

**DETERMINANTS OF ACCESS AND UTILIZATION OF LIBRARY SERVICES
THROUGH TRAINING: A CASE OF NYERI NATIONAL POLYTECHNIC**

ROSEANN MUNGAI

BSIS (KEMU), HND LINS (KSPS)

**A THESIS SUBMITTED TO THE BOARD OF POSTGRADUATE STUDIES IN
PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE
DEGREE OF MASTER OF INFORMATION SCIENCE OF THE SCHOOL OF
INFORMATION SCIENCE AND TECHNOLOGY, KISII UNIVERSITY.**

JULY, 2026

DECLARATION

This project is my original work and has not been presented for a degree in any other University.

Signature.....

Date.....20/7/2026

NAME OF STUDENT: **ROSEANN MUNGAI**

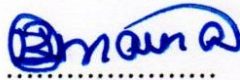
ADMISSION NUMBER: MIN12/20349/14

DECLARATION BY THE SUPERVISORS

This research project has already been approved for data collection by the following University Supervisors.

SUPERVISORS

DR. JANE MAINA (Ph. D)


.....

21/7/2026
.....

SENIOR LECTURER

Signature

Date

DEPARTMENT OF COMMUNICATION MEDIA AND INFORMATION SCIENCE,
KISII UNIVERSITY

DR. JAMES OGALO (Ph. D)


.....

21/7/2026
.....

LECTURER

Signature

Date

COMPUTING DEPARTMENT,
KISII UNIVERSITY

PLAGIARISM DECLARATION

Definition of plagiarism

Is academic dishonesty, which involves; taking and using the thoughts, writings, and inventions of another person as one's own.

DECLARATION BY STUDENT

- i. I declare I have read and understood Kisii University Postgraduate Examination Rules and Regulations, and other documents concerning academic dishonesty.
- ii. I do understand that ignorance of these rules and regulations is not an excuse for a violation of the said rules.
- iii. If I have any questions or doubts, I realise that it is my responsibility to keep seeking an answer until I understand.
- iv. I understand I must do my own work.
- v. I also understand that if I commit any act of academic dishonesty like plagiarism, my thesis/project can be assigned a fail grade ("F")
- vi. I further understand I may be suspended or expelled from the University for Academic Dishonesty.

Name: **ROSEANN MUNGAI**

Signature: 

Reg. No: **MIN12/20349/14**

Date: **20/7/2026**

DECLARATION BY SUPERVISOR (S)

- i. I/we declare that this thesis/project has been submitted to a plagiarism detection service.
- ii. The thesis/project contains less than 20% of plagiarised work.
- iii. I/we hereby give consent for marking.

DR. JANE MAINA (Ph. D)



21/7/2026

SNR. Lecturer

Signature

Date

Department of Communication Media and Information Science

Kisii University

DR. JAMES OGALO (Ph. D)



21/7/2026

Lecturer, School of Information Science & Technology

Signature

Date

Kisii University

DECLARATION OF NUMBER OF WORDS

Name of Candidate: **ROSEANN MUNGAI**

Adm No: MIN12/20349/14

School: School of Information Science and Technology (SIST)

Department: Department of Communication Media and Information Science

Thesis Title: DETERMINANTS OF ACCESS AND UTILIZATION OF LIBRARY SERVICES THROUGH TRAINING: A CASE OF NYERI NATIONAL POLYTECHNIC

I confirm that the word length of:

1) The thesis, is 21,386 and, 2) the Bibliography is 2,088 words.

I also declare the electronic version is identical to the final, hard bound copy of the thesis and corresponds with those on which the examiners based their recommendation for the award of the degree.

Signed:

Date: 20/7/2026

(Student)

I confirm that the thesis submitted by the above-named candidate complies with the relevant word length specified in the School of Postgraduate and Commission for University Education regulations for Masters Degrees.

Signed: J. Munga

Email: j.munga@ken.ac.ke

Tel: 0724172268

Date: 21/7/2026

(Supervisor 1)

Signed:

Email: j.munga@ken.ac.ke

Tel: 0724172268

Date: 21/7/2026

(Supervisor 2)

COPYRIGHT

All rights reserved. No part of this thesis may be reproduced in any form or by any electronic or mechanical means (including photocopying, recording or information storage and retrieval) without prior written permission from the author or Kisii University.

© 2026, **ROSEANN MUNGAI**

DEDICATION

I am dedicating this work to my husband for his great assistance to me, not forgetting our children for their perserverance and encouragement towards the accomplishment of this work. Last but not least my brother and my sisters. God bless you all.

ACKNOWLEDGEMENT

I wish to express my sincere gratitude to all those who supported me in the successful completion of this thesis. First and foremost, I thank the Almighty God for granting me good health, strength, wisdom, and perseverance throughout the period of my study. My appreciation also goes to the management and staff of Nyeri National Polytechnic for allowing me to conduct this study within the institution. I also extend my sincere thanks to the librarians, trainers, and students who willingly participated in this research by providing the required information. Special appreciation goes to my family more so my husband James Tutu and friends for their constant encouragement, moral support, and patience throughout the period of my study.

I am thankful to my supervisor, Dr. Jane Maina, for her precious guidance. I want to thank her so much for her unending patience, useful advice, and ideas. Her willingness to meet me at short notice is highly appreciated. I cannot forget to thank Dr. James Ogalo for his contributions too in this work. My humble thanks goes to the respondents who took their time and resources to contribute to the data that made this research possible. I thank The Almighty God for the gift of life and strength that ensured the project was concluded without interruption. Finally I would wish to extend my sincere gratitude to all those who contributed in one way or the other in completion of this thesis. May the almighty God bless you all

ABSTRACT

Information centre is the main core source of knowledge skills and a central place in every learning institution. However, much has been done but accessing its resources and utilizing them has not been optimally used. The study aims to investigate on determinants of access to and utilization of information centres services, focusing on the specific case of Nyeri National Polytechnic. The main objectives of this research were to: Establish the factors that enhance access and utilization of information centres services in academic information centres; evaluate the influence of training on access and utilization of the resource learning center at Nyeri National Polytechnic and assess the challenges facing provision for access and utilization of information centres services in Nyeri National .Uses and Gratification theory (UGT) and Unified Theory of Acceptance and Use of Technology (UTAUT) theory were used since they signified the relationship pattern between the students and the information centre The study accepts a comprehensive approach, which encompasses the use of descriptive statistics which involves the summary and presentation of findings from data collected utilizing a qualitative technique which was thematically used to examine and statistical package for social science(SPSS) was used to evaluate quantitative data in research methods. The Slovincs mathematical formula was used to get a sample size of 365 respondents. The population of the study was the registered users which consisted of 4000 students, 10 information centres staff and 173 lecturers of Nyeri National Polytechnic. Questionnaires and documentary reviews were used to collect data. The selection was done through simple random and purposive sampling techniques. The study found that poor quality of resources, the low turnout of information centre staff, technology integration being low: lack of awareness, lack of enough and outdated materials, and inadequate training programs like user education, digital literacy and information literacy skills as the major challenges by all the students and trainers, other challenges included poor arrangement information materials according to the recognized order that is colour, call numbers. The recommendations of the study at the Nyeri National Polytechnic is that a comprehensive meeting should be conducted between the information centres staff and school administrators to organize a seminar or workshop on user education programs curb this low usage of information centres services and resources. Data was presented in form of tables for easier calculations and understanding.

TABLE OF CONTENTS

DECLARATION.....	ii
PLAGIARISM DECLARATION.....	iii
DECLARATION OF NUMBER OF WORDS.....	iv
COPYRIGHT.....	v
DEDICATION.....	vi
ACKNOWLEDGEMENT.....	vii
ABSTRACT.....	viii
LIST OF TABLES.....	xiii
LIST OF FIGURES.....	xiv
LIST OF APPENDICES.....	xv
LIST OF ABBREVIATIONS.....	xvi
CHAPTER ONE	
INTRODUCTION.....	1
1.1 Background to the Study.....	1
1.2 Statement of the Problem.....	8
1.3 Purpose of the Study.....	10
1.4 Objectives of the Study.....	10
1.5 Research Questions.....	10
1.6 Significance of the Study.....	10
1.7 Assumption of the Study.....	12
1.8 Scope and Limitations of the Study.....	12
1.8.1 Scope of Study.....	12
1.8.2 Limitations of the Study.....	13

1.9 Conceptual Framework	14
1.10 Definition of Terms	15
1.11 Roadmap of Chapters	16
CHAPTER TWO	
LITERATURE REVIEW	17
2.0 Introduction	17
2.1 Theoretical Framework	17
2.1.1 The Uses and Gratifications Theory (UGT)	17
2.1.2 The unified theory of acceptance and use of technology (UTAUT).....	18
2.2 Influence of Training on Access and Utilization of Information centres Services	20
2.3 The Role role of Training in enhancing access and utilization of library services.	23
2.4 Challenges to Accessibility and Utilization of Information centres Services	28
2.4.1. Challenges of Accessibility and utilization of information centres low motivation at Nyeri National Polytechnic.....	30
2.4.2 Development of Accessibility and Utilization of Information centres Services in Kenya	30
2.4.3 Recent Technological Accessibility and Utilization of Information centres Services in Kenya	31
2.5 Research Gaps	32
CHAPTER THREE	
RESEARCH METHODOLOGY	34
3.1 Introduction	34
3.2 Research Design.....	34
3.3 Study Area	34
3.4 Target Population.....	35
3.5 Sample and Sampling Techniques.....	36
3.5.1 Sampling Techniques.....	36
3.5.2 Sample Size	37

3.6 Data Collection Methods.....	38
3.6.1 Questionnaire.....	39
3.6.2 Data collection procedure	40
3.7 Validity and Reliability.....	40
3.7.1 Validity.....	40
3.8 Data Analysis.....	41
3.9 Ethical Considerations.....	42
CHAPTER FOUR	
DATA PRESENTATION, INTERPRETATION, AND ANALYSIS	43
4.1 Introduction	43
4.2 Response Rate	43
4.2.1 Demographic Information	44
4.3. Factors Enhancing Access and Usage of Information centres Services by trainees.	45
4.4 Influence of training in enhancing access and utilization of information centres resources.....	49
4.5 Challenges in Access and Utilization by Students	53
4.6 Regression Test.....	58
CHAPTER FIVE	
SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS	61
5.1 Summary of Findings	61
5.1.1 Factors Enhancing Access and Utilization of Information centres Services	61
5.1.2 Role of Training in Improving Information centres Services	62
5.1.3 Challenges in Access and Utilization of Information centres Services	62
5.2 Conclusions	63
5.3 Recommendations	64
5.3.1 Recommendations for Information centres Administration	64

5.4 Recommendations for Future Research	65
REFERENCES.....	66
APPENDICES	74

LIST OF TABLES

TABLE 1: TARGET POPULATION	36
TABLE 2: SAMPLE POPULATION	38
TABLE 3: RESPONSE RATES BY CATEGORY	43
TABLE 4: YEAR OF LEARNING	44
TABLE 5: YEARS OF TEACHING EXPERIENCE	44
TABLE 6: YEARS OF EXPERIENCE AS A INFORMATION CENTRES STAFF	45
TABLE 7: FREQUENCY IN USING INFORMATION CENTRES INFORMATION SERVICES	45
TABLE 8: FACTORS ENHANCING ACCESS AND UTILIZATION	46
TABLE 9: FACTORS ENHANCING ACCESS AND UTILIZATION OF INFORMATION CENTRES RESOURCES BY LECTURERS	47
TABLE 10: FACTORS ENHANCING ACCESS AND UTILIZATION	48
TABLE 11: FREQUENCY OF TRAINING	50
TABLE 12: INFLUENCE OF TRAINING ON INFORMATION CENTRES SERVICES.....	50
TABLE 13: INFLUENCE OF TRAINING ON INFORMATION CENTRES SERVICES.....	51
TABLE 14: INFLUENCE OF TRAINING ON INFORMATION CENTRES SERVICES.....	52
TABLE 15: CHALLENGES FACED BY STUDENTS.....	54
TABLE 16: CHALLENGES FACED BY LECTURERS.....	55
TABLE 17: CHALLENGES FACED BY LIBRARIANS.....	57
TABLE 18: MODEL SUMMARY	58
TABLE 19: ANOVA STATISTICS	58
TABLE 20: COEFFICIENTS.....	59

LIST OF FIGURES

FIGURE 1: CONCEPTUAL FRAMEWORK.....	14
-------------------------------------	----

LIST OF APPENDICES

APPENDIX I: AN INTRODUCTION LETTER	74
APPENDIX II: NACOSTI AUTHORIZATION	75
APPENDIX III: QUESTIONNAIRES.....	76
APPENDIX IV: MAP OF THE STUDY AREA.....	85
APPENDIX V: PUBLICATION.....	86
APPENDIX VI: PLAGIARISM REPORT	88

LIST OF ABBREVIATIONS

ICT: Information and Communication Technology

OCLC: Online Computer Information centres Centre

TVET: Technical Vocational Education and Training

UNESCO: The United Nations Education, Scientific and Cultural Organization

CHAPTER ONE

INTRODUCTION

This is the chapter that helps us to understand that helps us to understand what the statement of the problem is ,the purpose of the study including the specific objectives of the research study. It also outlines the questions related to research including the significance of the research being studied, assumptions of the research study and scope. It also presents the limitations of the study, conceptual framework including operational definitions of the term.

1.1 Background to the Study

A information centres consists of a collection of information sources whose bibliographical information is provided to allow for intellectual access to the sources and staffed with trained personnel who offer information resources and services and also programs that adapts to the needs of the information centres attendants (Levine-Clark & Carter, 2013).

The management of information centres and archives plays a central role in determining the access and utilization of information centres services, particularly through training initiatives. Effective management functions such as planning, organizing, staffing, and controlling ensure that information centres resources are well-developed, properly organized, and easily accessible to users. Through structured training programs, users are equipped with essential information literacy skills, enabling them to navigate cataloguing systems like Dewey Decimal Classification and digital platforms such as Koha. These training efforts enhance users' ability to locate, evaluate, and utilize information resources effectively. Additionally, well-managed reference and circulation services, supported by trained staff, improve user engagement and satisfaction. In archives, proper records management and user orientation further facilitate access to valuable information. Therefore, the level of training provided, combined with efficient information centres and archives management practices, significantly influences how users access and utilize available services, ultimately contributing to improved academic performance and research outcomes (Akiy,2020).

University information centres act as reservoirs of information, aiding the educational and research endeavours of their parent institutions. Information centres significantly contribute to facilitating both conventional and digital forms of learning. (Tsekea & Chigwada, 2021).

The information centres provides detailed knowledge and facts-intensive services, acts as a repository of knowledge and equips users with competencies . Information proficiency and intelligence that imparts abilities and contents necessary for information need recognition, information sources identification and selection, information search, retrieval and ethical utilisation by observing copyright and avoidance of plagiarism. Information centres are a critical aspect of learning, which is a fundamental component of a nation's general progress because it is the greatest tool for human efficiency and development. The information centres plays an important role in imparting quality information literacy education through its services. The information centres as part of the education process is a useful tool for societal development. The improvement that is expected in the educational system can be obtained through information centres services. Learning can be aided through the effective use of the information centres by students who are regarded as future leaders. Ilori & Owolabi, (2020) from the University of Nigeria explore the factors influencing access and utilization of information centres services emphasizing the role of user training programs in enhancing information centres engagement among students and faculty.

An investigation by Yebowaah & Owusu-Ansah (2020) showed that information literacy training promotes the use of information centres services and resources and advocated for tailored training sessions. The important role of information literacy in the access and use of the information centres was further underscored in a study by Mabweazara & Zinn (2020) which concluded that digital literacy improved the access and use of information centres services in underserved rural areas.

As noted by Bamidele (2014), the Nigerian educational system remains a focus for stakeholders who believe it requires significant transformation due to its deteriorating condition. The information centres, as an integral part of the educational framework, has the potential to contribute significantly to the desired transformation in the education sector. The effective use and appreciation of the information centres system can lead to considerable advancements in education.

Agyeiku et al., (2022) investigated the effect of training on the use of electronic resources and orienting students to the information centres. The study surveyed the students' ability to search academic databases and use the Internet to search for information. The study established that

equipping students with information and digital literacy skills was a major factor in determining the effective access and use of information centres academic databases.

Information literacy trains students on the search and ethical use of information. Information centres literature and practice emphasise the need for teaching information literacy and therefore advocate for the adoption of an education system that emphasizes training students on academic and research skills. Research on information literacy stresses the importance of information centres orientation and training programs to equip students with the necessary skills for the exploitation of information centres services and sources. It also orients students on how to borrow and return items and the additional advantage of having reference assistance, interinformation centres loan and technology support. The ultimate goal of information centres orientation is to empower users to navigate the information centres effectively, make informed use of its resources and cultivate information literacy skills that will serve users in academic, professional and personal endeavours (Ashikuzzaman, 2024).

Information centres are pivotal in learning institutions because they offer services that facilitate learning, research, and knowledge dissemination. The quality of information centres services is influenced by various factors, and one critical determinant is the training provided to information centres staff. This study seeks to establish the determinants of the provision of information centres services through training, the case of Nyeri National Polytechnic. Globally, the significance of well-equipped information centres has been recognized as integral to the educational landscape. Regionally, the importance of information centres services is underscored by their contribution to academic excellence. Locally, the Nyeri National Polytechnic represents a microcosm of the broader challenges and opportunities faced by educational institutions in ensuring effective information centres services through training.

