in the process of satisfying their information needs and suggest procedures to deal with the challenges. This is the gap that this study intends to fill.

This research is geared towards exploring the information needs of nontraditional students with a view of identifying the challenges that the nontraditional students encounter in the process of satisfying their information needs.

2.5 Summary and Research Gap

After reviewing the literature that was available on the challenges facing nontraditional students and user studies, it was apparent that questions regarding the investigation of challenges facing nontraditional students in the process of satisfying their information needs in both UoN and KU in relation to policy frameworks, library resources and services, had not been adequately addressed. Nontraditional students' unique characteristics call for different approaches for information needs satisfaction. Literature reviewed mostly are from western countries therefore cannot be directly adapted to the Kenyan situation. This suggests that not much has been researched on this area thus creating—knowledge gap that needs to be filled. Nontraditional mode of learning is also a new phenomenon in the country's education system that calls for new approaches from the tradition.

The existing gaps would be filled through some of the following strategies; Highlighting the areas which need to be attended to in order to improve user satisfaction of nontraditional students in institutions of higher education. Highlight gaps in the existing library policy frameworks which require urgent improvement in order to accommodate information needs of nontraditional students. Libraries' service charters, strategic plans, objectives, mission statements and guides will be core items to be scrutinized under libraries' policy frameworks. A policy is a fluid document. Hence the policy requires evolving as information needs of other users apart from those of students studying through traditional modes of learning in

universities. The policy must reflect the changing needs of its users. Where such policy exists, it is preferred that it be reviewed from time to time. This is essential in order to be in line with ever changing users' needs and advances in information technology and repackaging of modern times.

On the same approach, information resources and services which are not user-friendly to nontraditional students will be highlighted and better strategies which need to be embraced by librarians will be recommended for consideration. Information literacy (IL) (user education) which has been defined as "the ability to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information" American Library Association (ALA, 1989). This serves as an important tool towards enhancing users' information skills. The kind of literacy education provided should also publicize the services provided by any library as this will play a big role in influencing how its resources are utilized and how the users seek information. In order to meet the actual needs of the library users it is preferred that circulation studies and survey of user opinions be considered as typical approaches to realize a user-centred library collection. In other words, use and user studies should be seen as important tools for systematically gathering information about user expectations and users' approach to the collection and challenges that the users meet in information seeking processes.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter describes the methods and procedures followed in carrying out the data collection, analysis through to interpretation of results of the study on challenges encountered by nontraditional students in the process of satisfaction of their information needs at both UoN and KU. The chapter is organized under the following sections: research design, area of study, target population, sampling techniques and sample size, data collection instruments, piloting, data collection procedures, data analysis techniques and ethical considerations.

3.1 Research Design

This was a study of challenges facing students enrolled in non-regular learning programmes of UoN and KU. The study adopted a descriptive survey as its design. It is a cross-sectional type of study since it involved delving into information seeking circumstances of a systematically selected proportion of students at one point in time. As Covey (2002), postulates, this is an effective way to gather information about peoples' current behavior, attitudes, beliefs and feelings through questionnaires. It was therefore a self reporting study which brought out quantifiable information from the sample (Mugenda and Mugenda, 1999). This design was intended to find out the challenges facing nontraditional students in the process of satisfying their information needs.

The survey research was appropriate for this study because the researcher was interested in collecting original data so as to be able to describe the large population which could not be observed. Secondly, the researcher collected data from the sample population in order to determine the current status of the population with respect to more than two variables. Thirdly, the survey design was suitable in the measurement of characteristics of the large population. Lastly, the survey was used to explain the existing status of the variables at a given point of time (Mugenda and Mugenda, 1999).

3.2 Area of Study

The study primarily dealt with information needs of post and under graduate nontraditional students at both UoN and KU libraries. These research sites were selected because they both host high population of post and undergraduate nontraditional students enrolled in various courses. Secondly, the two university libraries have experience in providing information services over a substantial period of time. The study focused only on the main campus libraries of the two universities and not any other library.

These Universities are corporate bodies established by Acts of Parliament. University of Nairobi has constituent colleges spread around the city of Nairobi and satellite campuses all over the country. The University of Nairobi main campus is situated near the City Centre and bounded by Harry Thuku road on the East, University Way and Nyerere Road to the South, Mamlaka Road to the West and Msonga Wai/Nairobi Rivers to the North. It dates back to 1957 when the parent institution, the Royal Technical College was a small technical college. In 1970, the University of Nairobi became a fully-fledged University through an Act of Parliament cap, 210 of the laws of Kenya. University of Nairobi main campus library hold approximately 700, 000 volumes of print resources and it also has access to a number of fully subscribed online electronic databases. The library serves about 5,000 users per day (Issue desk borrowers' statistics register 2010).

Kenyatta University is situated along Thika Road, about 12 km from the city centre. The history of Kenyatta University dates back to 1972 when it became a constituent college of the University of Nairobi (UoN). In 1985 by an Act of Parliament of the laws of Kenya, Kenyatta University College became a fully-fledged University. Kenyatta University has several satellite campuses all over the country but this study is based on the main campus library and not any other library. The library has a book collection of over 28, 0000 volumes, over 120 periodical collections and has access to a number of fully subscribed online electronic databases. The library serves approximately 2,000 users daily as per the library statistics.

3.3 Target Population

The target population is defined as the population to which a researcher wants to generalize the results of a study (Saunders, 2007). The target population should be comparable on many characteristics with those of an accessible population herein defined as all the nontraditional students in UoN and KU. The target population for the study consisted of all post and undergraduate students who were not enrolled in regular programmes in both University of Nairobi and Kenyatta University. From data available in the respective students' registries of the two universities, there were 29,476 nontraditional students in 2009/2010 academic years. Consequently, the accessible population consisted of 29,476 students from the two purposively sampled universities (Government of Kenya Economic survey, 2010).

Kenya had thirty Universities; seven publicly and twenty three privately supported http://www.che.or.ke/library.html. Out of this, the researcher purposefully selected two Universities that was, UoN and KU as the study sites. The two Universities were selected for the reason that they have a big population of nontraditional students and experience in provision of information services over a substantial period of time (Kavulya, 2006).

3.4 Sampling Technique and Sample Size

A sample is a smaller group obtained from the target population. In this case, the sample was drawn to be a representative of the whole population with salient characteristics. Sekaran (2006), suggested that for descriptive studies, ten percent of the target population is sufficiently large to depict the population parameters. On the whole, the sample must be of optimum size; neither be excessively large nor too small. When too small, it may not serve to achieve the objectives and if it is too large, huge cost implications are involved (Kothari, 2004).

In this study, multistage sampling techniques were adopted to select nontraditional student respondents. The multistage sampling procedure is a complex sample design in which two or more levels of units are imbedded in the other. At each stage, a sample of primary units was selected and so on. All ultimate units selected at the last step of this procedure were then surveyed.

On the other hand, purposive sampling was used in obtaining library staff respondents. Purposive sampling procedure enabled the researcher to use his or her own judgment to select cases that had the required information with respect to the objectives of the study. This therefore made it possible to obtain responses to the research questions and met the study objectives. It is often used when working with a small sample size or where the intention is to select cases that are particularly informative (Neuman, 2000).

To arrive at the minimum sample size, the 'sample size determination table' developed by Bartlett, Kotrlik and Higgins (2001), was applied. From this table, an overall minimum sample size of 378 individuals was required given that the total population of post and undergraduate nontraditional students for the 2009/2010 academic year was 29,476 (UoN, 19,934; and KU, 9,542). The number of nontraditional students reached for responses in the two universities was, thus, determined by computing their respective weighted proportions of 378 as follows:

(Total target students population from each university \div Sum of students in the target population in the two universities) \times 378 (The minimum sample size).

Thus, for KU, we have:

 $(9,542 \div 29,476) \times 378 = 122$ nontraditional students.

Similarly, the corresponding statistic for UoN was:

 $(19,934 \pm 29,476) \times 378 = 256$ nontraditional students.

The next stage entailed determining the number of nontraditional students to be drawn from various schools/programmes of UoN and KU to constitute the sample size of 256 and 122 respectively. To this end, data on the distribution of undergraduate and post-graduate nontraditional students by main campus based schools/departments in the two universities for the 2009/2010 academic year was obtained from the respective academic registrar offices. The number of undergraduate and post-graduate students selected from each of the two universities were further determined by first computing the proportion of these students' categories in the database of the registrars' offices. Then were used as indices of weighting

the sample sizes from each university. Accordingly, the proportions of undergraduate and post-graduate (masters) nontraditional students in the 2009/2010 academic year for UoN was 71.35 % and 28.65% respectively. The corresponding statistics for KU was 86.24% and 13.76% respectively. In this way, the resultant distribution of the 378 expected post and undergraduate nontraditional student tier of respondents by degree course types and universities was as presented in table3.1.

Table 3.1: Distribution of Nontraditional Students' Sample Size by Universities and Degree Category

Degree course category	KU	UoN	Total	%
Undergraduate	106	182	288	76
Ondergraduate	100	102	200	70
Post-graduate	16	74	90	24
Total	122	256	378	100

Source: UoN and KU 2009 graduation booklets

The next step was to determine the schools (programmes) and magnitude of students who eventually responded to the questionnaires from the schools. To this end, the top three schools in terms of the numerical strength of registered nontraditional students in each of the two universities were selected for ultimate visit for responses. Upon examination of the database, the identified schools (programmes) for drawing the desired student respondents in KU were School of Education, School of Business and School of Environmental Studies (Community Development). From the UoN they included Bachelor of Arts, Bachelor of Arts Anthropology, and Journalism and Mass Communication students under the undergraduate cluster. While the postgraduate students were drawn from those registered for Master of Business Administration (MBA) though the School is in Kabete campus but the post graduate students are housed in JKML, Master of Mass Communication and Master of Rural Sociology and Development Studies degree programmes. Analogously, the ultimate students

drawn from each school/ programme were computed on the basis of their relative percentage weight indices as presented in table 3.2.

Table 3.2: Distribution of Target Students by School of Study and Degree Course

School/ program	UNIVERSITY OF NAIROBI			KENYATTA UNIVERSITY				ROW TOTALS		
	Undergrad	uate	Post gradu	ate	Undergrad	Undergraduate Post graduate		Total no. of students	%	
	Weighted index%	Number	Weighted index%	Number	Weighted index%	Number	Weighted index%	Number		
MBA			81.6	61					61	16
MA (Comm. Studies)			5.9	4					4	1
MA (Economics)			12.5	9					9	2
Journalism & Mass Communication	10.1	18							18	5
BA	84.4	154							154	40
Anthropology	5.5	10							10	3
Education					7.2	8	45.6	7	15	4
Business					87.5	92	44.1	7	99	26
Environmental Studies					5.3	6			6	2
MA							10.3	2	2	1
TOTAL	100.00	182	100.00	74	100.00	106	100.00	16	378	100%

Source: UoN and KU graduation booklets: 2009

The researcher purposively selected five (5) library staff from UoN, five (5) from KU and the two (2) university librarians giving a total of twelve (12) respondents. Two in-depth interviews were conducted with the two (2) university librarians, while ten (10) librarians from UoN and KU filled-in questionnaires. The basis of this procedure was level of seniority and experience at work/ exposure in user services and being in charge of a service point. Both university libraries had five key service points /sections each, namely Africana collection, issue desk, reserve collection, periodicals /E-journal section, reference section which were manned by at least one senior librarian and about 2 library assistants. The library service points were important in this study for the reason that they act as mirrors to the libraries and they are the points where users and library staff interact in the process of meeting their information needs in the two universities.

Table 3.3: Sample Frame for Libraries' Staff

Section	Kenyatta University	University of Nairobi	selected	%
East African	1 library staff	1 library staff	2	17
Issue desk	1 library staff	1 library staff	2	17
Reserve collection	1 library staff	1 library staff	2	17
Periodicals/E-	1 library staff	1 library staff	2	17
journal				
Reference	1 library staff	1 library staff	2	17
University librarian	1 university librarian	1 university librarian	2	17
Total	6 library staff	6 library staff	12	100

Source: UoN and KU internal directories, 2009

From the two sample frames the sample size for this study was as follows; university librarians 2, library staff 10, and nontraditional students 378 to make a total sample size of 390 respondents.

3.5 Data Collection Instruments

In line with the type of primary data needed for analysis of the study topic (quantitative and qualitative), two study tools were used to solicit responses. The quantitative data was obtained with the aid of two semi-structured questionnaires drawn separately for nontraditional students and librarians respectively at the various service sections of the target libraries.

Questionnaire for Nontraditional Students

The content of Appendix II was informed by the purpose and objectives of the study. Questions were formulated to specifically solicit for the information the study was required address. Appendix II was divided into five sections. The first section was aimed at gathering background characteristics of respondents. This was instrumental in building the profile of users as a basis for drawing comparisons among different types of users in terms of their information needs. The other four sections of the appendix II solicited for information on information needs of the target population, library resources and services, and challenges met by this category of students in the process of satisfying their information needs. To facilitate quantification and analysis, mainly closed-ended questions were used along with checklists and rating scales.

Questionnaire for Library Staff

The appendix III also focused on the study objectives. The questions addressed issues related to policy framework, satisfaction of the nontraditional students information needs, library resources and services offered and their degree of adequacy, and challenges they meet in the process of offering services to the nontraditional students. The appendix III consisted of semi-structured, open ended, checklists and rating scale type of questions.

Questionnaire was the main instrument used for collecting raw data. This instrument was preferred since it is economical in terms of the researchers time, finances, confidentiality is upheld and information can be collected from a large sample and diverse areas.

Semi-Structured Interview Schedule for University Librarians

Appendix IV was prepared for in-depth interviews with the two librarians of the target libraries. The content of the interview schedule was also informed by the purpose and objectives of the study. The two librarians were required to address issues related to among other things policy frame work related issues, information resources and services; information needs of the nontraditional students and challenges they face as they offer information services to this category of students.

