EVALUATING ACCESS AND USE OF LIBRARY INFORMATION RESOURCES AMONG STUDENTS AT RIFT VALLEY NATIONAL POLYTECHNIC, NAKURU COUNTY, KENYA

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A Thesis Submitted to Graduate School in Partial Fulfilment of the Requirements for the Degree of Master of Science in Information Science of Egerton University

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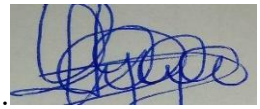
DECLARATION AND RECOMMENDATION

Declaration

This thesis is my original work and has not been presented in this University or any other for the award of a degree.

Signature……  Date: 1/10/2025

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Recommendation

This thesis is submitted for examination with our approval as University Supervisors.

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DEDICATION

To my daughter, Victoria, my parents Joseph and Rose

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ABSTRACT

Academic libraries play a critical role in supporting teaching, learning, and research within higher education. With the increasing prevalence of digital technologies, libraries now provide both physical and digital resources, including e-journals, databases, and e-books. However, students often make limited use of these resources. This gap between availability and actual use highlights the need to understand what influences students' engagement with library materials. Without such understanding, libraries may struggle to fully support academic success. Therefore, this study aimed to evaluate access to and use of library information resources for academic success among students at Rift Valley National Polytechnic (RVNP) .The specific objectives of the study were: establish the availability of information resources at Rift Valley National Polytechnic library to meet students' information needs, examine the access and utilization of library information resources among students at Rift Valley National Polytechnic Library to fulfill their information needs and to analyze Library users' experiences and satisfaction with the information resources at Rift Valley National Polytechnic in meeting their academic information needs. The research employed the Expectation Confirmation Theory and adopted a mixed-methods approach. The study population comprised 2025 RVNP students, from which a stratified random sample of 206 students was selected, along with one librarian for an interview. Data collection involved student questionnaires and a face-to-face interview with the librarian. Quantitative data were analyzed using SPSS with descriptive and inferential statistics, while qualitative data underwent thematic content analysis. The results indicate that print information sources remain the primary information resource in TVET libraries, with limited availability of electronic resources. The study recommends increased investment in electronic resources and digital infrastructure to remain relevant in today's technologically driven environment.

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LIST OF ABBREVATIONS AND ACRONYMS

ARL	Association of Research Libraries
CBET	Competency-Based Education and Training
ECT	Expectancy Confirmation Theory
ICT	Information Communication Technology
KLISC	Kenya Libraries and Information Services Consortium
OA	Open Access
RVNP	Rift Valley National Polytechnic
TVET	Technical Vocational Educational Training
UNESCO	United Nations Educational Scientific and Cultural Organisation

CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Technical and Vocational Education and Training (TVET) involve education and learning that equip individuals with practical knowledge, skills, and competencies for both the formal and informal sectors (Technical and Vocational Education & Training Authority, 2018). It prepares learners to become craftsmen, technicians, and technologists, thereby contributing directly to workforce development. TVET institutions aim to reduce poverty by empowering young people with employable skills, enabling them to secure decent jobs and sustainable incomes. Recognizing that economic growth depends on a skilled and productive workforce, many governments have increased investment in quality vocational education and training as a strategy to promote employment and drive economic transformation.

The Kenyan government has identified and shifted focus to TVET institutions more than ever before to achieve quality education and improve the employability of its citizens. TVET Libraries as sources of information resources are thus an important asset to achieving the transformational education and employment creation goal set for TVETs. In consideration of this, funds invested in TVETs have also been channelled towards improving their library status. However, there exists limited evidence in the current body of literature elaborating how and to what extent TVET libraries in Kenya are implementing their mandate.

Libraries play an essential role in supporting education, learning, innovation, and research. Worldwide, academic libraries ensure access to information and thus directly support teaching, learning, and knowledge creation. Today, libraries have evolved from traditional repositories of physical books to hybrid academic libraries that offer users a wide range of digital information resources, including electronic journals, online databases, and e-books (Chirchir & Musyoka, 2013). Further, empirical studies conducted in well-endowed countries have shown that improved students' academic performance is influenced by frequent access and use of library information resources. Thus, students who frequently engage with library information resources are likely to achieve better grades compared to their peers who do not (Wanyonyi et al., 2018). However, although the advancement of digital technologies in academic libraries has improved access to information resources worldwide, inequality continue to persist.

Students in African countries face challenges such as outdated information resources and technological barriers that impede effective use of information resources in meeting their academic needs.

Globally, availability, accessibility, user awareness, user education, and perception of users on service quality are determinants of how students engage with library resources (Boakye et al., 2022). For instance, in continents such as North America and Europe with advanced education systems, libraries have significantly invested in digital technology, including institutional repositories, online databases, online catalogues, and digital lending. These significant investments have led to high use of information resources.

By contrast, in African countries, especially in Sub-Saharan countries, academic libraries face multiple obstacles such as financial constraints, limited trained staff, outdated resources, lack of user awareness, and inadequate infrastructure that often hinder effective library services (Diki, 2022). These challenges often hinders students' access to and use of information resources. Consequently, many countries struggle to fully adopt electronic resources and provide access to information resources due to poor internet access and limited digital literacy among students, which contributes to reliance on print materials. Furthermore, lack of awareness and negative users' attitude and perspective of the service provided determines the continued use of information resources and the level of satisfaction (Diki et al., 2022).

Within, the Kenyan context, the Kenyan government has shifted focus to the education system more than ever before as a key element for creating employment opportunities and the implementation of its Big Four Agenda, which is aimed at achieving Vision 2030. TVET colleges aim to offer high quality education and eradicating poverty by empowering learners to become economically literate and to combat poverty among young people by providing them with avenues to secure good jobs and adequate income in the informal and formal sectors of the economy which has in turn increased demand for library resources and services. However, despite, the government efforts to improve the education system through providing radical reforms in education policies and framework on integrating ICT in education sector as well as digitizing library services, these policies have not been effectively implemented. Consequently, universities and National polytechnics alike continue to face challenges of providing adequate information resources to serve the growing students population experienced recently.

Further, inequality persist because the capacity of universities to provide resources is generally better than that of polytechnics (Koech & Mutai, 2015). As a result, institutions continue to face persistent obstacles such as poor network, obsolete collections, inadequate information resources, and limited access time to information resources. Consequently, many students rely more on lecture notes or peer-shared materials than on formal library holdings (Wanyonyi et al., 2018; Zipporah et al., 2023).

In this regard, National Polytechnics, as TVET institutions, are unique in nature because most of their courses are technical. Their focus is designed on providing learners with practical, skills and competencies that are relevant to the job market in the formal and informal sector of the economy, which require access to specialized and often technical information resources (Technical and Vocational Education and Training Authority, 2018). However, despite this need for a unique context, many researchers have focused on the he utilisation of information resources in Universities academic libraries and little research has been devoted to Kenyan polytechnics (Mong'are, 2014). This research gap is particularly significant as students in TVET institutions may present different, unique information-seeking behaviors and different academic support requirements hence, Polytechnic students may find it difficult to meet academic requirements and can affect their preparedness for the workforce.

At the institutional level, Rift Valley National Polytechnic (RVNP) stands out as one of the largest polytechnics in Nakuru County and Kenya at large. The library provides both print and digital resources, which serves as a central academic support unit in supporting teaching learning and research activities. Nevertheless, questions about the adequacy , relevancy , accessibility of library services, and the extent to which students effectively access and use what is available is poorly understood. Moreover, it is unclear how satisfied students are with the services provided, especially given the challenges of limited infrastructure, high demand, and evolving user expectations and needs (Chirchir & Musyoka, 2013; Koech & Mutai, 2015).

Equally important, the current generation of learners, often referred to as Generation Z (born between 1995 and 2010), now represents the majority of students enrolled in higher education, particularly at RVNP. Generation Z generation is widely described as digital natives who have grown up with constant access to the internet, smartphones, and social media platforms.

Unlike previous generations, their information-seeking habits are strongly influenced by rapid technological change, online interactivity, and the expectation of instant access to information **(**Berk, 2009; Prensky, 2001). Studies further indicate that Gen Z learners prefer fast, user-friendly, and technology-based access to resources rather than traditional print materials **(**Seemiller & Grace, 2017). They frequently rely on search engines, online databases, and digital repositories for academic work, while also using social networks and peer-sharing platforms for informal learning. This trend represents a major shift from passive use of library resources toward more active, self-directed, and collaborative approaches to knowledge acquisition (Williams et al., 2012).

The success and effectiveness of academic libraries to demonstrate its value as a worthwhile investment can only be achieved by understanding the changing demands of users' needs and strategizing on providing library services that cater for these evolving user's needs. A library can only truly serve as vital in academic activities when it supports the institution's objectives by possessing ample and well-utilised resources. The significance and influence of a library are demonstrated through the utilisation of its diverse resources. Therefore, evaluating access and use of information resources in the RVNP library is important because it helps library staff and administrators understand how the library is being used and identify any barriers to access that exist. This information can then be used to make improvements and better serve the academic needs of the students. The findings revealed at, RVNP library can also determine whether their services are meeting its crucial role in supporting teaching, learning and research through provision of information resources that meet the curriculum needs of their students.

1.2 Statement of the Problem

Academic libraries are vital for supporting students' learning, research, and skill development, yet their effective utilization remains a challenge. In Kenya, most research on library use have focused on universities, highlighting obstacles such as inadequate ICT infrastructure, limited access to digital databases, and insufficient user training (Koech & Mutai, 2015; Wanyonyi et al., 2018). By contrast, relatively little research has been conducted on National Polytechnics and other TVET institutions, despite their growing student enrollment and distinct practical learning needs. Unlike universities, National Polytechnics need specialized and technical resources to support hands-on training, yet what influences students' access to and use of these resources remain poorly understood (Mong'are, 2014).

At Rift Valley National Polytechnic (RVNP), the library plays a central role in supporting students, but concerns still exist about the adequacy and accessibility of resources, as well as how satisfied students are while using them.

National Polytechnics frequently encounter challenges such as insufficient internet bandwidth, outdated collections, and restricted access to electronic resources. (Koech & Mutai, 2015). Consequently, students depend more on lecture notes and peer-shared materials than on formal library holdings (Wanyonyi et al., 2018). This underuse is concerning because TVET students often need specialised resources, like updated technical manuals and digital learning tools, to develop industry-relevant skills. Limited access may harm both academic performance and workforce readiness. Therefore, understanding the access to and use of information resources at the RVNP library is crucial to closing this gap, enhancing service delivery in National Polytechnics, and ensuring libraries effectively support teaching, learning, and the development of technical skills.

1.3 Objectives of the Study

The overall objective of this study was to evaluate access and use of library Information resources for academic success among students in Rift Valley National Polytechnic (RVNP). The specific objectives were to:

i. Establish the availability of information resources at Rift Valley National Polytechnic library to meet students' information needs.
ii. Examine the access and utilization of library information resources among students at Rift Valley National Polytechnic library to fulfill their information needs.
iii. Analyze Library users' experiences and satisfaction with the information resources at Rift Valley National Polytechnic in meeting their academic information needs.

1.4 Research Questions

i. What information resources are available for students at Rift Valley National Polytechnic library?
ii. How are information resources accessible for use by students in RVNP college library?
iii. What are the users' expectations and experiences regarding library information resources in the Rift Valley National Polytechnic library?

1.5 Justification of the Study

To achieve the development agenda of Kenya's Vision 2030 and Big Four Agenda, the government has shifted focus to TVET colleges more than ever before. This resulted to an increased investment in the institutions hence increasing interest in pursuing tertiary education compared to past years. The negative perception of TVETs, as being a learning institution or college for failures, has significantly diminished because those individuals who don't score relatively high grades in high school have an opportunity to successfully further their education and make a life for themselves. This therefore increases the demand for knowledge and information, a gap that the library fills exceedingly well. Mbolonzi (2021) noted that Kenyans are more likely to enroll in TVET programs when there is a steady flow of information.

Libraries often have more authoritative, reliable and accurate information, updated, related subjects and content put together with bibliographic details than what you might find on the internet. This is because the information in a library has been vetted by experts and is generally more trustworthy. According to Kumah (2015) even though the Internet has a large amount of information, the relevance, quality, and authenticity should not be neglected. In the same vein, Howard (2019) also notes that the explosion of information online hasn't sidelined librarians. It's only made them more essential at a time when too few of us know how to distinguish real news from the fake variety. A comprehensive understanding of how various services and resources are utilized enables library management to make informed decisions that enhance service delivery. This insight facilitates the resolution of challenges students encounter when accessing library resources, ultimately leading to improved overall service.

1.6 Scope and Limitation of the Study

This study was conducted at Rift Valley National Polytechnic (RVNP) in Kenya, focusing on the three objectives of the study which were to establish the available information resources, examine how students access, and use information resources, and to analyse the experiences students encounter when using these resources in fulfilling their information needs, with students and librarians as the main respondents. The study investigated how the library information resources, both print and non-print were used to influence the students' academic outcome. While the findings provided meangful insights for understanding and improving library services at RVNP, the study had some limitations. The study was conducted on one institution, which may limit the generalizability to all polytechnics in Kenya.

Additionally, data was collected through self-administered and depended on participants' self-responses, which could be prone to bias. Despite these limitations, this study provides empirical evidence on understanding how students' access and use of information resources in RVNP library.

1.7 Definition of Terms

Accessibility - The ease with which a person may enter a library, gain access to its online systems, use its resources, and obtain needed information regardless of its format. In a more general sense," the quality of being able to be located and used by someone" (Reitz, 2002). Ukachi (2015) defines accessibility as Accessibility refers to the ease with which information resources can be easily found, retrieved, and utilised by intended users, regardless of their format or location. This highlights convenience and usability as key aspects.

Access time - The time it takes a computer to retrieve data from a storage medium such as a hard drive, CD-ROM, or remote server is dependent on the correct procedures being followed by the user. In online retrieval, the speed of the Internet connection is an important factor, but even with a fast connection, access time may be slower during periods of peak use (Reitz, 2014).

Availability –presence of an information resource for immediate use .The circulation status of a specific item or category of items in a library collection (Reitz, 2014).

Library information resources - these are materials that are used by the library in order to support learning and all the other needs of the target users of the library.

They can be in both printed and electronic formats including textbooks, journals, indexes, abstracts, newspapers, magazines, reports, CD-ROM databases, internet, email, videotapes/cassettes, diskettes, computers, and microforms (Ogbebor, 2011).

Library information services - these are activities that libraries and their personnel render to meet the information needs of their users.

Utilisation - the extent to which a resource or service is used for its intended purpose.

CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction

This chapter discusses the existing literature related to the availability of information resources, access and use of information resources, and user's expectations of the users on library information resources and theoretical framework.

2.1 Availability of Information Resources

The availability of information resources lies at the foundation of effective teaching, learning, and research in academic institutions. For students in TVET, the adequacy and relevance of these resources is even more critical, as the pedagogy is often practical, skills-oriented, and tied to the needs of industry (Marope et al., 2015). Availability refers not only to the physical presence of resources within the library but also to their adequacy in terms of quality, quantity, relevance, and format (Aguolu & Aguolu, 2002). Without availability, issues of access, utilisation, and satisfaction become secondary, as students cannot use what is not there.

Libraries in economically advanced countries, worldwide, for example United States, United Kingdom, and Canada, have experienced a significant transformation on how they acquire, organize and deliver information resources. Equitable access to academic literature has been contributed due to adequate funding, collaborative initiatives and strong reforms hence reducing discrepancies among institutions. For instance, Tenopir et al. (2015) examined the changes in availability and access to information resources in wealthier countries. The purpose of the study was to determine the significance of digital transformation and the role of library in consortia in resource availability. Information Behavior Model was used to inform the study. Longitudinal survey was the research design adopted. The target population comprised Academic Research Libraries (ARL) in North America, with a sample of 125 member libraries. The target population comprised Academic Research Libraries (ARL) in North America, with a sample of 125 member libraries. The findings highlighted that improved equitable and reduced disparity among institutions was a result of availability of information resources enhanced by digital innovations, collaborative licensing agreements and shared consortium models.

The rapid development and integration of ICT in academic libraries has brought a paradigm shift in the way information resources are available and accessible to users. Nowadays, information resources are available and accessed far beyond the physical building anywhere and anytime due to the expansion and developments of technology in regards to electronic databases and institutional repositories.