To educate and conduct research effectively, educators need a range of information for both teaching students and personal growth. To facilitate this, the right information needs to be accessible to the appropriate individuals at the correct time and in the proper format, which is a duty of the information centres. Accessing information resources via information centres is crucial because it aids in the dissemination of costly materials, which include books, journals, films, and videos (Arachchige, 2019).

Information sources are likely to be used if they demand little effort to access. User education programs give the students the necessary skills that enable them to expend little amount of

effort to utilise the information sources. The accessibility and usage of information are crucial to the teaching, research, and service functions of students. Many students frequent the information centres early in the morning and late at night to study for exams. Some students also visit the information centres to access online databases, suggesting that a significant number of them finish their research tasks there.

Arachchige, (2019) demonstrated that the use of sources found in the information centres enhanced students' critical thinking capabilities. Toner, (2008) established a positive correlation between academic performance and information centres use. Students who searched information centres catalogues for information centres books, sought help from information centres staff, and used the information centres electronic resources such as e-journals and e-books performed better. Anyaoku (2015), notes utilisation of information centres services is crucial to students' academic success. Therefore it is necessary to pay attention to the three main success factors for information centres services access and use of resource availability, resources accessibility , and resources use.

Worldwide, colleges and universities are using the facilitation of accessing information centres services as an enhancement to educational opportunities. In the UK, Muir et al. (2016) noted that information centres resources are crucial in supporting the educational requirements of students. In India, Sinha (2015) discovered that teaching users about information centres resources enhances the quality of students' education. Additionally, the research indicated that user education is essential for the efficient use of information centres materials. Similarly, Suleiman (2012) in Malaysia further confirms that user education initiatives are beneficial for students in completing class tasks and enhancing their overall academic success.

An investigation conducted by Asemi & Riyahiniya (2007) explored the connections between student awareness and utilization of digital resources at Isfahan University of Medical Sciences. The findings revealed that 70 per cent of students were knowledgeable about digital resources, yet only 69 per cent utilized them; 62 per cent were aware of offline databases, while roughly 19 per cent accessed them via the Central Information centres LAN network. Approximately 70 per cent were informed about online databases available through the Central Information centres website, and around 53 per cent of participants reported using them. A total of 64 per cent recognized the “CLBJ Database,” with more than half having utilized it. Overall,

87 per cent of students believed that the available data resources fulfilled their informational needs.

Trivedi & Joshi (2009) found that patrons of the Pramukhswami Medical College (PSMC) information centres in Karamsad, Gujarat, India, utilize both e-journals and print journals available in their departmental information centres and the computer centre within the Central Information centres. The primary purpose for accessing these journals was to obtain information related to research, dissertations, presentations, seminars, lectures, treatment protocols for rare cases, and journal clubs, among other topics, primarily to enhance their knowledge. Nevertheless, the study also highlights various challenges associated with the use of e-journals, including issues like computer illiteracy, insufficient computer training, and difficulties in retrieving specific relevant health information from advanced databases such as MD-Consult, EBSCO, ProQuest, and Science Direct. Additional technical problems, such as slow download speeds, poor connectivity, and visual strain from prolonged screen use, are also evident when accessing e-journals.

Tuhou's (2011) research on how students from Māori, an indigenous and minority group in New Zealand, access and use information centres services found that they encountered three primary obstacles: insufficient structural and physical resources, institutional barriers, and individual viewpoints regarding the utilization of information centres services. According to research conducted by Anyaoku (2015), students reported that they would go to the college information centres to read their textbooks, peruse newspapers, gather information for research or project assignments, and complete classwork. Nevertheless, the ability to effectively access and use information centres services and resources was impeded by a shortage of computers, internet connectivity, and up-to-date materials. The research by Nkamnebe et al., (2014) found that college students utilized information centres services to a moderate extent, primarily during exam periods. However, there were shortages or inadequacies in resources for certain courses, and the online information centres services were lacking.

Research conducted by Soria et al. (2013) showed that information centres users outperformed non-users and retained more information. Nonetheless, for the information centres to positively influence students' learning, its resources and facilities need to be easily accessible. A study conducted by Foley (2010) involving international students at the Institute of Technology, Carlow, Ireland, found that language proficiency in English hindered students' access to

information centres resources, along with their low engagement in information centres orientation sessions or information skills training programs. A contrasting study by Nisha & Ali (2012) at the information centres of IIT Delhi and Delhi University revealed that while users were knowledgeable about the information centres's resources, particularly e-journals, they were not utilizing them. The reasons for this included slow download speeds, the unavailability of specific issues, insufficient training, and restricted access to terminals.

In Africa, higher learning institutions have also attempted to ensure access to information centres resources. The use of information centres resources by trainees and all the participants Africa has been found to be critical in improving their performance. Research on participation on the use of information centres by learners by Onifade et al. (2013) realized that most trainees do not use information centres services. They visited the information centres to utilize repository materials and used web based materials than any other resource. Lack of time was the major hinderance to the use of the resource center.

The UADA-NEPAD through the Africa Union Development pointed out that, despite 10- 11 million youths graduating yearly from African institutions of higher learning, the graduates lack practical and employability skills for the world of work. During the leadership forum held in Johannesburg South Africa, the UADA-NEPAD insisted on the need to strengthen the institutions as practical avenues for innovation. According to a study carried out on the African job market, only 3 million formal job opportunities are created yearly, hence the need to evaluate the training strategies to facilitate entrepreneurship opportunities created for the next youth generation in Africa ((Morsy & Mukasa, 2019). The representatives from various college organizations in African Countries were advised to work along with the Ministry of Employment, vocational training, and the private sector in designing the practical curriculum to alleviate the skills gap. Further, UADA-NEPAD acknowledged the significant need for capacity building by ensuring all the TVET institutions have functional information centres in terms of user education, services, staff, and policies to facilitate access and use of information ((Morsy & Mukasa, 2019).

Accessing and utilizing information centres services and resources is a crucial factor in enhancing education, as highlighted in Vision 2030, Kenya's development strategy for the years 2008 to 2030. This plan strives to transform Kenya into a nation that is globally competitive and prosperous, ensuring a high standard of living by the year 2030. The strategy

is structured around three main pillars: economic, social, and political. The social pillar focuses on fostering a fair and unified society that benefits from equitable social progress within a healthy and safe environment, addressing matters related to education and training (Kelemba, 2018). Students who excel in their examinations are generally more frequent users of information centres services and resources.

Chibini (2011) examined the utilization of electronic resources in the information centres at Strathmore University. Though there was awareness of the resources the usage remained low. Major causes for low utilisation of the resources were attributed to skills inadequacy, bandwidth constraints, unmanageable workload and publishers' embargoes. Research, teaching and learning, the core functions of a university, are enhanced by accessing and using the resource center sources and services. Trainees, faculties and university administrators must have access to the information centres services and resources to actualise the core functions of the university. The information centres has then to acquire, organise and make accessible resources needed and provide services required for effective use of the learners center resources and services.

Mwatela's (2013) research at the University of Nairobi, Mombasa Campus established that familiarity, awareness, information centres skills, information literacy competency and organisation of the information centres resources, influence the access and use of the information centres.

Existing studies on the access and use of information centres services suggest that these factors significantly impact students' academic performance. Accessing and utilizing information centres services leads to an improvement in students' learning experiences. However, the majority of research conducted on this topic has focused primarily on universities, with limited studies addressing technical institutions regarding the access and usage of information centres services and resources. Consequently, this study aims to fill these research gaps by identifying the factors influencing access and use of information centres among technical and vocational colleges in Kenya, investigating information centres usage patterns, the level of information centres engagement, and the factors that influence the use of information centres services. Training plays a significant role in enhancing access to information centres services by equipping users with the necessary skills to locate and retrieve information. Information centres user education programs, such as orientation and information literacy training, create

awareness of available resources and services, thereby improving users' ability to access them. Studies have shown that lack of training limits users' ability to effectively navigate information centres systems and databases, resulting in poor access to information resources. Conversely, users who undergo training are more likely to understand how to use catalogues, databases, and other retrieval tools, which enhances their access to both print and electronic resources (Mungai & Ogalo, 2023; Tenya et al., 2024).

Training also significantly influences the utilization of information centres services by improving users' competence and confidence in using available resources. When users are equipped with the necessary information literacy and digital skills, they are more likely to make effective use of information centres services, including borrowing materials, accessing electronic databases, and seeking reference assistance. Research indicates that untrained users often underutilize information centres resources due to lack of skills and awareness, while trained users demonstrate higher levels of engagement and usage. Therefore, training contributes to increased frequency and effectiveness of information centres use (Okongo, 2014; Tenya et al., 2024).

Training serves as a critical link between access and utilization of information centres services. While access refers to the ability to obtain information resources, utilization involves the actual use of those resources. Training ensures that users not only gain access but also possess the skills to effectively use the information retrieved. It reduces barriers such as information centres anxiety and lack of technical skills, thereby promoting independent learning and active engagement with information centres services. Consequently, institutions that invest in continuous user training are more likely to experience improved access and higher utilization rates among their users (Mungai & Ogalo, 2023).

1.2 Statement of the Problem

Information centres are pivots for teaching, learning and research by providing resources. Information centres services help in achieving the educational ambitions of all the users. However, studies have indicated that students rarely visit or use the information centres. Librarians go through a lot of training on user education programs to be well equipped in offering information centres services. There is also notable increase of information centres materials both in print and non-print format but the users of all these materials are few. This

could have been caused by a lack of user education programs which entails orientation, instructions and technical skills. This calls for regular training and awareness for the users.

In Kenya, academic information centres are part of the colleges' agenda in helping to prepare students for the world of work, by ensuring the provision of relevant information resources and imparting information literacy skills to learners for lifelong learning (Chibini, 2011). Despite technical polytechnic institutions in Kenya investing in information centres resources with buildings and personnel, librarians lament the underutilization of information centres resources and services. It has been also observed that students mainly visit the information centres during the examination period and rarely use the subscribed electronic databases (Mwatela, 2013).

Provisions of information centres services are considered to be vital in schools/ learning institutions. This provision should also include internet services/hotspots for the students' and lecturers' wellbeing. It's the role of the education system administration to add value to students by providing information centres services that will motivate and influence the students into the information centres and teach them the skills of using the computers. Studies carried out have focused on factors influencing the use of information centres services in universities but little has been done to establish factors hampering the use of information centres services in technical and vocational training institutions in Kenya, a research gap addressed by Mogere Nyakerario Vennah and Martin Gichugu (2022).

Despite the significant role that academic information centres play in supporting teaching, learning, and research, the access and utilization of information centres services by students remain relatively low in many institutions. While most information centres are well-organized using systems such as Dewey Decimal Classification and automated platforms like Koha, many students lack the necessary skills to effectively locate and use available resources. In most cases, students tend to visit the information centres primarily to complete assignments, read for examinations, or access quiet study spaces, rather than to fully explore a wide range of information centres services such as reference support, digital databases, and research assistance. This limited use suggests a gap in awareness and information literacy competencies, which may be attributed to inadequate or ineffective training programs. Consequently, the underutilization of information centres services persists despite the availability of diverse resources and facilities. Therefore, this study seeks to examine the determinants of access and utilization of information centres services through training, with a focus on how training

influences students' ability to move beyond basic usage for assignments to more advanced and meaningful engagement with information centres resources.

1.3 Purpose of the Study

The purpose of the study was to investigate the determinants of access and utilization of information services through training at Nyeri Polytechnic.

1.4 Objectives of the Study

The objectives of the study are to:

- i. Establish factors that enhance access and utilization of information centres services in academic information centres.
- ii. Evaluate the influence of training on access and use of resource learning center, at Nyeri National Polytechnic.
- iii. Assess challenges facing provision for access and use of resource center sources and services in Nyeri National Polytechnic

1.5 Research Questions

- i. Which factors influence access and use of information centres services in academic information centres?
- ii. How does training influence access and use of information centres resources and services?
- iii. What challenges are experienced in the provision for access and utilization of information centres services?

1.6 Significance of the Study

This study is important as it will help in decision-making, improve library operations, user training, and information access, valuable insights to the enhancement of information centres services at Nyeri National Polytechnic and similar institutions. By understanding the determinants of information centres service provision through training, the study sought to justify its importance. The investigation addressed the critical importance of well-trained information centres staff in adapting to changing information landscapes.

The study will benefit library management by identifying the training needs, challenges, and factors that affect users' access to and utilization of library services. The findings will help library managers design effective user education programs, improve service delivery, develop user-centered services, and adopt innovative technologies that promote efficient access to information resources. The study will also provide insights for enhancing digital literacy among library users.

The findings of this study will be useful to policymakers in the education and library sectors by providing evidence for the formulation and review of policies aimed at improving access to and utilization of library services. The study may inform policies on library funding, integration of information and communication technologies (ICTs), adoption of Artificial Intelligence (AI) in libraries, and the development of standards that support equitable access to information resources in TVET institutions and other academic libraries.

It also aimed to fill existing gaps in understanding how training contributed to effective information centres services, thereby advancing scholarly knowledge in the field.

Students will benefit greatly from the study, as it will highlight the importance of training in improving their ability to access and effectively utilize information centres resources. The findings will help students develop better information literacy skills, enhance their academic performance, and promote independent learning. Information centres staff will benefit from the study by gaining insights into how training programs influence users' access and utilization of information centres services. This will enable them to design more effective user education programs, improve service delivery, and address challenges that hinder optimal use of information centres resources.

Trainers will benefit, as the study will demonstrate how integrating information centres training into teaching and learning processes can improve students' research skills and academic outcomes. This will encourage collaboration between teaching staff and librarians in promoting effective use of information resources. Researchers / scholars and the communities within will benefit from the study, as it will contribute to existing knowledge on information centres use and information literacy, particularly by addressing the gap in technical and vocational education and training (TVET) institutions. It will also provide a basis for further research in this area.

1.7 Assumption of the Study

The investigation made the assumption, that the study participants would voluntarily participate in the investigation and that the research participants would provide correct and accurate data to answer the research questions.

1.8 Scope and Limitations of the Study

The study examined the determinants of access and utilization of information centres resources and services at Nyeri National Polytechnic and the problems that are likely to occur when pursuing the study.

1.8.1 Scope of Study

The study information was collected from students, trainers, and librarians at Nyeri National Polytechnic. It focused on examining the determinants of access and utilization of information centres services through training within the institution. The study was conducted immediately there researcher received the for data collection and concentrated on current practices and experiences related to information centres use. The key variables under investigation included training as the independent variable and access and utilization of information centres services as the dependent variable, while also considering other factors such as user skills, availability of resources, and technological infrastructure.

. The focus was on the information centres services provided at Nyeri National Polytechnic, examining the effect of training on the access and utilization of information centres materials and information centres services. This also encompasses user study behaviour, needs, digital literacy, and preferences. Effectiveness of training programs in the use of information centres resources and services as well as training methods. The government's role in boosting information centres services and resources through funding cannot be ignored since it will promote education and information access

1.8.2 Limitations of the Study

The major primary limitations of this research was the constraints imposed by the sample size. The study might not have included a sample of information centres staff, faculty, and students at Nyeri National Polytechnic. This limitation could affect the external validity of the findings, limiting the generalizability of the results to other institutions with different characteristics. This limitation could impact the research ability to provide a wide range of understanding of the subject matter.

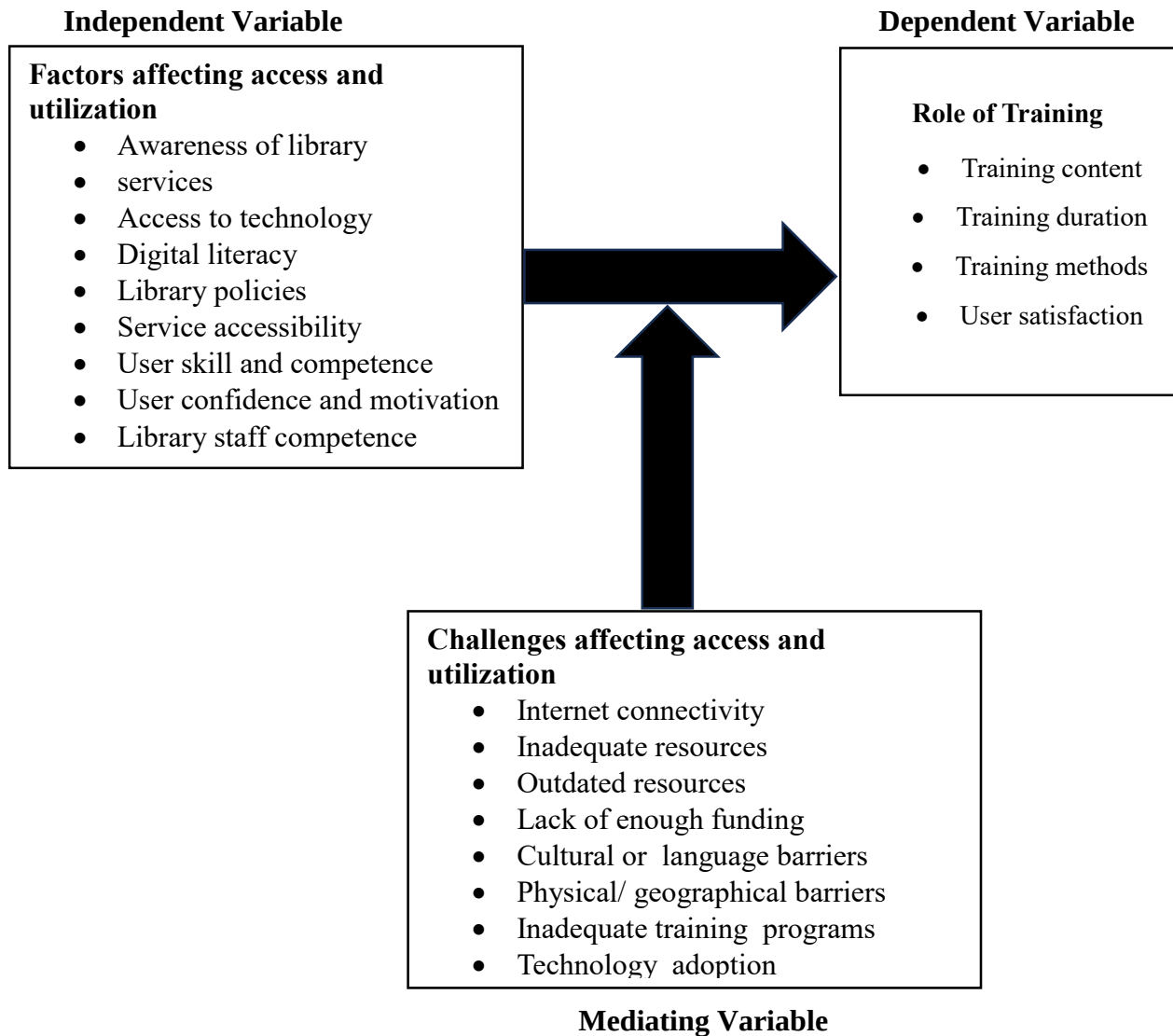
The effectiveness of this reaserch heavily relied on the accuracy and reliability of the data collected. Therefore, response bias arising from the use of self-reported instruments for data collection is a possible limitation of the study that could introduce errors in the findings of the study. Recall bias could also arise from historical and retrospective data.