3.6 Piloting (pre-tests)

Before commencement of the data collection exercise a pre-test of the tools and nature of responses was conducted for about two weeks in Kikuyu campus of UoN. The pre-testing site was chosen because the campus hosts a large number of nontraditional students with the same characteristics as the study target groups. And also to ensure that the respondents at the pre-tests were not included in the actual respondents in the study. Ten (10) nontraditional students and two librarians conveniently selected were reached for responses at the pre-test site. This is the minimum figure to work with in pilot study which should be sufficient to include any major variations in the study population that are likely to affect responses (Fink, 2003).

The two library staff were also selected conveniently from the library service points. The criterion for selection was experience and exposure to information service provision to students. The pre-test exercise was instrumental in examining the feasibility of the study techniques and to redesign the research instruments' concepts and wording, depending upon the extent to which the contents and administration of the instruments are commensurate with the objectives of the study.

3.6.1 Reliability

Frankfort-Nachmias and Nachmias (1996), defined reliability as the extent to which a measuring instrument contains variable errors, that is errors that appear consistently during any one measurement attempt or that vary each time a given unit is measured by the same

unit. Because scientific measurements are indirect, the number of errors that occur when social variables are measured tends to be higher than when physical variables are measured.

The following measures were observed as recommended by Chatman (1992), to ensure reliability:

- a) Pre-test was undertaken so that where ambiguity and double barrelled questions or anything that would bring confusion to the respondents when framing questions and instructions were identified and removed or streamlined.
- b) Reliability of the study findings was strengthened by the fact that data was collected from varied respondents representing undergraduate and post graduate nontraditional students' population from the two target universities.
- c) The two Universities which were the study sites for this study are well established institutions of higher learning and thus suitable representation of academic universities. This gave credibility to this study.
- d) The researcher made as many call backs as possible to ensure completeness of responses and improved on response rate.
- e) Probing was used as a tool to ensure correct responses.
- f) A fairly large number of questions in the questionnaires were closed- ended
- g) The study used a representative sample size (10%) of the study population.
- h) This study used the most appropriate instruments (Questionnaire) for the respondents who were highly literate.

3.6.2 Validity

Orodho (2005), defined validity as the meaningfulness of inferences based on research results. Validity is the degree to which results obtained from the analysis of data represents the phenomenon under investigation. It is concerned with the question "Are you measuring what you think you are measuring?" Thus validity is the degree to which an empirical measure or several measures of a concept accurately represent that concept. The researcher used data collection instruments; questionnaire, interview schedule and analysis of data from secondary sources of information that contained information relevant to the study. The researcher addressed criterion validity by pre- testing the questionnaire on both nontraditional students and library staff with the same characteristics as of the target

respondents. At the same time construct validity was addressed by examining data with respect to challenges encountered in information needs satisfaction propositions expounded in "SAVQUAL theory of marketing."

The researcher undertook a literature review on the subject study, particularly in the following areas, "Information needs of students in academic libraries, information policy frameworks concerning nontraditional students, information resources and services relevant to the nontraditional information needs, and challenges that are encountered by the same group of students in satisfaction of their information needs. Reading extensively in the areas mentioned above ensured that the researcher acquired invaluable knowledge that enabled him to develop valid data collection instruments. Verification of research instruments by experts/supervisor was also very important.

3.7 Data Collection Procedure

Data was collected through the following approaches. Several copies of the students' questionnaire (Appendix 11) was made and distributed by the researcher to parallel students involved in the target programmes of the study. This was done through prior arrangements with the course coordinator or the lecturer either before the commencement of the lecture or just before the students leave their lecture halls. The school based category of students were given the questionnaires during school holidays when they were on-campus for tuition. The researcher explained and clarified questions to respondents and established a good rapport with the respondents as they administered the questionnaires. Respondents were given two weeks within which they filled the questionnaires and dropped them at the circulation-desk of the two universities' libraries. Where collection within the specified period was not possible, recalls and follow ups were made by the researcher. The selected library staffs at the service points of the target libraries were approached by the researcher herself who explained the importance of participating in the study.

The researcher personally participated in distribution and collection of the survey instruments (Appendix III) where possible. This was advantageous to both the researcher and the respondents; the researcher had the opportunity to establish rapport with the respondents and also where there was need, offered clear explanations and elaborated on the subject

matter. Equally the respondents had the chance to ask for clarifications on areas that did not make sense to them. Response rate was therefore acceptably high.

For the two university librarians, interview schedule (Appendix IV) was used to collect data. Consultation with the two university librarians concerning the preferred date of interview was done in advance in order to arrange for the interviews at their most convenient time. The researcher conducted the interview at the place convenient to the two librarians and notes were taken as the interview progressed. The questions from the schedule were put to them in the order in which they were listed and responses were recorded in the space provided for the same. The two librarians availed themselves for the interview. The researcher explained the goal and objectives of the study and also clarified what the respondents had difficulties in comprehending.

Above all, the researcher was as honest and sincere as much as possible and strove to exercise patience and perseverance. A tape recorder was made available to capture what could not be captured as notes were made with the permission of the respondents.

3.8 Data Analysis Techniques

Data analysis forms a crucial part of any research as it allows salient points and data patterns to be analysed upon which a researcher can make concrete arguments and draw valid conclusions. Generally, the choice of method and type of analysis used are however, influenced by many factors. Sekaran (2006) identified such factors to include the general design of a study, characteristics of the variables in a research, and the level of variable measurement. In consideration with these issues, before the actual data analysis, the gathered data were validated, edited and then coded. In the validation process, the collected questionnaires and interview schedule were checked to determine whether an accurate or acceptable sample was obtained in terms of proportion of the issued instruments.

Instruments were checked for completeness. Those that were less than 50% complete were disregarded. The second step was editing.

The instruments were scrutinized to see whether there were errors and omissions, inadequate responses, illegible responses. Instruments with 60% questionable responses were identified and classified on a prepared sheet. Appropriate descriptive statistics was used in the analysis of data. The data was then presented in tables, pie-charts and graphs by use of computer via the statistical Package for Social Sciences (SPSS) windows.

The second level of analysis involved identification of common themes from the responses obtained from the two librarians as recommended by Glaser and Strauss (1997) as the procedure of qualitative data analysis. The identified common themes were used to foster arguments, discussions on observations made from responses contained in the filled-out questionnaires.

3.9 Ethical Considerations

Before setting on to collect the data, a letter of introduction was obtained from the Department of library and information science, KU for identification purposes. The researcher begun by introducing to the respondents the purpose and importance of the research study. The principle of voluntary participation was strictly adhered to. The potential respondents participated in this study with informed consent. Confidentiality of the information given by the respondent was upheld. For this purpose, the study did not require the participants to reveal their own identity. They remained anonymous throughout the study. Information collected was used for the purpose intended.

CHAPTER FOUR

DATA ANALYSIS, DISCUSSION AND PRESENTATION

4.0 Introduction

This chapter presents the results of analysis of the responses received. It begins by describing the socio-economic, demographic and library-related characteristics of the respondents. Thereafter, the results and discussions corresponding to the study objectives are presented.

4.1 Background Characteristics of Respondents

The information needed for examination of the study topic was obtained from all the three categories of the target respondents: nontraditional students, staff and university librarians. As stipulated in the sampling procedure, all the targeted 10 staff provided responses. In-depth interviews were also held with university librarians. In the case of students, a total of 326 filled out the questionnaires, thereby providing a response rate of 86.2. The rest of this section is devoted to describing these characteristics.

4.1.1Background Characteristics of Students

Out of the 326 student respondents, 229 (70.25%) were from the University of Nairobi and the remaining 97 (29.75%) were from Kenyatta University. These students differed in their socio-economic and demographic characteristics as well as in their experiences with library services use.

4.1.1.1 Demographic Characteristics of Nontraditional Students

The sex and age distribution of the student respondents was as presented in table 4.1.1. Most of the students were male (59.5%). Only 40.2% were female. This is reflective of the sex disparity of students' population that has been a typical feature of Kenyan public universities. In terms of age, table 4.1.1 shows that a large number of students (66.9%) were 20-30 years old, followed by those in the 31-35 years age group (16.3%). This is because the majority of nontraditional students are admitted into the degree courses when they are in their early adulthoods. Those aged 36 years and above constituted only 15% of the total nontraditional students and the rest (1.8%) did not state their ages.

4.1.1.2 Degree Programmes and Year of Study

In line with the targeted sample stratification by degree programmes enrolled under, majority of students were enrolled under undergraduate degree programmes (76.7%). Only 23.3% were enrolled for graduate degree courses. As table 4.1.1 finally shows, only 18.4% of the students had been at the university for one academic year. The rest (81.6%) reported that they were in second year or above. This raises the likelihood advantage that data was obtained from students who had a sufficiently long period of exposure to the respective university libraries, which placed them at a prime position to ground their views and opinions regarding the libraries' satisfaction of information needs of nontraditional students on long time experiences.

Table 4.1.1: Distribution of Students by Age, Sex, Degree Programme, Year of Study

	UoN		KU		UoN and KU		
Background	Number	Percent	Number	Percent	Number	Percent	
characteristics							
Sex							
Male	129	56.3	65	67	194	59.5	
Female	100	43.7	32	32.0	132	40.2	
Not stated	0	0.0	1	1.0	0	0.3	
Total	229	100.0	97	100.0	326	100.0	
Age in years							
Unstated	5	2.2	1	1.0	6	1.8	
20 – 30	138	60.3	80	82.5	218	66.9	
31 – 35	47	20.5	6	6.2	53	16.3	
36 -40	21	9.2	3	3.1	24	7.3	
41 – 45	14	6.1	3	3.1	17	5.2	
46 and above	4	1.7	4	4.1	8	2.5	
Total	229	100.0	97	100.0	326	100.0	
Degree							
Undergraduate	161	70.3	87	89.7	248	76.7	
Graduate	68	29.7	10	10.3	48	23.3	
Total	229	100.0	97	100.0	326	100.0	
Year of study							
First	53	21.3	7	7.2	60	18.4	
Second	104	45.4	53	54.6	157	48.2	
Third	33	14.4	21	21.6	54	16.6	
Fourth	39	17.1	16	16.5	55	16.9	
Total	229	100.0	97	100.0	326	100.0	

4.1.1.3 Disciplines and Degree Courses

Table 4.1.2 displays the distribution of students by the degree course pursued and respective disciplines. As depicted in this table, students were drawn from different disciplines. Although it was outside the scope of this study to examine variations in information needs of nontraditional students by faculties, the responses were obtained from students across disciplines. This lays the foundation for robustness of the conclusions drawn from the analysis to overall performance of libraries toward satisfying information needs of nontraditional students.

Table 4.1.2: Distribution of Students by Degree Course Pursued

Degree course	Frequency	Percent
Bachelor of Arts (BA)	136	41.72
Anthropology	8	2.45
Journalism / Mass communication	14	4.29
MBA	49	15.03
Business Studies	84	25.77
Education	15	4.60
MA (Economics)	8	2.45
Environmental studies	6	1.84
MA (Communication Studies)	4	1.23
MA	2	0.61
Total	326	100.00

Source: Field Data: 2012

4.1.1.4 Occupation and Class Attendance Schedule

The amount of time nontraditional students have to visit libraries was explored in the study. To this end, they were asked to report whether they had any other occupations apart from being students. As figure 4.1.1 shows, a large number of students (78.5%, UoN and KU combined) responded in the affirmative to this attribute. Only 20.9% reported that they did

not have any other occupation and another 0.6% did not respond to this question. As depicted in figure 4.1.1, this picture of response was true across the two universities.

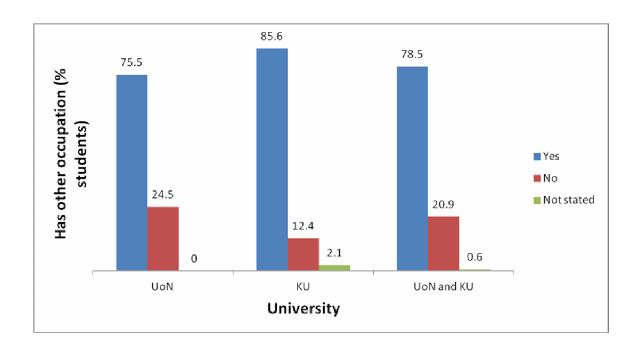


Figure 4.1.1 Distribution of Students by Occupation and University

Source: Field Data: 2012

Those who reported that besides being students they were on full time employment (n=256, 78.5%) were further asked to state the nature of their occupation. The distribution of the responses received is as provided in figure 4.1.2. As this figure indicates, a large number of nontraditional students across the universities (75.5%) were working in the formal sectors. Some were self-employed (11.9%) or were engaged in business activities (7.9%), and a very small proportion (4.7%) either engaged in "other" activity or were housewives.

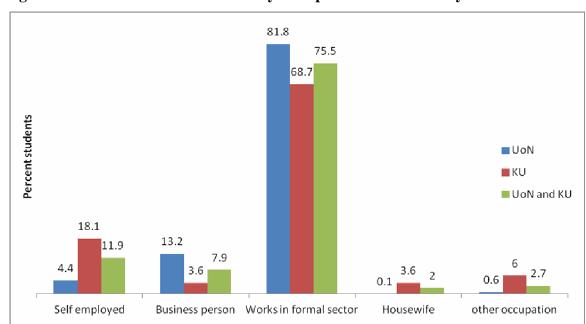


Figure 4.1.2 Distribution of Students by Occupation and University

As regards time of taking lessons, the responses in figure 4.1.3 show that most nontraditional students take lessons either in the evenings during the weekdays (55.8%) or both evenings and weekends (29.1%). Those who reported taking lessons only during school holidays and weekends were 10.7% and 4.4% respectively. The responses presented in figure 4.1.2 and figure 4.1.3 point to the conclusion that finding time off income generating routine to visit libraries presents a daunting challenge to many nontraditional students in the two public universities.