For instance, in developed countries, Agreements between ARL in North America coordinates and major publishers has facilitated the access of high impact journal to smaller institutions (Smith, 2019).In Europe, the public can access the available Publicly funded research which has been facilitated by the European Open Science Cloud (EOSC) initiative, which aims to reduce the need for costly subscriptions (European Commission, 2020). Open access (OA) publishing has made information resources available and accessible worldwide regardless of the geographical boundary. Initiatives such as the Budapest Open Access Initiative and subsequent mandates by funding bodies like the NIH in the United States and the European Research Council (ERC) have significantly increased the volume of peer-reviewed materials freely available online (Piwowar et al., 2018).In developed countries, Universities have heavily invested their resources in digitizing their rare manuscripts and projects in their digital repositories to facilitate their access globally. Despite these advancements many libraries in developed countries are still confronted with challenges. Many academic libraries are unable to afford the increasing high cost from commercial publishers like Elsevier, Wiley, and Springer due limited budget resulting to limited availability of information resources (Larivière et al., 2015) . Nevertheless, Innovation and collaborative agreements are still relevant in the expansion of resources worldwide

In contrast, there is a different reality in the African context. Persistent challenges such as underfunding, obsolete collections, and infrastructural weaknesses continue to negatively impact the role of academic libraries across Sub-Saharan Africa (Ocholla, 2020).Insufficient budget, has led many academic libraries to heavily rely on donor-funded initiatives and external partnerships such as Research4Life, which provide free or low-cost access to journals for developing countries(Rosenberg, 2019). Digital divide continue to persist in many different African countries. A study by Chisita and Chiparausha (2019) highlighted that while universities in South Africa are advantaged from comprehensive e- resources and well-developed ICT infrastructures, many libraries in Zimbabwe, Nigeria, and Kenya continue to experience digital divide.

Additionally, financial constraints have hindered many academic libraries from integrating electronic information resources into their collections, denying postgraduate students the opportunity to use these resources for global knowledge and research. As a result, traditional undergraduate textbooks continue to dominate over subject-specific journals or scholarly databases (Moahi & Ojedokun, 2018). Further, Sejane (2017) examined access to and use of electronic information resources in the academic libraries of the Lesotho library consortium. The objective of the study was to determine the types of e-resources available, how they are accessed and used, and the challenges faced by member institutions. The Unified Theory of Acceptance and Use of Technology (UTAUT) model, was used to inform the study. The study adopted a mixed method of qualitative and quantitative approaches. The target population comprised nine member institutions. Data was collected through self-administered questionnaires distributed to librarians (systems, subject, and acquisitions librarians) and semi-structured interviews with senior administrators such as Pro-Vice Chancellors, Rectors, and Library Directors. The response rates were 69.6% for librarians, 44.4% for senior administrators, and 56% for library directors. Quantitative data were analyzed using SPSS Version 20.0, while qualitative data were examined through thematic content analysis. Findings revealed challenges such as budget cuts, poor internet connectivity, lack of ICT infrastructure, limited searching skills, and absence of e-resource collection development policies hindered optimal use.

Delays in acquisition caused by bureaucratic processes are another major issue. It can take months to years before purchasing of new information resources collection due to Government inefficient procurement systems (Nwagwu, 2019). In many developing countries financial instability caused by political instability negatively affect foreign exchange required to pay for journal subscriptions and online databases. However, opportunities to improve availability exist, despite these numerous challenges. Collaborative initiatives such as regional consortia, for example, South African Site Licensing Initiative (SASLI) and the Consortium of Tanzanian Universities and Research Libraries (COTUL) have received huge discount rates because of enhanced collective bargaining power, enabling wider availability of digital resources at subsidized costs (Ocholla, 2020).

To Achieve the African Union's Agenda 2063 devoted attention has been focused on integration of ICT to create knowledge economies, resulting in national governments shifting attention to the role of libraries in achieving educational development goals.

In Kenya digital divide between Universities and TVET institutions is a reality. Inconsistencies in the availability of information resources in higher education academic libraries have been a challenge for a long time, with university libraries receiving more funding compared to TVETS libraries. For example, the Universities such as the University of Nairobi and Egerton University, which are members of the Kenya Library and Information Services Consortium (KLISC), benefit from discounted subscription databases including Emerald, JSTOR, and Springer (Mutula, 2021). However, TVET institutions like RVNP continue to face greater challenges like limited budgets which are common, and these limited library budgets competes with other essential needs, such as laboratory equipment, infrastructure maintenance, and staff salaries (Ayilo & Kemboi, 2023). Accordingly, Waweru and Chege (2022) examined the state of information resource availability in TVET institutions in Kenya. The aim of their study was to establish the impact of library collections in supporting teaching, learning, and research. Specifically, the objectives focused on examining the extent to which TVET libraries provided relevant information resources to meet students' information needs. A descriptive survey design was used to targeting TVET colleges across Kenya. The population consisted of students and librarians in selected TVETS, from which a stratified random sample of 210 students and 12 librarians was drawn. Data were collected through structured questionnaires and interviews, and analysis was conducted using descriptive statistics supported by qualitative thematic analysis. The findings revealed that most TVET libraries in Kenya are dominated by outdated print textbooks, with limited availability of electronic resources and research databases. The study concluded that inadequate funding and lack of ICT infrastructure remain critical barriers. While this study provided insightful information, a research gap was identified. The knowledge gap identified is that the study did not deeply study factors such as satisfaction and access, leaving room for further inquiry.

The predominance of traditional books in many TVET libraries in Kenya, with limited access to up-to-date journals, e-books, and online databases clearly demonstrates digital gap. Even when these information resources exist, there utilisation is limited due to lack of comprehensive user education and weak ICT infrastructure. Government initiatives such as the Kenya Vision 2030 blueprint underscores the significant role of TVET in driving industrialization and economic growth. However, there is little effort made in libraries within TVET institutions compared to universities libraries, leaving students with insufficient access to current, specialized resources required for technical training (Republic of Kenya, 2018).

Mukundi and Njuki (2019) highlighted the importance of integrating digital libraries in TVET institutions in Nyeri County, Kenya. They argued that digital libraries support competency-based education and training (CBET) and contribute to promoting sustainable development. This gap creates a digital divide with learners in universities more advantaged compared to TVET students.

Several challenges continue to hinder the availability of information resources in academic libraries, especially in Kenya's TVET sector. Financial constraints remain the most significant barrier, as underfunding prevents libraries from acquiring adequate or up-to-date materials (Ozioko, et al., 2014). Many collections are outdated, with some relying on books published over a decade ago, which are often irrelevant in fast-evolving fields such as ICT, engineering, and health sciences (Okiki, 2013). Disparities in allocation of resources between institutions also affect availability; while well-established universities may afford diverse comprehensive subscriptions because of more financial allocation in their library budgets, national polytechnics and rural institutions face acute resource shortages (Mwangi & Njoroge, 2021). Poor infrastructure, such as lack of modern ICT facilities, poor internet connectivity, and unreliable power supply, further limits the acquisition and use of electronic resources (Chisita & Chiparausha, 2019). Additionally, small TVET institutions are often inadequately supported due to inefficiencies in policy and procurement procedures, causing frequent delays and the absence of a policy framework that prioritizes and evenly distributes resources (Nwagwu, 2019).

Although limitations persist, several positive developments are improving availability. The global Open Educational Resources (OER) movement supplies free, adaptable learning materials that TVET libraries can integrate into their collections (UNESCO, 2019). In addition, Institutional repositories offer another promising avenue, allowing locally produced research such as student projects and theses to be made widely accessible (Okello-Obura, 2020). Library user demands are constantly evolving, therefore satisfying the informational demands of all library users is a difficult task for academic libraries to fulfil. Hence, many academic libraries in Kenya today have realized that no library can exist in isolation and be self-sufficient regardless of its size and following.

Furthermore, academic libraries have had to contend with a reduction in their budget especially in this period of global economic recession. To diffuse these challenges, many academic libraries are forming some consortia. Consortia can be found at different levels such as international, regional or national level.

For instance, International Network for Availability of Scientific Publication (INASP) is a co-operative network that provides an opportunity for academic libraries in Africa to access international and scholarly published work through negotiating for heavily discounted or free access to online information from publishers and information providers in developed countries. At the national level, Kenya Libraries and Information Service Consortium (KLISC) was formed in 2003 and draws its members from academic libraries, research institutions libraries, and public/national libraries. However, at the commencement of the study, RVNP was not a member of the KLISC.

Expanding KLISC's reach to include all TVET institutions could greatly improve access to international databases at lower costs, while public-private partnerships among the government, libraries, and others can broaden access to e-books, digital labs, and cloud resources. Such innovations have the potential to close the access gap and foster more equitable learning opportunities for students across Kenya.

In summary, despite the rapid advancement in library technology leading to improved availability of information resources globally such as open access, and collaborative initiatives, significant inequality in academic libraries continue to persist at regional and institutional levels. African libraries particularly Kenyan TVET libraries—continue to struggle with persistent challenges such as underfunding, outdated collections, and infrastructural barriers. However, OER, digital repositories, and consortium-based resource sharing are new avenues through which academic libraries provide alternative solutions. For TVET institutions like Rift Valley National Polytechnic, strategically addressing these availability gaps is essential to maintain the significant role of the library in supporting institution goals and objectives as well as supporting the academic information needs of their users. To achieve this, developing a clear and structured collection development policy is essential for library staff to meet the academic requirements of the institution and ensure easy access to relevant resources. For institutions like Rift Valley National Polytechnic (RVNP), it is crucial to address these gaps to uphold the library's vital role in supporting institutional goals and the academic needs of users. . Additionally, as vocational education and training evolve, libraries must adapt by providing updated and pertinent information resources for all courses offered. Understanding the emerging needs of users is also vital, making a user needs analysis a necessary step for RVNP librarians to effectively cater to these requirements.

By the same token, Aguolu and Aguolu (2002) opine that it is imperative for libraries to consider curriculum needs requirements during the collection development stage of information resources to maintain its significance.

2.2 Access and Use of the Library Information Resources

The role of academic libraries in higher education is indispensable. Academic libraries support the educational objectives of the parent institution by providing access to information resources for teaching, and research. Libraries are not only custodians of information resources, but they also provide a conducive environment for socialization, where academic communities gather to brainstorm ideas, and share new knowledge. The impact of digital technologies has changed user's expectations and reshaped how users access and use information resources. As such, libraries today exist as hybrid libraries providing both print and electronic information resources.

Students often perceive libraries as vital for to their education because they provide information resources that help them meet their academic requirements such as completing assignments, revising exams and completing research projects. Students who frequently use library resources beyond classroom material often achieve positive academic outcome than those who are non-users. For example, Dent (2006), observed that there is a significant influence between academic performance and access to and use of library information resources. Students who frequently engage library information resources performed better in certain topics than those who did not despite both groups reading the same amount. Similarly, De Jager (2002) observed that, students who borrowed book for academic purposes performed well in the final grades in some courses, although this observation was not similar in all disciplines suggesting the value of information resources was not relevant in certain courses. Consequently, academic libraries should take into account the diverse curriculum requirements across various disciplines to ensure fairness and minimize disparities among them. Han, Wong, and Webb (2011) also found the frequency of borrowing books for academic purposes positively influenced the GPAs at Hong Kong Baptist University. Their findings highlights a positive correlation between the role of academic libraries in providing information resources for use and academic performance. Cox & Jantti (2012) examined the connection between student performance and library use.

They shared same conclusion as previous studies but highlighted the need for further research to build stronger arguments. Each of these case studies independently shows that the function libraries extends beyond availing information resources. They present students with the opportunity to substantiate claims more effectively, use a variety of references, and improve their academic performance. In recent years, academic libraries continue to function as hybrid libraries. Stone et al. (2013) found that academic success was positively linked with significant increase in preference for electronic and online information resources for academic purposes. This highlights the emerging preference of electronic information resource. Haddow and Joseph (2020) highlights the emerging trend of learners preference shifting from traditional print information resources to digital information resources to perform their different academic tasks .

Montgomery et al. (2021) further highlighted that digital access became crucial during the COVID-19 pandemic, when the education system experienced the sudden closure of physical classroom to learning through digital platforms ,these circumstances pushed academic libraries offer remote access to prevent learning disruptions and maintain their relevance. Owoko (2024) investigated the role of online resources in supporting skill development in TVET programs in Kenya. The study adopted a cross-sectional mixed-methods design, combining quantitative and qualitative approaches. The target population comprised 255 public TVET institutions (UNESCO-UNEVOC, 2021), from which 21 institutions were strategically sampled. A total of 100 participants, including trainers, and students, completed an online questionnaire administered via Google Forms. The findings revealed varied patterns of online resource use: 62% of respondents reported daily use, 21% monthly, 13% rarely, and 3% never. The study concluded challenges such as technical problems, poor internet connectivity were the common barriers to using online resources and affected the ability of students to experience global knowledge and achieving positive academic success. These findings highlights the importance academic library existing as a hybrid system where both print and digital resources are equally important for student success. Tenopir and Volentine (2012) highlighted the significance of digital search tools in facilitating the search and location of information resources. These tools are particularly beneficial when navigating through vast online information sources. To achieve maximum and effective use othese searching tool, it is essential that users receive training in digital searching skills. By using these tools, users can save a considerable amount of time and effort, allowing them to concentrate on completing other academic tasks.

Tenopir (2009) also argued that impact of libraries should be evaluated by how well student are able to access and use information resources to achieve academic success as well as its contribution toward achieving institution goal and objectives. In a further study, Tenopir et al., (2010) observed the role of academic libraries directly supported essential academic activities such as providing bibliographic information, securing research grants, and understanding usage patterns necessary for academic excellence.

More recently, Scoulas and De Groote (2023) noted that the impact of academic library was significant during the covid 19 pandemic period where libraries prevented learning disruptions and quickly by transitioning from traditional print to providing digital access.This swift transitioning was critical in maintaining the relevance in academic libraries in academic Institutions. The role of libraries has changed due to the rapid expansion of digital technology worldwide. For centuries, printed resources have dominated many academic libraries as a major carrier of information for teaching, learning, and research in academic libraries (Okon, 2013). However, recently, the rapid growth of the internet has brought a paradigm shift in academic libraries, transforming and reshaping the way libraries provide information resources, to meet user's new expectations and preference for accessing library services. Tenopir et al. (2009) found the shift preference for electronic information resources for academic activities by faculty in both the United States and Australia

Similarly, Xu and Du (2018) explained that users compare the ease of retrieving information on the web and expect libraries to provide information with speed, ease and convenient without difficulties. Sharma and Kumar (2016) argued that academic libraries can maintain their relevance by considering and aligning collections with curriculum requirements to provide a balanced collection of both print and digital formats. In light of these , Cox (2019) notes, the perception that physical libraries are the only spaces where students can access information resources has been diminished, due to the multi access capability of online information resources. Meanwhile Bronstein (2010) highlighted that information technology has greatly influenced how users seek and use information to acquire new knowledge. The role of academic libraries during the Covid 19 pandemic was indispensable, because they continued to maintain their relevance by swiftly transitioning to offer remote access to users thereby preventing any disruption in the education system (Byrnes et al., 2021).

Wexler and Oberlander (2021) further suggested that digital libraries will remain relevant in academic libraries going forward as traditional libraries have been increasingly supplemented by digital access.

Despite these positive developments, challenges remain. Oyewusi and Oyeboade (2009), in their study of undergraduates in Nigeria, found that there was a significant shift of students preferring and relying on internet than books. This is a common pattern is consistent worldwide where majority of learners in higher learning institution are the generation z characterised as digital natives who have grown up surrounded by technology, expect resources to be available instantly and around the clock (Owens et al., 2011). Yet, as Gibbons (2001) noted, many libraries close at midnight limiting student the access of rich, scholarly information resources locked inside the physical building, hence leaving students with no option but rely on the internet to perform their academic tasks. Although convenient, this overreliance on internet materials occasionally compromises quality, as Ozoemelem (2009) observed that students are aware that library information resources are authoritative, reliable, and comprehensive than information found in the internet.

Inclusion and equity among higher institutions must be addressed to achieve quality education. While digital technologies have improved the availability and accessibility of information resources, disparities and the digital divide are a reality in many TVET institutions, influencing how different categories of learners connect with library modern library services. User studies have shown that there is a correlation between improved academic outcomes and access to library information resources; therefore, the wider question of equity and inclusion must be addressed. For instance, many rural TVET institutions in Kenya face barriers such as a lack of digital user education, fewer devices, and poor internet connectivity, which limit their capacity to experience current scholarly academic knowledge (Walton & Hepworth, 2011).Furthermore, Misenda and Wanami (2022) studied the quality of competency-based education and training during the COVID-19 lockdown in Kenya's TVET institutions. The objective of the study was to analyze internet connectivity and the quality of distance learning. A total of 47 counties across 8 provinces were analyzed regarding internet connectivity. Findings from the study revealed that in these 47 counties, less than 50% had reliable internet access, except for Nairobi County.
Additionally, the study highlighted a significant difference in internet access between urban and rural areas, with urban areas having over 19% more access compared to rural areas, which had

only about 6%. This digital gap between students in urban areas for example in Nairobi County raises serious concerns of equity and inclusivity .These findings clear show that students in rural areas who are the majority, are disadvantaged compared to their peers in urban areas .

These findings clear show that students in rural areas who are the majority, are disadvantaged compared to their peers in urban areas .These challenges highlighted can addressed through a policy framework that provides equitable resource allocation to all institution of higher learning. Similarly, Koech et al., (2023) researched trainees' challenges in accessing online training for technical courses in selected institutions in Nandi County, Kenya. The purpose of the study was to assess trainees' ICT competencies. The research was conducted in five TVET institutions in Nandi County. The findings revealed that these institutions relied on libraries and ICT laboratories to access e-learning content and information resources. The study also noted that each student was allocated a maximum of 30 minutes to use the computer, which was insufficient for comprehensive use of information resources and digital learning. Consequently, contemporary studies highlights the significance of having a policy framework addressing reforms on equity and inclusivity in higher education particularly rural TVETs, can solve major challenges experienced by learners and also provide opportunities to for learners to access online information resources (Zhong, 2021).