1.9 Conceptual Framework

The conceptual framework is presented in Figure 1.

Figure 1:

Conceptual Framework



The accessibility and usage of information centres services are influenced by independent variables, mediated by variables emanating from challenges, but are dependent on variables related to training. The dependent variables are factors that directly impact access and usage of the information centres services. These factors can hinder or enhance the use of the information centres services. These factors affect both the information centres attendees and the staff. The information centres users should be aware of the information centres materials,

they should be able to access and use information centres technology, they must have the necessary digital and information centres skills and competence, they should be aware of the information centres rules and regulations and possess the confidence and motivation to make use of the information centres. The information centres staff should be competent enough to be able to discharge information centres services professionally and competently.

However, the effective access and utilisation of information centre services can be hindered by mediating variables which pose a challenge. The challenges could come from any of these sources poor internet connectivity, inadequate resources, outdated resources, underfunding, cultural, language, physical and geographical barriers, inadequate training programs and technology adoption.

The training, the independent variable enables to access and utilisation of information centres services. The factors affecting the access and use of information centre services which are mediated by the challenges, are dependent on training variables which are influenced by the training content, duration of the training, methods used for training and how satisfied by the training provided.

The conceptual framework presents the interdependence and interplay of the independent variable of the research study, factors affecting access and utilisation, factors that can hinder the access and use of information centre services by providing challenges, the mediating variable, and the dependent variable, the role of the training, which is pivotal in addressing the challenges and enhancing users' ability to effectively access and use information centre and its services.

1.10 Definition of Terms

Academic information centres: It's an information center found in a higher learning institution aimed to support teaching ,learning and research inorder to provide a wide range of information resources to its immediate users such as students, lecturers and researchers

Access: The ability to use information centres services and Resources with ease

Awareness: Refers to ability to reach , locate and identify information materials and services with ease. It also includes the availability of information centres facilities, opening and closing hours, internet usage catalogues and user training for enablibling the trainees, lecturers to search the information in e-resources without struggle.

Learning: refer to acquisition of knowledge, skills, attitudes and understanding by studying, training and experience that finally results change in behaviour, thinking and performance in certain tasks it also results to improvement of academic performance.

Information centres barriers: these are hinderances or challenges that hinder the access and utilization of information centres sources and services. Thses may include unapproachable librarians, lack of internet connectivity, lack of awareness, negative attitude of users themselves and restricted opening hours etc.

Information centres resources: refers to print and non-print materials that users get access to , to enhance their knowledge.

Information centres services : These are supportive activities and facilities that are offered in the information centres to enable information centres users receive relevant information and knowledge.

1.11 Roadmap of Chapters

This thesis is organized into five chapters, each addressing a specific aspect of the study. Chapter One presents the introduction, including the background, problem statement, and objectives of the study. Chapter Two reviews relevant literature and presents the theoreticall framework. Chapter Three outlines the research methodology, including design, sampling, and data collection methods. Chapter Four presents and analyzes the findings of the study, while Chapter Five provides a summary, conclusions, and recommendations based on the research findings.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The chapter presents theoretical and empirical literature related to access and use of information centre and its services and sources. The past research reviewed was instrumental in providing insight and understanding of the research topic regarding the effect of information centres policies, user education, and promotion as well as other factors that affect access and utilization of the information services for training. The researcher also highlighted the topic gap which needed further explanation.

2.1 Theoretical Framework

The research is grounded in the Uses and Gratifications Theory (UGT).

2.1.1 The Uses and Gratifications Theory (UGT)

The uses and Gratifications Theory was developed by Katz Blumler (1974). The theory proposes that individuals seek for information to meet specific needs. The theory posits that the users of information systems, such as information services, are active participants and not passive partakes of the service.

According to the theory, users choose to use an information service to fulfil their information needs. The needs could be learning or knowledge acquisition, entertainment, self-development or decision-making. The users seek the sources of the information or system on the premises that will gratify or satisfy their needs.

The theory categorises the needs into cognitive, affective, personal, social and tension release. Therefore a user chooses an information system to meet any of these needs. These needs mirror the needs possessed by information centre users whenever they decide to use the information centres services. The theory is therefore appropriate for this study because it provides a framework to understand the needs that motivate the use of information services and how different types training can be used to enhance user satisfaction or gratification. The theory sheds light on the relationship between the factors affecting access and utilisation of information centres services and training.

2.1.2 The unified theory of acceptance and use of technology (UTAUT)

The Unified Theory of Acceptance and Use of Technology explains the factors that influence individuals' acceptance and use of technology. The theory identifies four key determinants of technology adoption: performance expectancy, effort expectancy, social influence, and facilitating conditions (Venkatesh et al., 2003).

Performance expectancy refers to the degree to which an individual believes that using a particular system will enhance their performance. Effort expectancy relates to the ease of use of the system, while social influence pertains to the extent to which individuals perceive that important others believe they should use the system. Facilitating conditions refer to the availability of resources and support necessary to use the system effectively.

Recent empirical studies have demonstrated the continued relevance of UTAUT in explaining user interaction with digital information systems, including information centres technologies (Dwivedi et al., 2020; Tamilmani et al., 2021). In information centres, the adoption and utilization of electronic resources, online catalogues, and digital repositories are strongly influenced by these factors.

In the context of this study, training is closely linked to the core constructs of UTAUT. Training enhances performance expectancy by enabling users to understand the benefits of information centres systems in supporting their academic work. It also improves effort expectancy by simplifying the process of using information centres technologies, thereby reducing perceived complexity. Additionally, training strengthens facilitating conditions by providing users with the necessary support and skills required to effectively access and utilize information centres resources (Dwivedi et al., 2020).

Furthermore, training can indirectly influence social factors by promoting a culture of information use among students, thereby encouraging wider adoption of information centres services.

In conclusion, the UTAUT is relevant to this study as it explains how training influences users' acceptance and continued use of information centres technologies. It provides a framework for understanding how improved skills, knowledge, and support systems contribute to enhanced access and utilization of information centres services.

The use of the UGT theory brings out the determinants of access and utilisation of information centres services through training by pointing out the motivation behind the use of information services and how it can be enhanced by training. The awareness of information centres services, competence and information centres skills, can be improved by training.

The theory is instrumental in establishing factors that enhance access and utilisation of information services by identifying the specific gratifications users seek, such as knowledge acquisition, completing assignments, or improving academic performance.

The theory helps analyse how training can align user perceptions with actual benefits offered by the information centres. Training is critical in enhancing users' capability in resource identification, equipping them with skills and knowledge for interacting with the information centres systems and processes, consequently satisfying their information or academic needs.

The theory, further, helps in exploring the structural, institutional, psychological and motivational barriers to access and information centres services utilisation, and how best to address the barriers.

Furthermore, Several studies in information centre and services have been premised on the theory. . Salubi & Muchaonyerwa's (2018) study on the use of information sources and online sources by students in South Africa was based on this theory. Mehrad & Tajer (2016) utilised the theory to establish the correlation between intelligence needs and the satisfaction of those needs by information services. Luo & Remus (2014) used the theory to establish what gratifications or benefits influence the use of information online services.

The application of the theory gives more insights into how training impacts users' access and use of information services and recommends more targeted, motivation-driven information centres training programs.

The Unified Theory of Acceptance and Use of Technology (UTAUT) provides a comprehensive framework for understanding factors influencing the adoption and utilization of technology-based services. The theory is significant in research as it explains user behavior through constructs such as performance expectancy, effort expectancy, social influence, and facilitating conditions. These constructs guide the selection of research variables, design of data collection instruments, and interpretation of findings. In the context of this study, UTAUT is particularly relevant in explaining how training influences users' ability to access and utilize

information centres services by enhancing their perceived ease of use and usefulness of digital resources. Furthermore, the theory supports the analysis of user differences and informs practical recommendations aimed at improving the efficiency and accessibility of information centre services."

2.2 Influence of Training on Access and Utilization of Information centres Services .

A study by Jacqueline (2024) explored how digital literacy training programs in public information centres increased access to e-resources among adults. This shows that training increases the utilization of information centres services and hence improves access.

The section emphasized the factors that influence the accessibility and usage of information centre services, particularly highlighting the importance of training. This will enable information centres users to maximize their use of available resources. Access and utilization generally involve a practical understanding of the tools for accessing information, the information centres's method of organizing knowledge, electronic resources, reference materials and services, along the information centres's rules and regulations. It prepares individual information centres users to utilize information both immediately and throughout their lives by teaching them the principles and reasoning behind information access and evaluation, while also promoting information independence and critical thinking.

Information centres serve a specific function and are designed to fulfil the needs and aspirations of their users. When a information centres successfully meets its goals, it is more probable that both users and the surrounding community will consider it beneficial. Effectively managing the information centre objectives enables it to reach the outcomes it aims for on behalf of its users. Information centres patrons anticipate receiving services of excellent quality.

Service excellence is more likely to be achieved/ attained through a strategic planning process. Many information centres collect usage statistics like the approximate number of books borrowed, the number of students who went for induction sessions either weekly or monthly, number of electronic articles downloaded. Items required for a information centres to perform are: accessible service, IT Network infrastructure user focused mission, information centres being at the heart of institutions, they require total maintenance and provision of materials to facilitate learning and development. Academic information centres offer information literacy, academic success and research.

Muir et al. (2016) explored the various ways in which public information centres services in the UK manage internet access. Their findings reinforced by earlier research showing that filtering software is a common method for regulating access to and safeguarding information centres patrons from "inappropriate," illegal, and harmful online content. The study suggested that while public information centres internet services can be beneficial, stringent access regulations can lead to socially negative outcomes, such as blocking legitimate websites and hindering users from accessing government services.

According to a study by Patrick (2015), education may significantly enhance the ability of the general public to make informed choices regarding material selection. As a result, this shift does not rule out the introduction of stricter measures to safeguard children, while still enabling public information centres to maintain their positive social contribution for individuals who cannot engage in the digital era.

Information centres have in place many policies that govern the management and provision of information centres services. According to the study, policies address a varied number of issues that include collection development; information centres patron behaviour; use of information centres resources and services; repository; and plagiarism; among others (Abu et al., 2018). Policies are necessary management tools that set out guidelines on the provision of information centres services by spelling out both the information centres and patrons' expectations. However, information centres rules and regulations are seen to be restrictive and, in most cases, discourage optimal use of the information centres (Udo-Anyanwu, 2015). Policy refers to statements, regulations, procedures, and guidelines that apply to a specific issue. Information centres policies help information centres managers and staff to perform information centres duties effectively. Further, policies provide support to the information centres staff through the governing body in the event of legal action. Consequently, the public perceives information centres policies as inflexible thus discouraging information centres use. Although the librarians understand the effects of strict information centres rules on information access and utilization, it may be challenging to alter without in-depth consultation with the institution's management (Yuvaraj, 2016). Furthermore, effecting changes in any specific institution's policy is a complex process that may take a prolonged time. According to a study carried out in Nigerian technical institutions, users fear borrowing information centres resources for fear of repercussions once they overstay with information centres resources. Therefore, the study recommended revaluation of the overdue regulations as well as educating the users on policy details to

promote and encourage consistent information centres usage. There is a need for information centres rules and regulations on the behaviour of information centres patrons. The reactions to situations such as theft or mutilation of materials, or disruptive behaviour, should not be left to an individual staff member's judgment.

In Greece, a study assessed the impact school information centres have on secondary education. The study noted that effective policies are essential in promoting the use of school information centres. According to the findings the Ministry of Education and all learning institutions have the responsibility to formulate and implement policies that encourage the use of school information centres (Bikos et al., 2014). The findings acknowledged that continuous use of school information centres is dependent on the available knowledge access, physical access, digital access and skills thus influencing the training of students. The study, however, was based in Greece while this study is based in Kenya, research at the University of Nairobi identified lack of training and information literacy as major barriers to effective utilization of information centres services (Okongo, 2014). Further studies indicate that digital literacy training plays a critical role in enabling users to effectively access and utilize digital information resources (Tenya et al., 2024). These findings suggest that training is a key determinant of information centres use, though limited studies have comprehensively examined its direct influence on both access and utilization, thus justifying the current study.. Owolabi researched the awareness and adherence to information centres rules and regulations among undergraduate students at Ladoke Akintola University and Obafemi Awolowo University information centres located in southwestern Nigeria. The findings indicated that undergraduate students at both universities were knowledgeable about the information centres rules and generally followed them. Nevertheless, the study suggests the implementation of additional awareness initiatives regarding the information centres regulations; users should be informed about the significance of following these rules. Furthermore, in contrast to other research that advocated for a revaluation of the rules and regulations, this study proposes the introduction of stricter measures to enhance compliance (Owolabi,Obafeni, Awolowo(2015)

2.3 The Role role of Training in enhancing access and utilization of library services.

Johnson (2021) investigated the role of librarians in delivering training programs to underserved communities implementing the importance of cultural sensitivity. In doing this it will force the university students to accommodate the librarians in a positive manner and better way to approach them in their respective information centres.

Skills held by librarians in enhancing accessibility and use of information during the pandemic. To help information centres patrons access and utilize information resources, librarians are required to have the essential information skills. With the appropriate expertise, librarians can offer users trustworthy and precise information sources in various formats. Beyond improving their understanding of emerging technology and information, librarians should also be capable of promoting information products or services. The COVID-19 pandemic provoked librarians to evaluate, better and expand existing information centres online services. The librarians were forced to embrace and acquire digital information centres skills (Walsh & Rana, 2020).

To information centres users getting the necessary information centres skills is significant for effective access and use of information centres services. Awareness of information centres services and resources is achieved through information centres orientation and induction. During the orientation and induction users are introduced to the Online Public Access Catalogue (OPAC) search, information search strategies and academic electronic databases. The users can retrieve information by navigating electronic databases. The users' skills are sharpened further by more intensive information literacy training. The training gives the users capabilities of information need recognition, sources selection and use, criteria for information evaluation to ensure the use of credible sources and ethical application of information. The skills imparted during information literacy ensure students' academic success and lifelong learning.

Training is significant in lessening information centres anxiety, building the users' confidence, and making the information centres users self-sufficient in their use of the information centres. The users acquire and cultivate a self-directed learning culture which is central in a university setting where independent research and study is encouraged. The students become better at doing research, completing assignments and engaging in critical thinking leading to academic success.

Besides training information centres users, the information centres staff should also do refresher courses and acquire new skills in emerging technology for effective acquisition, management, preservation and dissemination of electronic sources of information.

Librarians exist to give services which are relevant information and therefore conscious efforts should be made to train and retrain information centres staff. Inadequacy of funds hinders the training process to take place. Information centres suffer budgetary allocations; they are poorly funded such that they cannot afford to subscribe or buy the most effective books for academic purposes.

In India, Chalukya assessed user education in information centres. The research indicated that educating information centres users was crucial for facilitating and enhancing the utilization of information centres services. The results suggested that all information centres users should be informed about how to effectively use the available resources to increase efficiency. The research posited that since information centres offer numerous resources, failing to educate users could lead to unproductive visits. The study suggested implementing web-based user education programs to instruct information centres users, thereby improving training efforts in classroom settings. The scope of the study was restricted, as it focused on India, whereas this research is centred on Kenya.

According to Ashraf & Gulati, (2013), user education includes all activities designed to assist students in becoming proficient in utilizing information by providing them with skills essential for identifying information needs and searching through various methods. Methods Used for User education include orientation, workshops, handouts and structured training.

Sinha, (2016) urges that user education aims to let information centres users be aware of the available information centres sources and services, and how to access and use these sources and services for their learning and future career developments. Besides, promoting students' personal and intellectual growth, and continuous lifelong learning.

A post-impact user education survey conducted by Philip (2016) at the University of Uyo information centres in Nigeria indicated that 74% of participants knew how to utilize the catalogue effectively. The research also revealed that 80% of users believed the course had improved their understanding of information centres usage. As a result, the researcher discovered that 27% of respondents reported not utilizing the University information centres at all. Aderibigbe and Emmanuel found that in various technical institutions in Kenya, user

education fails to address crucial areas like utilizing different search engines to find information in the online catalogue.