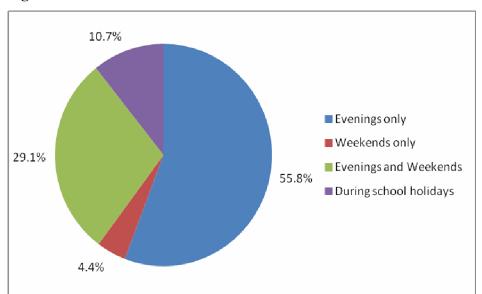


Figure 4.1.3 Schedule of Lessons for Nontraditional Students

4.1.1.5 Organisation of Courses and Time Space for Library Use

To evaluate the correspondence between library resources and services with information needs of nontraditional students, the students were asked about the organization of the curriculum structure of the courses they pursued and frequency of their visit to the libraries. As figure 4.1.4 shows, most of the courses pursued by nontraditional students require more than coursework accomplishments. Only 25.2% indicated that their studies purely entailed coursework. A substantial number of students, however, reported that in addition to coursework, their studies also involved writing research projects (58.7%) or dissertation (14.1%). This response indicates that for a large number of nontraditional students, libraries are a useful facility for successful completion of their degree courses.

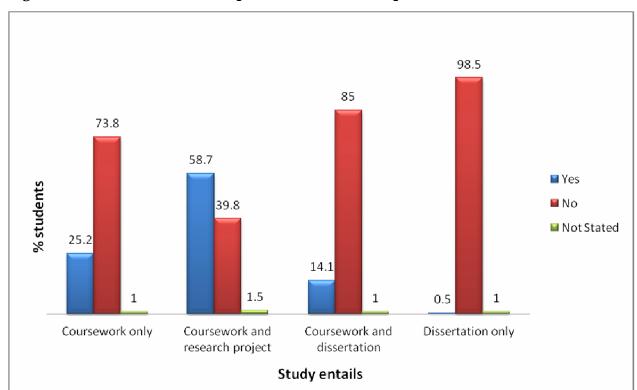


Figure 4.1.4 Distribution of Responses on Course Requirements

Table 4.1.3 presents the frequency of visits to the library by nontraditional students. As this table shows, nearly half (49.0%) of the students reported that they only visited the library once a week, and another 17.5% visited the library on a monthly basis. Those who reported visiting libraries regularly ("daily" or "twice a week" combined) constituted 32.6% of students.

Table 4.1.3 Frequency of Visits to the Library

Student visits library	Number	Percent
Daily	68	20.9
Twice a week	38	11.7
Once a week	159	49.0
Monthly	58	17.5
Does not visit at all	3	0.9
Total	326	100.0

Source: Field Data: 2012

The study further sought to establish the explanation for stated frequency of visit to the libraries. For those who visited libraries regularly ("daily" or "twice a week)," a common motivating factor advanced was preparation for examinations and quest for supplementary information to that provided by the course instructors. For example, one female student commented, "I go to the library to acquire conceptual skills and strive for excellence in my course work." This is a show of the appreciation of the value nontraditional students attach to libraries towards accomplishment of their course requirements.

Taking the rest of the students who reported visiting library neither "daily" nor "twice a week" as *irregular users* (n=220), their explanations for this behaviour were further examined. The resultant picture was that they would not visit libraries quite often due to lack of time. As figure 4.1.5 depicts, nearly all of them (92.8%) reported lack of time as the reason for irregular visit to libraries. Those who responded in the contrary were only 5.8% and the rest (1.4%) did not state an explanation for this discrepancy. The fact that a substantial number of students were engaged in formal income generating activities confirms the conjecture posited earlier that lack of time prevents nontraditional students from making maximum use of library resources and services, an observation which corroborates the findings of Heery and Morgan (1996) on academic library services to nontraditional students in the UK.

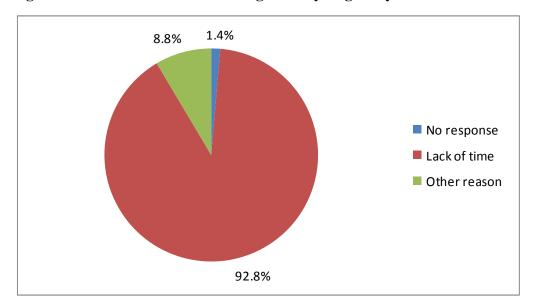


Figure 4.1.5 Reasons for Not Visiting Library Regularly

4.1.2 Background Characteristics of Library Staff

Like nontraditional students, the 10 library staff respondents were of various background characteristics. As set out in table 3.3 in chapter three, 5 of them came from the University of Nairobi and another half from Kenyatta University: One each from the Africana, issue desk, reserve collection, periodicals and reference sections of the respective libraries; and 4 were serving in positions of Senior librarian, three as Librarian and another three as Library Assistants.

Table 4.1.4 presents the distribution of staff respondents by the duration they had worked in the library. As this table shows, all staff respondents had served in the library for at least 15 years. Also the two university librarians interviewed had several years of service in these libraries (35 and 20 years in UoN and KU libraries respectively). This response indicates that most of the staff respondents had several years of interaction with students with regard to provision of information services, and on this strength had the opportunity to reflect insights from this long standing experience in their responses.

Table 4.1.4 Distribution of Staff by Duration Served in Library

Years served	Number	Percent
Staff		
5 to 15	2	20.0
15 to 25	6	60.0
25 and above	2	20.0
Total	10	100.0
University librarian		
35 years (UoN)	1	50.0
20 years (KU)*	1	50.0
Total	2	100.0

^{*}Deputy librarian, Librarian was committed elsewhere at the time of the study

4.2.0 A Survey of Challenges Encountered by Nontraditional Students

Having highlighted the background characteristics of respondents, this section is devoted to describing the results of analysis of responses to the main objective of the study: challenges encountered by nontraditional students in satisfaction of their information needs. As outlined in section 1.4, in this study these challenges were conceived to take three dimensions. First, challenges associated with the policy perspectives of the functioning of libraries. The second tier of challenges is those related to orientation of library resources and services to information needs and circumstances of nontraditional students. Finally are challenges that non-traditional students face in the libraries in relation to the unique dimensions of their information needs.

4.2.1 Policy Issues

This study sought to assess the policy environment for service provision of the two university library systems in relation to information needs of nontraditional students. The specific policy perspectives considered in the study were the nature and provisions of the policy frameworks, research approaches for identification of strong and weak links in service

delivery and library staffing and motivation. This section presents the findings on these three attributes of policy dimensions.

4.2.1.1 The Nature and Provisions of the Policy Frameworks of the Libraries

This attribute was explored with the library staff and university librarians. Both tire of respondents reported that libraries have not developed written policies that specifically focus on library service delivery to nontraditional students. Instead, provision of library services to these students is embedded within the broader strategic plans of the libraries. In the case of Kenyatta University, plans to develop written statement of purpose or plan of development for the services to nontraditional students were underway at the time of this study.

4.2.1.2 Research Approach to Decision Making and Actions

The responses to the question which sought to enlist how the library systems of the two universities identify the information needs of nontraditional students revealed that both libraries conduct a survey of user satisfaction annually. The needs identified in this way form a basis for library services decision making and actions. As noted by the librarians, information gathered from these annual surveys had been instrumental in gauging the user satisfaction with services, resources including staff and hours of operation. At Kenyatta University, the feedback from the nontraditional students had led the library administration to redesign the operating hours to go up to midnight during weekdays and to 10pm and 5pm on Saturdays and Sundays respectively. This, in the judgment of the university librarian had significantly reduced complaints about the operating hours of the library and time available for nontraditional students to use the services.

The feedback mechanism had also set a basis for integration of subject librarians who are required to work very closely with the respective academic departments to ensure that students meet their information requirements in various fields of study. In addition, feedback from students regarding the library online resources and internet based reading materials had stimulated actions in the way of expanding opportunities for students to have access to online and internet, albeit with slow connectivity speed as reported by students. As noted earlier, even a vast number of staff agreed the nature of information needs of nontraditional students

had significant bearing on the performance of the libraries in meeting the information needs of nontraditional students.

4.2.1.3 Staff Recruitment and Motivation

The issue of library staffing was also explored from the perspective of recruitment and arrangements for building their on-job capacity, the level of motivation they enjoyed and compensation for the work done. As table 4.2.1 shows, the key issues for effective performance of the library staff with regard to addressing information needs of NTS are remuneration, motivation and engagement of skilled personnel. Only 20% of staff thought that their level of training in relation to provision of library services was an important element to provision of services to NTS. This can be attributed to the liberty that the two universities' libraries have granted to staff for further training, albeit with minimal financial support. In addition, the analysis indicated that both universities had not initiated programmes for capacity building of staff in line with the changing learning circumstances and dynamics of information services, including the requirements of nontraditional students.

Table 4.2.1 Staff Rating of Library Management

	Staff rating on extent of influence on library performance (% student)								
Staff related factor	aff related factor Small Moderate Large Very large Total								
Recruitment of skilled staff	10	40	20	30	100				
Training of staff	30	50	0	20	100				
Motivation of staff	30	10	10	50	100				
Remuneration	40	10	20	30	100				

Source: Field Data: 2012

The appalling low picture of staff motivation painted in table 4.2.1 rests on the premise that hiring temporary staff has been a common staffing strategy of the two university library systems. This supports the conclusion often made in the literature on economics of librarianship that the major advantages of hiring temporary employees usually turn out to be

financial and managerial. It is hardly characterized by commensurately high commitment to services delivery on the part of the hired temporary staff due to the fact that they are conscious of the reality that they are prone to short term financial benefits (Chervinko, 1986). A combination of these factors could be the underlying explanation for the unfavourable attitude noted on the staff by the nontraditional students.

4.2.2 Challenges Relating to Dimensions of Students' Information Needs

This study assessed the challenges nontraditional students face in relation to dimensions of their information needs relative to those of traditional students. These challenges varied according to determinants and levels of information needs of the students, their connection with instruction methodologies of respective courses and the depth of information literacy skills students possess. This section describes the results of analyses of responses to these attributes.

4.2.2.1 Determinants of Information Needs

The study sought to enlist the determinants of information needs of nontraditional students in the two universities. To this end, they were asked to rate various possible determinants of information seeking behaviour of students on a scale of "very important," "important," "less important" and "not important" in that order of perceived importance. The six possible determinants provided for the rating were coursework and presentations or examinations, extra reading to enhance lecture notes, class-group discussions, tutorial presentations, research for thesis and proposal writing, and awareness about current issues. The results of the rating responses to this question were as presented in table 4.2.2.

Table 4.2.2 Students' Rating of Determinants of Information Seeking

	Rating											
Reason for seeking information	Very important		Important		Less important		Not important		Not stated		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Coursework and preparation for exams	281	86.4	29	8.7	6	1.9	2	0.5	8	2.5	326	100
Extra reading to enhance class notes	133	40.8	138	42.7	30	9.2	5	1.4	20	5.9	326	100
Class-group discussions	68	20.9	144	44.2	79	24.3	14	4.4	21	6.4	326	100
Tutorial presentations	68	20.9	110	34.0	85	26.2	29	8.7	34	10.3	326	100
Research for thesis and proposal writing	145	44.7	65	19.9	33	10.2	43	13.1	40	12.1	326	100
Equip self with current and up-to-date information	130	39.8	97	30.6	42	13.1	43	10.2	14	4.4	326	100

Taking the "very important" and "important" ratings presented in table 4.2.2, the results indicated that in the overall, nontraditional students put emphasis on all the key methods of learning at the universities. This is to the extent that 83.5% regarded "extra reading to enhance class notes" as either "very important" or "important." The corresponding statistics for class group discussions, tutorial presentations, research for thesis and proposal writing and acquaintance with current and up-to-date information were 65.1%, 54.9%, 64.6% and 70.4% respectively. A majority of students (95.1%) considered "course work and preparation for exams" an important driver of the search for information from the libraries.

The study also explored the value they attached to various information resources provided by the library systems. The rating scale was provided for, namely very important, important, less important and not important in that order. The results of analysis of the responses to this question are as presented in table 4.2.3. Accordingly, the responses were similar to those presented in table 4.2.2. This is to the degree that most of the students rated the various information sources either as "very important or "important." Only a dismal number of students opted for lower level ratings, as "less important" and "not important."

Table 4.2.3 Students' Value Rating of Library Resources in satisfying their Information needs

	Very important		Important		Less		Not important		Not stated	
					important					
	Count	%	Count	%	Count	%	Count	%	Count	%
Information resource										
Print journal articles	82	25.7	134	40.8	55	17.0	24	7.3	31	9.2
Recommended textbooks	216	66.5	89	27.2	11	3.4	0	0.0	10	2.9
Lecture notes and handouts	232	71.4	76	23.3	10	2.9	3	1.0	5	1.5
Tutorial presentations	78	23.8	125	38.3	62	18.9	23	7.3	38	11.7
Past MA/MSc & PhD	83	25.2	87	26.7	46	14.1	76	23.3	34	10.7
Theses and projects										
Websites /webpages	141	43.2	119	36.4	29	9.2	8	2.4	29	8.8
Online databases and	151	46.1	119	36.4	34	10.7	7	1.9	16	4.9
electronic sources										
Search engines	181	55.8	101	31.1	26	7.8	11	3.4	7	1.9
(Yahoo/Google)										

In a related question, nontraditional students were asked to indicate in successive order of preference the sources of information they frequently use to locate relevant reading materials. These were, library card catalogues, and online public access catalogues (OPAC), reference librarian, lecturers, abstracts and indexes in electronic databases and in print form. The results were as in figure 4.2.1. OPAC is the most frequently used source of information for relevant reading materials by nontraditional students (36.9%) followed by directions provided by lecturers (24.3%). Library card catalogues are comparatively less favoured (16.0%), though they are usually thought of in the first place as information sources in comparison to Reference librarians (3.9%) and abstracts and indexes in electronic databases (1.9%) and in print form (1.5%). Others in the "not stated" category are cases in which students did not respond to the question on this attribute. Entries in the "inconclusive response" category correspond to cases where students ticked against two or more of the options supplied in the list of response options, thereby rendering it not possible to determine the intended order of priority.