Moreover, academic libraries have other roles rather than providing access to resources. One of the most significant functions is user education which is a vital academic skill. User education aims to equip users with the knowledge and skills necessary to independently locate, evaluate, and utilize information resources effectively. Academic libraries have a variety of ways of conducting user education, such as workshops, offer one-on-one consultations, library orientation, and include user education training in courses to equip students with these skills (Gross & Latham, 2012).The impact of these initiatives on students' academic performance is notable. For example, Saunders (2018) discovered that students who took part in user education programs showed strengthened analytical skills and were able to retrieve and use information resources independently hence reporting positive academic achievement in coursework. Librarians are not only providers of information resources, but they also active educators who teach users on how to access and use the provided information resources for their academic pursuits. In addition, despite the growth of digital resources in libraries today, the role of physical library has not diminished and continue to remain highly valued.

Lee & Schottenfeld (2014) found that, the library provides a quiet focused and conducive environment with facilities where students can perform various activities including individual focus work, group projects, social gatherings, and relaxation. This multifunctional environment contributes to students' sense of belonging and academic engagement. Scoulas and De Groote (2023) similarly observed that the library therefore, not only serves as a facility that promotes knowledge, but it also provides an area for socialisation amongst its entire user base.

Although digital access is significant, the physical library extends a distinct academic environment beyond the classroom by providing a variety of information resources in print and electronic formats, allowing users direct access to resources and have an opportunities for social engagement. However, many TVETS still struggle with limited space because of the influx e of students resulting from the growing demand for technical courses in recent years. For example, Osawa et al. (2018) examined the preparedness of Kenyan Technical and Vocational Education and Training (TVET) institutions to implement Competency-Based Education and Training (CBET) programmes. The objective of the study was to assess physical resources, trainers' capacity, and institutional partnerships needed for CBET. The descriptive research design used both qualitative and quantitative methods. The target population was administrators and trainers from 2,178 registered TVET institutions. Stratified random sampling produced a sample of 369 institutions. A structured questionnaire collected data. . Data anaylsed and presented in frequency tables. Results showed that 51.5% of respondents from National Polytechnics (NPs), 33.6% from public Technical and Vocational Colleges (TVCs), 56.8% from private TVCs, and 21% from Vocational Training Centers (VTCs) reported having a spacious, adequately equipped library to support CBET. Conversely, 25.7%, 46.6%, 25.7%, and 59% from these institutions disagreed. These findings align with Makunja (2016), who identified inadequate resources as a barrier to a competence-based curriculum.

Academic libraries must justify they are a worthy investment to their parent institution by demonstrating their impact and value in meeting the institution educational goals. Universities are increasingly judged by how they are able to meet the academic information needs of users which in turn enhances improved academic success and research productivity. Tenopir (2009) argued that libraries must demonstrate their impact contributions rather than marketing their importance. Subsequent studies also highlight that, library statistics on usage pattern demonstrate the library effectiveness and relevance **(**Cox & Jantti, 2012; Stone et al., 2013; Tenopir, 2010**).**

As higher education becomes more data-driven, libraries have begun using learning analytics and data visualization to demonstrate their impact and guide resource allocation (Leebaw, 2021).

Meanwhile, the rise in misinformation online has raised concerns about the quality of information available to users. Libraries often have more authoritative, reliable and accurate information, updated, related subjects and content put together with bibliographic details than what you might find on the internet. This is because the information in a library has been vetted by experts and is generally more trustworthy. As Xu and Du (2018) observed, users prioritize speed and convenience, over the quality of information resources which may compromise the quality of academic work presented. Similarly, Koech et al. (2023) researched trainees' challenges in accessing online training for technical courses in selected institutions in Nandi County, Kenya. The purpose of the study was to assess trainees' ICT usage. The research was conducted in five TVET institutions in Nandi County. The findings highlighted that students primarily used WhatsApp groups, emails, and Facebook groups to share educational content, complete assignments, and write projects. Furthermore, students reported that ease and convenience were the reasons they used these platforms, compared to formal information resources available in libraries. Consequently, the quality of their academic performance is compromised. Therefore, libraries must educate on user how to evaluate credible information resources for academic purposes specially information resources found in the web.

The covid 19 pandemic has had a major impact on the education system globally. Worldwide, the education systems experienced the sudden closure of physical learning to online learning platforms as learning institutions took preventive measures as a precaution against the virus spreading widely .Academic libraries, in a similar manner, also felt the pinch of the sudden closures hence they had to extend their services beyond the physical collection by offering remote access. Wexler and Oberlander (2021) noted that the pandemic accelerated expansion of digital services as a core library function. Libraries had to quickly adapt and adjust to providing information resources from the physical collection to virtual space. These changes not only maintained academic continuity but also reshaped expectations for future library services.

At the same time, the pandemic highlighted persistent barriers. Gibbons (2001) had already pointed out earlier that limited opening hours and restricted access to print materials could frustrate students, and these challenges became more pronounced during the pandemic where the physical libraries were completely shut down for some time.

Although electronic resources mitigated some of these challenges, many students struggled to adapt and cope to these sudden changes with inadequate access to technology or quiet study spaces at home (Byrnes et al., 2021). This underlines the continuing importance of the physical library as both a resource hub and a learning environment, even in an increasingly digital context. Youth unemployment is a persistent challenge in Kenya.

Although a stagnant formal employment sector is predominantly identified as the cause of low youth employment, skills mismatch has also been suggested as a key constraint to both youth wage and self-employment. To address the skills gap, the government has in recent years intensively invested in TVET institution since the learning institutions are fundamentally designed in equipping students with practical skills. Despite this intervention, there has been limited report by employers of a change in the skills mismatch or significant improvement in youth self-employment. This points out that TVETs are still constrained in delivering graduates well prepared for wage and self-employment. One possible cause for this is the large number of students as compared to few instructors, which limit efficient learning of students. Thus, for students to effectively gain industry required skills in the current TVET context, they need to be facilitated in self-learning. Student self-learning has been established to contribute to competent graduates as it complements teacher guided learning positively.

Furthermore, the global perspective reveals variations in how libraries contribute to academic outcomes depending on local conditions. In Nigeria, Oyewusi and Oyeboade (2009) found that despite the advancement of digital technologies in libraries, academic libraries must continue to exist as hybrid libraries and have a balanced collection of both print and electronic resources to cater for the diverse user preferences to different information resources. Similarly, Ozoemelem (2009) argues that users are aware that libraries have more comprehensive and scholarly resources than most websites but these resources are not easily accessible compared those on the web. These findings suggest that while the core value of libraries is to support students in their academic pursuits by proving information resources limitations hindering accessibility of these resource can negatively affect the students from achieving academic success.

Finally, there is no doubt that any academic institution of higher learning that can achieve its educational objectives without a sound library. The use of library information resource positively influences student academic achievement.

Stone et al. (2013) demonstrated that library usage data can provide evidence of student success and justify the relevance of academic libraries as a worthy investment. Investment in both physical and digital library infrastructure enables polytechnics to gain knowledge and produce well prepared learners ready for the work force.

2.3 User Experience and Satisfaction

Academic libraries classified as service industries have experienced tremendous technological advancement in the recent years .The expansion of information technology has not only increased internal competition, but has also changed the way consumers interact especially in social media. Users' demands and needs have also evolved with new expectations in regards to service quality. Therefore libraries must adapt to changing users expectation and reshape the way they provide information resources to meet these new expectations. Academic libraries face stiff competition from information providers such as Amazon, Google, and iTunes. These resources are simple, quick, and convenient unlike most library information resources, which are not straightforward and require some process to access for example, log in passwords (University of California Libraries, 2005). Academic libraries must therefore strive to remain relevant especially nowadays where users can access alternative online information resources. It is worth noting that library users are shifting into a clientele characterised with high expectations, varied requirements, preferences, and alternatives (Gupta, 2003).

Furthermore, Cox (2019) points out that with today's online collections, accessing information from anywhere is now possible, making visits to physical libraries optional. Bronstein (2010), similarly emphasizes how advances in computing, telecommunications, and information systems have changed user expectations and how they seek information. Libraries should therefore assess existing conditions and adapt or develop solutions so that they continue providing what their users expect of them. The ongoing success of the academic library operating within the service in the research study depends on its ability to transform its products and services in accordance with user needs. Librarians must engage and consider their products and services in meeting the needs of their library users (Abiola, 2016). The quality of a library is often assessed based on its ability to meet stated or implied user needs (ISO 11620, 1998).

Ordinarily, the measurement of the library, including the size of the library, holdings, and statistics, has been the basis for assessing the quality of the library.

According to the Association of College and Research Libraries (2010), the value of academic libraries is evaluated in terms of the amount of financial resources spent to invest in print and electronic resources and their significance in supporting teaching, learning, and research activities. However, the increasing student population especially in TVETs is emerging as a significant challenge to consider. Brophy (2004) also highlights that academic library managers should come up with new strategies and approaches of ensuring quality service is provided. Furthermore, Barnard (1994) extends beyond and observes users will determine a value product or service depending on how it is provided.

This, therefore, suggests, according to Sahu (2006), that the increasing demand for library services experienced today is attributed to how users perceive the quality of the service they receive. Sahu expanded beyond to define quality service as "one that fully meets the expectations and requirements of the users" (Sahu, 2006). Therefore, to maintain quality, it is essential to deliver information resources to users at the appropriate time and in the correct format. The concept of service quality in the library context can be defined as the difference between users' expectations and perceptions of service performance compared to the reality of the service provided (Sahu, 2006). Therefore, in this research context, the quality of library services is defined as the gap between users' perceptions, the actual services received, and the expectations regarding those services.

A librarian designs, plans, organises, implements, manages and evaluates library and information services and systems to meet the needs of the users of library and information services in the community. They are therefore a very important asset to the library, without which the library would more likely than not crumble. As such, with regard to service provision in the library, their input is not negligible. To provide the best possible service to the user community, it is necessary to maintain well-trained and highly motivated staff to make effective use of the resources of the library and to meet the demands of the community. Staff should be available in sufficient numbers to carry out these responsibilities (IFLA, 2001). A well-staffed library will conduct its operations smoothly, efficiently and effectively and this translates down to proper collection management and high user satisfaction. According to Forrest (2009), the library's achievement should not be evaluated in terms of its collection size but rather its role in supporting, teaching, learning and research activities to improve students' academic performance.

This alludes to the importance of the library staff, without whom all he described as measures of success would not be possible. The staff should also be keen to perform their duty in a way that will bring joy to the users of the library facility where they work at.

The RVNP library serves Generation Z students who are characterized as digital native users with a shift preference for digital information resources. Therefore, the library management should consider new approaches of reshaping how they should provide information resources to these students with heightened expectations to maintain relevance and ensuring these students access and use information resources for their academic endeavors.

Today library users use digital devices such as smart mobile phones and laptops to easily access to online information. Cox (2019) points out that multi user and multi access capability of digital information resources where users are able to access information resources anywhere and anytime has reduced the need for physical visits to the library. Bronstein (2010) similarly emphasises how advances in computing, social media, and information systems have changed user expectations and how they seek information. Despite this technological advancements , many TVET libraries still face challenges such as limited electronic collections, outdated resources, and poor technological infrastructure, which hinders effective use of scholarly information resources to their perform academic tasks. As a result many users are often pushed to rely on information on the web. Also, Gibbons (2001) notes that while students live in a 24/7 digital world, where information is available any time, most academic libraries close early, preventing users from accessing materials outside working hours.

Although full-text databases may be available, locked physical collections and restricted institutional borrowing policies hinder effective use. This challenge is compounded by findings from Ozoemelem (2009), who argues that although libraries offer more scholarly and comprehensive resources compared to websites, many institutional polices for example registration , complex passwords to access , make library databases not user-friendly compared to information on the web. Empirical evidence from Nigeria demonstrates similar barriers. Oyewusi and Oyeboade (2009) found that undergraduate students at Ladoke Akintola University of Technology continued to rely heavily on books and journals, but internet resources were increasingly used due to accessibility.

Similarly, Salako and Amusan (2019) studied Sources, Format Preference and Challenges of Accessing TVET Information among the Engineering Students of the Federal Polytechnic Ede, Osun State, Nigeria. The study adopted a survey method. Questionnaire was administered on a sample size of 379 students selected from the School of Engineering of the Federal Polytechnic, Ede, from a population of 7400 students through a stratified sampling technique. 306 sets of questionnaire were returned and valid for analysis, representing (80.74%) return rate. The findings of the study revealed the most commonly experienced challenge was high cost of accessing TVET information sources (98.37%), closely followed by poor attitudes of library staff (97.06%) and non-availability of preferred format of information source (94.12%). Similarly, some (93.80%) of the respondents claimed that non-awareness of TVET information sources constitutes a barrier, some (82.68%) claimed that poor campus Wi-Fi constitutes a barrier. Also, some (37.58%) claimed that outdated TVET information sources constituted a barrier. The least challenges they experience were poor information retrieval skills (23.53%) and no smartphone (10.46%). further revealed that engineering students in a Federal Polytechnic faced challenges such as high costs of accessing information, poor staff attitudes, non-availability of preferred formats, poor campus Wi-Fi, and outdated resources. These challenges mirror broader infrastructural and organizational barriers faced by many TVET libraries in sub-Saharan Africa. Funding and policy issues present another category of challenges. Adala (2016) identifies legal ethical laws to information resources such as intellectual property rights, copyright regulations, and insufficient budget as barriers to the adoption of Open Educational Resources (OER) in TVET institutions in Kenya. Similarly, Adedoyin and Soykan (2020) lack of adequate computers and poor network infrastructures remain a major barrier to access and use of information resources in many TVET institutions.

For the library manager, it is essential to understand how resources are used, the evolving needs of users, and their levels of satisfaction. The value derived from library use is shifting toward librarian expertise and experience, moving away from the collections the library holds. There is also a shift toward how library experiences and interactions with staff and resources influence the information seeker, change their knowledge, and help them accomplish their goals. The only thing that matters is the customers' opinions because, without users, there would be no need for libraries other than to serve as storage facilities. After all, customers (present, potential, and former) believe that the library's purpose for being open is to meet their needs.

Each customer evaluates the quality of service received and decides when (or if) there will be further interaction with that organization (Altman & Hernon, 1998). Krolak (2005) argues in his work that libraries and librarians are no longer just custodians of books; their role has evolved into facilitating information transfer and learning, emphasizing service, identifying user needs, and communicating solutions. Line (1996), in his study of national libraries and funding, described the new era of librarianship as "managing information resources for the people," highlighting the importance of the library user's role in service delivery.

2.5 Theoretical Framework

The study adopted the Expectancy Confirmation Theory (ECT) (Oliver 1980) from marketing literature concerning customer satisfaction processes. ECT holds that consumers' experience and satisfaction with prior use of a product or service determine the customer's deliberate decision of repurchasing or continuing to use it (Anderson and Sullivan 1993; Oliver 1980, 1993). The theory compares the performance of a product and service against expectations of that service. It uses the Expectancy confirmation theory (ECT) that has four main constructs: expectations, performance, disconfirmation, and satisfaction.

First, consumers form an initial expectation of a product or service prior to purchase. Second, they accept and use that product or service. Following a period of initial consumption, they form perceptions about its performance. (Bhattacherjee, 2001). Third, they assess its perceived performance vis some vis their original expectation and determine the extent to which their expectation is met. Fourth, they form a satisfaction, or affect, based on their confirmation level and expectation on which that confirmation was based. Finally, satisfied consumers form a repurchase intention, while dissatisfied users discontinue its subsequent use (Bhattacherjee, 2001).

The main idea of the expectancy confirmation theory, originally developed in consumer behavior research, is that satisfaction or dissatisfaction is as a result of comparison between the standard of a product or service with the perceived performance (Oliver 1977, 1980).

Expectations usually serve as a benchmark for evaluating performance. (Oliver, 2010). If performance exceeds expectation, consumers are satisfied and when the performance fall short of the expectation customers are dissatisfied. (Oliver 1980; Spreng et al., 1996). The higher the disconfirmation value, the wider the divergence between performance and expectation.

Expectations, which are related to consumer's expected performance (link D), influence confirmation (link A) along with perceived performance (link B). Satisfaction occurs when expected performance satisfies or surpasses expectations (also known as "positive confirmation"). Dissatisfaction occurs when perceived performance falls below expectations (also known as "negative confirmation"). Link C displays the ECM's primary relationship of confirmation-satisfaction.

Furthermore, perceived performance (link E), as well as expectations (link F), have a direct influence on satisfaction. Expectations and performance are defined as external factors in the model because they are considered to exist prior to confirmation (Van Ryzin 2004; 2006; 2013). Figure 1 illustrates the comprehensive expectancy confirmation model (adapted from Van Ryzin, 2004, p. 435**)** along with the explanatory variables.