Suleiman (2012b) conducted research at the International Islamic University (IIUM) to examine users' perceptions of user education programs and their content, as well as to determine the influence of user education on the searching abilities of information centres patrons. The results of the study indicated that user education resulted in a positive transformation in users' behaviour regarding information centres usage.

Moyane et al. (2015) conducted a study to assess the effectiveness of user education initiatives for postgraduate students in the School of Management, Information Technology, and Governance at the University of KwaZulu-Natal's Westville Campus. They found that users participated in the program shortly after their admission. Nonetheless, the research highlighted the necessity to reevaluate the content, delivery methods, scope, presentation techniques, and overall applicability and relevance of user education programs to align with user requirements. Santhalingam et al. (2011) emphasize the importance of evaluating the appropriateness, effectiveness, and efficiency of instructional methods and pedagogical issues when providing user education.

A research investigation aimed at assessing the impact of a information centres education initiative on undergraduate students in Southern Nigeria revealed that user education and information centres utilization continue to pose significant challenges (Esse, 2014). The findings also indicated that user education enhances information centres usage; nonetheless, information centres should make a concerted effort to provide annual education to users, as the initial orientation program does not adequately address their information needs.

Wickramanayake (2016) in contrast, conducted an empirical analysis aimed at identifying the constraints, capabilities, weaknesses, challenges, and strengths of current user education programs within university information centres in Sri Lanka. The analysis revealed that the user education programs in Sri Lanka did not have clearly defined goals and objectives. Additionally, several constraints were identified, including a lack of physical resources, insufficient collaboration between faculty and information centres staff, limited time for preparation, poor planning, and low student attendance. Inconvenient time slots for the program, insufficient time allocated for training, large classes, and lack of depth in the content were cited as major drawbacks that impacted the delivery of the program.

Research conducted by Nna-Etuk et al., (2024) indicated that the information centres, though the trained users failed to evaluate the information centres skills taught to measure the effectiveness of the training. Consequently, it is hard to know if the training yields the expected results.

A study by Ilo (2011) on the Covenant University user education program showed that the program covered information centres orientation, bibliographic skills, study skills, information search and retrieval. Research conducted in Nigeria by Onifade et al.(2013) revealed that information centres opening and closing hours, and a higher number of students taught in each group reduced the impact of user education program.

A study by Maduako (2013) in Abia and Imo States, Nigeria, indicated that user education offered came short of adequately equipping the users with effective search and retrieval skills. User education emphasises information centres orientation tours and bibliographic instruction, and therefore the need for training librarians more adequately on effective teaching methods.

Academic information centres provide various products and services designed to fulfil the information needs of students and faculty. The extent to which these products and services are utilized depends on how aware individuals are of their advantages and the added value they bring to their lives. As a result, information centres users will only take advantage of the information centres's offerings if academic information centres promote awareness of those products and services. In a study conducted by Saika & Gohain (2013), Marketing includes components such as public relations, publicity, promotion, and advertising. Consequently, public relations aim to shape perceptions, attitudes, and opinions by communicating the advantages of the information centres's offerings. Publicity is conducted through methods like signage, brochures, direct mail, emails, and personal interactions, although word-of-mouth remains the most impactful form of publicity today.

The research conducted by Simon & Ogom (2015) revealed that information centres utilize marketing strategies to raise awareness about their offerings and to diminish obstacles to utilizing information centres resources. Aderibigbe (2024) noted that academic information centres promote their services through various means such as brochures, leaflets, handbooks, and pamphlets; advertising, sales promotions, personal selling, and publicity efforts; as well as signage, notice boards, feedback mechanisms, and established rules and regulations. The findings by Mustapha et al., (2023) indicated that information centres patrons can be informed

about information centres services and products through intuitive and informative websites, print and electronic media, engaging displays and exhibits, effective interior and exterior way-finding systems, regular publications in both print and electronic formats, continuous reading and literacy initiatives, support from information centres friends and advocates, annual information centres week events, fundraising and friend-raising efforts, and by celebrating special anniversaries and awards.

Only a small number of academic information centres utilize blogs to promote awareness of their services. Atuase & Maluleka, (2023) outlines various methods that information centres can employ to enhance awareness of their offerings, such as utilizing Facebook, the information centres's website, email, newsletters, leaflets, and blogs. The Internet can enhance the information centres's reputation and enable it to provide improved services. The use of the online catalogue, optimizing the information centres's website for search engines, creating promotional landing pages, advertising online, using social media platforms, and distributing postcards and brochures could be effective strategies for raising awareness.

Research conducted by Simon & Ogom (2015) in Nigeria found that academic information centres invest millions of dollars annually in electronic resources, yet a significant number of these resources remain underutilized and unrecognized by users. According to a study by Motiang, (2014), there is a low level of usage of information centres services, as users have yet to fully appreciate the information centres's role in achieving academic success. Slutskaya et al.(2013) discovered that although information centres users recognize the importance of information centres for their learning, they frequently do not utilize information centres resources and services. Santhalingam et al. (2011) reported low awareness regarding the use of electronic resources provided by information centres. According to report only 58 percent of respondents were uncertain whether their information centres offered online databases and an online information centres catalogue, among other services.

Carvalho e Rodrigues & Mandrekar (2020) in the United States of America assessed how information centres services influence the performance of students the study established that the use of information centres services influences positively the performance of students. The study noted that the use of information centres services must be promoted by creating awareness The study indicates that raising awareness on the availability and importance of information centres services among students goes a long way in motivating students to use the

information centres, thus improving the training experience. The study explained that the use of websites can help in raising awareness on the services offered by the information centres, therefore motivating more students to visit the information centres. The study was based in the United States of America while this study is based in Kenya.

Technical institute information centres in Kenya are specialized academic information centres established within Technical and Vocational Education and Training (TVET) institutions to support skills-based education, training, and applied research. These information centres provide access to both print and digital resources tailored to technical disciplines such as engineering, information technology, business, and applied sciences. They play a critical role in equipping students with practical knowledge and competencies required in the labor market.

In recent years, technical institute information centres in Kenya have increasingly integrated digital resources and information communication technologies (ICTs) to enhance access to information. However, their effectiveness largely depends on users' ability to access and utilize available resources. According to Otiike and Hajdu Barát (2021), academic and training institution information centres in Kenya are undergoing significant transformation driven by technological advancements and evolving user needs. Similarly, Tenya, Maina, and Awuor (2024) note that digital literacy and user training are key determinants in the utilization of electronic information resources in Kenyan learning institutions.

Therefore, training programs offered by technical institute information centres—such as user orientation and information literacy—are essential in improving students' ability to effectively access and utilize information centres services, making them central to the achievement of educational objectives in TVET institutions.

2.4 Challenges to Accessibility and Utilization of Information centres Services

Musungu & Maina (2023), in their study, found that librarians recognized several significant challenges to accessing and using information centres resources, including insufficient collaboration, a shortage of digital information centres skills, understaffed teams, and unreliable network connectivity.

The utilisation of information centres services is influenced by how easily the services can be accessed and used. A study by Covey (2002) established that college students used more information centres services, resources and facilities that were easily accessible. Students in

Sri Lanka in a study by Gunasekera (2010) felt frustrated and discouraged by the use of the academic databases that were restricted by vendor licenses and password requirements.

Access to information centres services in Tanzania's higher education institutions was restricted by physical and geographical barriers, user negative perceptions, information centres rules and regulations, and the use of jargon by the information centres staff (Benard & Dulle, 2014)

A study by Nna-Etuk et al. (2024) found negative perceptions of information centres staff as unapproachable and authoritative, weak and incompetent, whose job is merely checking out and in books, hampered the use of information centres services. Other barriers to access and use of information centres services according to Saikia & Chandel (2012), include limited access to databases, inadequate power terminals in the information centres buildings, internet connectivity and speed, low bandwidth and insufficient computer resources. Besides, outdated resources, insufficient relevant reading materials, restricted operation hours, and insufficient sitting capacity.

Lack of digital literacy according to a study by Jaeger et al. (2012) greatly hampered the use of electronic resources. Therefore the a need for training in digital literacy that is inclusive of all types of information centres users including individuals with disabilities.

The organisation of information centres resources is critical in the access and use of information centres resources. A study by Ngcongolo & Oyelana (2017) showed that poor shelving of books created difficulties in accessing the books. Users were unable to find, access, and utilise books for their studies. The inadequate number of recommended titles placed in the short loan section with a limited checkout period was a major hindrance to the use of the information centres. The low internet connectivity compromised the use of electronic resources, other challenges faced by information centres users included loss or damage of books, and misshelving of crucial books that were widely used by some information centres users.

The information centres is a user-centred institution therefore understanding user needs and designing services and training programs guided by the needs will improve the access and utilisation of information centres services (Brophy,2007).

Access to information centres services in Kenyan academic and technical institute information centres is influenced by several challenges that limit users' ability to effectively obtain information resources. One major challenge is limited ICT infrastructure, including inadequate

computers, poor internet connectivity, and insufficient access to digital platforms, which restrict users from accessing electronic resources (Otiike & Hajdu Barát, 2021).

Another significant challenge is low levels of information and digital literacy among users. Many students lack the necessary skills to search, retrieve, and evaluate information, particularly from electronic databases, which hinders effective access (Tenya, Maina, & Awuor, 2024). This is closely related to inadequate training programs, where users are either not trained or receive insufficient orientation on how to use information centres systems.

Additionally, lack of awareness of available information centres services affects access. Some users are not fully informed about the range of resources and services provided by the information centres, leading to underutilization (Ateka, Bosire, & Maseh, 2023).

2.4.1. Challenges of Accessibility and utilization of information centres low motivation at Nyeri National Polytechnic.

The major challenges at Nyeri National Polytechnic library include inadequate user skills, negative staff-user relations, low awareness of services, technological limitations, institutional constraints, and insufficient training programs. These challenges collectively hinder effective access and utilization of library services, emphasizing the critical role of user education and institutional support.

2.4.2 Development of Accessibility and Utilization of Information centres Services in Kenya

The development of accessibility and utilization of information centres services in Kenya has evolved significantly over time, driven by technological advancements, policy reforms, and increased emphasis on user-centered services. Initially, information centres services in Kenya were largely print-based, with limited access confined to physical spaces. However, the expansion of higher education institutions and the growth of information communication technologies (ICTs) have transformed information centres into hybrid and digital information centers.

In recent years, academic and technical institute information centres in Kenya have increasingly adopted electronic resources such as e-books, online journals, and institutional repositories, thereby improving remote access to information. According to Otiike and Hajdu Barát (2021), the integration of digital technologies has enhanced access to information centres

resources, although challenges such as infrastructure and funding persist. Similarly, Ateka, Bosire, and Maseh (2023) observe that modern information centres spaces and services are being redesigned to promote greater user engagement and improve utilization.

Furthermore, the development of information literacy and user training programs has played a crucial role in enhancing both access and utilization. Litsalia, Van Deventer, and Bothma (2024) highlight that training initiatives, particularly in digital and data literacy, have become essential in enabling users to effectively navigate and utilize electronic resources. This shift underscores the growing recognition that access alone is insufficient without the necessary user competencies.

Despite these advancements, disparities in access and utilization remain, particularly due to digital divides, varying levels of user skills, and resource constraints. Tenya, Maina, and Awuor (2024) emphasize that digital literacy significantly influences the extent to which users can utilize available information centres services, reinforcing the importance of continuous training and capacity building.

The development of information centres services in Kenya demonstrates a transition from traditional access models to digitally driven systems, where training has become a key determinant in bridging the gap between access and effective utilization.

2.4.3 Recent Technological Accessibility and Utilization of Information centres Services in Kenya

Recent technological advancements have significantly transformed the accessibility and utilization of information centres services in Kenya, particularly in academic and technical institutions. The adoption of Information and Communication Technologies (ICTs) has enabled information centres to transition from traditional print-based systems to digital and hybrid service models, thereby improving access to information resources beyond physical information centres spaces.

One major development is the increased use of electronic resources, including e-books, online journals, and institutional repositories, which allow users to access information remotely. Studies indicate that post-COVID-19 information centres environments in Kenya have emphasized remote access systems, virtual services, and online platforms to ensure continuity in learning and research (Musungu & Maina, 2023).

Additionally, mobile technologies have enhanced accessibility, as users can now access information centres services through smartphones and mobile-friendly platforms. George (2023) found that mobile phone technology plays a crucial role in facilitating access to information centres resources, especially in institutions where physical access may be limited .

Another key technological advancement is the promotion of digital literacy and user training programs, which are essential for effective utilization of digital resources. Tenya, Maina, and Awuor (2024) highlight that digital literacy skills significantly influence users' ability to access and utilize electronic information, emphasizing the need for continuous training in Kenyan information centres .

Furthermore, information centres in Kenya are increasingly adopting cloud computing and digital management systems, enabling seamless storage, retrieval, and sharing of information resources. These technologies allow users to access information centres services anytime and from any location, thereby enhancing convenience and efficiency (Kenya National Information centres Service, 2023) .

Despite these advancements, utilization remains influenced by factors such as user skills, infrastructure, and awareness. For instance, participation in user education programs has been shown to significantly improve engagement and perception of information centres services among students (Kibos, Nkoroi, & Kerandi, 2025) .

2.5 Research Gaps

The reviewed literature revealed several research gaps that the study strived to investigate further. The study reviewed focused on the immediate impact of training on access and use of information centres services. However, there is a need to research how to achieve the long-term impact of training on the access and use of information centres services and staff performance.

The study centred mostly on aligning training programs to user needs and in-house training. The study did not address issues of pre-training assessments and the possibility of collaborative training with external experts, and professionals from the industries.

Furthermore, the studies did not examine the effectiveness of training programs adoption and use of emerging technologies. This study will explore how the information centres could

integrate emerging technology such as virtual reality and artificial intelligence into the training programs.

The studies presented the challenges facing access and utilisation of information centres services but did not propose solutions. This study examined the present challenges affecting the access and utilisation of information centres services and provided innovative solutions and strategies.

By addressing these research gaps the study has greatly contributed to more understanding of the relationship between access and utilisation of information centres services and training.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology used to explore the determinants of access and utilisation of information centres services through training in Nyeri National Polytechnic. The research design adopted, study area, methods for data collection, procedures used for data analysis, and ethical considerations are discussed.

3.2 Research Design

A descriptive research design was espoused for the study. The descriptive design was opted for to provide an accurate representation of the characteristics of the phenomenon under study. The descriptive design enabled the elucidation of the current state of the information centres services and training at Nyeri National Polytechnic.

Descriptive research design allowed the collection of data from a predefined sample by the use of structured questionnaires and interviews. The design was pivotal in getting data on the perceptions, opinions, and attitudes of the respondents on information centres services. The perspectives of librarians and lecturers on the impact of training on information centres services.

3.3 Study Area

The study was conducted at Nyeri National Polytechnic, Nyeri County, Kenya. The choice of the study area was necessitated by the fact that Nyeri National Polytechnic is one of the well-known National polytechnics offering technical and vocational courses. It provides a high-density, diverse, and relevant environment for testing technical systems in Kenya. The technical institute focusses more on innovation in engineering, technology, and industrial development to ensure that the research applied are practical and modern vocational training setting. Still, the Nyeri National Polytechnic addresses the existing research gap in the utilization of library services within Technical and Vocational Education and Training (TVET) institutions in Kenya. Although academic libraries have increasingly invested in digital resources and user education programs, several studies indicate that these services remain underutilized due to inadequate user training and low levels of information literacy (Baro et al., 2021; Mutshewa,

2022). Notably, most existing studies have focused on universities, with limited empirical attention given to polytechnics, thereby necessitating context-specific research in TVET institutions.

Guided by the Unified Theory of Acceptance and Use of Technology, this study examines how training influences users' acceptance and utilization of library services. According to UTAUT, factors such as performance expectancy, effort expectancy, social influence, and facilitating conditions significantly determine technology adoption (Venkatesh et al., 2003). In the context of academic libraries, training programs serve as facilitating conditions that enhance users' perceived ease of use and usefulness of information systems, thereby promoting greater utilization of library services (Tamilselvan & Balasubramani, 2021; Yakubu & Dasuki, 2023).

3.4 Target Population

A target population is the entire group or items the researcher intends to examine and draw conclusions about. It is from a target population, a sample is selected or drawn.

The population of the study included information centres staff (10), trainers/lecturers (173), and students (4000) at Nyeri National Polytechnic. Inclusion criteria were established to ensure that participants had direct involvement or influence on information centres services and training. The target population comprised information centres staff who directly engaged in information centres services, responsible for cataloguing, organizing resources, and assisting information centres users.

Trainers/Lecturers: these are also users of information centres materials and services and can also be used to facilitate information centres services and training or academic instruction related to information centres services at Nyeri National Polytechnic. Table 3.4.1 illustrates the target population.

Table 1:***Target Population***

Category of Respondent	Size
Students	4000
Lecturers	173
Librarians	10
Total	4183

3.5 Sample and Sampling Techniques**3.5.1 Sampling Techniques**

Sampling refers to the process of selecting a smaller group of participants from a larger population so that the selected group can represent the entire population in a research study. It allows the researcher to collect data efficiently without studying every member of the population. It can as well be defined as the process of selecting representatives from the study population (sample) for the analysis of a phenomenon/study ((Jupp, 2011).

In this study, sampling was used to select respondents from the population of trainers, students, and librarians at Nyeri National Polytechnic in order to examine how training influences the utilisation of tertiary academic information centres services. By selecting a representative sample, the researcher was able to obtain reliable information about information centres access and usage while saving time and resources.