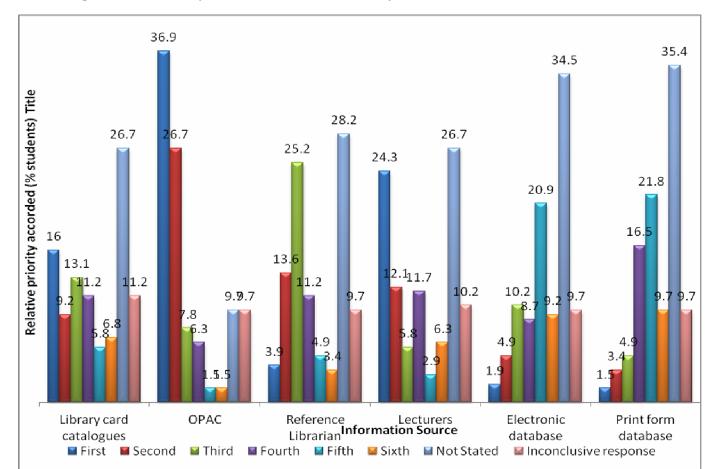


Figure 4.2.1 Priority Students Attach to Library Information Sources

4.2.1.2 User Information Literacy Skills for Nontraditional Students

The researcher sought to find out if nontraditional students had ever gone through any library user education sessions in their academic lives. The responses received were as presented in figure 4.2.2. Accordingly, a substantially high number of students had had library orientation sessions in their academic lives (70.3%). Only 29.7% responded otherwise.

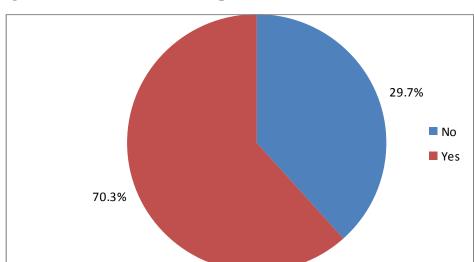


Figure 4.2.2 Student ever Participated in User Education

The students who reported that they had never attended any library orientation (n=97, 29.6%) were further asked whether lack of orientation affected their use of the library print and electronic resources. An overwhelming majority (65.57%) responded in affirmative (figure 4.2.3). Those who responded in the contrary were only (18.03%), and the rest (16.39%) were not sure of the effect lack of orientation on the use of library.

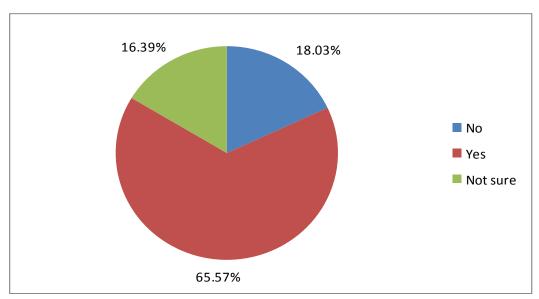


Figure 4.2.3 Effect of Non Participation in User Education on Library Use

Although respondents reported not being adversely affected by non attendance of library user orientation sessions, there were several remarks pointing to doubts about effectiveness of the information literacy capacity building approaches of the libraries in satisfying information needs of nontraditional students. For example, an undergraduate University of Nairobi student disclosed that "it is difficult to follow shelf arrangements to locate books," a matter made more serious by the scenario that "staff are not motivated and display poor PR"(Undergraduate, University of Nairobi). Similarly, an undergraduate Kenyatta University student admitted, "I am not able to get books I need and accessing e-journals is a problem due to lack of skills. The library should set ample time for orientation."

These remarks by the students were in harmony with those made by the library staff on the subject of user information literacy skills. One University of Nairobi library staff put it candidly, noting that "some of them (students) are not computer literate thus can't access information easily. They want everything to be done for them and in a hurry." A combination of these remarks represent the wide feeling of frustrations attendant on nontraditional students arising from the asymmetrical relationship between the user information literacy skills and the range of services and materials available in the libraries for addressing their information needs.

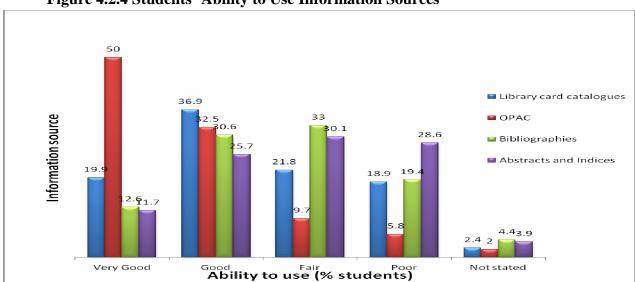


Figure 4.2.4 Students' Ability to Use Information Sources

The ability of nontraditional students to use the various resources and services provided by the library systems of the two public universities was also assessed. They were asked to rate their ability to use four library information sources, namely library card catalogues, online catalogues (OPAC), bibliographies, abstracts and indexes on a scale of "very good," "good," "fair" and "poor." The results were as presented in figure 4.2.4 above. Accordingly, half of the students rated their ability to use online catalogues as "very good" and another 32.5% as "good," thereby bringing to a total of 82.5% the students who felt that their ability to use these resources are reasonably adequate. Feeling of competence on use of library card catalogue was second high, considering that a joint size of 56.8% students rated themselves as either "very good" or "good" on this attribute. However rating on ability to use bibliographies, abstracts and indexes by students was very low, being 52.4% and 58.7% in the "fair" and "poor" rating category combined.

No question specifically sought to establish why majority of students felt most comfortable using online catalogues compared to other information sources. However, the fact that a large size of the students were those engaged in the formal working environment and had little time to visit library raises the possibility that many of them possess laptops and therefore strive to be familiar with electronic information sources as a means of fending for themselves against the odds visited upon them by lack of sufficient time.

In addition, students were asked to rate the usefulness of guides or directional signs and the users' support and help systems of their respective libraries. As figure 4.2.5 shows, 81.9% of the students rated the guides and directional signs as either "very useful" or "useful" and another 12.1% as "satisfactory." Only 5.3% students rated this resource as "poor" or "very poor."

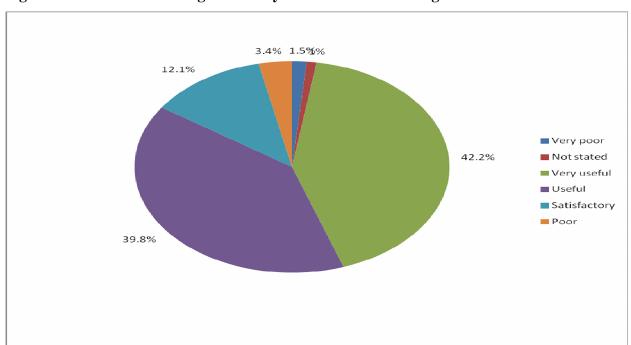


Figure 4.2.5 Students' Rating of Library Guides/Directional Signs

On user's support and help systems of the library figure 4.2.6 indicates that 72.3% provided a rating of either "excellent" or "good," another 21.8% as "fair," and only a combined proportion of 4.9% rated the system as "poor" or "very poor."

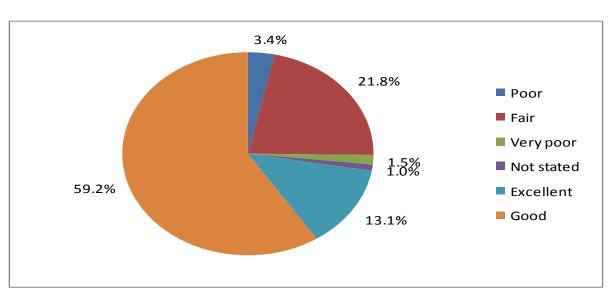


Figure 4.2.6 Students' rating of Users Support Systems

4.2.3 Nontraditional Students' Information Needs, Library Resources and Services

This study also examined the challenges encountered by nontraditional students in the two public universities in the context of the range of resources and services available in the libraries. To this end, several dimensions of issues were investigated into. These ranged from functions of the library, the resources and services frequently utilized by the students, the technical skills and ability possessed by students to access the available resources, the structure and form of library operations in relation to satisfaction of information needs of nontraditional students, accessibility of the resources and services by nontraditional students and perceptions of students about the effectiveness of the library systems in enabling them satisfy their information needs. This section describes the outcome of the analysis of responses on these attributes.

4.2.3.1 Functions of the Library

All the staff confirmed that bibliographic, reference, reader services, circulation and information provision were the main functions of the libraries subjected to scrutiny for the challenges facing nontraditional students toward satisfying their information needs.

4.2.3.2Commonly Used Library Resources and Services

A list of services offered by the libraries were provided and students were asked to indicate in order of priority how frequent they used them. The resultant responses were as presented in figure 4.2.7. These results show that loaning and borrowing of books is the most frequently use library service in the libraries of the two universities (35.4 %). The corresponding relative percentages for UoN and KU students were 34.1% and 37.7% respectively. Inter-library loan services were the least used by nontraditional students (0.5%). This is followed by Reference and Information services, indicated by close to quarter of the students in both universities, and OPAC (22.3%).

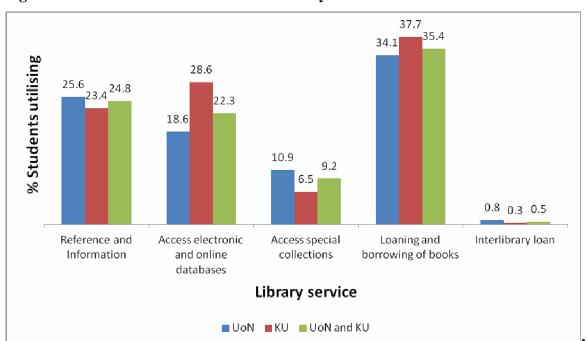


Figure 4.2.7 Students' Prioritization of Library Services

The extent to which the library resources and services meet the information needs of nontraditional students was also explored with the staff. The staff rating of their affiliate libraries on several attributes of this matter was as shown in table 4.2.4. Almost all the staff (70%) rated provision of information literacy skills and photocopying services as critical to meeting information needs of nontraditional students. Services such as user instruction, interlibrary loans, document delivery and books reservation were relatively rated by staff on a lower scale.

Table 4.2.4 Staff Rating of Library Information Resources and Services

	Degree of influence on information needs (%)								
	Non	Small	Moderate	Large	Very	Not			
Library service					large	Stated			
Information literacy skills	0.0	20.0	10.0	20.0	50.0	0.0			
Reference services	10.0	10.0	20.0	20.0	40.0	0.0			
User instructional services	20.0	20.0	30.0	30.0	0.0	0.0			
Interlibrary loans	10.0	40.0	20.0	30.0	0.0	0.0			
Document delivery services	0.0	20.0	30.0	10.0	30.0	10			
Books reservation service	0.0	40.0	20.0	10.0	30.0	0.0			
Photocopying service	0.0	10.0	20.0	10.0	60.0	0.0			
Current awareness' services	20	30	20	10	20	0.0			

4.2.3.3 Accessibility and Appropriateness of Library Resources and Services

In general, the study aspired to enlist the correspondence between information needs of nontraditional students and the range of resources and services available within the library systems for meeting these needs. To this degree, a list of possible areas of challenges in obtaining information from the libraries were presented to students and they were instructed to indicate as "yes" if the issue was a barrier, and as "No" if otherwise. The results were as presented in figure 4.2.8.

As figure 4.2.8 depicts, nontraditional students face multiple challenges with the various library resources and services in a bid to satisfy their information needs. These challenges are built around the opening hours of libraries (65.5%), outdated books (76.7%), inadequate assistance by the library staff (43.2%) inadequate computers (60.7%) and limited access to essential service points like Africana, and periodical sections (54.9%).

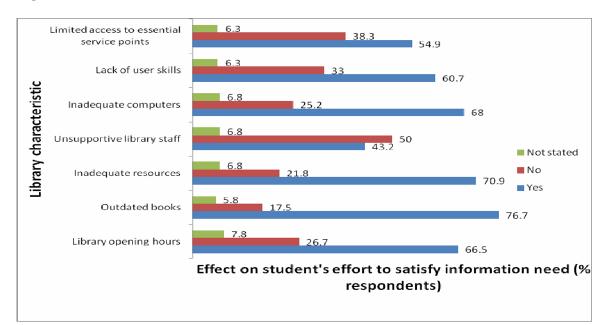


Figure 4.2.8 Libraries and Satisfaction of Students' Information Needs

Students were asked if, based on their experiences, they would say that the library caters for the information needs of nontraditional students. The responses to this question were as presented in figure 4.2.9. Only 43.7% of the students responded in affirmative. Those who felt otherwise were more than half of the students (50.5%).

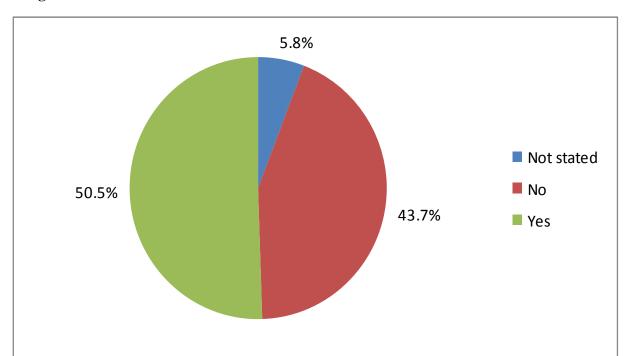
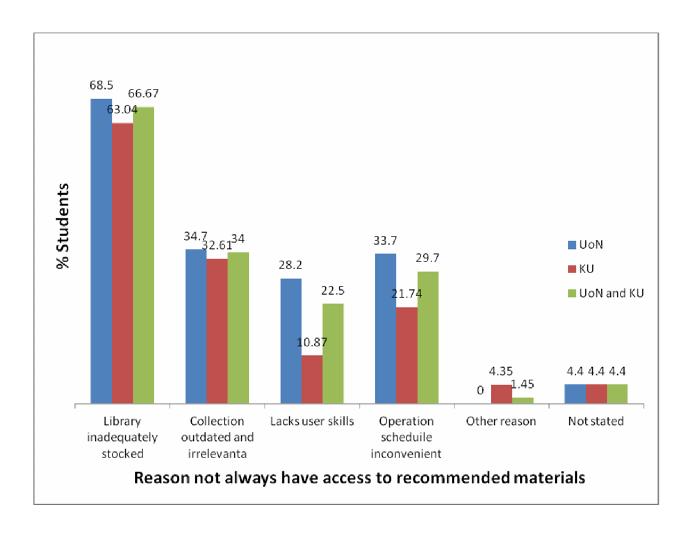


Figure 4.2.9 Students' Views on Libraries' Satisfaction of Information Needs

The study sought to find out why students information needs were not met satisfactorily. The results were as indicated in figure 4.2.10. As this figure shows, inadequate stocking of library was the most cited reason (by 66.67% of students). 34.0% of the students reported outdated and irrelevant library collection as the explanation, and 29.7% of the students reported inconvenient library opening hours. Lack of user skills was cited by nearly one quarter of the students in both universities (22.5%) as the reason for this discrepancy.