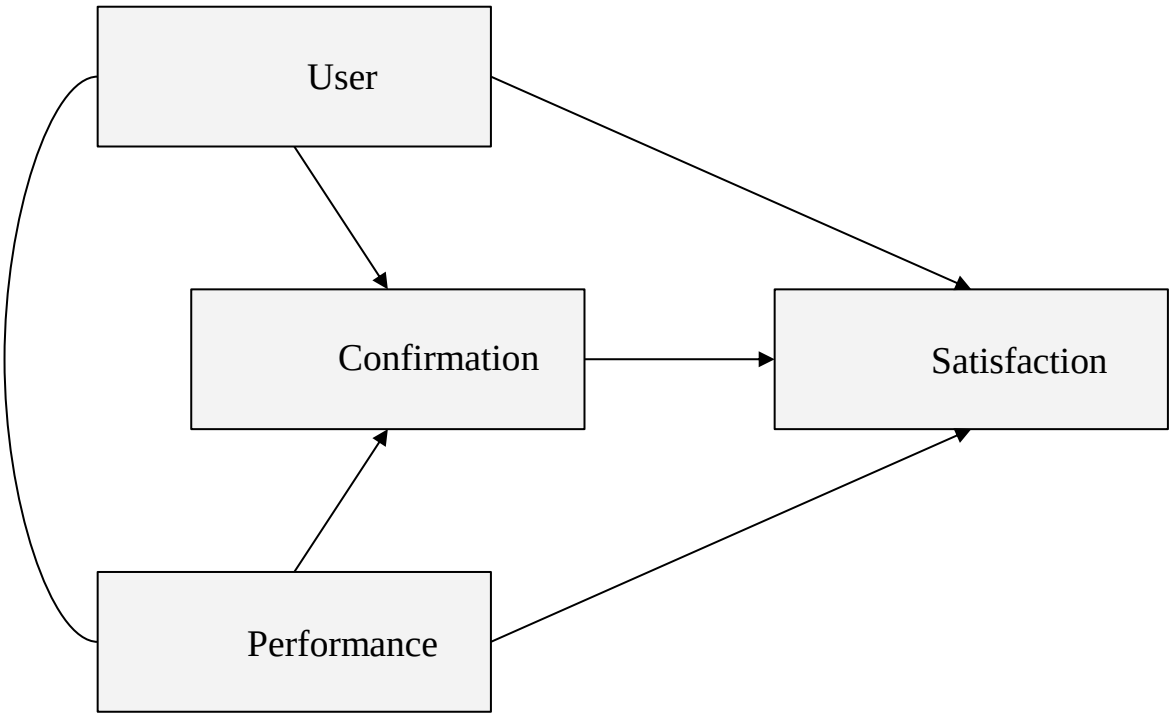

Figure 1: Expectancy confirmation model

Source: Adapted from Van Ryzin (2004)

In the context of the library, users will go to the library with expectations that their information needs will be met through the use of the different information resources available.

When their information needs are met positive confirmation occurs, leading to satisfaction. Satisfied users will more often than not be repeat customers of the library as well as share their experiences with their friends, in this age of the internet through reviews.

On the other hand, when their information needs are not met negative confirmation occurs leading to dissatisfied users who are disappointed. Consequently, users may develop a negative attitude and share the same experience with their friends. In addition, Buckland (1999), opines that Users usually perceive the library information resources important in fulfilling their different information needs, and they will actively seek to engage with these information resources. Individual users will assess the benefits of using the information resources based on their perceived expectation, which influence their decision whether it's worth their time using them. Significant, therefore, in the decision whether or not to use the library is the perceived quality of the library service from the perspective of the potential user. How beneficial and how costly previous experiences in using the library services have been likely to influence heavily the potential user's perceptions of the quality of library service and of the cost of using it. The decision to then select a particular library service for a particular inquiry is likely to be taken only if it seems likely to be worthwhile. It is therefore the quality of library services that dictates the perception of the library within its parent institution and society. Comparable quality measures (which refer not only to library services but also to all aspects of library performance) are of vital importance for efficient and effective library management, in addition, the quality services can only be delivered if the library is sensitive to the needs of its users and shapes its services to meet those needs. Satisfied users are the best advocates of the library service (Buckland, 1999).

CHAPTER THREE
RESEARCH METHODOLOGY

3.0 Introduction

This chapter covered research design, the study population, the study sample, methods of data collection, tools for data collection, and methods of data analysis and presentation. Methodology in research is defined as the systematic method to resolve a research problem through data gathering using various techniques, providing an interpretation of data gathered, and drawing conclusions about the research data. Essentially, a research methodology is a blueprint of research or study (Murthy, 2009). Simply, research methodology describes the path through which researchers formulate their research problem objectives, up to when they present the results from the data obtained during the study period.

3.1 Research Design

This study adopted a descriptive case study design to generate an in-depth analysis and comprehensive understanding to access and use of information resources among students at the RVNP library. Both qualitative and quantitative research methods were used. The reasoning behind case study approach was to enable the researcher to examine and provide a comprehensive understanding within a specific context. Typically, this design is restricted to a small geographical area with limited defined study subjects. Zaina (2007) highlights that Case studies are effective because they provide a comprehensive understanding of a particular phenomenon. Studies that have used descriptive case design include, Magaji (2020) who used questionnaires to analyze students' challenges in accessing resources, identifying issues such as the irrelevance of retrieved information and inadequate internet connectivity. Similarly, Abubakar (2025) adopted a descriptive case design approach to demonstrate the influence of information resource availability and actual use in polytechnic libraries.

3.2 Location of Study

The location of this study was the Rift Valley National Polytechnic (RVNP) library on the main campus located in Nakuru County, Kenya. The library was selected due to its central location and the fact that RVNP is the largest public TVET in Nakuru County. RVNP also offers a wide variety of technical courses and describes its library as being a modern hybrid library.

3.3 Target Population

The total population of diploma students was 3,625. The target population consisted of second- and third-year diploma students, totaling 2,025, in addition to two library staff members. Year 2 included 1,113 students, while Year 3 comprised 902 students. Data on student and departmental populations were obtained from the Management Information Office at RVNP. Diploma programs typically last two to three years. Therefore, students in advanced years are generally more familiar with and frequent users of the library compared to certificate students, whose programs last only a few months.

3.4 Sample and Sampling Procedure

The sample size is a research term that defines the number of individuals included in a research study as a representation of the entire population. The sample size therefore, refers to the total number of respondents included in a study. The sample size in this case was 206 students which was calculated using Yamane's (1967) formula that is suitable for calculating when the population is known. From the calculation the sample size was 334, however due to time and resource constraints 206 was chosen as the sample size.

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

Where:

- n = sample size
- N = population size
- e = margin of error

$$n = \frac{2025}{1 + 2025(0.05^2)}$$

$$n = \frac{2025}{1 + 5.0625}$$

$$n = \frac{2025}{6.0625}$$

$$n = 334$$

A sample size of 206 was chosen with a confidence level of 95 % and margin error of 6.6% the sample size was chosen based on time frame of the study and available resources. Nevertheless, the sample size was sufficient and statistically reliable to draw meaningful insights.
Mugenda and Mugenda (2003), when dealing with a known population below 10000, the sample size can range up to (10%) of the target population for social science studies. Therefore, (10%) chosen fell within the recommended range.

Sampling on the other hand refers to the process of selecting a sub-section of a population that represents the entire population to obtain information regarding the phenomenon of interest (Singh & Masuku, 2014). The study used both probability and non-probability sampling techniques. Since RVNP offers different courses, the stratified sampling technique was the ideal technique to use because of the greater level of representation it generated from all the different departments for the student population.

The participants were divided into strata based on the courses in their various departments. Simple random sampling was used within each stratum to select the respondents for the study because it provided all participants with an equal chance to take part and helped eliminate bias. The distribution of the questionnaires depended on the respondents' department and year of study, with each stratum allocated a proportionate number of questionnaires according to these categories, as shown in Table 1.

.

Table 1

Summary of Respondents Across Departments

	Population			Sample		
Departments	Total	Year 2	Year 3	Total	Year 2	Year 3
Liberal studies and Business Studies	727	394	327	74	41	33
Health and Applied Science	207	113	93	21	12	9
Hospitality and Tourism	227	125	102	23	13	10
Computer Studies	176	96	79	18	10	8
Electrical and Electronics	148	82	66	15	8	7
Building and Engineering	99	54	44	10	6	4
Agriculture and Extension	79	44	35	8	4	4
Mechanical Engineering	168	93	75	17	9	8
Agriculture	197	108	88	20	11	9
Total	2,025	1,113	909	206	113	92

Note. This table summarises the distribution of respondents across various academic departments.

Convenience sampling was used to collect data from librarians through both structured and unstructured face-to-face interviews. Only one librarian was available during data collection, as the other was on leave for study purposes. Since the study required just one librarian respondent, the first available and willing librarian was sufficient for the study, as the primary focus was on students' participants.

3.5 Data Collection Tools and Instruments

The primary methodology was used in this study. Data collection involved questionnaires and interviews. The interview was conducted exclusively with the librarian, while the questionnaires were distributed to selected students. The questionnaires included an introduction part where the researcher introduced herself and the purpose of the study followed by both open-ended and closed-ended questions. Each question was carefully designed capturing the specific objectives of the study.

The close-ended questions provided a list of options from which the respondents chose the best option that described their situation while the open-ended questions on the other hand gave the respondents the freedom to give their thoughts, views and opinions in their own words. In this regard, the open-ended questions probed the respondents to give more insight and information on issues pertinent to the study.

Prior meetings were held with the head of the research department, during which the researcher introduced herself and explained the study's nature and purpose. The researcher then agreed with the head of department on the suitable dates for actual data collection. The questionnaire was divided into the introduction part in which the researcher introduced herself to the respondents, followed by sections with both open and close-ended questions. Respondents were accorded enough time to answer the questions accurately, and the questionnaires were collected afterward. For the librarian interview, both structured and semi-structured face-to-face interview was used based on study objectives. Detailed notes were taken during the interviews to ensure comprehensive capturing of relevant information. To facilitate efficient data collection, two research assistants assisted the researcher distribute the questionnaires to selected respondents over multiple days until the targeted sample size was achieved. To minimize the need for follow-up, the researcher and a research assistant attentively listened and recorded the responses to ensure thorough coverage of study-related concerns.

3.6 Validity and Reliability

According to Mugenda and Mugenda (2003), Validity refers to how well an instrument measures what it is intended to measure. To ensure the validity of the data collection instruments, great attention was given to the structuring, framing and quality of questions to ensure the questions flowed logically. The researcher ensured that the questions were precise, clear, easy, and focused on the study's objectives. These measures were achieved with the help of the researcher's supervisors, who evaluated the questions and then advised on achieving a proper flow of questions. In the case of the interviews, the researcher listened attentively and carefully recorded the responses from participants to ensure clarity and consistency of information, as guided by the interview schedule.

Mugenda and Mugenda (2003), define reliability as the ability of a research instrument to yield the same results after repeated trials.

Therefore, to ensure reliability, a preliminary pretesting of the research instruments was carried out to assess the clarity and relevance of the research instruments. The purpose of pretesting is to ensure that items in the instrument are stated clearly and has the same meaning to all respondents (Mugenda & Mugenda, 2003). The instrument was pre-tested using 21 (twenty-one) library users (10% of the desired sample size). The questionnaire was pretested at the Rift Valley Institute of Business Studies (RVIBS).

Devoted attention was given to the information obtained during the pretest to assess any ambiguous questions that were unclear to the respondents. Consequently, relevant updates were made to the data collection tools to ensure the final research instrument was clear and to the point. Stratified random sampling was used to select the six departments in Rift Valley Institute of Business Studies (RVIBS) and random sampling was used to select 21 respondents (four respondents were drawn from each of the departments with more population and three students from departments with low population). According to Kathuri and Pals (1993), 20-30 cases are sufficient for pre-testing of instruments in survey studies. The reliability of the questionnaires was assessed using Cronbach alpha coefficient. A reliability coefficient of 0.894 was computed and taken as satisfactory.

3.8 Data Analysis

According to Data Analysis – Research-Methodology (n.d.) Data analysis is the process of collecting, modeling, and analyzing data to extract insights that support decision.

Data was analyzed using a qualitative approach and a quantitative approach. Qualitative approach was used to analyze data collected through open-ended questions and the interview method because the responses were in words, opinions and experiences that could not be measured numerically. In qualitative research using interviews, focus groups, experiments, etc. data analysis is going to involve identifying common patterns within the responses and critically analyzing them to achieve research aims and objectives (Data Analysis – Research-Methodology, n.d.). The researcher thus organized and labeled the data in such a way that they identified keywords or phrases, themes, patterns in the data, and relationship between the themes and assigned to them a category of meaning. On the other hand, the quantitative approach was used to analyze data using descriptive statistics such as frequencies and percentages tabulated in tables.

Data analysis for quantitative studies, on the other hand, involves critical analysis and interpretation of figures and numbers and attempts to find the rationale behind the emergence of main findings ((Data Analysis – Research-Methodology, n.d.).

3.7 Ethical Consideration

The researcher secured ethical approval from the Egerton University Research Committee, demonstrating a commitment to upholding ethical principles and conduct during the research process. Additionally, the researcher obtained a research permit/license from the National Commission for Science Technology and Innovation (NACOSTI). An introductory letter from Egerton University was provided and presented to the relevant authorities at RVNP to acquire permission to conduct the study. With the requisite approvals and permits in hand, the researcher proceeded with the research at RVNP. Upon initial engagement with the respondents, the researcher provided an introduction to the study's topic which aimed to establish familiarity with the forthcoming research. Adherence to the principle of voluntary participation and assurance of response confidentiality were paramount. Ethical standards and behavior were consistently maintained throughout the research process. Subsequently, the research findings were disseminated to the RVNP library,

CHAPTER FOUR
RESULTS AND DISCUSSIONS

4.1 Introduction

The purpose of this study was to assess the determinants of library information resources usage for academic success among students in Rift Valley National Polytechnic (RVNP). The study objectives were: to establish the availability of information resources at RVNP library to meet students' information needs; to examine the access and utilization of library information resources among students at Rift Valley National Polytechnic Library to fulfill their information needs; and to analyse Library users' experiences and satisfaction with the information resources at RVNP library in meeting their academic information needs. A total of 206 respondents were selected.

4.2 Response Rate

A total of 206 questionnaires were targeted as per the sampling techniques used in the study. A total of 206 questionnaires were successfully administered among the targeted respondents making response rate of 100% (Table 2).

Table 2

Questionnaire Response Rate

Category of Respondents	Observed Frequency	Expected Frequency	Response Rate
Second-Year Students	113	113	100.0%
Third Year Students	92	92	100.0%
Librarians	1	1	100.0%
Total	206	206	100.0%

Note. All respondent categories achieved a 100% response rate, indicating full participation.

The high response rate was achieved as a result of vigorous data collection exercise. The researcher collected the data herself. The use of contact persons made the process of data collection easier. According to Mugenda and Mugenda (2003), a response rate of 80% and above implies a good representation of the sample to the population.

4.3 Demographic Information of Respondents

As shown in Figure 2, (54.9%) of the respondents were in year two of their studies while (45.1%) were in their third year of studies which is the final year of studies in the Kenyan TVET system. The study purposively targeted second-year and third-year students because they were more likely to be familiar with the available college library information resources and more likely to utilize the resources. This postulation was in coherence with Whitmore (2001) who found that a student's level of library uses increases during each successive year of the study. Hence, the selected students were likely to provide the best sample to evaluate the availability, access, and user experience of library information resources available in the institution.

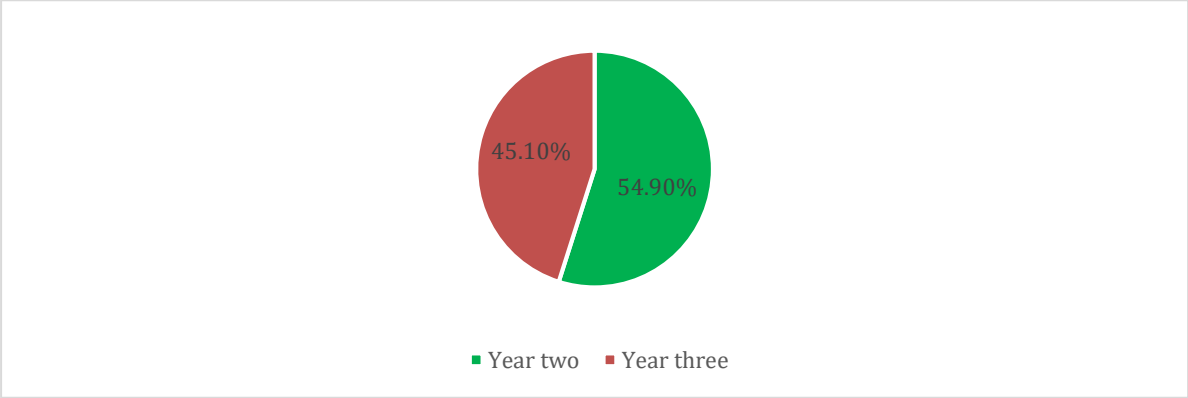

Figure 2: Year of study

The results in Figure 3 show that most (35.9%) of the students were students of programs in the department of liberal sciences and business studies.