Different sampling techniques were used depending on the group of respondents. Simple random sampling was used to select trainers and students to ensure that each member had an equal chance of being included in the study. Purposive sampling was used to select librarians because they possess specific knowledge and experience about information centres services and training programs, making them the most suitable respondents for providing detailed information relevant to the study.

The target population comprised 4040 participants, comprising of 10 information centres staff, 30 trainers/lecturers, and 4000 students. Simple random sampling was used to select the

students, and purposive for trainers, and librarians who visited the information centres and therefore guaranteed the researcher a lot of research data that can be used to generalize the entire population.

3.5.2 Sample Size

Slovin's Formula was adopted to calculate the sample size of the students selected for the study. This is because it's the best in educational institutions, a small and homogeneous population and it's a straightforward method. The formula is as follows:

$$n = \frac{N}{1 + N(e)^2}$$

n = required sample size.

N = the population size.

e = the degree of accuracy (the margin of error) expressed as a proportion (.05).

Total Population= librarian+ students+ lecturers.

$$N=10+4000+ 173$$

$$N=4183$$

Margin of error=0.05(5%)

$$n = \frac{4183}{1+4183 (0.05)^2}$$

$$n = \frac{4183}{1+4183(0.0025)}$$

$$n = \frac{4183}{1+10.4575}$$

$$n = \frac{4183}{11.4575}$$

$$n=4183/11.46$$

$$n=365$$

Using the solving formula the sample size was 365 respondents.

To calculate the sample size for each category, we use this formula

$RPS \cdot n/N$ where RPS=Respondents Population Size

N =Total Population size

n =total sample size

Students sample size= $4000 \cdot 365/4183$

$$n=1460000/4183$$

$$n=349.03$$

$$n=349$$

According to Mugenda and Mugenda (2003), a sample size of between 10% and 50% of the target population is considered adequate for social science research a census of all the 10 information centres staff was selected for the study. 50% of the lecturers making up 87 lecturers were sampled for the study.

The population and sample size are shown in Table 3.2.

Table 2:

Sample Population

Strata	Size	Sample
Students	349	150
Lecturers	173	87
Information centres staff	10	10

3.6 Data Collection Methods

Questionnaires were used to collect data from lecturers, students and information centres staff.

3.6.1 Questionnaire

The Structured questionnaires were the primary instruments for data collection. Separate questionnaires were designed for librarians, trainers/lecturers, and students to gather specific insights tailored to their roles and experiences. The questionnaires were divided into two sections the first section covered demographic data of information centres users and the second covered the objectives of the research including the background information. The reason for choosing the questionnaires was because they carry detailed information about the research topic and the respondents could fill them at their convenience time. These questionnaires were directly submitted to the respondents

A questionnaire is a research instrument consisting of a set of written questions used to collect information from respondents. It is commonly used in research because it allows the researcher to gather data from many participants in a systematic and efficient manner, allowed collection of data from many respondents (trainers, students, librarians) , ensured uniformity because all respondents answered the same questions, made data analysis easier, especially when using descriptive statistics and finally saved time and resources compared to interviews.

In this study, structured questionnaires were used to collect primary data from trainers, students, and librarians at Nyeri National Polytechnic. A structured questionnaire contains questions that are predetermined and arranged in a specific order, ensuring that all respondents answer the same questions. Most of the questions were closed-ended, allowing respondents to select answers from the options provided.

The questionnaire was appropriate for this study because it enabled the researcher to collect data from a relatively large number of respondents within a short time. It also ensured uniformity of responses, which made it easier to analyze the data using statistical methods.

The questionnaires were distributed to the selected respondents to obtain information regarding the training provided on information centres services, factors that enhance the utilization of information centres resources, and the challenges affecting access and use of tertiary academic information centres services.

Using structured questionnaires also helped maintain objectivity and minimized researcher bias since respondents answered the questions independently.

Document Analysis / Document Review

The researcher also employed the use of document reviews. This involves collecting information from existing documents such as reports, records, books, institutional documents, or archives. It helps the researcher obtain background or supporting data.

3.6.2 Data collection procedure

The questionnaires were distributed manually to students, trainers, and librarians and were purposively sampled. The researcher was strategically positioned at the circulation desk next to the information centres entrance through direct approach and participants were to complete and submit the questionnaire. This approach allowed for flexibility and ensured a high response rate and improved data quality because it focuses on essential questions, reducing chances of user confusion or errors and thus higher quality data.

3.7 Validity and Reliability

A researcher needs to determine the feasibility of the study by testing the research instrument in a real-world setting. Therefore, the researcher conducted a pilot study before the actual research at Thika Technical Institute, which shares similar attributes with the study's target institution. The validity and reliability of the research instrument were confirmed by randomly selecting respondents. This process enabled the researcher to pinpoint errors and enhance the instruments before the actual study.

3.7.1 Validity

Validity is the ability of the research instrument to collect data that after analysis provide an accurate and meaningful conclusion mirroring the reality being investigated (Orodho, 2005).

The validity of the data collection instruments was established to ensure that the questionnaire measured the variables under investigation. The researcher sought expert opinion from supervisors and research experts who examined the questionnaire to determine whether the questions were relevant, clear, and adequately covered the objectives of the study. Their suggestions and corrections were used to improve the instrument before the final data collection.

A pilot study was also conducted on a small group of respondents who were not part of the main study population. The responses from the pilot test helped the researcher identify

ambiguous questions and make necessary adjustments to improve the clarity and relevance of the questionnaire.

A correlation coefficient was employed to establish the validity of the research instruments. The correlation coefficient was used to establish the relationship between variables, predict data patterns in-information centres use, and the performance of students using the information centres as compared to non-users. The content and face validity of the instruments were tested by an expert review of the content coverage adequacy, language clarity, relevancy and appropriateness. The recommendations from the experts were used to adjust the instruments.

3.7.2 Reliability

The reliability of the research instruments was tested by the use test-retest method. Two tests were conducted by administering the questionnaires to the same participants at intervals of 14 days. The results were evaluated for consistency and the correlation coefficient was done on the results to establish the degree of similarity. The results yield a coefficient of 1.00 confirming the reliability of the research instrument.

3.8 Data Analysis

The study employed descriptive statistics to give a clear comprehensive picture of the variables under study. Qualitative data from open-ended questions was analyzed through thematic analysis involving data familiarization, coding, categorization, and theme development. The findings are then interpreted and supported with verbatim responses to provide deeper insights into participants' experiences and perceptions.

The categorization and display of the number of occurrences of different values, and to facilitate visual understanding of the distribution pattern, tables were used for proper understanding

Inferential statistics were used to reach conclusions about the population and to generalise the findings beyond the sampled population. ANOVA and regression analysis were done to assess the significance of relationships, differences, or associations within the data, to get insight into the effect of training on information centres services.

To estimate the range within which each population parameters were likely to fall, confidence intervals were calculated, to provide a measure of the precision and reliability of the findings.

Statistical significance was used to assess whether the observed relationships in the sample exist in the larger population.

3.9 Ethical Considerations

Ethical considerations were assured by observing the ethical principles of informed consent, confidentiality, anonymity, potential for harm, and conflict of interest to all study participants.

Informed consent, confidentiality, anonymity, potential for harm, and conflict of interest. Transparency was to be upheld. All the participants were allowed to participate and should maintain a high level of confidentiality about the information being searched for. The letter of introduction is another ethical consideration.

CHAPTER FOUR

DATA PRESENTATION, INTERPRETATION, AND ANALYSIS

4.1 Introduction

This is the chapter that presents the findings from the raw facts and opinions collected from different respondents and provides an interpretation of these findings, and conducts a detailed analysis. The main aim is to understand the specific reason of training in enhancing the provision of information centres services at Nyeri National Polytechnic. The data is presented in tables, for clarity and ease of understanding, allowing for an indepth analysis of the information collected or received.

4.2 Response Rate

The responses from the questionnaires distributed to students and trainers and information staff are presented in table 4.1.

Table 3:

Response Rates by Category

Category	Questionnaires Distributed	Questionnaires Returned	Response Rate (%)
Students	349	150	42%
Trainers	87	52	59%
Information centres Staff	10	10	100%

Amongst 349 questionnaires distributed to students, 150 were properly answered and brought back representing a response rate of 42%. Amongst 87 questionnaires disseminated to trainers, 52 questionnaires were answered and brought back indicating a response rate of 59%. All the 10 librarians filled out and returned the questionnaires. According to Mugenda and Mugenda (2003), the response rates for trainers and information centres staff are acceptable and reliable, while the students' response rate, though lower, is still usable for the study.

4.2.1 Demographic Information

The research done sought to find out the reality about the attendants. Student respondents requested to show their year of study at the polytechnic and the findings are presented in Table 4.2.

Table 4:

Year of Learning

Study year	No. of times visited the information centres	Percentage score
Year one	50	33%
Year two	60	40%
Year three	40	27%

The table indicates that 40% of the students are in the second year of study followed by 33% who are in the first and the least (27%) are third-year students. The table shows that information centres usage tends to peak in the second year and decline slightly in later years. This pattern highlights the importance of continuous user training and awareness programs to sustain and improve information centres utilization across all levels of study.

Lecturers were asked to indicate their teaching experience and the findings are presented in Table 4.3

Table 5:

Years of Teaching Experience

Years of Experience	Frequency	Percentage
1 to 5 years	20	38%
6 to 10 years	25	48%
11 to 15 years	5	10%
16+ years	2	4%

The figures show that the greatest number of trainers were well experienced in teaching with 25(48%) having worked for 6 to 10 years; 5(10%) have taught for 11 to 15 years and 2(4%) indicated that they have worked for over 16 years. The long time in service could imply that

the majority of the lecturers are likely to have engaged with the information centres and its services. User education programs should be enhanced to enable the few 20(38%) new trainers to engage more with the information centres.

The information centres staff were requested to indicate their work experience and their findings are shown in Table 4.4

Table 6:

Years of Experience as a Information centres Staff

Years of Experience	Frequency	Percentage
1 to 5 years	3	30%
6 to 10 years	4	40%
11 to 15 years	2	20%
16+ years	1	10%

Majority (40%) information centres staff have worked between for 6 to 10 years; 20% having worked between 11 to 15 years and 10% having worked for over 16 years. The findings show that most respondents have between 6 and 10 years of experience, indicating a workforce that is relatively experienced but still active and adaptable. This distribution enhances the reliability of the data, as it reflects a balance between emerging and moderately experienced professionals in the study.

4.3. Factors Enhancing Access and Usage of Information centres Services by trainees

The first objective needed to assess prevailing factors that influence access and utilization of information centres services. Lecturers were requested to show the frequency of using information centres information services and the findings were presented in the Table 4.5.

Table 7:

Frequency in using information centres information services

Frequency of Information centres Use	Frequency	Percentage
Daily	15	29%
Weekly	26	50%
Monthly	10	19%
Rarely	1	2%

The frequency of information centre use shows that a half (50%) of the lecturers use the information centre every week, with a notable portion (29%) also using it daily.

Student representatives were requested to comment on the determinants that enhance access to and usage of information centres services. The outcomes are presented in Table 4.6.

Table 8:

Factors Enhancing Access and Utilization

Factor	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Availability of Resources	50	60	25	10	5	3.93
Staff Assistance	50	60	20	15	5	3.90
Quality of Resources	45	55	15	20	15	3.63
Accessibility of Information centres	30	50	20	30	20	3.27

The results in Table 4.6 indicated that availability of resources (mean of 3.93) and staff assistance (mean of 3.9) enhanced access and utilization of information centres services by students. Availability of information resources and staff attendants assistance are very critical in influencing students to avail themselves to use information services and resources. Heads of departments should be consulted to give the best type of resource to request for the students and the resources list forwarded to the librarian. Having available resources and staff available will also enhance training. Respondents also agreed that the quality of resources (with a mean of 3.63) enhanced information centres resources. Respondenst were however neutral on accessibility to the information center with a mean of 3.27.

Lecturers were also asked to indicate the factors that enhance access and use of information centres resources. The results are shown in Table 4.7.

Table 9:*Factors Enhancing Access and Utilization of information centres resources by lecturers*

Factor	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Integration with technology	22	27	2	1	0	4.07
Institution support	20	13	16	3	0	4
Recognition and support	15	25	10	2	0	3.93
Access to high-quality resources	30	19	2	1	0	3.83
Ease of access to information centres systems	20	30	1	1	0	3.77
Technology and innovation	20	25	6	1	0	3.77
Research approach	21	27	3	1	0	3.73
Promotion and communication	15	25	10	2	0	3.73
Conducive environment	20	22	8	2	0	3.67

Responses in Table 4.7 from lecturers indicate that integration with technology (mean 4.07), institution support (mean 4.0) and recognition and support (mean 3.93) are the major factors that enhance accessibility and utilization of information services. Integration in the use of technology into information centres services significantly enhances access and utilization. This includes digital resources, online catalogues, e-books, and user-friendly platforms that make services more accessible and convenient. Strong institutional support, such as funding, infrastructure, and policies, plays a critical role in enabling information centres to offer effective training programs and resources. Recognition of the importance of information centres services and support from stakeholders (administration, community) encourages greater access and utilization. This includes promoting the value of information centres and training programs. Other factors that enhance accessibility and utilization of information services were access to high-quality resources, ease of access to information centres systems, technology and innovation.

The information centres staff gave their comments on the factors enhancing access and use of information centres information services and the results are shown in the Table 4.8.

Table 10:*Factors Enhancing Access and Utilization*

Factor	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Information centres users can make use of the information centres list effectively to identify and acquire information centres materials	4	3	2	1	0	4
Most of the users have a higher understanding regarding the arrangement and organization of materials in the information centres	4	3	2	1	0	4
Access to online information centres materials has too improved due to increased awareness	4	3	2	1	0	4
There has been proper communication between the librarians and users	4	3	2	1	0	4
Motivation to use the information centres amongst users has increased	3	4	2	1	0	3.9
Students using the information centres have increased significantly	3	4	2	1	0	3.9

Students are more willing to borrow learning materials than before	3	3	2	1	1	3.6
Adequate resources and facilities	2	2	3	1	2	3.1
The training enabled students to effectively and efficiently use the information centres resources	3	3	2	1	1	3.0

From Table 4.8 it has been found that information centres users are more able to access the list of items in the information centre and acquire materials (mean 4.00), most of the users have a higher understanding regarding the arrangement and organization of resources in the information centre (mean 4.00) and therefore facilitating higher information centre usage, access on online information centres materials has also improved due to increased awareness from user education programs (mean 4.00). Training in user education programs increases the skills in locating and accessing information centres materials. This is enhanced by the use of a information centres catalogue which is a list of all the materials in the information centres and it is alphabetically arranged increasing the overall utilization of information centres use.

User education programs also influence awareness of online services and therefore increase digital information centres service use. Online training services enhance user's performance to make use of information centre and its services and higher engagement on information centres services.

4.4 Influence of training in enhancing access and utilization of information centres resources

The study sought to evaluate the influence of training on the access and utilization of information centres services. Information centres assistants were asked about the number of training and the findings are shown in Table 4.9

Table 11:*Frequency of training*

Training frequency	Frequency	Percentage
Annually	4	40%
Biannually	3	30%
Quarterly	2	20%
Rarely	1	10%

Results indicated that 40% of information centres staff indicated that training is carried out annually while 30% indicated that the training is carried out biannually. This findings clearly shows that training is not effectively done. This means user needs assessment should be conducted to determine the number of trainings for the information centres staff to equip them with enough knowledge to offer information centres services. This will increase the efficiency of learning in the information centres.

The responses of student respondents on the influence of training are presented in Table 4.10.

Table 12:*Influence of Training on Information centres Services*

Training Aspect	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Training on Resource Use	65	40	15	16	14	3.84
Information Literacy	48	52	25	15	10	3.75
Digital Literacy	50	40	10	30	20	3.47

Responses in Table 4.10 showed that respondents agreed that training on resource use (mean of 3.84) and information literacy (mean of 3.75) influenced access and utilization of information centres resources. Investing in user education programs, especially on resource use facilitates better engagement and improved access to information centres resources and utilization. Information literacy skills are also very critical in fostering growth and improvement. Information literacy also improves the delivery of content. However, training on

digital literacy with a mean of 3.47 seemed to have less influence on access and utilization of information centres resources by the students.

Regarding the influence of training, the responses from lecturers are presented in Table 4.11

Table 13:

Influence of Training on Information centres Services

Training Aspect	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Enhanced information literacy	20	28	5	2	0	4.44
Enhanced institutional reputation	20	28	3	1	0	4.33
Improved networking	28	13	10	1	0	4.31
Improved research efficiency	20	25	6	1	0	4.23
Collaborating in research opportunities	25	15	10	2	0	4.21
Enhanced teaching and curriculum development	22	18	10	2	0	4.15
Updated technological advancement	18	22	11	1	0	4.10
Promoted lifelong learning	25	15	10	2	0	4.1
Incorporated information centres resources in teaching	12	30	10	0	0	4.03
Supporting academic publishing	20	15	15	2	0	4.01
Supported students' engagement	12	20	15	5	0	3.75

Responses presented in Table 4.11 on the role of training showed that enhanced information literacy(4.44), enhanced institution reputation(4.33), improved networking(4.31) and improved research efficiency (4.23) are crucial for a well-utilized information centres .Users are more able to conduct their research more effectively and efficiently, enhanced institution reputation is paramount to increase access to relevant resources, and already improved networking enhances information browsing for quick access. All these and more contribute to users' ability

to navigate and utilize information centres services in a manner that maximizes their research outcomes.

The focus on digital skills such as using online databases, understanding digital formats, and navigating digital platforms demonstrates that digital literacy is fundamental for modern information centres engagement.