Figure 4.2.10 Reasons for Limited Access to Library Materials



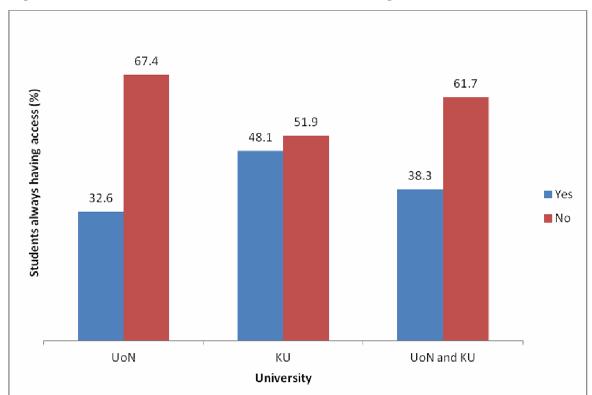
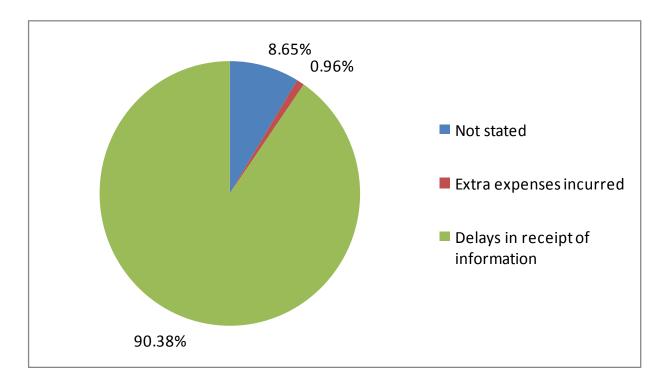


Figure 4.2.11 Students Access to Recommended Reading Materials

To assess the challenges specifically associated with accessibility, the study sought to find out whether non-traditional students 'always' had access to reading materials recommended by their lecturers. 61.7% responded to this aspect in the negative and the remaining students (38.3%) responded otherwise (figure 4.2.11).

Figure 4.2.12 Effect of Inadequate Library Attention on NTS



Of those who responded in the negative to this attribute, the next question sought to establish the extent to which this situation affected their effort to identify and locate information sources in the library. As figure 4.2.12 indicates, a substantially high number of the students 90.38% noted that they experienced delays in acquiring the needed information. This was to an extent that they had to rely on friends and classmates to obtain the materials, a scenario exacerbated by reluctant staff and inability on the side of the students which is as a result of inadequate user literacy skills to access information materials

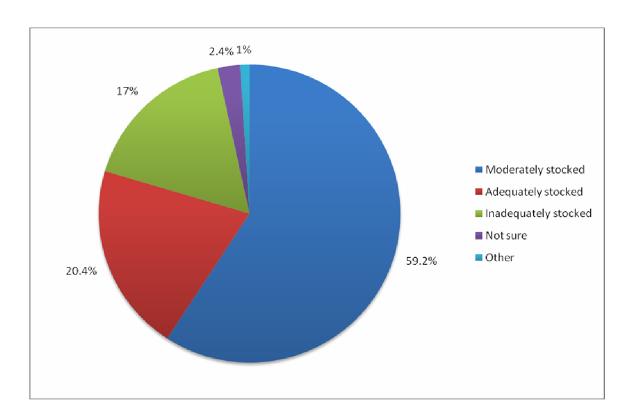


Figure 4.2.13 Students' Rating of Library Collections

Students were further asked to rate the library collection in terms of satisfying information needs in their respective areas of study. The resultant responses were as presented in figure 4.2.13. As this figure shows, 59.2% of the students rated their respective libraries as "moderately stocked" and another 17.0% as "inadequately stocked," thereby bringing to an accumulative proportion of 76.2% of the students who expressed dissatisfaction with the level of availability of reading materials in the libraries. Those in the "other" and "not sure" response categories were only 1.0% and 2.4% respectively.

In the same breadth, students were asked to list in order of priority the options they resort to in the event they do not find the material they need from the library. The results were as outlined in figure 4.2.14.

Resorting to online services (internet and cybercafé) in the event they fail to get needed material from the library is the most favoured option by nearly half (49%) of nontraditional students. Seeking help from the library staff was the next option after the online services (with a magnitude of 20.4% students). Visiting other libraries (8.7%) or purchasing books (7.8%) are the least possible solutions nontraditional students often think of in the first place. Others in the category of "not stated" correspond to cases in which students did not respond to the question on this attribute. Entries in the "inconclusive response" category correspond to cases in which students responded by placing a tick against two or more of the options, thereby rendering it not possible to determine the respondent's intended order of priority accorded to the alternative sources.

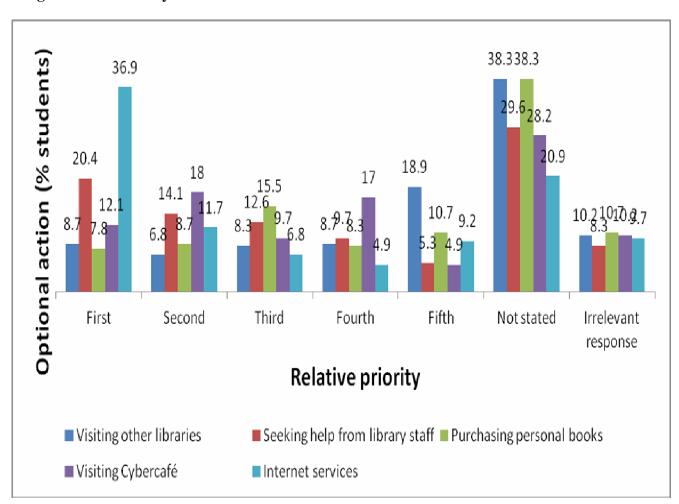


Figure 4.2.14 Priority Accorded to Alternative Information Sources

Students were further asked to indicate in order of priority how they viewed their library in terms of convenience of opening hours, ability to locate and retrieve reading materials, up-to-date and reliability of library collection, supportiveness and friendliness of library staff and ability to follow the organization of books on the shelves. The response was as shown in figure 4.2.15. For most nontraditional students the key issue of the library system functioning is the extent to which it is in tandem with their study schedule. Although only slightly over half (52.9%) placed first premium to this attribute in reference to their libraries. This score is far ahead of the corresponding values attached to the ease with which they can find reading materials they require (8.3%), degree to which the library collection is current and relevant (9.7%), extent of support and friendly treatment by library staff (8.3%) and the extent to which organization of books on the shelves are appropriate though to a less degree (16.0%). All these four attributes tended to be a lot concentrated in the last (third to fifth) scales of the library value judgments as provided for in the responses.

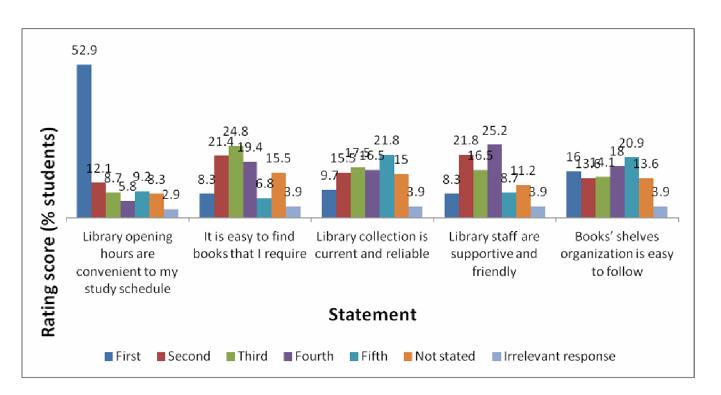


Figure 4.2.15 Students' Relative Judgment about Library Services

In relation to this aspect of the study, the library staff were asked to rate on a scale of 1 to 5 ("non" to a "very large extent") the degree to which elements like information needs; provision of adequate financial, human and physical resources; identification of information needs; and provision of policy guidelines influenced performance of the library in the way of service delivery to nontraditional students. The responses were as presented in figure 4.2.16 Accordingly, the staff like students, expressed the view that identification and satisfaction of user information needs alongside the prevailing policy frameworks and human resource base were critical for adequate performance of the libraries in service delivery to nontraditional students.

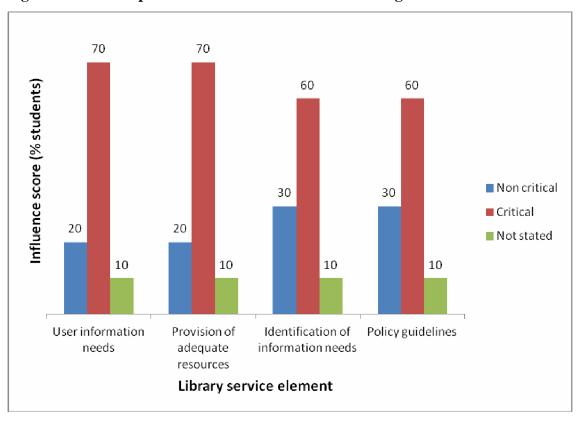


Figure 4.2.16 Perceptions of Staff about Libraries' Management

4.2.3.4 Perceptions of NTS about Library Resources and Services

The study sought to assess the views nontraditional students regarding the functioning of various library services, and to enlist their suggestions for appropriate actions on areas where they felt the library was performing dismally. To this extent, a list of statements on the library services and resources were supplied to students. The responses were as presented in table 4.2.4 which shows that 66.5% of the students were in agreement with the statement that, "book' loaning period is adequate." Another large size of students (77.7%) "strongly agreed" or "agreed" with the statement that, "catalogues are perfect guides to books' arrangements on the shelves." 65.5% either "strongly agreed" or "agreed" with the statement that, "materials are easily located and retrieved in the open shelves."

On the contrary, a substantial size of nontraditional students (89.2%) did not agree with the statement that library opening hours are adequate and convenient. This could be the underlying factor most of the students agreed with the statements: "Special collection points be set up for part-time students" (61.2%), "all library service points be accessible throughout" (80.6%), "reference and information help-desk services be available throughout" (88.8%) and "internet and telecommunication systems be used to assist part-time students" (86.9%).

Table 4.2.5 Agreement with Statements about Library Resources and Services

				Strongly	Not	
	Strongly	Agree	Disagree	Disagree	Stated	
Statement	agree	(%)	(%)	(%)	(%)	
	(%)					
(i) Books' loaning period is adequate	24.3	42.2	23.8	7.3	2.4	
(ii) Catalogues are perfect guides to	26.7	51.0	17.0	2.9	2.4	
books' arrangements on the shelves						
(iii) Materials are easily located and	22.3	43.2	26.7	5.8	1.9	
retrieved in the open shelves						
(iv) Library opening hours are adequate	7.8	11.7	44.2	35.0	1.5	
and convenient						
(v) Special collections be set-up for part-	21.8	39.3	25.2	10.7	2.9	
time students						
(vi) All library service points be	43.7	36.9	12.1	3.4	3.9	
accessible throughout						
(vii) Reference and information	42.2	46.6	7.8	1.5	1.9	
(viii) Internet and telecommunication	51.5	35.4	6.8	3.4	2.9	

The analysis revealed that for many nontraditional students, action should be taken by the library administrators towards making library opening hours adequate and convenient. is. They suggested that libraries should open from 7.00 am rather than the current 8.00 am, extend closing time, and operate throughout weekends and public holidays. On the subject of catalogues, suggestions for improvement included integration of sign languages, regular updating, provision of information literacy skills on the same, proper user guides and shelf labeling and automating all library sections (reading materials). About the possibility of improvements in the location and retrieval of library materials, the suggested directions for action included re-shelving regularly possibly 3 times a day and engagement of more

qualified staff, whom in the opinion of many students, ought to display a favourable work ethics and be friendly to the patrons.

The distinct statements made by some of the students on the issue of staff-student interactions in the course of provision of library services reflected the depth of the agony nontraditional students' face. One student expressed his dissatisfaction with the attitudes of the library staff by noting that "staff available should not think that library users are disturbing them by asking questions as how to use catalogues. Some of them (student users) do not go through library orientation sessions. Besides, library users is the reason why they are employed. It is part of their work to assist users to conveniently locate books. We are not a bother" (Undergraduate, Kenyatta University).

Noting that for many nontraditional students whom lack of time off their occupations present a fundamental challenge to use of library resources and services, these remarks are a pointer to the grave disparity obtaining between the operational schedule of the libraries and the time available for them (students) to benefit from circulation services provided by the libraries. This remark was succinctly expressed by a particular undergraduate student at University of Nairobi in his statement that, "Most of the recommended books are taken by regular students during the day. The reserve books are given out in the evenings only when students are retiring for the night. When can they read the books?" In instances where nontraditional students manage to secure time and borrow books from the libraries, they are still confronted with such unintended consequences such as incurring extra expenses in terms of overdue fines over materials returned late to the library.

Finally, the study sought to enlist suggestions of the nontraditional students on possible actions for harmonizing library services and resources with their information needs. The most pertinent suggestions were stocking the library with adequate and current books (67.21%), ensuring that library reading materials correspond to rising number of students (41.53%), making online materials accessible to all students (24.04%), change of operation schedules to include weekends, late night and public holidays (74.32%), setting up special collection points for part-time students (16.39%), making all service points operational

whenever the library is open (16.39%), integration of effective user information literacy skills, capacity building programmes especially use of electronic databases (21.31%), improvement of public relations and adoption of more friendly attitudes towards students and greater dedication to services delivery on the part of staff (22.95%), creation of more space for users (21.86%) and increasing the number of staff (21.86%).