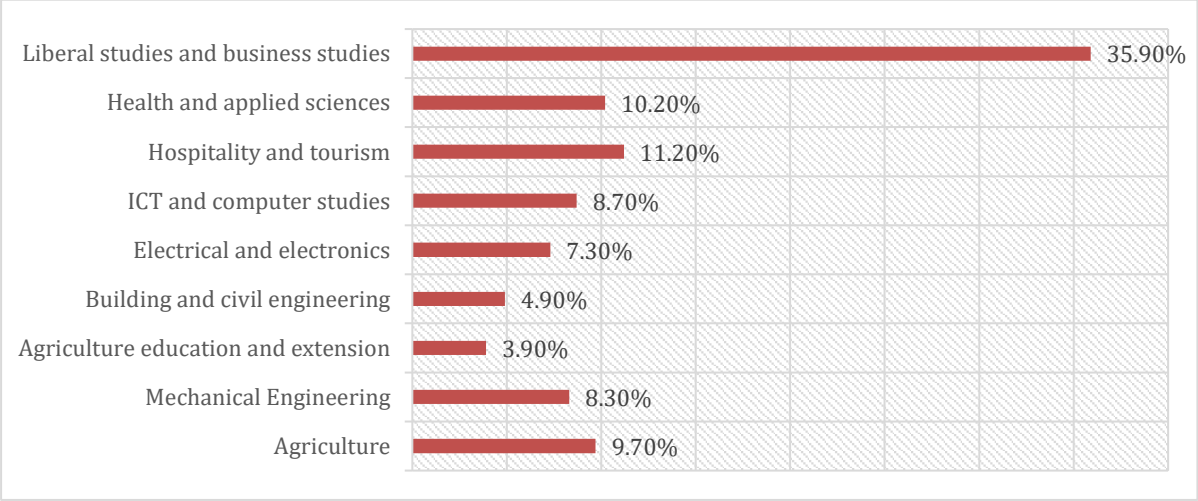

Figure 3: Department affiliation

The higher representation of students from Liberal Sciences and Business Studies could be due to the larger enrollment in these programs compared to other departments at RVNP.

It may also reflect the department's greater engagement with library resources, possibly because the coursework in these programs typically requires extensive reading, research, and use of information materials.

4.4 Information Resource Availability

4.4.1 Information Resource Availability by Year of Study

The results of the availability of information resources by year of study are shown in Table 3. The findings on the availability of information resources at Rift Valley National Polytechnic (RVNP) revealed that the availability of books was consistently across both year2 and year 3, with (83%) and (89%) respectively confirming uniformity in access. This implies that dominance of traditional information resources in TVETs particularly books, which underscores the continued over reliance on print-based resources within TVET libraries with limited opportunities and exposure to digital content. This observation is consistent with Njuki (2019), who noted that most Kenyan TVET libraries remain largely traditional, prioritizing print collections at the expense of digital resources. Similarly, Obajemu and Adetimirin (2021) found that many Sub-Saharan African colleges continue to emphasize physical materials while lagging in the adoption of e-libraries.

Internet access, was ranked second available information resource after books, (33%) of second-year indicating availability and (39%) of third-year students. This percentages in both years indicated very limited use of internet which is insufficient to support learning and effective academic research. Okello et al. (2019) similarly identified limited internet bandwidth and unstable connectivity as persistent barriers to resource access in East African tertiary institutions. The notable lack of reliable internet access limits the students the opportunity to access and experience a variety of information resources in the global knowledge.

Other resources such as newspapers and magazines were reported to be available to only 21% of students, with just 14% acknowledging access to magazines. The findings suggest that institutions do not prioritize allocating financial resources in their budgets for purchasing periodicals. This trend is also echoed by Bii and Otike (2018), who noted that the insufficient availability of periodicals in Kenyan polytechnic libraries is linked to inadequate budgets. Electronic resources were the least available, with only 2–4% of students reporting access. This shows absence of e-resources highlighting a notable gap in the library's capacity to meet the evolving needs of modern academic users especially Gen Z learners characterized as digital natives.

Students are restricted to access a variety of essential scholarly databases, e-books, and peer-reviewed journals, which denies them an opportunity to access and experience global knowledge emerging in their different disciplines. These findings agree with Mwantimwa (2020), who reported that vocational colleges in Tanzania face similar challenges, with e-resources often unavailable or inaccessible due to weak ICT infrastructure and high subscription costs. Kakai and Namulekwa (2020) argue, TVET libraries risk irrelevance in the modern knowledge economy unless institutions intentionally invest in electronic information resources.

Notably, the Pearson Chi-square results indicated no statistically significant differences between second- and third-year students across all resources, suggesting that the availability challenges experienced are uniform and systemic to both cohorts. This finding aligns with Wanyama and Chege (2022), who highlighted that access to information resources all students in Kenyan TVET libraries is affected by institutional obstacles such as inadequate funding, outdated acquisition policies, and lack of ICT infrastructure .

Table 3

Information Resources Availability by Year of Study

Information Resource	Books		Newspaper		Electronic Resources		Magazines		Intern	
Year of study	No	yes	No	yes	no	Yes	no	yes	no	Yes
Year two	17%	83%	76%	24%	96%	4%	88%	12%	67%	33%
Year three	11%	89%	82%	18%	98%	2%	85%	15%	61%	39%
Total	14%	86%	79%	21%	97%	3%	86%	14%	65%	35%
χ^2	0.213		0.328		0.370		0.579		0.373	

4.4.2 Availability of Information Resources by Department

Table 4, presents information resources' availability by department. The results show that across the departments, the most available information resource was books and the least available information resource was electronic resources. This indicates TVET libraries lag behind in providing and integrating electronic information resources into their collection. . Most public libraries in Africa have not integrated digital information resources in the collection despite (Mwaniki et al, 2021).

Table 4

Information Resources Availability by Department

Information Resource	Books		Newspaper		Electronic resources		Magazines		Internet	
Department	No	yes	No	yes	No	Yes	no	yes	no	Yes
Agriculture	10%	90%	85%	15%	85%	15%	80%	20%	75%	25%
Mechanical Engineering	18%	82%	82%	18%	100%	0%	94%	6%	53%	47%
Agriculture education and extension	0%	100%	63%	38%	88%	13%	75%	25%	25%	75%
Building and civil engineering	10%	90%	90%	10%	100%	0%	100%	0%	50%	50%
Electrical and electronics	7%	93%	93%	7%	100%	0%	93%	7%	60%	40%
ICT and computer studies	6%	94%	50%	50%	89%	11%	78%	22%	67%	33%
Hospitality and tourism	26%	74%	78%	22%	100%	0%	96%	4%	57%	44%

Health and applied sciences	5%	95%	100%	0%	100%	0%	100%	0%	91%	10%
Liberal and Business Studies	19%	81%	74%	26%	99%	1%	80%	20%	66%	34%
Total	14%	86%	79%	21%	97%	3%	86%	14%	65%	35%
χ^2	0.314		0.011**		0.026**		0.094*		0.051*	

** and * significance at 5% and 10% level respectively

Note χ^2 = Chi-square test of association between department and availability of each information resource.

A Pearson Chi-square test of the results indicated that there is a departmental difference in availability of newspaper at a 5% significance level. This means that there is a relationship between department of study and availability of newspapers as an information resource. Newspapers cover a range of fields ranging from agriculture, economics to health. The coverage of these fields is usually structured on a daily thematic basis and on basis of currently trending topics. In this regard, it is plausible for students from fields not covered on the day's theme or not having recent trending developments, fail to find any available information related to their fields in the newspapers. Moreover, because libraries usually have inadequate copies of newspapers (Larson, 2021), the information resources ends up being mostly utilized by students of fields being covered on the day's theme leaving it unavailable to other students.

The results further show that there is departmental difference in availability of electronic resources at a 5% significance level. This implied that there is a relationship between department of study and availability of electronic resources. In essence, this translates to the availability of electronic resources depending on the learner's department of study. This result is consistent with that of Mukundi & Njuki (2019), who discovered that the majority of educational institutions lack electronic material related to green skills, such as manufacturing, agriculture, and industry.

The results also indicated that there is a departmental difference in availability of magazines at a 10% significance level. According to McGuigan (2008), the main issues affecting periodicals collection management in libraries include the availability of technology, the financial constraints placed on libraries, and the way patrons seek for information. Thus, some departments may have limited magazines available due to limited budgets to subscribe for sufficient magazines for all departments and the current trend of accessing periodicals online by learners and faculty. According to the results, there was a departmental difference in availability of internet. This means that the department of study of students was related to the availability of the library's internet. Different disciplines in TVETs have different program structures and schedules. While some disciplines have predominantly theoretical classes, some disciplines like agriculture and health and applied sciences have significantly more hours of practical lessons hence limiting free time during the day which learners can utilize the library's internet. Moreover, programs in Health and applied sciences often have practical lessons outside the college thus making the library's internet unavailable to the learners

4.5 Library Visits

4.5.1 Frequency of Visiting Library

The results in Figure 4 showed that most TVET students (65.5%) visit libraries once in a while. The large number of students not physically visiting libraries in not only synonymous to academic libraries in Kenya but also globally. As Chilimo (2014) observes, academic libraries have been experiencing a steady decline in physical visits, largely due to rapid technological advancements, changing patterns of information-seeking behavior, and the growing number of students pursuing their studies off-campus.

At RVNP, occasional visits may indicate that students rely more on digital platforms, peer-shared materials, or classroom resources. However, in the context of TVET institutions, this trend raises concern since technical and vocational students often require access to specialized print resources, practical manuals, and standards that may not always be accessible online. Limited library visits could therefore hinder their ability to engage deeply with high-quality, authoritative sources essential for their academic and professional growth.

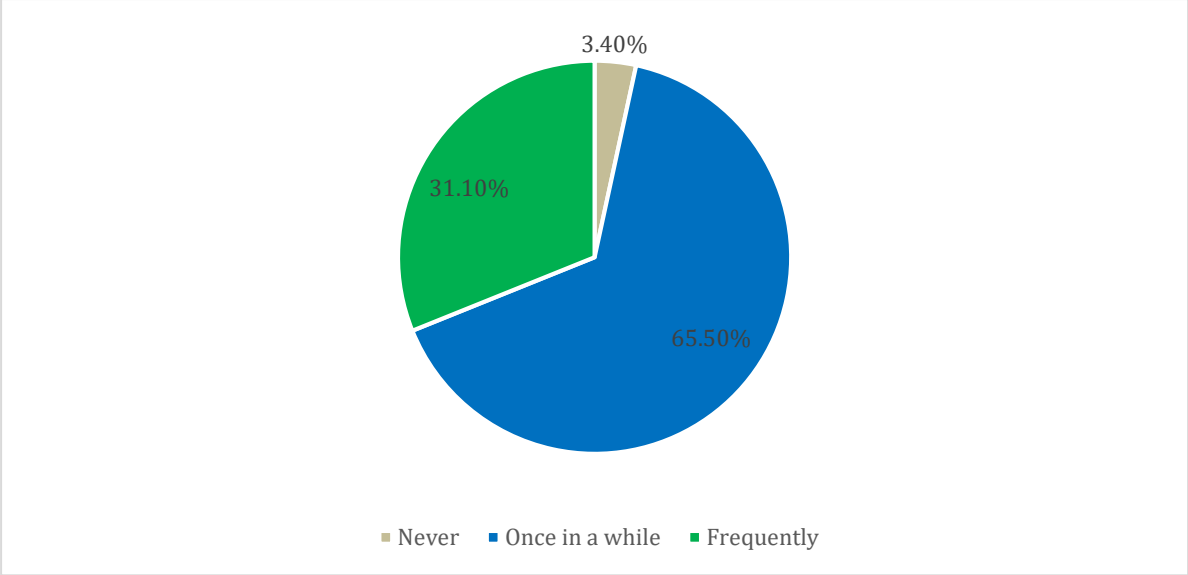

Figure 4: Frequency of visiting the library

4.5.1.1 Reasons for Never Visiting the Library

The study explored the reasons why students never visit libraries through a thematic analysis. The two main reasons reported were poor internet and the inadequate of the library's print information resources. According to the results in Table 5, all students (100%) who never visited the library cited poor internet as the main reason for never visiting the library. Additionally, (71%) reported inadequate availability and access of library's print information resources as another obstacle that hindered them from visiting the library. These findings highlighted two major barriers experienced by academic libraries in Kenya and other African countries: poor technological infrastructure and inadequate print collections. Poor internet connectivity is a major issue that aligns with broader research. Yebowaah (2017) argues that barriers to effective access of internet in academic libraries can discourage library use because students often rely on internet as their primary information resource in doing their academic work. Generation Z learners, prefer fast, convenient, and digitally accessible resources therefore access to internet can be very relevant to them (Seemiller & Grace, 2017). Any hindrance to access and use on internet, may cause students to alternatively seek other spaces with better connectivity such as cybercafés, home internet, or mobile data. In this way, poor internet not only diminishes the library's role but also widens the digital divide within higher education.

The second reason was inadequacy of print information resources which is a major issue in African academic libraries.

Insufficient budget cuts in many TVET institutions, including polytechnics, impede academic libraries form updating their library collection with new information resources resulting to outdated and insufficient collections (Koech & Mutai, 2015).

When students cannot find relevant textbooks, technical manuals, or updated references for their coursework and projects, they result in relying peer-shared notes, lecture materials, or freely available but less authoritative online sources. In such cases, students form a negative perception on the library as irrelevant, hence its role in supporting learning and research diminishes (Zipporah et al., 2023). Consequently, the quality of students work may be negatively affected because of the over reliance of unauthoritative channels of information rather than the formal library holding. Globally, similar patterns have been observed. In South Africa, Hoskins (2014) found that students' dissatisfaction with outdated or irrelevant collections reduced library visits, even when facilities were available. Likewise, Tenopir et al. (2009) in the United States noted that users increasingly prefer digital access to information over physical collections, but where libraries fail to provide sufficient digital alternatives, user engagement declines. The Study at RVNP therefore mirror a wider shift in user behavior where accessibility, relevance, and convenience determine patterns of library use.

Table 5

Reasons for never visiting the library

Variables	Description	Frequency	Percent
The library has poor internet	No	0	0 %
	Yes	7	100%
	Total	7	100%
Challenges with the library's print information resources	No	2	29%
	yes	5	71%
	Total	7	100%

4.5.1.2 Reasons for Visiting Library Only Once in a While

Table 6 shows the thematic analysis results of reasons for only visiting the library once in a while, which was the modal library visiting behavior among the learners. The results show the most prevalent reason for only visiting the library occasionally was not having enough time to visit more. TVETs programs in Kenya are designed to provide a more hands-on training approach. In this regard, most TVET courses have theoretical classes and a significant number of practical classes. Resultantly, this limits the number of hours the learners have during the day to visit the library.

Table 6

Reasons for Visiting Library Only once in a While

Variables	Description	Frequency	Percent
I don't have enough time to visit more	No	80	59%
	Yes	55	41%
	Total	135	100%
I stay far away from library	no	131	97%
	yes	4	3%
	Total	135	100%
I only need to go to the library to get specific information that I need	no	89	66%
	yes	46	34%
	Total	135	100%

4.5.1.3 Reasons for Visiting Library Frequently

Table 7 shows the thematic analysis results of reasons for frequently visiting the library. The themes that emerged from the analysis include the availability of wide knowledge in academic programs, availability of general knowledge in many fields, and a conducive environment for revising for exams. The most predominant reason (88%) for visiting the library was the availability has general knowledge in many fields. This implies that the frequent user behavior is attributed to the availability of information outside the learner's immediate program of study.

This finding is supported by Hotsonyame (2023), who reported that libraries have maintained their relevance by evolving into user-focused institutions that provide demanded services, including information needed to conduct the currently popular multi-disciplinary research (Tikekar, 2009).

Table7

Reasons for Visiting Library Frequently

Variables	Description	Frequency	Percent
Library has wide-ranging knowledge in my field of study	No	34	53%
	Yes	30	47%
	Total	64	100%
Library has general knowledge on many fields	no	8	12%
	yes	56	88%
	Total	64	100%
Library has a conducive environment to revise for exams	no	41	64%
	yes	23	36%
	Total	64	100%

4.5.2 Influence of students' level of study on their frequency of library use

This study sought to analyse whether year of study influenced the frequency of library use among students. Pearson's correlation coefficient and linear regression analyses were used to analyse whether patterns of use were consistently the same in different years of study as presented in Table 8 and Table 9 respectively. The Pearson correlation coefficient between year of study and frequency of library use was r = 0.035 with a p-value = 0.613 (two-tailed). The coefficient is very close to zero, indicating no meaningful linear relationship between the two variables. Since the p-value is greater than the 0.05 threshold, the result is not statistically significant.