Comprehensive training programs focusing on both research efficiency and digital literacy increasing the rate of usage and accessibility of information centre and its services. By doing so, they are able to enhance that information centres attendants will be better equipped to go through the shelves and increasingly complex information landscape, ultimately enhancing into an increased engagement and efficient use of information centres materials.

Information centres staff indicated their views about the influence of training and their responses are presented in Table 4.12.

Table 14:

Influence of Training on Information centres Services.

Training initiative	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
The use of online catalogue greatly improves the study	4	3	3	1	0	4.3
Managers with open-mindedness affect training positively	5	2	2	1	0	4.1
Managers with open-mindedness affect training positively	5	2	2	1	0	4.1
Training is influential and reasonable when it assists the overall users with adequate skills	5	2	2	1	0	4.1
Training is effective and successful when it links to the organizational needs	4	3	2	1	0	4
The effectiveness of training always depends on how the training is given	4	3	2	1	0	4
Poor managerial duties affect the effectiveness of training negatively	4	3	2	1		4
Relevant training is designed with the aim of teaching skills and behaviours which help the organization achieve its goals	3	4	2	1	0	3.9

The findings show that use of an online catalogue greatly improves the study (mean 4.3), managers with open-mindedness affect training positively (mean of 4.1) and managers with open-mindedness affect training positively (mean of 4.1) influence training. Training is relevant and successful when it meets to organization needs (mean 4) Effectiveness of training always depends on how the training was given (mean 4.0)

The responses in Table 4.12 indicate that training is important because it increases the knowledge in use and access to information centres services especially online / technologically. Training should be considered as a primary factor because it equips all the users with adequate skills and knowledge as ,it's a continuous process in technological advancements, foster an environment where users can continually improve their skills and knowledge.

Information centres should implement regular training sessions and workshops to ensure that all users have the opportunity to enhance their understanding and skills related to information centres services. Establishing mechanisms for gathering user feedback. Training sessions can help information centres refine and tailor future training initiatives to better meet the needs of their users.

Resource Availability: Providing ongoing resources—such as online tutorials, guides, and support can aid users in their learning process and encourage self-directed exploration of information centres services.

4.5 Challenges in Access and Utilization by Students

The third objective assessed the challenges faced in access and use of the information centres and the responses from students are presented in Table 4.13.

Table 15:*Challenges Faced by Students*

Challenge	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Limited Resources	70	50	15	12	3	4.15
Inadequate Training Programs	40	80	20	8	2	3.99
Insufficient Staff	45	55	35	8	7	3.82
Confusion with the database interface	45	50	30	15	10	3.7
Slow Internet connectivity	45	40	30	30	5	3.6
Poor attitude towards librarians	40	45	35	20	10	3.57
Lack of technical skills	45	30	40	25	15	3.53
Fear of intimidation	40	45	30	25	10	3.53
Lack of up-to-date information materials	50	35	25	25	15	3.53
Lack of awareness on accessing online databases	45	35	30	30	10	3.5
Lack of training	40	40	35	20	15	3.47
Lack of awareness in knowledge of information centres services	40	30	40	30	10	3.4
Lack of enough time	35	45	30	20	20	3.37

Responses in Table 4.14 pointed out that limited resources (mean of 4.15), inadequate training programs (mean of 3.99) and insufficient staff (3.82) were challenges experienced by students

in the information centres. The findings highlighted crucial areas where students face challenges in utilizing information centres services. By focusing on increasing the availability of resources, enhancing training programs, and improving staffing levels, information centres can significantly enhance the student experience. Taking these actions will not only address current challenges but also promote greater utilization of information centres resources overall.

Table 16:

Challenges Faced by Lecturers

Challenge	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Research challenges	30	15	6	1	0	4.42
Language and cultural barriers	29	16	4	3	0	4.37
Adapting to changing roles	26	20	5	1	0	4.37
Time allocations for students to use the information centres	30	12	9	1		4.37
Changing roles and expectations	25	22	3	2	0	4.35
Lack of collaboration with librarians	28	13	8	3	0	4.27
Physical accessibility	20	25	6	1	0	4.23
Access issues	23	19	9	1	0	4.23
Technical challenges	20	25	5	2	0	4.21
Institutional policies and restrictions	25	13	13	1	0	4.19
Lack of personalized support	18	18	14	2	0	4
Resource quality and relevance	15	20	15	2	0	3.92
Resource quality and relevance	15	20	15	2	0	3.92
Limited awareness and familiarity	15	20	15	2	0	3.92
Navigating complex information centres systems	22	12	12	4	0	3.88

The responses in Table 4.14 show that research challenges(mean 4.42), language and cultural barriers(mean 4.37)adapting to changing roles(4.37)lack of collaborations with librarians (mean 4.27) are the major challenges facing the lecturers in information centres services use.

Information centres should strive to improve access to databases and journals, possibly through institutional subscriptions or partnerships with other information centres providing dedicated research support services, such as research consultations or specialized workshops for lecturers, which could greatly alleviate their research challenges. **Fostering Collaboration with Librarians:** implement regular meetings or workshops between lecturers and librarians to discuss needs, challenges, and collaborations. **Encourage joint initiatives** where librarians co-teach research skills or information literacy sessions with lecturers, enhancing collaborative ties. **Establish a system for continuous feedback** from lecturers regarding the information centres's collection. This could involve surveys or focus groups to better gauge demand. **Targeted Acquisitions:** Based on feedback, information centres should focus on acquiring high-quality, relevant resources that meet the specific needs of lecturers' academic fields.

By addressing these challenges through targeted improvements in research support, enhancing collaboration, and ensuring the quality and relevance of resources, information centres can foster a more conducive academic environment for lecturers. Implementing these changes will not only improve the use of information centres services but also enhance overall academic outcomes.

Librarians were asked to point out the challenges they experienced and the results were indicated in Table 4.15.

Table 17:*Challenges Faced by Librarians.*

Challenge	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Budget constraints	4	3	2	1	0	4
Information overload	4	3	2	1	0	4
Support of diverse needs eg PWDs	4	3	2	1	0	4
Balancing print and digital collections	3	4	2	1	0	3.9
Ensuring accessibility	4	2	3	1	0	3.9
Collection management	3	4	1	2	0	3.8
Technological advancement	3	2	2	3	1	3.6
Staffing constraints	3	3	1	2	1	3.5
Managing user expectations	2	2	3	3	0	3.3
User education and training	2	2	3	2	1	3.2
Adapting to changing roles	1	1	1	2	2	1.5

Responses in Table 4.15 indicate that budget constraints(mean 4), information overload(mean 4), support of diverse needs i.e. people with disabilities PWD(mean 4) and balancing print and digital collections(mean 3.9) a lot has to be done to reduces these challenges for effective information centres use and access. This indicates that the allocated amount of finances should go directly to the information centres to relieve budget constraints. Librarians are also overwhelmed with a lot of information which makes them forget the important issues in the information centres.

A lot has to be done For instance the data indicates that respondents feel the current state of information centres services may not adequately meet their needs, which suggests a gap between what is offered and what users require, .technological advancement for example, improved databases and increase reading spaces, increase on user education programs, collection management programs should also be enhanced Establish a system for personalized research consultations where users can receive tailored assistance from librarians. Implement targeted training sessions to enhance users' skills in navigating information centres resources effectively. This can include workshops on information literacy, research methods, and database usage.

4.6 Regression Test

In this research, a multiple regression analysis was performed to examine the effects of predictor variables. The study utilized the statistical package for social sciences (SPSS V 21.0) to code, input, and calculate the results of the multiple regressions.

Table 18:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.635 ^a	.403	.392	.34644

Source: Research data, (2024)

The coefficient of determination (R-Square) indicates the overall variations attributed to factors that enhance access to and utilization of information centres services, the role of training, and the obstacles in providing the desired information centres services at Nyeri National Polytechnic. According to Table 4.16, the Adjusted R-square for the model is 0.392. This indicates that the roles of training, factors, and challenges contribute to 39.2% of the variation in the utilization of information centres services and resources at Nyeri National Polytechnic. Furthermore, this coefficient suggests that 60.8% of the variation in the utilization of information centres services and resources is due to other influencing factors. The subsequent phase of the regression analysis involved calculating the ANOVA. The ANOVA was generated to determine if the model was statistically significant in explaining the relationship among the study variables (roles of training, factors enhancing, and challenges in access to and utilization of information centres services and resources at Nyeri National Polytechnic).

Table 19:

ANOVA Statistics

Model	Sum of Squire	Df	Mean Squire	F	Sig.
Regression	13.279	3	4.426	36.879	.000
Residual	19.684	164	.120		
Total	32.963	167			

Source: Research data, (2024)

Based on the ANOVA statistics, the research found that the regression model had a significance level of 0.000%, which suggests that the data was suitable for concluding the population

parameters, as the significance value (p-value) was below 5%. The calculated value exceeded the critical value ($36.879 > 4.49$), indicating that the roles of training, factors that enhance access and use of information centres services, and the challenges encountered in accessing and utilizing these services all significantly affect the use of information centres services and resources at Nyeri National Polytechnic. The significance value was below 0.05, confirming that the model was significant. Furthermore, the research utilized the coefficient table to establish the study model.

Table 20:

Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	T	Sig.
(Constant)	2.418	.336		7.187	.000
Factors influencing access and utilization.	.242	.084	.178	2.888	.004
Roles of training in access and utilization	.413	.075	.335	5.485	.000
Challenges affecting access and utilization	.836	.105	.496	7.941	.000

Source: Research data, (2024)

As per the SPSS generated output as presented in the table above,

$$Y = 2.418 + 0.242 + 0.413 + 0.836$$

The results suggest that if the roles of training, enhancing factors, and challenges are kept constant, the utilization of information centre services and tangible materials at the Nyeri National Polytechnic would remain at 2.418. Furthermore, a single unit change in information centres policies, with other impeding factors held consistent, would improve the usage of information centre services and tangible resources at the Nyeri National Polytechnic by a factor of 0.242. These results support Suleiman's (2018) assertion that factors contributing to

accessibility and usage of information centre and its services, such as enhancements on service delivery, are crucial for ensuring student satisfaction with information centres services, thereby increasing their access to and use of these services.

The results indicate that adjusting the role of training while keeping other variables stable would increase the usage of information centres services and resources at Nyeri National Polytechnic by a factor of 0.413. These results align with previous findings that demonstrate information centres' success is linked to their training, which in turn positively affects students' educational quality.

The results also reveal that a change in the challenges impacting access and utilization of information centres services, while maintaining other factors constant, would boost the utilization of information centres services and resources at Nyeri National Polytechnic by a factor of 0.836. This outcome contradicts the conclusion reached by Bassey and Odu (2015), who argued that employing marketing strategies to lessen usage barriers, inform and persuade customers, and carefully address their needs is effective.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

This study research tried to investigate the determinants pertaining to access and utilization of information centres services through training, focusing on Nyeri National Polytechnic. This chapter presents the summary of findings, conclusion and recommendations of the study. The summary of the findings were presented according to the specific objectives of the research study. For each objective:

5.1.1 Factors Enhancing Access and Utilization of Information centres Services

Student respondents appreciated the availability of the resources accessible and assistance given to them by staff and this increased their access to the information centres. Lecturers' responses indicated that Technology integration, institution support, and positive perception responses from information centres staff are indicators of strong institutional performance without forgetting recognition and support. On the side of information centres staff, a user education program is key in enhancing accessibility and utilization to the information centres as it acts as a booster in their area of specialization.

A majority of respondents strongly agreed that adequate information centres information materials, such as books, journals, and online resources, the critical importance of ensuring that users have access to well-stocked collections. Professional guidance provided by librarians was found to be indispensable in navigating information centres systems and maximizing resource usage. Respondents rated this factor with a mean score of 3.90, underscoring the necessity of skilled and approachable staff. The accessibility of information centres systems, including user-friendly interfaces for digital catalogues and resources, greatly enhanced user experience. This was particularly noted among lecturers and students, emphasizing the role of streamlined systems in fostering frequent information centres use. Modern ICT tools and digital platforms were identified as crucial enablers for information centres access. Respondents highlighted that investment in up-to-date technology boosts the information centres' relevance in academic and research activities.

5.1.2 Role of Training in Improving Information centres Services

Lecturers responded that Training programs enhanced information literacy, increased institution reputation, improved networking and improved research efficiency aimed at teaching users how to navigate information centres systems, access digital resources, and effectively utilize catalogues this indicates positive outcomes in enabling users to maximize available resources. Training initiatives from students' responses like resource use that fostered information literacy skills and digital literacy for students, such as evaluating and using information sources critically, highlight their importance in academic success and research efficiency. Respondents recognized that targeted training in digital tools and platforms empowered them to utilize e-resources more effectively. This was especially relevant given the increasing reliance on digital resources for research and study. Information centres staff's responses use of online catalogue greatly improved the study, training is effective and successful when it links to organizational needs this showed that training improved their ability to assist users, organize resources efficiently, and stay updated on emerging trends in information centres science. This contributed to enhanced service delivery and user satisfaction.

5.1.3 Challenges in Access and Utilization of Information centres Services

A significant challenge identified was the inadequacy of information centres materials, inadequate training programs , insufficient staff. Lecturers also lamented that they had difficulties in doing their work. Research challenges , language and cultural barriers information centres utilization and assistance and this hinders to effective information centres use. A lack of comprehensive and consistent training opportunities for both staff and users was another key issue. Many respondents cited unreliable internet access as a barrier to utilizing digital resources, affecting research and academic productivity. Insufficient user knowledge in navigating digital tools and online resources emerged as a barrier, requiring continuous education and training interventions. Policies and regulations limiting information centres use, including restrictive borrowing terms and limited operating hours, were reported as challenges. Insufficient funding for information centres operations and resource acquisition was identified as a systemic issue affecting service quality

.

5.2 Conclusions

The research study concluded that, the availability and accessibility of a high-quality information centres information resources, supported by high qualified professional staff, assistance from staff, quality resources, accessibility of information centres services and effective integration of technology and institutional support, positive perception by lecturers, recognition and support are pivotal in promoting information centres utilization. Other determinants of access and utilization of the information centre entail, user education programs, awareness creation and display. These factors foster an environment conducive to academic and research excellence among the users.

Comprehensive training programs targeting information literacy, digital skills, and resource management are integral to improving user engagement and optimizing information centres services. Effective training programs result in increased user satisfaction, enhanced research capabilities, and better academic outcomes. Persistent barriers such as inadequate resources, slow internet connectivity, and illiteracy of information communication innovation pose huge great variety of technological barriers to a variety of online platforms. Still, some information centres staff are not fully equipped with digital literacy skills and competencies to facilitate stable and constant access and use of information in online digital platforms and restrictive institutional policies, book loss and damage and vandalized (tearing of papers) are other inclusive challenges faced by the users. These therefore mean the information centres information is not enough and hence hinders the full potential of information centres utilization. Addressing these challenges requires institutional commitment and strategic interventions.

From the UGT perspective, users are active participants who deliberately seek information centre services to satisfy specific academic and research needs. The availability and accessibility of high-quality information resources, support from qualified staff, and effective integration of technology reflect users' motivation to achieve gratification in terms of academic success, knowledge acquisition, and research productivity. Therefore, user education programs, awareness creation, and proper display of resources enhance users' ability to locate and use information services, ultimately increasing satisfaction and continued engagement with the information centre.

On the other hand, the UTAUT model explains the behavioral intention and actual usage of information centre services through factors such as performance expectancy, effort expectancy,

social influence, and facilitating conditions. In this study, training programs in information literacy, digital skills, and resource management directly improve users' perceived ease of use (effort expectancy) and perceived usefulness (performance expectancy) of information centre services. Similarly, institutional support, availability of qualified staff, and access to technological infrastructure act as facilitating conditions that enable effective system use. Positive perceptions by lecturers and institutional recognition further enhance social influence, encouraging users to adopt and utilize information centre services.

However, the study also identifies barriers such as inadequate resources, poor internet connectivity, low digital literacy among both users and staff, and restrictive institutional policies. Within the UTAUT framework, these challenges weaken facilitating conditions and reduce effort expectancy, thereby limiting users' intention and actual use of information centre services. From a UGT perspective, these barriers prevent users from achieving their desired gratifications, leading to dissatisfaction and reduced engagement. Therefore, addressing these challenges through improved infrastructure, continuous training, and institutional commitment is essential to enhance both technology acceptance and user satisfaction, ultimately optimizing the utilization of information centre services.

5.3 Recommendations

The study provided recommendations to information centres administration and institutional support.

5.3.1 Recommendations for Information centres Administration

- i. Allocate more funding for acquiring current books, journals, and digital resources.
- ii. User education training programs should be enhanced to equip information centres users with the knowledge to navigate through information centre resources and services. And at the same time change the attitudes and perceptions.
- iii. Regularly conduct user needs assessment tests to be up-to-date with the needs of users to ensure resource acquisition aligns with academic and research demands.
- iv. Design and implement user-centred training modules focusing on digital and information literacy.

- v. Conduct workshops, and seminars for librarians to equip them with knowledge and skills in information centres services provision.
- vi. Improve internet connectivity and invest in modern ICT tools, such as high-speed Wi-Fi and user-friendly digital interfaces.

5.4 Recommendations for Institutional Support

- i. Review and streamline borrowing policies to make them more user-friendly.
- ii. Extend information centres operating hours to cater for the diverse schedules of students and lecturers.
- iii. Promote a culture of information centres use through campus-wide campaigns and incentives.
- iv. Increase budgetary provisions for information centres operations, including staff training and resource acquisition.
- v. Seek external funding opportunities, such as grants and sponsorships, to supplement institutional allocations.
- vi. Facilitate partnerships between the information centres and academic departments to align resources with curriculum needs.
- vii. Engage external experts and industry professionals in training programs to provide diverse perspectives and insights.