CHAPTER FIVE

SUMMARY OF THE MAIN FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents a summary of the main findings of the study discussed in chapter four, the conclusion drawn and recommendations made and directions for policy development and actions toward improving the effectiveness of public university libraries in satisfying the information needs of nontraditional students.

5.1 Summary of the Main Findings

This study has examined the challenges encountered by nontraditional students in satisfaction of their information needs with reference to university of Nairobi and Kenyatta University. The information needed for the analysis was obtained from the nontraditional students and staff stationed at various library service points of the main libraries of the two universities with the aid of semi-structured questionnaires. In-depth interviews were also conducted with the respective university librarians. The study specifically examined the dimensions of information needs of nontraditional students in both universities libraries; assessed the strength of the information resources and services of the libraries for meeting the nontraditional students' information needs; and evaluated effectiveness of the policy environment for the library systems of the two universities toward enabling nontraditional students satisfy their information needs.

Integration of nontraditional modes of learning in the degree programmes of the universities has inflicted diverse constraints on the physical and human resource bases of public university libraries; this has adversely affected their capacity to effectively and efficiently deliver services to satisfy the information needs of nontraditional students. These include insufficient staff relative to increasing population of nontraditional students, inadequate financial resources to undertake comprehensive measures like staff motivation, installation of adequate equipment like computers, non commensurate hours of operation and slow pace of divergence from the service delivery approaches tailored to the needs of regular students

needs. The noted mismatch between information needs of nontraditional students and academic libraries corroborate the conclusion made by Bunge (1984:129) that "our expanded range of information sources, which should add to our ability to respond to the needs of our clients and hence to our joy as reference librarians, all too often, therefore, becomes a source of frustration, feelings of inadequacy, or lack of competence, and a sense of loss of control over our practice."

The major challenge facing nontraditional students toward satisfying their information needs borne out of this analysis is inadequate time to make use of the resources and services provided by the libraries. Other pertinent challenges are ineffective information literacy skills, especially with regard to access to online information resources and databases; and their large population size which imposes fundamental constraints on the university library systems to provide commensurate number of physical, financial and human resources to enable the students to satisfy their information needs. Concerning low use of online catalogues (OPAC), the finding of this study is in harmony with the conclusion arrived at based on the results of a survey of use of online databases by Bellardo and Stephenson (1986:155) that, "there is enormous untapped market of potential users who remain unaware of these information products."

The noted low information literacy among nontraditional students confirms the assumption made in chapter one that lack of adequate user skills would be a possible explanation for the failure of nontraditional students to meet their information needs. The two universities libraries studied usually conduct user education at the initial weeks of the students admissions as part of the wider process of orientation to university functioning. However, this study has found out that a substantially high number of nontraditional students had had library user education but they still displayed fundamental difficulties in uptake of library services. This irony provokes the supposition that the timing of the education, duration taken and content scope are not in tandem with the socio-economic circumstances and information needs of nontraditional students. The current practice of library orientations put the schedule at specifically defined points in time at initial stages yet, for majority of students, library

resources are critical at later stages of learning when they are needed to accomplish term papers and assignments, develop research proposals and dissertations.

The library systems of the two universities have responded to these challenges by extending hours of operation to late evenings and weekends. Other measures include expansion of students' access to information and subscription to electronic reading materials. In addition, libraries have automated their services, engaged specialized subject librarians (as in the case of Kenyatta University), temporary employees and part-time volunteers. Further, they conduct annual surveys with a view to map out the state of information service delivery.

While these multiple measures are commendable, they still fall short of effectively enabling nontraditional students satisfy their information needs. This disparity is attributed to numerous reasons. First, the initiatives are not supported by strong and explicit policy atmosphere that are tailored to the unique circumstances of these students. Operations of academic libraries, to a large extent, are still anchored on the traditions of service provision to the hitherto regular students. Second, a great deal of effort is noticeable in the direction of expanding the supply side of information needs of nontraditional students through online and internet avenues. However, these are not accompanied by commensurate information literacy, library equipments, and sufficient and adequately motivated staff establishments to comply with the burgeoning size of nontraditional students in the universities.

The library systems have taken steps towards maximizing the opportunities for students to use the services and resources they offer by extending their hours of operation. These measures still fall short of satisfying information needs of nontraditional students because essential service points like special library collections, e-journal section, reference desks and loaning time schedules are largely parallel to the schedules of the nontraditional students. The extension of the opening hours have not significantly translated into the opportunities for students to benefit from the borrowing facilities provided by the libraries for satisfaction of their information needs.

Concerning the specialized library staff at the reference desk initiative at KU, the thesis posited by Bunge (1984) that specialization of services is another way in which reference librarians may change their jobs in the face of limited time and resources is herein very instructive. The finding on this attribute endorses Bunge's (1984) remark that needs for special services present themselves at the reference desk at unpredictable times, making a match between client needs and the skills of specialized staff available very difficult to achieve.

5.2 Conclusion

The overall picture that emerges from the findings of this study is that nontraditional students in the public universities have diverse information needs, and in their bid to satisfy these needs they are faced by myriad challenges. These challenges are dichotomous; slow pace at which the university libraries are realigning their operations in the light of information needs of nontraditional students; and circumstances exogenous to the academic systems of the universities. This scenario is made even more complex by the fact that the policy environment of the respective library systems for addressing information needs of nontraditional students is both peripheral and incomprehensive. The current practice in which the needs of nontraditional students are only implied in the strategic plans of the libraries is likely to relegate the unique information needs of nontraditional students outside the bounds of mainstream library decision making processes and actions.

5.3 Recommendations

5.3.1 Policy and Programmes Development

The study has revealed that there is a weak policy environment under which the university libraries operate to satisfy the information needs of nontraditional students. Useful steps towards reversing this state would entail explicit recognition of the challenges facing nontraditional students and their peculiar learning circumstances in the regulative and strategic management frameworks of libraries. This should go alongside creating an atmosphere for continuous dialogue between nontraditional students and respective library administrations. In this way, the dynamics of the information needs of nontraditional students

are mapped out over time and appropriate actions including those relating to staff development, are set in motion at the right time.

Currently, libraries' linkages with academic faculties are limited to lecturers providing directions for resource acquisitions. In addition, the working relations between library management and university administrations are rather inconsistent with the needs and circumstances of nontraditional students. Efforts should be put in place for more intensive interactions among faculties, library management and university administrations towards addressing the dynamics of nontraditional students information needs. Programmes that would be found useful are those that promote user information literacy skills and encourage mutual staff-student interactions.

Finally, library management in conjunction with the university administrations should find a forum for engagement with the government to ensure that these directions for policy action and programmes development are fostered in the Kenyan public services delivery and governance.

5.3.2Recommendations to Nontraditional Students and Staff

The library staff are constantly in contact with students compared to other equally important decision makers like the university librarians and the teaching staff. Thus, they should inculcate a favourable working atmosphere for interactions with nontraditional students in the libraries.

It is also imperative that nontraditional students cooperate with the library in the way of availing the information on appropriate actions they think would improve the level of satisfaction they derive from the library service provision. This would mean active participation and disclosure of vital information during the annual needs assessments carried out by the libraries. Students are also under a moral obligation to create time to attend the library orientation sessions.

The results further evoke the need for libraries to extend hours of operation and integrate programmes that promote effective user information literacy and narrow the gaps in the

attention accorded to nontraditional and traditional students. In terms of hours of operation, libraries should remain open to very late hours to enable the nontraditional students who are usually in their work places during the day to have expanded opportunities to make use of the library services. For the same reason, libraries should be open till late hours during weekends and public holidays ensuring that all service points remain accessible by students throughout.

Library instructions for nontraditional students need to be designed so as to be responsive to their detachment from the academic routines, inability to have full time commitment to academics and inadequate experience of interacting with library staff and library research tools. These measures would enable nontraditional students to satisfy their information needs against the odds visited upon them by the dynamics of their work environment and the rigidity of university academic schedules.

5.3.3 Recommendations for Further Studies

This study was done with reference to only two public universities of Kenya and drew the needed data from nontraditional students, staff and university librarians. While the choice of these two universities as reference points of information service provision to nontraditional students in public universities was deemed appropriate by virtue of their historical prominence in university level education in Kenya, this study should be replicated in other public universities in future.

Research should also be carried out to gather views of traditional students for comparative analyses. This would be useful to establish the degree to which the findings of this study are particular to the challenges encountered by nontraditional students or reflect the totality of functioning of the library systems. From a content and methodological perspective, future studies should include the interactions of nontraditional students, libraries and affiliate faculties toward satisfaction of information needs of nontraditional students. This understanding portends great potential to bear on library service delivery to nontraditional students. Similarly, future studies that adopt more rigorous qualitative techniques like focus group discussions with nontraditional students and library staff would be found very useful in

unravelling, from a naturalistic perspective, such issues as low staff motivation and unfriendly student-staff interactions in the libraries that traversed the responses.

REFERENCES AND BIBLIOGRAPHY

Abdoulay, K. (2003). Information seeking behaviour of African students in Malaysia: A research study. Information Development. 18 (3), 191-95.

Aduda, D. (2009) Kenya: Time to review parallel Degree courses in public Universities. *Daily Nation*, p.10.

Ajiboye, J. O. and Adeyinka, T. (2007). Problems and issues in teaching and learning in large under-resourced classroom in Nigeria public schools: Implication for policy making. The Social science, 2: 24-30.

American Library Association (ALA) 1989). Presidential Committee on Information Literacy. Final Report. Available:

http://www.ala.org/ala/mgrps/divs/acrl/publications/whitepapers/presidential.cfm

Ariyapala, P.G. and Edzan, N.N. (2002). Foreign post graduate students and the online Catalogue at the University of Malaya library. Malaysians Journal of library and Information science, 17 (1), 57-67.

Association of College and Research Libraries, (2000). *Guidelines for Distance Learning Library Services*, [Online] available: www.ala.org/Content/NavigationMenu/ACRL/Standards and Guidelines/Guidelines or Distance Learning Library Services1.htm

Bailin, A. and Anne, G. (2005). The evolution of academic libraries: the networked environment. The Journal of Academic Librarianship 31 (4), 317-323.

Bartlett, J., Kotrlik, J.W. and Higgins, C.C. (2001). Organizational Research: Determining Appropriate Sample Size in Survey Research. Information Technology, Learning and Performance Journal, 19 (1).

Bellardo, T. and Stephenson, J. (1986) "The use of online numeric databases in academic libraries: A report of a survey" The *journal of Academic Librarianship* 12(3): 152-157

Belkin, N. J. and. Vickery, A. (1989). *Interaction in information systems*. London: British library.

Boadi, B. V. and Letsolo, P. (2004). 'Information needs and information seeking behaviour of distance learners at the institute of extra-mural studies in Lesotho'. Information development, 20 (3), 189-99.

Bolton, N., Unwin, L., and Stephen, K. (1998). *The role of the library in distance learning*. London: Bower, 1998.

Borgman, C. L. (2000). From Gutenberg to the global information infrastructure: Access to information in the network world. Cambridge, MA: MIT Press.

Branch, J.L. (2003). Nontraditional undergraduates at home, at work, and school: an examination of information seeking behaviors and the impact on information literacy instructions. Research strategies, 19 (1), 3-15.

Brophy, P. (1993). Networking in British academic libraries. Journal of Academic librarianship. 8 (1), 49-60.

Brophy, P. (2000). The academic library. London: Library Association Publishing.

Bryson, J. (1999). *Effective library and information centre management*. (2nd. Ed.) Hampshire: Gower.

Bunge, C.A. (1984) "Potential and reality at the reference desk: Reflections on a 'Return to the Field" The journal of Academic Librarianship 10(3), 128-133

Chacha, R. N. (1990). *Analyzing User problems in academic libraries*. M.A thesis, Loughborough: Loughborough University.

Chatman, E. A. (1992). *The Information World of Retired Women*. Westpork, CT: Greenwood Press.

Chervinko, J.S. (1986) "Temporary employees in academic and research libraries" *The journal of Academic Librarianship* 12(4):217-220

Chikonzo, A.C. and Aina, L.O. (2001). *Information needs and source of information used by Veterinary students at the University Of Zimbabwe. IAALD Quarterly Bulletin.* XLV (1 / 2), 24-28.

Clarke, R. (1999). User education at the main library of the University of the West Indies: A historical chronicle. Library Review. 48 (5/6), 10 –15.

Cooper, C. D. (2001). Not just a numbers thing: tactics for improving reliability and validity in qualitative research. RM Forum. Vol. 6 [online] available: www.aom.pace.edu/rmd

Covey, T.D. (2002). *Usage and Usability assessment: Library practice and concern.* Washington D.C.: Digital Library federation Council on Library and Information Resources.

Devadason, F. J. and Lingam, P. P. (1997). A methodology for the identification of information needs of users. IFLA Journal. 23 (1), 41-51.

Dew, S.H. (2000). *Knowing your users and what they want: surveying off-campus students about library services*. Proceedings of the 9th Off-Campus Library Services Conference, Portland, Oregon. April 26-28.

Fidzani, B.T., Fidzani, B. T. (1998). *Information needs and information-seeking behaviour of graduate students at the University of Botswana. Library Review.* 47 (7), 329-340.

Fink, A. (2003). The survey handbook. (2nd Ed.). Thousand Oaks: CA, Sage.

Frankfort-Nachmias, C. And Nachmias, D. (1996) Research Methods in the Social Sciences, London: Arnold.

Garcha, R. and Gatten, J.N. (1990). Preliminary Observations of Nontraditional University Students' Library Skills. Library Review, 39 (1), 13-20.

Garrison, R. (2000). *Theoretical challenges for distance education in the 21st century: A shift from structural to transactional issues*. Accessed on May 2010 at http://www.irrodl.org/content/v1.1/randy.html.