Table 8

Pearson's Correlation Coefficient Analysis for the Influence of Students' Level of Study on Frequency of Library Use

Frequency of library use	B	Std. Error	T	Sig.	95.0% Confidence Interval Range for B	
(Constant)	2.226	.107	20.890	.000	2.016	2.436
Year of study	.035	.069	.507	.613	-.101	.171

Note: Calculated F (1, 204) = 0.257, Prob> F = 0.613, R-squared = 0.001, Adj R-squared= 0.004

Note. The correlation between year of study and frequency of library use was weak and statistically insignificant ($r = .035$, $p > .05$).

This means that students' frequency use of the library is not determined by the year of study. This implies that there was consistent use of the library regardless of their year of study. Linear regression analysis was also used to establish whether the year of study influenced the frequency of library use among students (to offer a confirmation of the correlation coefficient results). The overall model fit was very weak, with $R^2 = 0.001$ and Adjusted $R^2 = -0.004$, indicating that year of study explains virtually none of the variance in the frequency of library use. The ANOVA results also showed no significant model fit ($F(1, 204) = 0.257$, $p = 0.613$).

Table 9

Regression Analysis for the Influence of Students' Level of Study on Their Frequency of Library Use

Frequency of library use	B	Std. Error	T	Sig.	95.0% Confidence Interval Range for B	
(Constant)	2.226	.107	20.890	.000	2.016	2.436
Year of study	.035	.069	.507	.613	-.101	.171

Note: Calculated F (1, 204) = 0.257, Prob> F = 0.613, R-squared = 0.001, Adj R-squared= 0.004

The findings from Table 9 shows that the regression coefficient for year of study (0.035) was not statistically significant ($t = 0.507$, $p = 0.613$), as the p-value is greater than the 0.05 threshold. The findings indicate that the way students use the library has no major impact on the year of study. This means that library patterns of library use among learners in different department is the same, and factors like student educational advancement is significant in influencing library use.

4.5.3 Purpose of library visits by frequency

Table 10 presents the cross-tabulation results of purpose of library visits by frequency of library visits. The results indicate that the ranking of purpose of library visits ranked from most considered to least considered is as follows; research, revising for exams, obtaining general information, borrowing of books and leisure.

Table 10

Purpose of Library Visits by Frequency

Purpose of visit	Obtaining general information		Research		Leisure		Revising for exams		Borrowing of books	
Frequency of visits	no	yes	No	yes	No	Yes	No	yes	No	Yes
Never	29%	71%	57%	43%	86%	14%	43%	57%	86%	14%
Once in a while	76%	24%	33%	67%	97%	3%	65%	35%	91%	9%
Frequently	70%	30%	39%	61%	97%	3%	64%	36%	91%	9%
Total	73%	27%	36%	64%	97%	3%	64%	36%	91%	9%
Pearson Chi-square	0.019**		0.361		0.270		0.486		0.890	

** Significant at 5%

The Pearson Chi-square test conducted on the cross-tabulation in Table 10 , indicated that there was a significant frequency of visit difference in obtaining general information. This means that the intention of obtaining general information by learners was related to their frequency of visiting the library. This conclusion is corroborated by Hotsonyame (2023), who said that libraries have continued to be relevant, as evidenced by the volume of patrons, by offering services that are in demand, such as the general knowledge required to carry out the increasingly common multidisciplinary study (Tikekar, 2009).

4.5.4 Correlation Analysis

The Pearson correlation coefficients in Table 11 examined the relationship between frequency of library use and the different purposes of visiting the library. The correlation coefficients for the purposes of visiting the library (obtaining general information, research, leisure, revising for exams, and borrowing books) are all very weak (ranging from -0.048 to -0.008) and negative, though close to zero. None of these correlations are statistically significant at 5% level, meaning that the observed associations could easily be due to chance.

Table 11

Pearson's Correlation Coefficient Analysis for the Influence of Students' Purposes of Visiting the Library on Their Frequency of Library Use

Variables	Pearson Correlation	Sig. (2-tailed)	N
Frequency of library use	1	.	206
Obtaining general information	-0.032	0.653	206
Research	-0.01	0.884	206
Leisure	-0.048	0.489	206
Revising exams	-0.029	0.681	206
Borrowing books	-0.008	0.905	206

The results in Table 11 indicate that there is no meaningful relationship between the purpose of library visits and how frequently students use the library. Whether students visit for research, general information, leisure, exam revision, or borrowing books does not significantly affect the frequency of their library visits. In order to confirm the findings (through correlation coefficient analysis), linear regression model was also used to examine the influence of different purposes of library visits (obtaining general information, research, leisure, revising exams, and borrowing books) on the frequency of library use. The overall model was not statistically significant: $F(5, 200) = 0.218$, $p = 0.955$, with $R^2 = 0.005$ and Adjusted $R^2 = -0.019$. This indicates that the model explains less than 1% of the variance in frequency of library use, and in fact performs slightly worse than a model with no predictors. Looking at the individual predictors, none of the purposes of visit significantly predicted frequency of library use (see Table 12).

Table 12

Regression Analysis for the Influence of Students' Purposes of Visiting the Library on Their Frequency of Library Use

Frequency of library use	B	Std. Error	Beta	t	Sig.	95.0% Confidence Interval for B	
(Constant)	2.337	.086		27.164	.000	2.167	2.506
Obtaining general information	-.053	.089	-.046	-.598	.551	-.228	.122
Research	-.043	.084	-.039	-.509	.611	-.208	.123
Leisure	-.152	.205	-.053	-.743	.458	-.557	.252
Revising exams	-.039	.078	-.036	-.495	.621	-.193	.116
Borrowing books	.009	.130	.005	.067	.947	-.248	.266

Note: Calculated F (5, 200) = 0.218, Prob> F = 0.955, R-squared = 0.005, Adj R-squared= -0.019.

The findings in Table 12 indicate that the purpose of the visit does not greatly impact the frequency of students' library visits. The frequency of library visits is consistently the same, despite the purpose of the visit, for example, (research, revision, general information, leisure, or borrowing books). This suggests that other determinants (e.g., timetable constraints, accessibility of resources, or personal study behavior) are more influential in evaluating the frequency of library use than the stated purpose of the visit

4.6 Information Resources Used

4.6.1 Types of Library Information Resources Used

According to Figure 5, the majority of respondents identified books as the most used library information resource (86%), highlighting their significance in supporting students' academic needs. The predominance of traditional print information resources as the main information resource available and accessible for teaching, learning and research reflects the current context in many TVET today.

The internet was identified as the second most used information resource (35%), indicating that few students use online information sources for their academic purposes, however the usage levels suggest limited adoption of digital resources into their academic work. Comparatively, Newspapers (21%) and magazines (14%) were rarely consulted, mainly for current updates and general information rather than main academic tasks. Majority respondents indicated (3%) use of electronic information resources highlighting the very limited availability and accessibility of digital academic platforms.

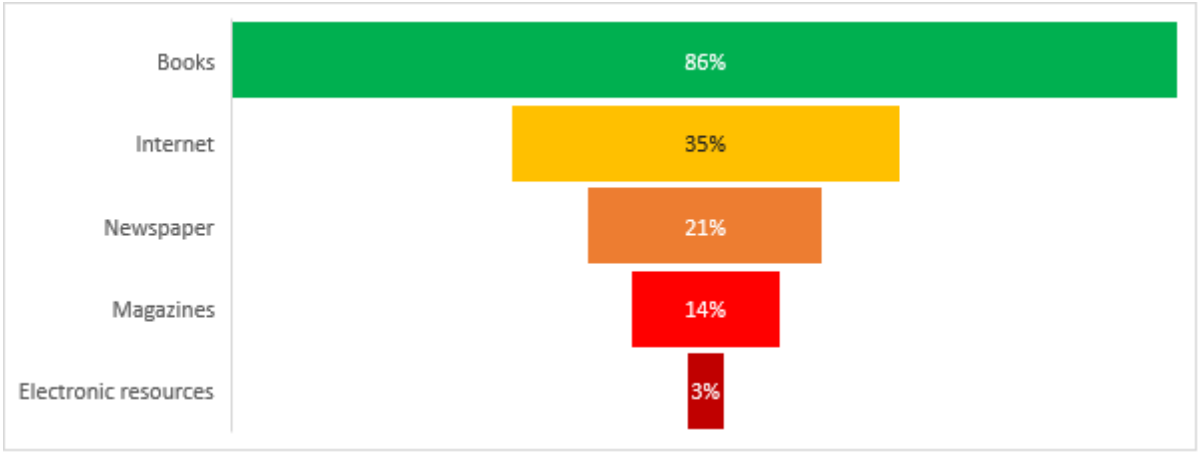

Figure 5: Information resources used

These findings highlight a traditional pattern of library use dominated by print resources, with underutilization of electronic and online information services. The strong reliance on books is consistent with similar studies in TVET institutions, where structured course readings drive student demand. However, the marginal use of electronic resources raises concern, particularly given the global shift toward digital scholarship and open-access learning materials.

4.6.2 Reasons for using books

Reasons for the use of the library books are shown in Figure 6. According to the results, the choice of a library information resource is predominantly (48%) guided by the availability of the resource. According to Njuki (2019), the majority of Technical and Vocational Education and Training (TVET) institutions in developing countries, like Kenya, have long embraced traditional libraries with books as the primary information resource. This explains why books are the most commonly used library information resource in TVET libraries.

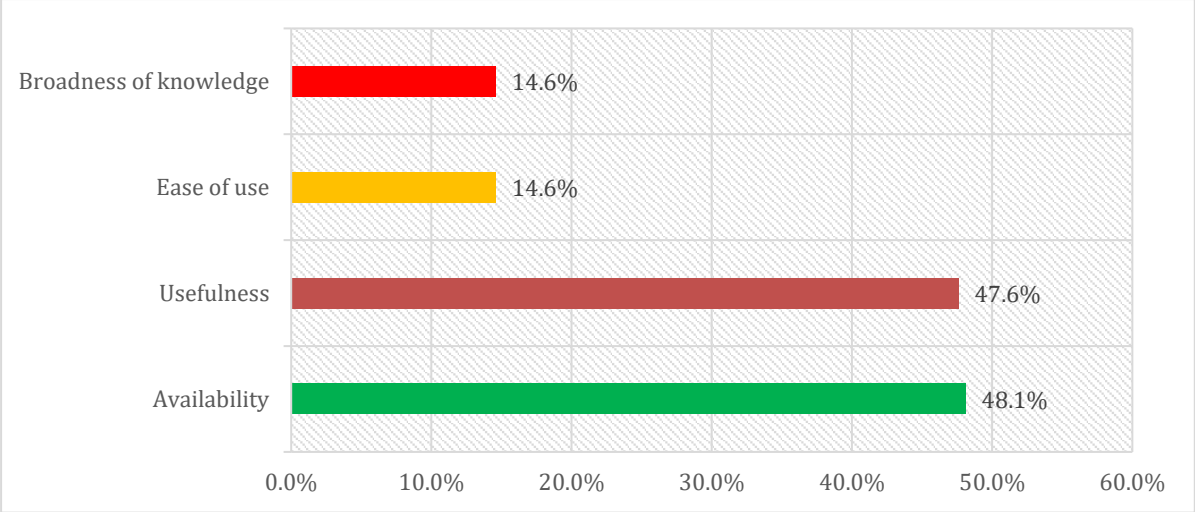

Figure 6: Reasons for using library books

4.7 Accessibility of Information Resources

4.7.1 Extent of accessibility of information resources

Figure 7 shows that most of the learners (41.3%) found information resources somehow accessible. This implies that most of the learners are able to obtain needed information from the available information resources. This indicates that academic librarians and information professionals have struck a balance, taking into account the subject specifics within the institution, between particular research and information needs and a useful collection of information resources to meet the needs of the institutions and their users.

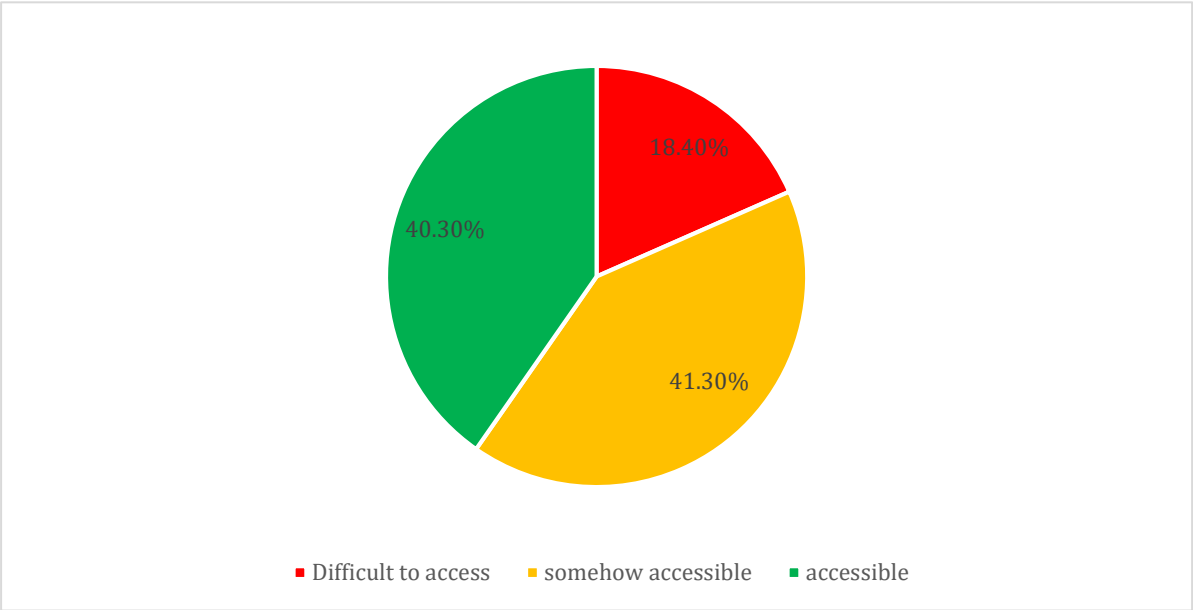

Figure 7: Extent of accessibility of information resources

This outcome highlights the efforts of academic librarians and information professionals to build collections that reflect subject-specific requirements of the institution. It also indicates an attempt to balance between diverse information needs and the availability of relevant, useful resources.

4.7.2 Accessibility of different types of information resources

Table 13 displays cross-tabulation results of information resource accessibility by type of information resource used. The results indicate that there is a significant accessibility difference in use of books at a 5% significance level. This means that there is a relationship between the ability to locate and utilize books in the library and the use of books as information resources. This study is consistent with that of Olorunfemi and Ipadeola (2021), who discovered that undergraduate students' inability to locate certain information resources in the library is a barrier to their use of those resources. The results also found a significant accessibility difference in use of internet at a 10% significance level. This finding implies that the ability of learners in utilizing the internet for learning is related to using the internet as an information resource. This concurs with Otolo et al, (2018) who observed that ICT skills of undergraduates impacts their effectiveness in utilizing internet-based information resources.

Table 13

Accessibility of Used Information Resources

Information resource	Books		Newspaper		Electronic resources		Magazines		Internet	
Accessibility	no	yes	No	Yes	No	yes	no	yes	no	yes
Difficult to access	24%	76%	79%	21%	95%	5%	90%	11%	53%	47%
Somehow accessibility	38	84%	82%	18%	99%	1%	91%	9%	61%	39%
Accessible	7%	93%	75%	25%	95%	5%	81%	19%	74%	27%
Total	14%	86%	79%	21%	97%	3%	86%	14%	65%	35%
Pearson Chi-square	0.038**		0.480		0.334		0.146		0.058*	

**, * significant at 5% and 10% significance level

4.8 Learners' Satisfaction with Library Information Resources

4.8.1 Level of Satisfaction with Information Resources Available in the Library

Figure 8 shows the level of Satisfaction with information resources available in RVNP library. As per then results, (73.3%) of users were satisfied and (26.7%) were unsatisfied. This result means that majority of the learners are of the opinion that the available library information resources in the libraries are best suited to address their knowledge needs for their academic programs.

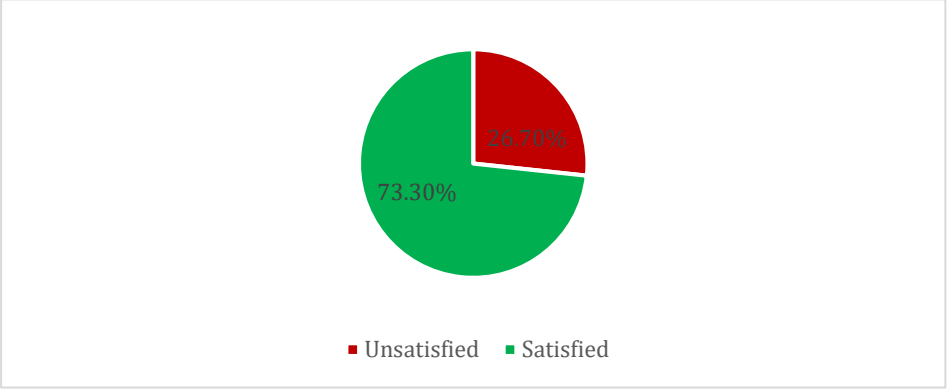

Figure 8: Level of Satisfaction with Information Resources Available in Library Fulfilling Information Needs

4.8.2 Reasons for being Unsatisfied with Library Information Resources Available in Library Fulfilling Information Needs

The study probed the reasons for being unsatisfied with library information resources available in the library fulfilling information needs through a thematic analysis. Figure 9 shows that the most prevalent (58.18%) reason for dissatisfaction was inadequate information in resources. This result is consistent with that of Mukundi and Njuki (2019), who discovered that the majority of educational institutions have information gaps related to green skills, such as manufacturing, agriculture and industry.