5.4 Recommendations for Future Research

- i. Investigate the long-term impact of training initiatives on information centres utilization and academic performance.
- ii. Explore the integration of emerging technologies, such as virtual reality and AI, in enhancing information centres services.
- iii. Assess user preferences for digital versus print resources to guide future acquisition strategies
- iv. Evaluate the effectiveness of collaborative approaches, such as inter-information centres loans and resource sharing, in addressing resource constraints.

REFERENCES

- Abu, A. A., Oyedum, D. U., Raji, R. E., & Abdulhamid, M. (2018). Information centres Policies as Factors Affecting Use of Information centres by Undergraduate Students of Two Federal Universities in North-Central, Nigeria. *MiddleBelt Journal of Information centres and Information Science*, 16. <https://mbjlisonline.org/index.php/jlis/article/view/44>
- Aderibigbe, O. A. (2024). Strategies for Marketing of Information Resources and Services in Academic Information centres. Available at SSRN 4945391. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4945391
- Agyeiku, J. O., Mr, J. O. A., & Agyeiku, J. O. (2022). The effect of information centres orientation programme on the use of information centres resources by new students in the University of Education, Winneba.(UEW). *Information centres Philosophy and Practice*, 1–19.
- Anyaoku, E. N. (2015). Evaluating Undergraduate Students Awareness and Use of Medical Information centres Resources: A Study of Nnamdi Azikiwe University, Nigeria. *International Journal of Information centres Science*, 4(3), 53–58. <https://doi.org/10.5923/j.information-centres.20150403.02>
- Arachchige, A. J. (2019). Enhancing the Students' Information centres Books Borrowing Skills in University Colleges in the Technical Vocational Education and Training (TVET) Sector in Sri Lanka. *Reinvigorating Information centres: Smart Responsiveness for Sustainability*. 10th International Conference of University Librarians Association of Sri Lanka (ICULA-2019).
- Asemi, A., & Riyahiniya, N. (2007). Awareness and use of digital resources in the information centres of Isfahan University of Medical Sciences, Iran. *The Electronic Information centres*, 25(3), 316–327. <https://doi.org/10.1108/02640470710754823>
- Ashikuzzaman, M. (2024). Role of information centres in promoting information literacy and critical thinking skills in the digital age. *Information centres and Information Science Network*. <https://www.lisedunetwork.com/role-of-information-centres-in-promoting-information-literacy-and-critical-thinking-skills-in-the-digital-age/>

- Ashraf, T., & Gulati, P. A. (Eds.). (2013). *Design, Development, and Management of Resources for Digital Information centres Services*: IGI Global. <https://doi.org/10.4018/978-1-4666-2500-6>
- Atuase, D., & Maluleka, J. (2023). Marketing of information centres resources and its impact on the information centres usage of distance-learning students. *Digital Information centres Perspectives*, 39(1), 111–123. <https://doi.org/10.1108/DLP-03-2022-0025>
- Bamidele, I. A. (2014). The Role of Information centres in the Transformation of Nigerian Education Adegoke, Opeyemi Laz Otti Memorial Information centres, Babcock University, Ilishan-Remo, Ogun State. *Akoka Journal of Education*, 6(2), 53–62.
- Benard, R., & Dulle, F. (2014). Assessment of access and use of school information centres information resources by secondary school students in Morogoro Municipality, Tanzania. *Information centres Philosophy and Practice*, 0_1.
- Bikos, G., Papadimitriou, P., & A. Giannakopoulos, G. (2014). School information centres' impact on secondary education: A users' study. *Information centres Review*, 63(6/7), 519–530.
- Brophy, P. (2007). *The information centres in the twenty-first century*. Facet Publishing. https://books.google.com/books?hl=en&lr=&id=YdkqDgAAQBAJ&oi=fnd&pg=PR9&dq=Peter+Brophy+The+Information+centres+in+the+Twenty-First+Century&ots=se_9mXgQ79&sig=LlgRW0auoX3v69OLfpkFSjMze04
- Carvalho e Rodrigues, M. D., & Mandrekar, B. (2020). Impact of academic information centres services on students' success and performance. *Information centres Philosophy and Practice (e-Journal)*, 4246. <https://digitalcommons.unl.edu/libphilprac/4246>
- Chibini, V. M. (2011). *Use of electronic journals by academic staff at Strathmore University*. [PhD Thesis]. Moi University.
- Covey, D. T. (2002). Academic information centres assessment: New duties and dilemmas. *New Information centres World*, 103(4/5), 156–164.
- Esse, U. C. (2014). *Effects of information centres instruction on satisfaction with the use of the information centres and its services: A study of undergraduate students in five universities in the Southern part of Nigeria*.

https://repository.elizadeuniversity.edu.ng/bitstream/20.500.12398/743/1/EFFECTS%20OF%20INFORMATION%20CENTRES%20INSTRUCTION%20ON%20SATISFACTION%20WITH%20THE%20USE%20OF%20INFORMATION%20CENTRES%20AND%20ITS%20SERVICES_%20A%20STUDY%20OF%20UNDERGRADUATE%20STUDENTS%20IN%20FIVE%20UNIVERSITIES%20IN%20THE%20SOUTHERN%20PART%20OF%20NIGERIA.pdf

- Foley, O. (2010). *An investigation into the barriers faced by international students in their use of a small Irish academic information centres* [PhD Thesis]. Aberystwyth University.
- Gunasekera, C. (2010). Students Usage of an Academic Information centres: A user survey conducted at the Main Information centres University of Peradeniya. *Journal of the University Librarians Association of Sri Lanka*, 14(1), 43–60. <https://doi.org/10.4038/jula.v14i1.2687>
- Ilo, P. I. (2011). Information centres user education programme for Covenant University freshmen: Impact, challenges and possible solutions. *Samaru Journal of Information Studies*, 11(1–2), 7–12.
- Ilori, M. E., & Owolabi, K. A. (2020). Availability and utilisation of information centres services by undergraduates in Lagos State University, Nigeria. *Ilorin Varsity International Journal of Information centres & Information Science*, 3(1), 101-110.
- Jacqueline, A. A. (2024). Digital Literacy in the 21st Century: Preparing Students for the Future Workforce. *Research Output Journal of Arts and Management*, 3(3), 40–43.
- Jaeger, P. T., Bertot, J. C., Thompson, K. M., Katz, S. M., & DeCoster, E. J. (2012). The Intersection of Public Policy and Public Access: Digital Divides, Digital Literacy, Digital Inclusion, and Public Information centres. *Public Information centres Quarterly*, 31(1), 1–20. <https://doi.org/10.1080/01616846.2012.654728>
- Johnson, B. T. (2021). *Inservice Teachers' Perceptions of Barriers to Information Literacy Instruction in Poverty Environments*. The University of Memphis. <https://search.proquest.com/openview/4136cf62bacac6902b6e688001fdbf99/1?pq-origsite=gscholar&cbl=18750&diss=y>

- Jupp, V. (2011). *The Sage dictionary of social research methods*.
<https://www.torrossa.com/gs/resourceProxy?an=4913678&publisher=FZ7200>
- Katz, E. (1974). Utilization of mass communication by the individual. *The Uses of Mass Communications: Current Perspectives on Gratifications Research*, 19–32.
- Levine-Clark, M., & Carter, T. M. (Eds.). (2013). *ALA Glossary of Information centres and Information Science* (Fourth edition). ALA editions, an imprint of the American Information centres Association.
- Luo, M. M., & Remus, W. (2014). Uses and gratifications and acceptance of Web-based information services: An integrated model. *Computers in Human Behavior*, 38, 281–295.
- Mabweazara, R. M., & Zinn, S. (2020). Expectations of Academics from the 21st Century Academic Information centres: Experiences from Zimbabwe. *African Journal of Information centres, Archives & Information Science*, 30(2).
- Maduako, P. U. (2013). User education and information centres use in Colleges of Education in Abia and Imo States. *Information centres Philosophy and Practice (e-Journal)*, 955.
<https://core.ac.uk/download/pdf/188144172.pdf>
- Mehrad, J., & Tajer, P. (2016). Uses and gratification theory in connection with knowledge and information science: A proposed conceptual model. *International Journal of Information Science and Management (IJISM)*, 14(2).
https://ijism.isc.ac/article_698234.html
- Morsy, H., & Mukasa, A. (2019). *Youth jobs, skill and educational mismatches in Africa*.
- Motiang, I. P. (2014). An evaluation of user satisfaction with information centres services at the University of Limpopo, Medunsa Campus (Medical University of Southern Africa). *Arabian Journal of Business and Management Review (Oman Chapter)*, 3(11), 41.
- Moyane, S. P., Dube, L., & Hoskins, R. (2015). Evaluating user education programmes for postgraduate students in the School of Management, Information Technology and Governance at the University of KwaZulu-Natal. *South African Journal of Information centres and Information Science*, 81(1), 28–40.

- Muir, A., Spacey, R., Cooke, L., & Creaser, C. (2016). Regulating Internet access in UK public information centres: Legal compliance and ethical dilemmas. *Journal of Information, Communication and Ethics in Society*, 14(1), 87–104. <https://doi.org/10.1108/JICES-02-2015-0005>
- Mustapha, A., Muhammed, I., & Ahmad, F. I. (2023). *Awareness and perception of information centres users towards the use of Online Public Access Catalogue (OPAC) in Bayero University, Kano. Library Philosophy and Practice*, 1–15.
- Musungu, M. S., & Maina, J. (2023). *Accessibility and utilization of information resources in the post-COVID-19 era: A case of selected university information centres in Kenya.* <http://www.repository.must.ac.ke/handle/123456789/997>
- Mwatela, W. M. (2013). *Factors influencing utilization of information centres services and resources: The case of University of Nairobi Mombasa Campus Information centres* [PhD Thesis]. University of Nairobi.
- Nagel, M., & Scholes, L. (2016). *Understanding development and learning: Implications for teaching.* Oxford University Press.
- Ngcongolo, B., & Oyelana, A. A. (2017). Obstacles Confronting Postgraduate and Undergraduate Students in Utilizing and Accessing Academic Information centres Resources: A Case Study. *Journal of Social Sciences*, 52(1–3), 74–81.
- Nisha, F., & Ali, N. (2012). Awareness and use of e-journals by IIT Delhi and Delhi University information centres users. *Collection Building*, 32(2), 57–64. <https://doi.org/10.1108/01604951311322039>
- Nkamnebe, E. C., Udem, O., & Nkamnebe, C. (2014). *Evaluation of the use of university information centres resources and services by the students of Paul University, Awka, Anambra State, Nigeria.*
- Nna-Etuk, G. M., Ezeibe, R., Udo-Okon, T., & Ishiwu, O. U. (2024). Media Literacy Skills and Use of Electronic Resources by Information centres and Information Science Students' in Digital Environment, University of Uyo, Nigeria. *International Journal of Information centres and Information Science Studies.*, 10(3), 35–50.

- Onifade, F. N., Ogbuiyi, S. U., & Omeluzor, S. U. (2013). Information centres resources and service utilization by postgraduate students in a Nigerian private university. *International Journal of Information centres and Information Science*, 5(9), 289–294.
- Owolabi, S. E., Idowu, O. A., & Aliu, B. D. (2015). Awareness and Compliance to Information centres Rules and Regulations by Undergraduate Students in Two University Information centres in Southwest Nigeria. *International Journal of Information centres Science*, 4(1), 1–6.
- Reitz, J. N. (2016). *Dictionary of information centres and information science*. Information centres Unlimited.
- Saika, M., & Gohain, A. (2013). Use and user satisfaction in information centres resources and services. A study in Tezpur University (India). *International Journal of Information centres and Information Science*, 5(6), 167–173.
- Saikia, M., & Chandel, A. S. (2012). Use and user's satisfaction on information centres resources and services in Tezpur University (India): A study. *Annals of Information centres and Information Studies*, Col, 59. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3377087
- Salubi, O. G., & Muchaonyerwa, N. (2018). Uses and Gratifications of the Internet and information centres information resources: An integrated model proposal. *Journal of Information centres & Information Technology*, 38(6), 429–435.
- Santhalingam, B., Revathi, K., & Devi, J. (2011). Mobile Phone Usage Survey among Students and Staffs of Universities Using Data Mining. *International Journal of Scientific & Engineering Research*, 2(10), 1–5.
- Simon, B. R., & Ogom, O. (2015). Evaluation of the Extent of Utilization of Electronic Information centres Resources and Services by Undergraduate Students in University of Calabar Information centres, Calabar–Nigeria. *Education Journal*, 4(2), 82–89.
- Sinha, M. K. (2015). Empowering LIS Professionals and Academic Information centres Users in a Networked and Digital Environment: A Case Study of Rabindra Information centres, Assam University, Silchar. In *Open Source Technology: Concepts, Methodologies, Tools, and Applications* (pp. 1788–1819). IGI Global Scientific Publishing.

- Slutskaya, S. A., Rose, R., Salter Ms, A. A., & Masce, L. (2013). Assessing faculty awareness of information centres services in two Georgia undergraduate institutions. *Georgia Information centres Quarterly*, 50(1), 10.
- Soria, K. M., Fransen, J., & Nackerud, S. (2013). Information centres Use and Undergraduate Student Outcomes: New Evidence for Students' Retention and Academic Success. *Portal: Information centres and the Academy*, 13(2), 147–164. <https://doi.org/10.1353/pla.2013.0010>
- Suleiman, S. A. (2012a). User education programs in academic information centres: The experience of the International Islamic University Malaysia students. *Information centres Philosophy and Practice*, 139.
- Suleiman, S. A. (2012b). User education programs in academic information centres: The experience of the International Islamic University Malaysia students. *Information centres Philosophy and Practice*, 139. <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=840616e26fe1c22d900e5669af8bd5b4a9c34be5>
- Toner, L. J. (2008). Non-use of Information centres Services by Students in a UK Academic Information centres. *Evidence-Based Information centres and Information Practice*, 3(2), 18–31. <https://doi.org/10.18438/B8HS57>
- Trivedi, M., & Joshi, A. (2009). Use of the Internet among Health Care Professionals in a Rural Medical College in India. *Journal of Electronic Resources in Medical Information centres*, 6(1), 33–39. <https://doi.org/10.1080/15424060802705194>
- Tsekea, S., & Chigwada, J. P. (2021). COVID-19: Strategies for positioning the university information centres in support of e-learning. *Digital Information centres Perspectives*, 37(1), 54–64. <https://doi.org/10.1108/DLP-06-2020-0058>
- Tuhou, T. M. P. (2011). *Barriers to Māori usage of university information centres: An exploratory study in Aotearoa New Zealand* [PhD Thesis]. Open Access Te Herenga Waka-Victoria University of Wellington.
- Udo-Anyanwu, A. J. (2015). Determinants of Students' Observance of Information centres Regulations in Federal Polytechnic Nekede, Owerri, Imo State, Nigeria. *Open Access Information centres Journal*, 2(04), 1.

- Walsh, B., & Rana, H. (2020). Continuity of Academic Information centres Services during the Pandemic The University of Toronto Information centres' Response. *Journal of Scholarly Publishing*, 51(4), 237–245.
- Wickramanayake, L. (2016). User Education and its Present Status in University Information centres in Sri Lanka: An Overview. *Journal of the University Librarians Association of Sri Lanka*, 19(1), 92–114. <https://doi.org/10.4038/jula.v19i1.7877>
- Yebowaah, F. A., & Owusu-Ansah, C. M. (2020). Evaluating the Information Access Skills of Students of a College of Education in Ghana. *Journal of Information Science Theory and Practice*, 8(2), 45–54. <https://doi.org/10.1633/JISTAP.2020.8.2.4>
- Yuvaraj, M. (2016). Exploring Factors for the Adherence of Information centres Rules and Regulations at Central University of South Bihar. *Information centres Herald*, 54(2), 143–153.
- George, B. O. (2023). Evaluating features of mobile phone technology needed to access information centres services in Mount Kenya University information centres in Kenya. *IP Indian Journal of Information centres Science and Information Technology*, 8(2), 99–104. <https://doi.org/10.18231/j.ijlsit.2023.017>
- Kibos, J. C., Nkoro, L., & Kerandi, D. O. (2025). Unlocking information centres potential: Insights into first-year undergraduate students' participation in information centres user education and their perceptions of university information centres. *International Journal of Professional Practice*, 13(1). <https://doi.org/10.71274/ijpp.v13i1.506>
- Musungu, M. S., & Maina, J. (2023). Accessibility and utilization of information resources in the post COVID-19 era: A case of selected university information centres in Kenya.
- Tenya, A. N., Maina, J. C., & Awuor, F. M. (2024). Digital literacy as a tool for enhancing access and utilization of digital information: A case study in Kenya. *Journal of Information and Knowledge*, 61(3), 125–133. <https://doi.org/10.17821/srels/2024/v61i3/171399>
- Kenya National Information centres Service. (2023). Digital transformation in information centres.

APPENDICES

Appendix I: An Introduction Letter

Dear Respondent,

I am a graduate student at Kisii University, Department of Information centres and Information Science. As a requirement for my Master's in Information centres and Information Science, I am researching the topic: "Factors Affecting Access and Utilization of Information centres Services to Enhance Learning in Technical and Vocational Colleges in Kenya: Case of Nyeri National Polytechnic" The study aims to increase the understanding of factors that affect access and utilization of information centres services to enhance learning in TVET colleges in Kenya.