Glaser B.G.and strauss, A. (1997). The discovery of grounded theory: strategies for qualitative research. New York: Aldine

Granger, D. and Benke, M. (1998). Supporting learners at a distance from inquiry_through competition. Cambridge: Cambridge University.

Heery, M. (1993). "Improving services". Learning Resources_Journal, 2(1).

Heery, M. and Morgan, S. (1996). "Academic library services to nontraditional students". London, ASLIB.n. 26

Ikoja-Odongo, R. and Ocholla, D.N. (2003). *Information needs and information- seeking behavior of artisan fisher folk of Uganda. International library and Information Research.* 259 (1), 89-105.

Kabede, G. (2002). The changing information needs of users in electronic information environment. The electronic library. Vol. 20 (1), 14-21.

Kakai, M., Ikoja-Odongo, R., and Kigongo, I.M.N.(2004). "A study of the information seeking behavior of undergraduate students of Makarere University", Uganda. Retrieved from http://www.worlib.org/vol 14no1/kakaiv14nl.shtml

Kanori, J. N. (2009). *Information seeking Behavior of graduate students: Case study of the college of Agriculture and Veterinary sciences.* Nairobi: Kenyatta University.

Kavulya, J. M. (2006). Trends in funding of university libraries in Kenya: a survey. The bottom line: managing library finances. 19 (1), 22-30.

Keegan, D. (1996). Foundations of distance education. (3rd Ed.) London: Rutledge.

Kenya Commission for Higher Education. http://www.che.or.ke/library.html. Accessed on 15 Feb 2011.

Kenyatta University (2009). The 36th congregation for the conferment and presentation of degrees and diplomas. University press: Nairobi

Kenyatta University (2009). Kenyatta university library internal directory. University press: Nairobi

Kettinger, W. J. and Lee, C. C. (1994). A service quality and user satisfaction with the information services function. Decision sciences, 25 (6), 737-766.

Knowles, M.S. (1975). Self directed learning. New York: Assoc. Press.

Knowles, M. S. (1960). Historical development of the adult education movement in the United States: Handbook of adult education in the UK. Washington D.C: Adult education Assoc.USA.

Koss, A.L. (1996). *Information needs of Kent University Masters of Business students*. *Masters 'research paper, Kent State University*. Retrieved 24th September 2010 from http://www.Unc.ed/-ckeyser?skool?inIS201/researchproposal.doc.

Kothari, C. R. (2004). *Research methodology: methods and Techniques*, (2nd Ed.) New Delhi: New age International.

Lebowitz, G. (2000). After the millennium: Library services to distance education. The Journal of Library Service to Distance Education. 1 (10).

Lee, D. (2000). *Marketing for library: theory ad practice*. Retrieved 12th May 2010 from www.lib.usm.edu/- mla/winter00/marketing.html

Leisner, T. (1995). *Should libraries engage in marketing?* Paper presented at the 61st IFLA General Conference, 20-25 August, Available at www.ifla.org/IV/ifla61/61- leit.htm (Accessed on 7th April 2010).

Luzius, J. (2002). Non-traditional students' library satisfaction. Library philosophy and practice. 5 (1).

Lyman, P. and Varian, H. R. (2003). *How much information 2003?* Retrieved 10th July 2009 from #www2.sims.berkeley.edu/research/project/how-much-info-2003.

Macgregory, K. (2008). *South Africa: Born in adult basic education*. Pretoria: University World News.

Martin, P. and Metcalfe, (2001). 'Informing the knowledge workers.' Reference services Review. 29 (9), 267-275.

Ministry of Planning (2009). *Economic survey 2009/2010*. Kenya National Bureau of statistics, pp.118, 239.

Montuiloff, V. (2003). National information policies: A handbook on the formulation, approval, implementation, and operation of a national policy on information. UNESCO, 180.

Moore, M. G. (1993). Theory of transactional distance. In D. Keegan, (ed.), Theoretical principles of distance education. New York: Routledge.

Moor, M. and Kearsly, G. (1996). *Distance education: A systems view*. Belmont, C.A.: Wadsworth.

Mutula, S. (2002) "University Education in Kenya; current developments and Future outlook" *International Journal of Educational Management*, 16(3): 109 -119

Mwangi, E. N. (2006). "An Assessment of library education programmes among undergraduate students in Kenyan Universities with particular reference to UoN and KU libraries". MA thesis, Nairobi: School of journalism.

National Policy Consultative Forum on Open Learning and Distance Education. *International Perspectives on open Learning and Distance Education*, Kenya. 13 – 15 September 2004.

Ndungu, C.W. (2007). Understanding library user needs in making appropriate collection development decisions for effective services: a case study of the university of Nairobi undergraduate library users. MLIS thesis: Kenyatta University.

Neuman, W. L. (2000). *Social Research methods* (2nd Ed.). London: Allyn and Bacon.

Nicholas, D. (2001). Assessing information needs: tools, techniques and concepts for the internet age. Aslib.

Nicholas, J. (1998). *Marketing and promotion of library services*. *ASP Conference Series*. Vol. 153. Retrieved 6th April from www.stci.edu/meetings/lisa3/nicholasj.html

Nitecki, D. (2000). Changing the concept and measure of service quality in academic libraries. Journal of Academic Librarianship 2 (3), 181-190.

Nwalo, K. I. N. (2002). Fundamentals of Library Practice: A Manual on Library Routines. Ibadan: Stirling-Horden.

Nyaigotti-Chacha, C. (2004). Challenges, lessons and Opportunities in Kenya: reforming Higher Education. Paper delivered at the State University of New York Workshop with the Parliamentatary Committee on Education, Science and Technology, Aug. 2004, Naivasha, Kenya

Odini, C. (1993). An overview of information systems in Kenya. Library Review, 42 (5), 44-49.

Ogeto, E.J. (2005). User Education in Academic libraries. Project. Nairobi: KTTC.

Orodho, A. J. (2005). Fundamentals statistics Made User Friendly for Education and Social Science Research. Nairobi: Masola.

Otike, F.W. and Omboi, M. (2010). *Challenges faced in establishing university libraries in Kenya. International journal of library and information science*, Vol. 2(8), 148-154.

Parasuraman, A., Zeithaml, V. A. and Berry, L.L. (1988). SERVQUAL: A multiple- Item scale for measuring consumer perceptions. Journal of Retailing, 64 (1) 12.

Parasuraman, A., Zeithaml, V.A. and Berry, L.L.(1994). Reassessment of expectations as a comparison standard in service quality measurement: Implications for future research. Journal of Marketing. Vol.17 (5), 111-24.

Pelzer, L. N., Leysen J. M. (2000). Library use and information-seeking behaviour of Veterinary medical students. *Bulletin of the Medical Association* 76 (4), 328-33.

Powers, J. E. (1995). Marketing in the special library environment. *Library Trends* 23(1), 7-13.

Republic of Kenya (1988). Report of the Presidential Working Party on Education and Manpower Training for the Next Decade and Beyond, Nairobi: Government Printer, pp.117-18.

Republic of Kenya. Commission for Higher Education (2007). *Revised Standards and Guidelines for University Libraries in Kenya*. Nairobi: Commission for Higher Education

Republic of Nigeria. National Commission for Colleges of Education (2000). Federal Colleges of Education: Regulation Governing the Condition of Services of staff. Uyo University: National Commission for Colleges of Education.

Roberts, P. (2000). Knowledge, information and Literacy. *International Review of Education Journal* 46 (5), 433-53.

Rodrigues, H. (2001). The role of the library in distance education. *Microcomputers for Information* 13 (1), 1-29.

Saunders, M. (2007). Research methods for Business student (4th Ed.). England: Prentice Hall.

Sekaran, U. (2006). *Research methods for Business* (4th Ed.). India: Wiley

Shaffer, I. A. (2001). Contracting to provide library services for a distance graduate education program. The Bottom Line. 893, PP. 20-27.

Sheppard, M. O. (1983). Information Seeking by TAFE trade student-teachers *Australian* academic and Research Libraries 14 (3), 149-57.

Ssendikadiwa, E. N. (1996). Evaluation of Library use instruction programmes to first_year students in Makerere University, (Unpublished Report), Makerere University

Stately, M. (2001). *Numbers guide: the essentials of Business Numeracy*. London: Bloomberg Press.

Udoumoh, C.N., Okoro, C. C. (2007). The effects of library policies on overdue materials in university libraries in the South-South Zone, Nigeria. Library Philosophy and Practice. Uyo Akwa-Ibom State, Nigeria: University of Uyo

United Nations, Educational, Scientific Cultural Organization. (1998). World Conference on Higher Education in the Twenty-First Century: Vision and Action. Paris, 5 - 9 October.

University of Nairobi (2008/2009). *University of Nairobi Academic calendar 2008/2009*. Nairobi: University press.

University of Nairobi (2009). The 42nd Congregation for the conferment and presentation of degrees and diplomas. University Press: Nairobi.

University of Nairobi (2009). *University of Nairobi internal directory*. University press: Nairobi

University of Nairobi library (2010). *Library customer service feedback survey*. Nairobi: University press.

Unwin, T. (2009). *ICT4D: information and communication Technology for development*. Cambridge: Cambridge University.

Wang J. and Frank D.G. (2002). Cross-cultural communication: Implication for effective information services in academic libraries. Libraries and Academy. 2 (2), 207-216.

Weaver, S. and Shaffer, I.A. (2001). Contracting to provide library services for distance graduate education program. *The Bottom Line* 893 (4), 20-27

Wilson, T. D. (2005). *Evolution of information behavior modeling*. Wilson model. IN; Fisher, K. E.Erdelez, S.and Mckechnde, L. (ed). *Theories of information behavior*. Medford, NJ; *Information today*. pp. 31-36.

Wood, P. A. and Walther J. H. (2000). *The future of academic libraries: changing formats and changing delivery. The Bottom Line: Managing Library Finances.* 13(4), 173-181.

Zeithaml, V.A., Parasuraman, A., Berry, L.L. (1990). *Delivering quality service: Balancing customer perceptions and expectations*. NewYork, NY: The Free Press

Appendix I: Letter of Introduction

Kenyatta University

Department of Library and Information Science

P.O Box 43844

Nairobi

5th April 2012

Dear Respondent,

RE: CHALLENGES ENCOUNTERED BY NONTRADITIONAL STUDENTS IN

SATISFACTION OF INFORMATION NEEDS: WITH REFERENCE TO

UNIVERSITY OF NAIROBI AND KENYATTA UNIVERSITY LIBRARIES.

I am a graduate student in the school of education, department of Library and Information

Science at Kenyatta University. As part of the requirements for my masters' degree, I am

conducting a study on "Challenges encountered by nontraditional students in satisfaction

of information needs with reference to university of Nairobi and Kenyatta University

libraries". From the findings, I hope to draw conclusions so as to recommend what should

be done to satisfy the information needs of nontraditional students.

The purpose of this letter is to kindly request you to complete the attached survey instrument

exhaustively to facilitate the generation of data to inform the objectives of the study.

Confidentiality and anonymity are guaranteed as you do not need to sign your name to this

questionnaire; only the investigator has access to survey data.

Thank you very much for your cooperation.

For further information please contact me as follows:

Florence Odenyo.

C/o University of Nairobi

P O Box 30197 Nairobi

Cell-phone 0733741254

e-mail address Odenyo1@yahoo.co.uk

103

Appendix II: Questionnaire for Nontraditional Students.

Instructions

Please indicate correct option as accurately and honestly as possible by putting a tick ($\sqrt{}$) against options provided in the boxes for each question/item. For questions which require your suggestions/comments, use the space provided to respond to each question. Kindly respond to all questionnaire items.

Section	1:	Background	informa	tion
---------	----	-------------------	---------	------

Section 1: Background information		
1.Which University do you stud	ly at? (Tick as appropriate)	
i. University of Nairobi ()	ii. Kenyatta University ()	
2. Gender: i. Male ()	ii. Female ()	
3. Age:	n. Pemale	
i. 20-30 ()	ii. 31-35 ()	
iii. 36-40 ()	iv. 41-45 () v. 46+ ()	
4. Year of study: i. Year I ()	ii. Year II ()	
iii. Year III ()	iv. Year IV ()	
5. Kindly state your programme of the	study (e.g. MBA)	
6. What does your programme of study	entail?	