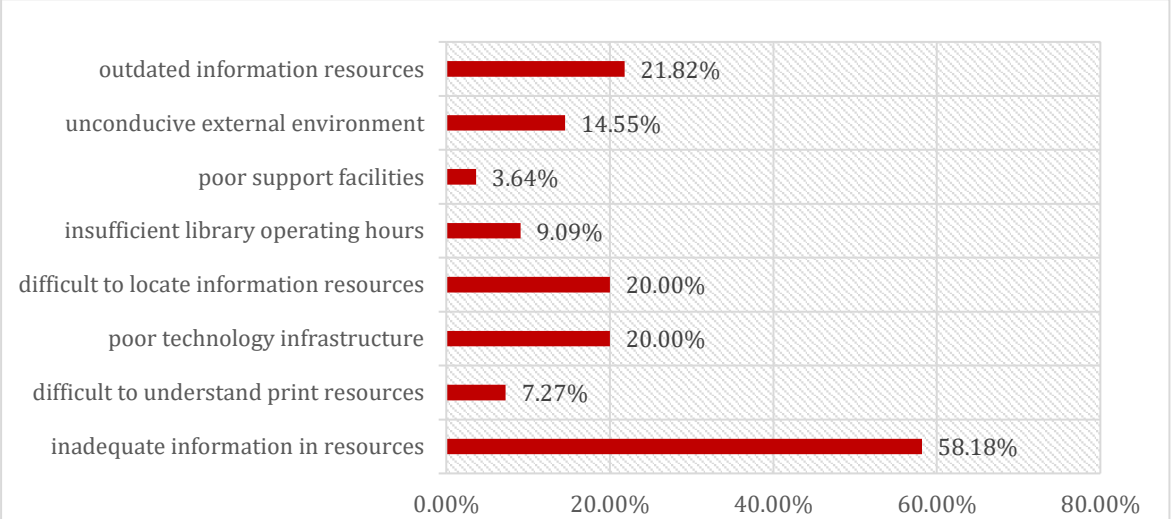

Figure 9: Reasons for being unsatisfied with Library Information Resources Available in Library Fulfilling Information Needs

4.9 Challenges in Usage of Library Information Resources

4.9.1 Learners' encounter of challenges when using library information resources

The study inquired whether the learners faced challenges when using library information resources. As shown in Figure 10 the study found that indeed majority of learners (59.70%) encounter challenges when using library information resources**.**

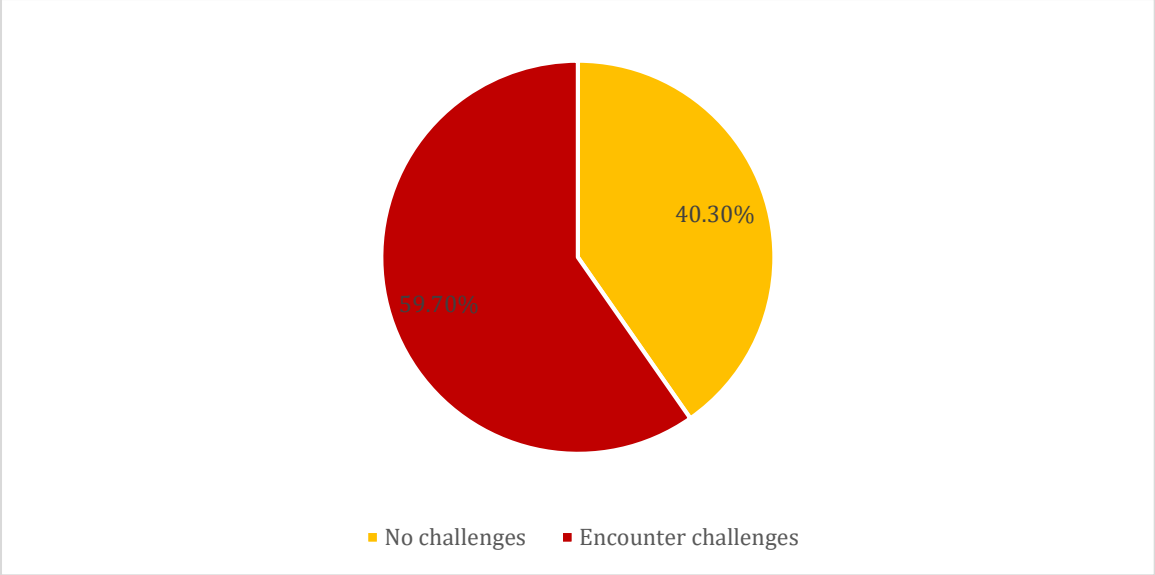

Figure 10: Challenges encountered when using library information resources

4.9.2 Specific challenges faced when using library information resources

To shed more light on the incidence of constraints when using library information resources, the study probed to identify the specific challenges faced by the users of library information resources through a thematic analysis. The results in Figure 11 indicate that the most prevalent challenge faced by the students was inadequate information resources since it was cited by (43.9%) of user who encountered challenges.

The primary problems influencing the administration of information resources collection in libraries, according to McGuigan (2008), are the budgetary limitations imposed on libraries. This is due to the fact that academic libraries are under pressure to prove their worth and significance to funding sources, governance boards, and institutional stakeholders in order to justify ongoing funding for them. (Hotsonyame, 2023).

Other key reasons included: outdated resources (some library materials were reported as not current and did not reflect recent developments in their fields of study), limited technology infrastructure (absence or insufficiency of digital databases, e-journals, and other online resources, which are increasingly essential for modern academic research, and difficulties in information resource access (challenges in accessing popular textbooks and reference materials due to insufficient copies).

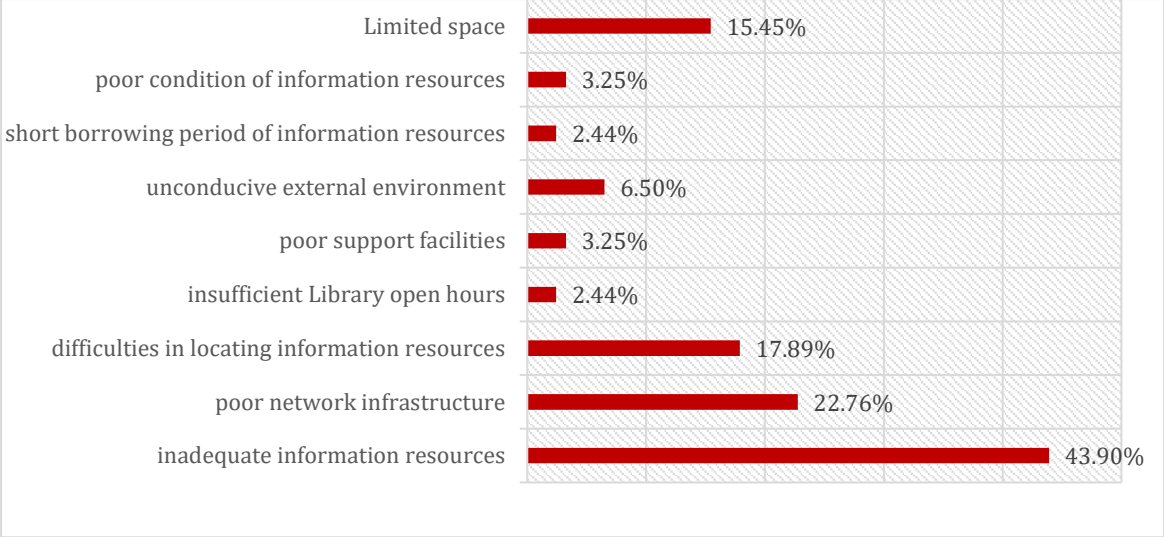

Figure 11: Specific Challenges Faced When Using Library Information Resources

The dominant barrier identified in the findings was inadequate of information resources highlighting the need for RVNP library review their collection development policy and address different curriculum needs in different departments. In addition, integrating electronic information resources can address concerns on digital divide.

The analysis in Table 14 sought to determine whether learners' encounters with challenges when using library information resources influenced the frequency of library use. The Pearson correlation analysis showed a very weak negative relationship between the two variables (r = –0.039, p = 0.579). This relationship was not statistically significant, suggesting that experiencing challenges does not meaningfully predict how often learners visit the library.

Table 14

Association between Learners' Encounter of Challenges When Using Library Information Resources and Frequency of Library Use

Variables	Statistics	Frequency of Library Use	Learners' Encounter of Challenges
Frequency of Library Use	Pearson Correlation	1	-.039
	Sig. (2-tailed)		.579
	N	206	206
Learners' Encounter of Challenges	Pearson Correlation	-.039	1
	Sig. (2-tailed)	.579	

N	206	206

The regression analysis in Table 14 confirmed this finding. The coefficient for challenges was negative (B = –0.041) but not statistically significant (t = –0.556, p = 0.579). The model itself was not significant (F (1, 204) = 0.309, p = 0.579) and explained almost none of the variance in frequency of library use (R^2 = 0.002, Adj R^2 = –0.003).

Table 15

Influence of Learners' Encountering Challenges When Using Library Information Resources on Frequency of Library Use

Frequency of Library Use	B	Std. Error	t	Sig.	95.0% CI [B]	
(Constant)	2.301	.057	40.323	.000	2.189	2.414
Learners' encounter of challenges when using library information resources	-.041	.074	-.556	.579	-.187	.105

Note: Calculated F (1, 204) = 0.309, Prob> F = 0.579, R-squared = 0.002, Adj R-squared= -0.003

Table 15 shows the influence of Learners' encountering challenges when using library information resources on frequency of library use. The findings indicate that use of information resources is not influenced by different identified barriers such as insufficient information resources, poor network connectivity, or difficulties in locating materials. This suggests that other factors—such as access and satisfaction with resources directly influence library use. The study also highlighted the user's perspective of the library information resources as critical in achieving their academic goals despite, the many challenges encountered.

4.10 Librarian Support Accessibility

As shown in Figure 12, majority of the learners (91.30%) were of the opinion that there was accessible librarian support. This implies that there are adequate and competent librarians in the colleges' libraries. This is explained by the Technical and Vocational and Educational Training Authority's (TVETA) recruitment drives, which aim to fill what appears to be a staffing gap for TVET colleges with competent staff.

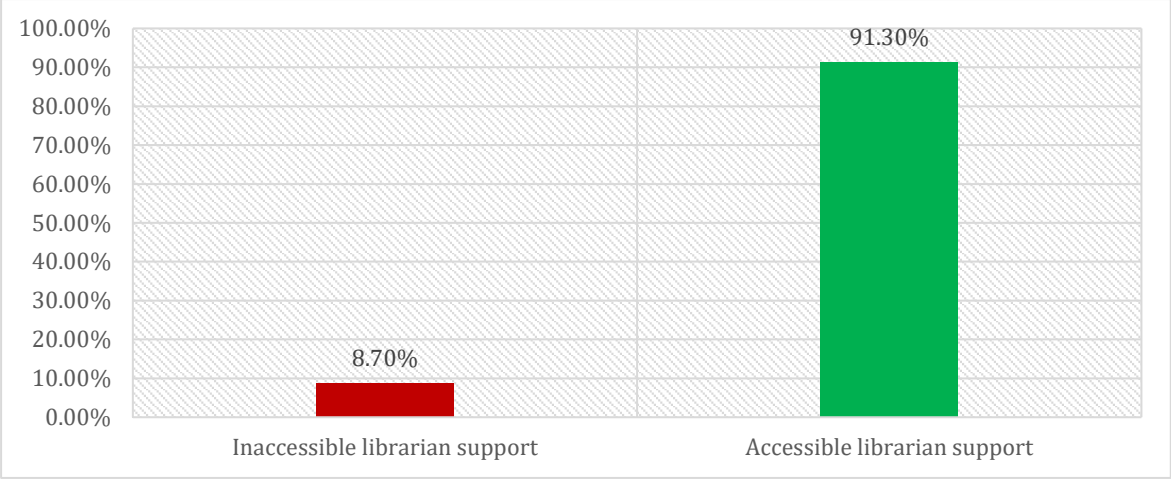

Figure 12: Librarian support accessibility

CHAPTER FIVE
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter provides a summary of the study findings, conclusions, and recommendations.

5.1 Summary of Findings

The overall objective of this study was to evaluate the access and use of library information resources among TVET students. Specifically, the study sought to; examine the availability of library information resources in RVNP, explore the use of library information resources in RVNP library and evaluate the user experience of library information resources in RVNP Library. To achieve these objectives, data was collected from RVNP students by means of a questionnaire. The data was then analyzed using descriptive and inferential statistics.

The summary of the findings according to the objectives of the study are as follows

Objective one of the study sought to establish the available of information resources at RVNP Library. The findings revealed the predominance of traditional books with very limited electronic resources. The results also indicated disparity in the availability of information resources for different academic disciplines in RVNP.

The second objective was to determine access and use of library information resources among students at RVNP Library. The summary of the findings is as follows:

i. Most students visit libraries once in a while. The predominant factor contributing to in frequent visits to the library was the constraint of time, attributable to demanding schedules and limited availability of free time.
ii. Most students visited the library to obtain general information, with books being the most commonly used resource due to their availability.
iii. Electronic information resources were the least utilized. Njuki (2019) stated that the majority of Technical and Vocational Education and Training (TVET) institutions in developing countries, like Kenya, have long embraced traditional libraries with books as the primary information resource, which explains why books are the most commonly used library information resource in TVET libraries.

Objective 3 sought to analyse the user experience and satisfaction of users on the information resources at RVNP Library. The summary of the findings is shown below.

i. Majority of the learners believe that the available library information resources are best suited to address their knowledge needs for their academic programs.

ii. About 26.7% of the library users reported being unsatisfied with the information resources available in the library. The most common reason for the dissatisfaction was the inadequacy of available information resources.

iii. Accessing library information resources presents challenges for many students (59.7%). The primary obstacle encountered by most students when utilizing library information resources was the insufficient availability of resources (43.9%).

iv. Majority of learners (91.3%) indicated that librarian support was easily accessible in their library.

5.2 Conclusions

Data for objective one was analyzed using cross tabulations with Pearson Chi-square test. From this analysis' results, it is concluded that most of the library information resources in TVET libraries are in form of books with very limited electronic resources. The results from the analysis of the objective one also infer the conclusion that there is an inequality of availability of information resources for the different academic disciplines in TVETs.

Data for objective two was analyzed using descriptive statistics and thematic analysis. The analysis results led to the formulation of several conclusions. First, it is concluded that most TVET learners visit the library only once in a while mostly because of packed timetables which limit their time for visiting the library. It is also concluded that books are the most used library information resource by TVET students and electronic resources being the least used information resource in TVET libraries. Moreover, the results prompt the conclusion that availability is the most considered factor by TVET students in terms of choosing a library information resource to use.

Data for objective three was analyzed using descriptive statistics and thematic analysis. The results of the analysis prompted the deduction of several conclusions.

First it was concluded that most TVET students find library information resources to be marginally accessible with books being the most accessible information resources. With regards to source of information resources used, it was concluded that most TVET students use other sources of information resources other than the colleges' library. It was also concluded that most TVET students are satisfied with information resources available in the library in terms of fulfilling their information needs.

The third objective also involved the analysis of incidence of challenges in library use.

The results of the analysis led to the conclusion that majority of TVET students encounter challenges when using library information resources with inadequate information resources being the most prevalent constraint. Finally, from the analysis, it was concluded that TVET libraries have accessible librarian support.