The questionnaire will take about 10 minutes and will include questions regarding your experience with access and utilization of information centres services. All your responses are confidential.

Thank you for agreeing to take the time to help me with this research.

Appendix II: NACOSTI Authorization

 REPUBLIC OF KENYA Ref No: 596052	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION Date of Issue: 08/March/2021
RESEARCH LICENSE	
	
This is to Certify that Ms. ROSE ANN WANJIKU MUNGAI of Kisii University, has been licensed to conduct research in Nyeri on the topic: DETERMINANTS OF ACCESS AND UTILIZATION OF LIBRARY SERVICES IN TECHNICAL AND VOCATIONAL COLLEGES IN KENYA: CASE OF NYERI NATIONAL POLYTECHNIC for the period ending : 08/March/2022.	
License No: NACOSTI/P/21/9119	
Applicant Identification Number 596052	Director General  NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION Verification QR Code 

Appendix III: Questionnaires

Section A: Demographic Information

A: Demographic Information

Kindly indicate with (√) where applicable.

1. Gender:

Male	
Female	

2. Category:

Lecturer	
Student	

3. Students' year of study

First Year	
second year	
Third year	

FACTORS THAT ENHANCE ACCESS AND UTILIZATION OF INFORMATION CENTRES RESOURCES AND SERVICES

4. On a scale of 1-5 indicate with (√) the extent to which the following factors affect access and usage of information centres services and resources.

Statement	1	2	3	4	5
Availability of resource					
Accessibility of information centres					
Quality of resources					
Staff assistance					

5. Indicate some of the signs and labels that are necessary to help navigate the information centres resources access and utilize information centres services and sources

.....

6. Evaluate the role of training in providing the desired information centres services

On a scale of 1-5 indicate with (√) to what extent you agree or disagree training information centres services and sources have been of great help. Key 1- Strongly Disagree; 2- Disagree; 3- Undecided; 4- Agree; 5- Strongly Agree

statement	1	2	3	4	5
Training helps you improve your use of information centres services.					
Digital training has enhanced the research study.					
Training in general has greatly assisted in the study.					
Databases in research are very helpful.					
The use of an online catalogue has improved my study.					
Creating awareness of training improves motivation.					
The training enabled students to effectively and efficiently use the information centres resources.					

CHALLENGES FACED BY STUDENTS IN ACCESSING AND UTILIZING INFORMATION CENTRES RESOURCES AND SERVICES

7. On a scale of 1-5 indicate with (√) to what extent you agree or disagree on the challenges facing access and utilization of information centres services and resources has been of great help. Key 1- Strongly Disagree; 2- Disagree; 3- Undecided; 4- Agree; 5- Strongly Agree

statement	1	2	3	4	5
Limited resources					
Inadequate training programs					
Insufficient staff					
Poor attitudes towards librarians					
Inadequate infrastructure					
Inadequate sitting facilities					
Slow internet connectivity					
Lack of awareness of services offered in the information centres.					
Lack of technical skills.					
Fear of intimidation					
Lack of enough time					
Confusion with the database interface					
Lack of awareness on accessing online databases					
Lack of research skills					
Lack of training					
Lack of awareness in knowledge of information centres services					
Lack of up-to-date information materials					

What is your opinion are the challenges facing access and utilization of information centres services and resources at Nyeri National Polytechnic?

.....

.....

.....

LIBRARIAN'S QUESTIONNAIRE.

Kindly indicate with (✓) where applicable.

1. Gender:

Male	
Female	

FACTORS THAT ENHANCE ACCESS AND UTILIZATION OF INFORMATION CENTRES RESOURCES AND SERVICES

2. On a scale of 1-5 indicate with (✓) to what extent you agree or disagree with user access and utilization of information centres services and resources. Key 1-strongly disagree 2- disagree, 3-undecided 4-agree 5-strongly agree.

Statement	1	2	3	4	5
Information centres users can use the catalogue effectively to retrieve materials.					
Motivation to use the information centres amongst users has increased.					
Most of the users have a higher understanding regarding the arrangement and organization of materials in the information centres.					
Students visiting the information centres have increased significantly.					
Access to online information centres materials has too improved due to increased awareness.					
Students are more willing to borrow learning materials than before					
adequate resources and facilities					
The training enabled students to effectively and efficiently use the information centres resources.					
There has been proper communication between the librarians and users.					

3. Indicate some extra information about access and utilization of information centres services and sources.

.....

The role of training in providing the desired information centres services

4. On a scale of 1-5 indicate with (√) to what extent you agree or disagree on user training on information centres services and resources. Key 1- Strongly Disagree; 2- Disagree; 3- Undecided; 4- Agree; 5- Strongly Agree

statement	1	2	3	4	5
Training is effective and successful when it links to organizational needs.					
Effective training is designed with the aim of teaching skills and behaviours which help the organization achieve its goals.					
Poor managerial duties affect the effectiveness of training negatively.					
Managers with open-mindedness affect training positively.					
The use of an online catalogue greatly improves the study.					
The effectiveness of training always depends on how the training is given.					
Training is effective and successful when it assists the overall users with adequate skills.					

CHALLENGES FACED BY LIBRARIANS IN ACCESSING AND UTILIZING INFORMATION CENTRES RESOURCES AND SERVICES

5. On a scale of 1-5 indicate with (√) to what extent you agree or disagree on the challenges facing access and utilization of information centres services and resources
 Key 1- Strongly Disagree; 2- Disagree; 3- Undecided; 4- Agree; 5- Strongly Agree

statement	1	2	3	4	5
Budget constraints					
Balancing print and digital collections					
Data privacy and security					
Information overload					
Supporting diverse needs eg disabled					
Staffing constraints					
Managing user expectations					
Technological advancements					
Ensuring accessibility					
Collection management					
User education and training					
Adapting to changing roles					
Advocacy and perception					
Lack of up-to-date information materials					

What is your opinion are the additional challenges facing access and utilization of information centres services and resources at Nyeri National Polytechnic?

.....

.....

.....

QUESTIONNAIRES FOR LECTURERS

Kindly indicate with (✓) where applicable.

1. Gender

Male	
Female	

FACTORS THAT ENHANCE ACCESS AND UTILIZATION OF INFORMATION CENTRES RESOURCES AND SERVICES

2. On a scale of 1-5 indicate with (✓) to what extent you agree or disagree with access and utilization of information centres services and resources. Key 1-strongly disagree 2- disagree, 3-undecided 4-agree 5-strongly agree.

Statement	1	2	3	4	5
Access to high-quality resources					
ease of access(user-friendly information centres system					
Research support					
Integration with teaching					
Promotion and communication					
Technology and innovation					
Conducive environment					
Recognition and support					
Institution support.					

Indicate some other benefits of access and utilization of information centres services and resources.

.....
.....

The role of training in providing the desired information centres services

3. On a scale of 1-5 indicate with (√) to what extent you agree or disagree on user training on information centres services and resources. Key 1- Strongly Disagree; 2- Disagree; 3- Undecided; 4- Agree; 5- Strongly Agree

Statement	1	2	3	4	5
Supported students engagement					
Improved research efficiency					
Enhanced teaching and curriculum development.					
Incorporated information centres resources in teaching.					
Supporting academic publishing					
Collaborating in research opportunities.					
Improved networking					
Enhanced information literacy					
Updated technological advancement					
Supported students engagement					
Promoted lifelong learning					
Enhanced institutional reputation					

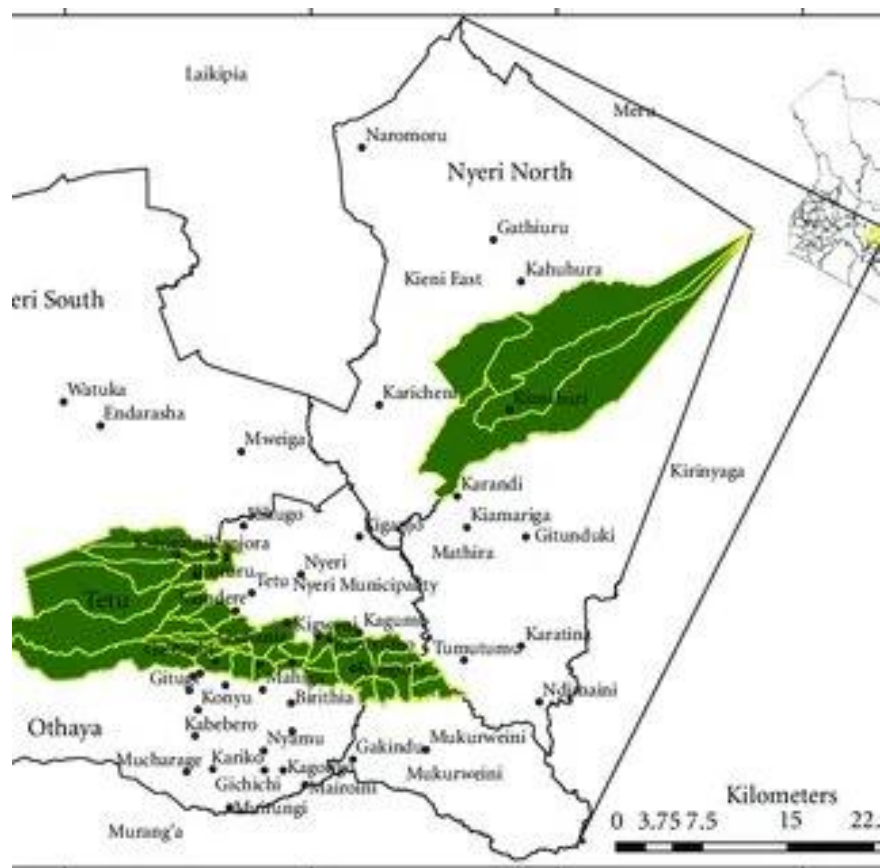
CHALLENGES FACED BY LECTURERS IN ACCESSING AND UTILIZING INFORMATION CENTRES RESOURCES AND SERVICES

4. On a scale of 1-5 indicate with (√) to what extent you agree or disagree on the challenges facing access and utilization of information centres services and resources
Key 1- Strongly Disagree; 2- Disagree; 3- Undecided; 4- Agree; 5- Strongly Agree

Statement	1	2	3	4	5
Budget constraints					
Research challenges					
Resource quality and relevance					
Lack of collaboration with librarians					
Institutional policies and restrictions					
Physical accessibility					
Language and cultural barriers					
Navigating complex information centres systems					
Access issues					
Limited awareness and familiarity					
Technical challenges					
Adapting to changing roles					
Lack of personalized support					
Changing roles and expectations					

What is your opinion are the additional challenges facing access and utilization of information centres services and resources at Nyeri National Polytechnic?

Appendix IV: Map of the Study Area



Appendix V: Publication



INTERNATIONAL JOURNAL OF RESEARCH AND INNOVATION IN SOCIAL SCIENCE (IJRISS)
ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume VII Issue V May 2023

Library User Education and Training Needs. A Case of Nyeri National Polytechnic – Kenya

Roseanne Mungai¹, James Ochieng Ogalo (PhD)²

¹Master student School of Information Science and Technology – Information Science Department – KISII UNIVERSITY- Kenya

²Lecturer – School of Information Science and Technology – Computing Department – KISII UNIVERSITY- Kenya

DOI: <https://doi.org/10.47772/IJRISS.2023.70582>

Received: 21 March 2023; Revised: 01 April 2023; Accepted: 06 April 2023; Published: 13 June 2023

ABSTRACT

The library holds a central place in learning institution and its main goal is provide resource for teaching, research, publishing, and innovation. This study sought to find out the effect of library user education on access and use of library services and resources. The study used a descriptive research design. The total target population was 640, comprising of 600 students, 30 lecturers and 10 librarians. Stratified sampling technique was used to categorize sample into student's, lecturers and librarians. The Krejci and Morgan formula was used to calculate a sample size of 240 respondents. Data were collected using questionnaires, observation checklists, and field notes. Qualitative data were thematically analyzed and the Statistical Package for the Social Science (SPSS) was used to analyze quantitative data. The study observed that Nyeri National Polytechnic promotes fairness in the use of library, the extent in use of library resources, depends largely on users' skill and knowledge of information search and retrieval and that at Nyeri National Polytechnic, there is increased access of information needed by library users after holding of promotion campaigns. The study concludes that library user education, library policies and library promotion all had a positive impact and on utilization of library services and sources in Nyeri National Polytechnic. Based on the study findings this study recommends that the management of technical training institutes should come up with policies that touch all areas of library operations and educate the users about the policies.

BACKGROUND TO THE STUDY

Teachers require various kinds of information for teaching and research for imparting knowledge in students and self-development. To achieve these, the right information must be available for the right person at the right time in its appropriate format, which is the responsibility of the library. Accessibility of information sources is very important (Ajith, 2019). The more accessible information sources are, the more likely they are to be used. Students tend to use information sources that require the least effort to access and this can be eased by offering user education programs. The quality of teaching, research, and community services of teachers in any institution depends on information sources and services. Information accessibility and utilization are essential to the teaching, research, and service activities of students.

Ajith (2019) was able to show that students who used library services and resources for project citations reported a significant improvement in their critical thinking abilities. Troy (2017) found a positive correlation between student's academic achievement and the use of library resources and services such as catalog, seeking assistance from library staff, and using different library materials such as electronic resources, journal articles, books and reference works. According to Anyaoku (2015) academic libraries'



performance in response to research, which demonstrates that library usage contributes to the academic achievements of students.

The three key aspects include; availability of resources, accessibility, and use of the resources.

Across the globe, higher learning institutions are ensuring access to library resources a technique of improving education. In the United Kingdom, Muir, Spacey, Cooke, and Creaser (2016) observed that library resources play an essential role in supplementing the educational needs of students. In India, Sinha (2016), found that library user education has a positive impact on the quality of students' education. Further, the study established that user education is paramount for the effective utilization of library resources. Similarly, Suleiman (2018) in Malaysia also reaffirms that user education program is useful to students both in carrying out a class assignment and in their overall academic performance.

A survey by Asemi and Riyahiniya (2016) investigated the relationships between awareness and the use of digital resources among students at Isfahan University of Medical Sciences. The results indicated that 70 percent of students were aware of digital resources, but only 69 percent of them have used them; 62 percent were aware of offline databases, whereas only about 19 percent used them through the Central Library LAN network. About 70 percent were aware of online databases, accessible via the Central Library website, and about 53 percent of respondents have used them. A total of 64 percent were aware of the "CLBJ Database", while over half of them made use of it. In total 87 percent of students felt that the available data resources met their information needs.

Troy (2017) study on access and utilization of library services by students from Māori, a New Zealand, indigenous and minority tribe, concluded that the students faced three main challenges in utilizing library services: including inadequate structural/physical resource, institutional challenges and personal perspectives on the use of library services. Students studied by Anyaoku (2015) found out that the students visited the college library to read personal textbooks, newspapers, sourcing information for research or project work, and class assignments.

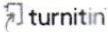
The access and utilization of library services and resources as an essential element in improving education as posited in the Vision 2030, Kenya's development blueprint covering the period 2008-2030. The blueprint aims at making Kenya a globally competitive and prosperous nation with a high quality of life by the year 2030. This policy comprises three pillars: economic, social, and political. The social pillar, which is geared towards a just and cohesive society enjoying equitable social development in a healthy and secure environment, outlines issues on education and training (Kelemba, 2018). A student who performs well in their exams tends to use library services and resources more.

Chibini (2017) studied the use of electronic resources in the Strathmore university library. The study revealed that users were aware of the resources but the use of the resources was low. This was attributed to inadequate skills, low bandwidth, work overload, and publishers' embargos. The core functions of research, teaching and learning are enhanced by access and use of library products and services by the students, administrators, and other staff. The university library acquires, organizes, and ensures irretrievability of information resources such as books, theses, journals, government publications, encyclopedia, dictionaries, e-journals, e-books among others. A university library also renders reference, lending, current awareness, dissemination of information, photocopying, user education, online database searching services, among others.

Statement of the Problem

The study was prompted by the observation that, despite government effort in building institutions' library capacity, there is less utilization of the library resources and services. Studies have been conducted to

Appendix VI: Plagiarism Report



Page 2 of 104 - Integrity Overview

Submission ID: trn:oid::1:3615387736

17% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

Filtered from the Report

- Bibliography
- Quoted Text

Match Groups

-  **299 Not Cited or Quoted** 16%
Matches with neither in-text citation nor quotation marks
-  **30 Missing Quotations** 1%
Matches that are still very similar to source material
-  **0 Missing Citation** 0%
Matches that have quotation marks, but no in-text citation
-  **0 Cited and Quoted** 0%
Matches with in-text citation present, but no quotation marks

Top Sources

- 15%  Internet sources
- 11%  Publications
- 7%  Submitted works (Student Papers)

Integrity Flags

0 Integrity Flags for Review

No suspicious text manipulations found.

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.

School Of Postgraduate

RoseAnn June 26 DETERMINANTS OF ACCESS AND UTILIZATION (1) (1).docx

-  DETERMINANTS OF ACCESS AND UTILIZATION OF LIBRARY SERVICES THROUGH TRAINING: A CASE OF NYERI NATIONAL POLYTECHNIC
-  Postgraduate
-  Kisii University

Document Details

Submission ID

trn:oid::1:3615387736

89 Pages

Submission Date

Jul 22, 2026, 9:51 AM GMT+3

22,080 Words

Download Date

Jul 22, 2026, 9:56 AM GMT+3

135,560 Characters

File Name

RoseAnn_June_26_DETERMINANTS_OF_ACCESS_AND_UTILIZATION_1_1_.docx

File Size

1.0 MB