Study programme entails:	Yes	No
Course work only		
Course work and special research project		
Course work and dissertation		
Dissertation only		
Other-specify		

7. Other than being a student, do you r	nave any otne	r occupation	!	
i. Yes () ii No (()			
8. If answer to (7) is yes, state the occur	pation by tic	king:		
. Self employed () i. Businessman () ii. Employed in formal sector () v. Housewife () Other (state)				
Section 2: Information needs of nont	raditional st	udents		
9. When do you attend your classes/tut	orials? (Plea	se tick)		
i. Evenings () ii. Week	ends ()	iii. During	school holiday	ys ()
iv. Others (specify)				
10. How frequently do you visit your li	brary?			
i. Daily () ii. Twice a week () iii. Weekly () iv. Monthly () v. Not at all () vi. Other specify				
11. Give reasons for your response to t	he above (10))		
12. Which among the information ne activities? (Give priority ranking). Issues				
Issues	important (1)	(2)	important (3)	important (4)
(i) Coursework and preparations for exams				
(ii) Extra reading to enhance lecture notes				
(iii) Class-group discussions				
(iv) Tutorial presentations				1

(v) Research for thesis & prowriting	oposal				
(vi) To be current and up to da	ite				
(vii) Any other (specify)13. Rank the importance of information needs.					satisfying you
Sources	Very	Imt	oortant(2)	Less	Not
	importan	_	,	important(3)	important(4)
(i) Print journals' articles	•			•	•
(ii) Recommended textbooks					
(iii) Lectures notes and					
handouts					
(iv)Tutorial presentations					
(v) Past Masters/PhD thesis					
and projects (vi) Websites/web pages					
(vi) Websites/web pages (vii) Online databases and					
electronic sources					
(viii) Search					
engines(yahoo/Google)					
14. Which of the following sour reading materials for your studies			•	•	o locate releva
i. Library card catalogue			()		
ii. Online public Access catalog	gue (OPAC	C)	()		
iii. Reference librarian			()		
iv. Lecturers			()		
v. Abstracts and indexes in elec	etronic data	abases	()		
vi. Abstracts and indexes in prir	nt		()		
15. How do you rate the library	collection	in terms	of your ar	ea of interest?	
i. Adequately stockediii. Inadequately stockedv. Other specify	()	ii. Mo iv. No	derately st ot sure	ocked ()	

16. Do	you alwa	ys access readi	ng materials	recomme	nded by your lecturer	s?
i. Y	es ()		ii. No	()	
17. If th	ne answei	to the above (16) is (No), g	ive reasor	18	
iv.	Library Lack of Inconve Any oth		lated and irrel			
18. Hav	ve you be	en offered libra	ary orientation	n sessions	during your academi	c life?
i. Yes	()		ii. No	()		
•		, ,	,	* *	ack of orientation aff vailable in your libra	• •
i. Yes	()		ii. No ()		iii. Not sure	()
•		ot find what you	•	our library	, what other options	do you resort to
i. ii. iii. iv. v.	Seek he Purchas Go to th Internet	her libraries p from library e personal text e cybercafé please specify	books	()		
		ne following f r them in order	-		r most in referring	to your university
i. ii. iii. iv. v. vi.	It Li L Bo	is easy to find brary collection ibrary staffs are books' shelves of	and retrieve that is current and retrieve the supportive appropriation is	he books nd reliable and friend s easy to f	e lly	() () () () ()

Section 3: Library resources and library Services

22. Which library services	do you utiliz	e most fr	equently	? (Please li	ist in order of priority)
 i. Reference and inferior. ii. Access electronic. iii. Access special color. iv. Loaning and borrow. v. Inter-library loan. vi. Any other, please. 23. How do you rate your and inferior.	and online deflection i.e. (As belowing books specify	atabases Africana,			
Information sources	Very good (1)	Good (2)	Fair (3)	Poor (4)	
(i)Library card catalogues					
(ii)Online catalogues (OPAC)					
(iii)Bibliographies					
(iv)Abstracts and Indexes					
24. How do you rate library	guides / dire	ectional s	igns in y	our library?	? (Please tick).
i. Very useful ()		seful		iii. Satis	sfactory ()
iv. Poor ()	v. Ve	ery poor	()		
25. How do you rate users' user instructions, online use					ır library? (For example,
i. Excellent () iv. Poor ()	ii. Good v. Very		()	iii. Fair	()

26. Please rank your response to the following statements by ticking.

	Strongly agree(1)	Agree(2)	Disagree(3)	Strongly disagree(4)
(i) Books loaning period is adequate				
(ii) Catalogues are perfect guide to books' arrangements on the shelves				
(iii) Materials are easily located and retrieved in the open shelves.				
(iv) Library opening hours are adequate and convenient				
(v) Special collections set-up for part-time students				
(vi) All library service points be accessible throughout (evenings and weekends included).				
(vii)Referenceandinformationhelp-deskservicesbeavailablethroughout				
(viii) Internet and telecommunication systems be used to assist part-time students				

27.	Su	ıgg	est	wh	at a	acti	ion	S S	ho	uld	be	ta	ker	ı ın	ar	eas	Wl	ner	e y	ou	dis	agı	ee	or	str	ong	gly	disa	agr	ee	
• • •		• • • •	• • •			• • •	• • • •		• • •	• • •		• • •		• • •		• • •		• • • •		• • •		• • •		• • •		• • •		• • • •	• • • •		•
• • • •			• • •	• • • •		• • •	• • • •		• • •	• • •		• • •		• • •	• • • •	• • • •	• • • •	• • • •		• • •		• • •		• • •		• • •	• • • •	• • • •	• • • •	• • • •	•
• • •	• • • •	• • • •	• • •	• • • •	• • • •	• • •	• • • •	• • • •	• • •	• • •	• • • •	• • •	• • • •	• • •	• • • •	• • •	• • • •	• • •	• • • •	• • •	• • • •	• • •	• • • •	• • •	• • • •	• • •	• • • •	• • • •	• • • •	• • • •	•
• • • •			• • •				• • • •		• • •	• • •		• • •						• • • •		• • •		• • •		• • •		• • •		• • • •			•
			• • •				• • • •			• • •								• • •				• • •									

Challenges encountered by nontraditional students

28. Indicate by ticking the challenges/ barriers which adversely affect your efforts to satisfy your information needs.

Challenges	Yes	No	
(i) Library opening hours			
(ii) Outdated books			
(ii) Saturda Sooks			
(iii) Inadequate resources			
(iv) Lack of adequate assistance by the			
library staff			
(v) Inadequate computers			
(vi) Lack of user education			
(vii) Limited access to essentials			
service points			
e.g.(Africana/Periodical/E-journals)			
(viii) Others-			
indicate			
29. From your own experience, doe nontraditional students? i. Yes () ii. No	·	y cater for i	nformation needs of
30. If your answer is (NO) above, how d locate information resources in your library			efforts to identify and
31. Please suggest areas for improvement	in your library		

Thank you.

Appendix III: Questionnaire for the Library Staff

Instructions

Please indicate correct option as correctly and accurately as possible by putting a tick () against options provided in the boxes for each question/item. For questions which your suggestions/comments are required, use the space provided to respond to each question. Kindly respond to all questionnaire items.

Section	1:	General	informa	ation.

1. Wł	nich university library do you w	ork	in'	?			
i. U	University of Nairobi ()			ii.	ŀ	Kenyatta University ()	
2. Wł	nich section of the library are yo	ou s	stati	ioned?			
3. Wł	nat is your position in the librar	y? -					
4. Foi	how long have you worked in	this	s lił	brary? (I	Ple	ase tick as appropriate)	
i.	Less than 5 years	()				
ii.	5 years but less than 15 years	()				
iii.	15 years but less than 25 years	()				
iv.	Over 25 years	()				
<u>Section</u>	on 2: Policy framework on int	<u>fori</u>	<u>mat</u>	tion nee	<u>ds</u>		
5. Do	es your library have a policy or	ı se	rvio	ces to no	on-	traditional students?	
i. Ye	es () ii No()	iii	Ιd	don't kn	юw	7 ()	

services t	, please indicate the ext o non-traditional stude extent, 4- Large extent,	nts in your li	ibrary.	•			L
			5	4	3	2	1
i. ii. iii. iv.	User education Reference and Inform Circulation services Hours of operations	ation services	[] [] []				
7. The po	erformance of the librar	ry can be mea	sured	in terms	s of the	quality as	nd speed of
service. (i) Please indicate to wha	t extent each o	of the li	sted ele	ments ir	nfluences p	performance
in your lib	orary. (Where 1- Non, 2	- Small extent	3-Mod	erate ex	tent, 4-	Large ext	ent, 5- Very
large exte	nt)						
	001			5 4	3 2	2 1	
	ve, efficient and conven		livery				
	rvey and feedback progra	ammes] [] [
` •	laints and complain)						
iii. Service	e innovation			[][]			
8. The per	formance of staff can be	measured in t	erms of	f the sati	sfaction	of users.	
Please indicate to what extent each of the listed elements influences the performance of							
library staff in provision of services to non-traditional students in your library. (Where l-Non,							
2-Small extent, 3-Moderate extent, 4-Large extent, 5-Very Large extent)							
		5 4 3	2	1			
i. Recrui	tment of skilled staff	[][][] []		
ii. Trainir	ng of staff	[][][] [] []		
iii. Motiva	ation	[][][] []				
iv. Comp	ensation	[][][] [] []		
v. Satisfa	ction of staff	[][][] [] []		

Section 3: Information needs of non-traditional students in academic libraries

9. What are the main functions of your li	brary? (Please tick as appropriate).	
i. Bibliographic ()		
ii. Reference ()		
iii. Reader services ()		
iv. Circulation ()		
v. Information ()		
10. Please indicate to what extent each o	of the enlisted elements influences the po	erformance of
the library as regards non-traditional stud	dents in your institution.	
(Where l-Non, 2- Small extent, 3- Moder	ate extent, 4- Large extent, 5- Very Lar	ge extent)
i. Users Information needs		()
ii. Provision of adequate resources in ter	rms of finance, staff, and equipments	()
iii. Identification of information needs		()
iv. Provision of policy guidelines		()
Section 4: Information resources and s	<u>services</u>	
11. Please rate the importance of the fol non-traditional students in your library. <i>Large extent, 5-Very Large extent)</i>		
	5 4 3 2 1	
i. Accessibility of user services		
ii. Accessibility of e-journals facilities		
iii. Accessibility of e- Mail services		
iv. Provision of books		
v. Communication strategy		

•	on literacy skills (ILS) sessions to the non-traditio	na
students?(Tick where appropriate)		
i. Yes () ii. No ()	iii. Don't know ()	
13. How do you rate the following info	ormation services in relation to meeting informati	ior
needs of nontraditional students in your	r library? (Where 1-Non, 2-Small extent, 3-Moder	ate
extent, 4-Large extent, 5-Very Large exte	ent)	
	5 4 3 2 1	
i.Information literacy skills(ILS)		
ii.Reference services		
iii.User instructional services		
iv.Current Awareness services		
v.Interlibrary loans (ILL)		
vi.Document delivery services		
vii.Books reservation service		
viii.Photocopying services		
14. How do you rate the library staff in	relation to the following aspects? (Where 1-Non,	2
Small extent, 3-Moderate extent, 4-Large	e extent, 5-Very Large extent)	
	5 4 3 2 1	
i.Level of training		
ii.Customer and public relations		
iii.On-job competency		
iv.Query/services Response rate		
v.Level of motivation		

Section 5: Challenges/barriers met by nontraditional students

15. Ple	ease indicate the effectiveness of each	of the listed elements in provision of services to		
non- tı	raditional students in your library. (Wh	ere l-not effective, 2-effective, 3-very effective)		
		3 2 1		
i. Us	ser orientation program in the library	[][][]		
ii. St	ii. Staff numbers in the library			
iii. Po	oints open on weekdays, weekends and	public holidays [] [] []		
iv. Siz	ze of library collection	[] [] []		
v. Fle	exibility of Operational hours of your li	brary [] []		
vi. Otl	her			
spec	eify			
1 (DI				
		the listed elements pose as a challenge in the		
-		ll extent, 3-Moderate extent, 4-Large extent, 5-		
Very L	Large extent)			
		5 4 3 2 1		
i.	Inadequate computers			
ii.	Inadequate reading space			
iii.	Demoralized staff			
iv.	Automation			
v.	Inadequate furniture	[] [] [] [] []		
vi.	Inadequate working tools			
vii.	Online/Internet services			
viii.	Understaffing	[][][][][]		
ix.	Overwhelming number Of users	[] [] [] [] []		
х.	Inadequate information resources	[][] [] [] []		
xi.	Errors in online catalogue records	[][][][][]		
xii.	Relevance of information sources	[][][][][]		
xiii.	Other			

17. What kind of complaints do you receive from the non-traditional students?(Please list them)
18. What suggestions can you make on the improvement of service delivery to non-traditional students? (Please list them)
traditional students? (Please list them)
traditional students? (Please list them)
traditional students? (Please list them)
traditional students? (Please list them)
traditional students? (Please list them)
traditional students? (Please list them)

Thank you.

Appendix IV: Interview Schedule for University Librarians

Name
Position
1. How long have you worked in the university?
2. How many years as a University librarian?
Policy framework
3. Is there any statement of purpose, a written plan of development for the services to non-traditional students in your library?
4. If 'No' are there plans to have it in place? Yes () No ()
5. If 'Yes, what are the highlights?
6. How does your office ensure the policy is adhered to?
7. Does your library have a user education policy?
8. How is the policy used to establish user needs expectations?
<u>Information needs</u>
9. How many members of staff do you have in the library?
10. How many do you have at each of the following five (5) service point?
a. East Africana b. Reserve c. Issue desk d. Periodicals e. Reference
11. Are the staff at the service points competent enough to handle the non-traditional students' information needs?

students?(Please explain)	our office receive regarding services to non-traditional
	pening hours to the non-traditional students?
14. How comprehensive is your libra	ry collection (prints and electronic)?
i.Books-(prints and electronic)	()
ii.Journals (prints and electronics)	()
iii.Digital repository	()
iv.Thesis and dissertations	()
v.Un publications	()
	given the skills to exploit the collection?
	or improving the situation?
18. How do you gauge the library sup	pport system towards the non-traditional students?

<u>Information resources and services</u>

20. Com	ment on the adequacy of the following library	y resou	ırc	es.						
(Where	l-Non, 2-Less adequate, 3-Adequate, 4-Very	adequ	ate)						
		4	3	3	2		1			
i.	Finance	[]	[]	[]		[]			
ii.	Staff	[]	[]	[]		[]			
iii.	Equipments	[]	[]	[]		[]			
iv.	Books and Journals (prints and electronic)	[]		[]	[]	[]			
v.	Library seating space	[]	[]	[]]	[]			
vi.	Computers (hardware and software material	s)[]	[]	[]		[]			
	does this affect your library service delivery									
23. How meet the	is the University encouraging staff to upgother challenges of service provision? (Please experience)	rade th	nei:	r p	rofes	ssio	onal qu	alifica	ations	
24. Does	s the management have a program for sponsor?	ring st	aff	to	vari	ous	s course	es for	capaci	ty
										. .

25 .Which of the following information servic in your library? (Please tick)	es are available to the non-traditional students
i.Loaning/lending	()
ii.Document delivery	()
iii.Databases/e-journal	()
iv.Reference services	()
v.Current Awareness Services (CAS)	()
vi.Information Literacy Skills (ILS)	()
vii.Book Reservations	()
viii.Photocopy	()
especially conditions of library use are user fri	
27. What challenges the UoN and KU library r nontraditional students' information needs?	
28. What kind of complaints do students?	you receive from the nontraditional
29. What suggestions would you make on how information needs of nontraditional students? -	your library services can be improved to meet

Thank you