5.3 Recommendations

The analysis results revealed limitations in TVET libraries that negatively affect the user experience of TVET students. Accordingly, the study made the following library management recommendations.

i. In relation to the first objective on the availability of information resources at RVNP Library, the study recommended that RVNP Library should invest in electronic resources to align with current library user behavior and technological savviness. The findings revealed low usage of electronic information resources. The library requested more funding to install and update ICT infrastructure, since retrieval of information resources requires a stable, well-developed ICT infrastructure for easy access and use of e-resources. Additionally, modern users increasingly prefer to use electronic devices to access information, and they have access to devices such as smartphones. Also, the findings revealed notable lack of enough information resources attributed to the increase in student enrollment in RVNP in the recent years. The demand for expansion of library services and collections is a driving force for collaboration among Academic Libraries.

    a. Further, today, TVET Libraries face reduced budgets from their parent institution which are underfunded because of hard economic times faced by the country. A consortium provides the best alternative in which TVET Libraries can continue to offer service delivery to their users. An example of a local consortia is Kenya Library and Information Services Consortium (KLISC) which supports member libraries through a collaborative collection development hence avoiding duplication, reduce the cost of purchasing due to bulk purchasing power, sharing of e- information resources to member libraries via a common network, training staff of new ICT developments and market their researchers and their publications among member Libraries. Therefore, joining a consortium like KLISC will add value to RVNP Library.

ii. Concerning the second objective, which examined access and utilization of library resources by students the study also recommended that librarian support be availed both physically in the libraries and virtually (remote access) as successful adoption of

electronic information resources is depends on accessible user support. This is especially important for RVNP students who require access to information resources regular working hours due to their demanding academic schedules.

iii. In addressing objective which sought to analyse students experience and satisfaction when using information resources , the study indicated majority of students experience challenges while using library information resources .Therefore the Library management in RVNP Library, should take advantage of communication platforms in ICT such as WhatsApp and face book to engage with their users regarding service delivery and to gather insights about satisfaction .The opinions, insights and suggestions can inform future improvements.

5.4 Further Research

The study makes the following suggestions for further research**:**

i. The study uncovered a notable lack of adoption and utilization of electronic information resources within RVNP library. Consequently, it is imperative to conduct further research to explore the factors contributing to both the success and limitations of electronic information resources in other TVET libraries.

ii. A broader comparative study across multiple TVET institutions would help establish whether the findings at Rift Valley National Polytechnic are representative of trends in TVET libraries nationally. Such research could reveal regional or institutional disparities and inform policy interventions at a systemic level.

iii. It would be valuable to investigate the perspectives of library staff and administrators alongside those of students. Understanding how staff perceive challenges and opportunities in resource provision and management could yield a more holistic picture of library services in TVET institutions and guide more sustainable solution.

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Appendix i

QUESTIONNAIRE

Determining Access and Use of Library Information Resources among Students in Rift Valley National Polytechnic, Nakuru County, Kenya

Introduction

My name is Jessica Nyawira Ng'ang'a, a student at Egerton University pursuing a master's degree course in Information Science. I am carrying out my research thesis on the **Determining Access Use of Information Resources among Students in Rift Valley National Polytechnic, Nakuru County, Kenya** to be submitted to the university as partial fulfilment of the requirement for a master's degree in Information Science. I am in the process of collecting data for this study and you have been identified as one of the respondents in this study. I therefore kindly request you to spare some of your time to respond to the questionnaire.

I assure you that your response will be accorded all the confidentiality it deserves and will only be used for academic purposes. Your accuracy in answering the questions will be highly appreciated.

SECTION A: DEMOGRAPHIC QUESTIONS

1. **Name (Optional)**

2. **Course**

3. **Department**

4. Diploma year two [ ] Diploma year three [ ]

SECTION B: AVAILABLE INFORMATION RESOURCES FOR USE

Please indicate your response by ticking in the brackets provided.

1. What information resources are available for use in the library?

Books [ ] Newspapers [ ] Electronic information resources [ ]

Magazines [ ] Internet [ ]

SECTION C: ACCESS AND USE OF INFORMATION RESOURCES

Please indicate your response by ticking in the brackets provided.

2. How often do you visit the library?

Every time [ ] Once a while [ ] Never [ ]

Please give reasons for any of the above indicated response

……

……

……

……

3. What is your purpose for visiting the Library?

Obtaining general information [ ] Research [ ] Leisure [ ]

Revising for Exams [ ] Borrowing books [ ]

4. What type of information resources do you mostly use while in the library?

……

……

……

……

5. Are the library information resources easily accessible when you need them?

Yes [] Sometimes [ ] Not accessible [ ]

If your response is Not accessible as indicated above, kindly explain which information resources are not accessible……

……

…

……

…

SECTION D: USER EXPERIENCE AND SATISFACTION OF THE USERS IN USING INFORMATION RESOURCES.

Please indicate your response by ticking in the brackets provided.

6. Are the information resources available in library satisfy your information needs?

   Yes [ ] No [ ]

   Please Give reason if your response is No as indicated above

   ……
……;.;……
……
……

7. Have you encountered any challenges in using library information resources?

   Yes [ ] No [ ]

   If your response for the above question is Yes, kindly explain the challenges you have encountered while using Library information resources

   ……
   ……
   ……
   ……

8. Are the Librarians always available to respond to your information needs?

   Yes [ ] No [ ]

Thank you for your cooperation

INTERVIEW SCHEDULE FOR LIBRARIANS

SECTION A: BIO INFORMATION

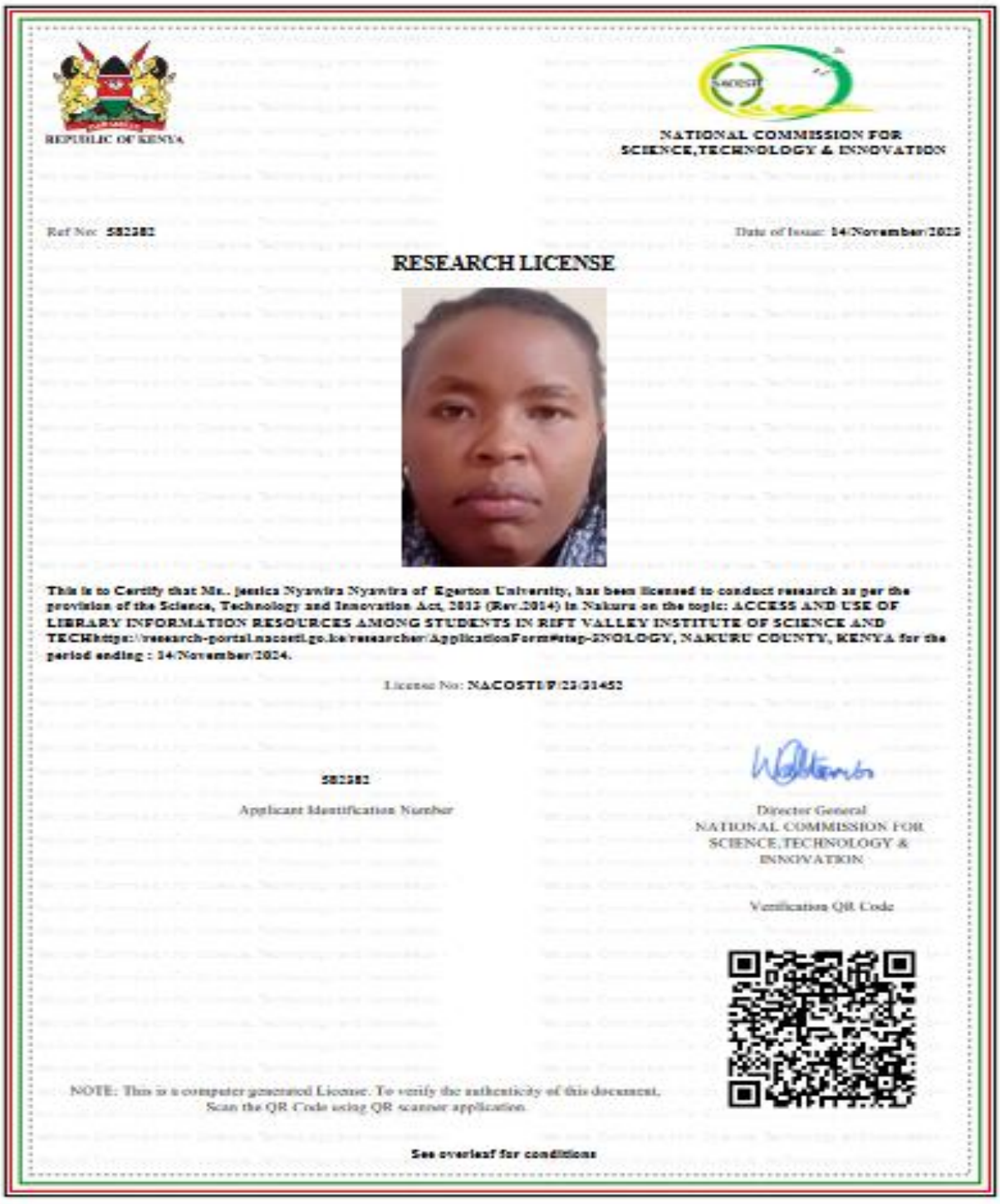
1. Name of the librarian_____
2. Designation _____
3. Experience (yrs) _____

SECTION B

1. How do you communicate with RVNP students to determine their expectations and information needs?
2. What measures have you taken to ensure that you provide quality services to RVNP students?
3. What are the challenges encountered when providing information resources to users?

Appendix ii: Research Permits and Approvals

Research Permit from National Commission for Science, Technology and Innovation



REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: 582382

Date of Issue: 14/November/2023

RESEARCH LICENSE

This is to Certify that Ms.. Jessica Nyawira Nyawira of Egerton University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nakuru on the topic: ACCESS AND USE OF LIBRARY INFORMATION RESOURCES AMONG STUDENTS IN RIFT VALLEY INSTITUTE OF SCIENCE AND TECHhttps://research-portal.nacosti.go.ke/researcher/ApplicationForm#step-2NOLOGY, NAKURU COUNTY, KENYA for the period ending : 14/November/2024.

License No: NACOSTI/P/23/31452

582382

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

See overleaf for conditions

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013 (Rev. 2014)

Legal Notice No. 108: The Science, Technology and Innovation (Research Licensing) Regulations, 2014

The National Commission for Science, Technology and Innovation, hereafter referred to as the Commission, was the established under the Science, Technology and

Innovation Act 2013 (Revised 2014) herein after referred to as the Act. The objective of the Commission shall be to regulate and assure quality in the science, technology and innovation sector and advise the Government in matters related thereto.

CONDITIONS OF THE RESEARCH LICENSE

1. The License is granted subject to provisions of the Constitution of Kenya, the Science, Technology and Innovation Act, and other relevant laws, policies and regulations. Accordingly, the licensee shall adhere to such procedures, standards, code of ethics and guidelines as may be prescribed by regulations made under the Act, or prescribed by provisions of International treaties of which Kenya is a signatory to
2. The research and its related activities as well as outcomes shall be beneficial to the country and shall not in any way; i. Endanger national security
    ii. Adversely affect the lives of Kenyans
    iii. Be in contravention of Kenya's international obligations including Biological Weapons Convention (BWC), Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), Chemical, Biological, Radiological and Nuclear (CBRN).
    iv. Result in exploitation of intellectual property rights of communities in Kenya
    v. Adversely affect the environment
    vi. Adversely affect the rights of communities
    vii. Endanger public safety and national cohesion
    viii. Plagiarize someone else's work
3. The License is valid for the proposed research, location and specified period.
4. The license any rights thereunder are non-transferable
5. The Commission reserves the right to cancel the research at any time during the research period if in the opinion of the Commission the research is not implemented in conformity with the provisions of the Act or any other written law.
6. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research.
7. Excavation, filming, movement, and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
8. The License does not give authority to transfer research materials.
9. The Commission may monitor and evaluate the licensed research project for the purpose of assessing and evaluating compliance with the conditions of the License.
10. The Licensee shall submit one hard copy, and upload a soft copy of their final report (thesis) onto a platform designated by the Commission within one year of completion of the research.
11. The Commission reserves the right to modify the conditions of the License including cancellation without prior notice.
12. Research, findings and information regarding research systems shall be stored or disseminated, utilized or applied in such a manner as may be prescribed by the Commission from time to time.
13. The Licensee shall disclose to the Commission, the relevant Institutional Scientific and Ethical Review Committee, and the relevant national agencies any inventions and discoveries that are of National strategic importance.
14. The Commission shall have powers to acquire from any person the right in, or to, any scientific innovation, invention or patent of strategic importance to the country.

15. Relevant Institutional Scientific and Ethical Review Committee shall monitor and evaluate the research periodically, and make a report of its findings to the Commission for necessary action

National Commission for Science, Technology and
Innovation(NACOSTI),
Off Waiyaki Way, Upper Kabete,
P. O. Box 30623 - 00100 Nairobi, KENYA
Telephone: 020 4007000, 0713788787, 0735404245
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Research Permit from Rift Valley Institute of Science and Technology

Ethical approval Letter from Egerton Universtity

Rift Valley Institute
of Science and Technology

NAKURU /NJORO ROAD P.O. BOX 7182-20100, Cell phone 0720 668 238, Nakuru, Kenya

Email: Principal@rvist.ac.ke Websit: www.rvist.ac.ke

Founder 1979: H.E. Hon. D.T. Arap Moi, C.G.H. The Second President of the Republic of Kenya

Principal: Sammy K. Chemoiwa, PGDE, Mount Kenya University, BSC (Agriculture Engineering), University of Nairobi.

RVIST/QMS/ADM/280/VOL.II

28 February 2024

Jessica Nyawira Ng'ang'a
P O BOX 17509
NAKURU
Mobile Number: 0723777613
Email: nyawirajessica84@gmail.com

Dear Jessica

RE: REQUEST TO CONDUCT RESEARCH

We acknowledge receipt of your letter received on 14th February 2024 on the above subject.

Thank you for showing interest in partnering with our Institution. We wish to inform you that your request to conduct research is approved. On your arrival kindly see the Public Relation Officer for further instructions.

Thank you for partnering with us.

Yours faithfully

Lincoln Langat
Deputy Principal Academics
FOR: PRINCIPAL

EGERTON UNIVERSITY

TEL: (051) 2217808 P. O. BOX 536
FAX: 051-2217942 EGERTON

EGERTON UNIVERSITY INSTITUTIONAL SCIENTIFIC AND ETHICS REVIEW COMMITTEE

EU/RE/DIR/009
Approval No. EUISERC/APP/290/2023 ***3rd November 2023***

Jessica Nyawira Ng'ang'a

P.O. Box 17509
Nakuru
Telephone: 0723777613
E-mail: nyawirajessica84@gmail.com

Dear Jessica,

RE: ETHICAL APPROVAL: ACCESS AND USE OF LIBRARY INFORMATION RESOURCES AMONG STUDENTS IN RIFT VALLEY INSTITUTE OF SCIENCE AND TECHNOLOGY, NAKURU COUNTY, KENYA

This is to inform you that the ***Egerton University Institutional Scientific and Ethics Review Committee*** has reviewed and approved your above research proposal. Your application approval number is ***EUISERC/APP/290/2023.*** The approval period is ***3rd November, 2023 – 4th November, 2024***

This approval is subject to compliance with the following requirements;

i. Only approved documents including (informed consents, study instruments, MTA) will be used.
ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by ***Egerton University Institutional Scientific and Ethics Review Committee***.
iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to ***Egerton University***
Institutional Scientific and Ethics Review Committee within 72 hours of notification
iv. Any changes, anticipated or otherwise that may increase the risks or affect safety or welfare of study participants and others or affect the integrity of the research must be reported

to ***Egerton University Institutional Scientific and Ethics Review Committee*** within 72 hours.

v. Clearance for Material Transfer of biological specimens must be obtained from relevant institutions.

"Transforming Lives through Quality Education"

vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal. vii. Submission of an executive summary report within 90 days upon completion of the study to ***Egerton University Institutional Scientific and Ethics Review Committee***.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) https://oris.nacosti.go.ke and also obtain other clearances needed.

EGERTON UNIVERSITY
Date.....
RESEARCH ETHICS

Yours sincerely.

Prof. Raphael M. Ngure

CHAIRMAN, EGERTON UNIVERSITY INSTITUTIONAL SCIENTIFIC AND ETHICS REVIEW CTTEE

RMN/BK/

"Transforming Lives through Quality Education"

Appendix iii : Abstract of Publication

Examining Access and Use of Library Information Resources: A Case of Students at Rift Valley National Polytechnic, Nakuru County, Kenya

https://doi.org/10.51317/jhss.v4i1.793

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Keywords: Access, Information Resources, Use Of Information Resources

ABSTRACT

This study aims to establish the availability of information resources at Rift Valley National Polytechnic (RVNP) library to meet students' information needs. The study examines the access and utilization of library information resources among students at RVNP library to fulfill their information needs and analysing users' experience with the information resources at RVNP library in meeting their educational needs. Library information resources are vital for supporting students' learning, research, and academic achievements. Despite the availability of the resources, there are challenges related to access and utilization that impede their effective use. There is a need to gain a comprehensive understanding of how students access and utilize library information resources, and to explore the potential benefits that contribute to their academic success. The research used the Expectation Confirmation Theory to inform the study and employed qualitative and quantitative research methods. The study selected 206 students using stratified random sampling and engaged one librarian through convenience sampling. Data was collected through self-administered questionnaires distributed to students and a face-to-face interview with the librarian. Quantitative data was analyzed using the Statistical Package for Social Sciences (SPSS), while thematic content analysis was applied to the qualitative data. The study revealed that books are the primary information resources in TVET libraries, with electronic resources being scarce. Additionally, students face challenges in utilizing information resources, with inadequate resources being the most prevalent obstacle. This study recommend that RVNP library should prioritise investments in electronic resources to stay relevant in today's technologically-driven environment.