ANALYSIS OF FACTORS INFLUENCING STUDENTS' DECISIONS IN SELECTING PUBLIC TVET INSTITUTIONS IN NAIROBI COUNTY, KENYA

GLORY KAMBANJA MUTUNGI

A Thesis Submitted to the School of Education and Social Sciences in Partial Fulfilment of the Requirements for the Conferment of the Degree of Doctor of Philosophy in Leadership and Education Management of Kenya Methodist University

MAY 2023

DECLARATION AND RECOMMENDATION

Declaration

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

Signed: ……. Date: ……..

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Glory Kambanja Mutungi
EDU-4-0193-1/2015

Recommendation

We confirm that the candidate carried out the work reported in this thesis under our supervision.

……. …… Date: ……..

Dr. Tarsilla Kibaara, Ph.D

Kenya Methodist University

……. …… Date: ……..

Dr. Severina Mwirichia, Ph.D

Kenya Methodist University

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DEDICATION

To my mum, husband and children, and my late Dad, Alexander Mange for setting very high standards for me to achieve in academics.

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ABSTRACT

The Kenyan government has improved Technical Vocational and Training Institutions (TVET) to give young people the opportunity to acquire the technical and practical knowledge needed in the employment market. Accordingly, it created the TVET Act, the TVET authority, Kenya Universities and Colleges Central Placement Service (KUCCPS), and Higher Education Loan (HELB). These reforms have caused an influx of students in some TVET institutions, while some have experienced low enrolment. Notably, some students choose to join colleges where their friends are, while others join a program but discover that they are not interested in that profession and therefore change the course. In other instances, students request to transfer from one TVET institute to another. This raises questions about the choice criteria and how students make selection decisions. The study's goal was to investigate the variables that affect students' decisions about public TVET institutions in Kenya's Nairobi County. The objectives covered physical facilities, staff, trainees' employability skills, courses provided, and government regulations, and their influence on students' decisions to enroll in public TVET institutions in Nairobi County. The 1982 Jackson model served as a framework for the investigation. A mixed methods strategy was used in this study, which used a descriptive survey research design. At TVET institutions in Nairobi County, the study focused on 349 module three trainees, six principals, and six officers in charge of admission. Initially, the student body was divided into three distinct groups based on the type of TVET and subsequently categorized by their academic year. A sample size of 349 students was selected using the simple random technique from each stratum. The study deliberately selected only a limited number of principals and admission officers to participate, as they constituted a small group. Questionnaires were self-administered on students, while interview guides were used on principals and officers in charge of admission. The validity and reliability of the research tools were evaluated in accordance with the given standards. Quantitative data was analysed by calculating percentages, means, and standard deviations. The relationship between variables was tested using Spearman correlation and ordinal logistic regression analysis, whereas qualitative data was analysed through thematic analysis. According to the findings, there is a strong positive association between physical facilities, staff adequacy, trainees' employability skills, courses offered and students' choice decisions for public TVET institutions in Nairobi County. These factors jointly account for a 33.5% variation in students' selection decisions for public TVET institutions. However, physical facilities were inadequate and dilapidated, while staff adequacy, knowledge and competency posed severe challenges. These had implications for trainees' employability skills and the courses offered in TVET institutions. The government should avail funds for developing physical facilities and refurbishing the old ones. It is imperative for the Ministry of Education to develop a comprehensive plan aimed at actively involving and retaining a competent and sufficient workforce. MoE should also institute capacity-building programs for the existing and new trainers. IT should ensure a continuous curriculum review of all courses offered. A policy by MoE is also needed to enhance linkages with industries to enhance practical training, industrial attachment, and internship. Principals of TVET institutions should establish the employability of their graduates, institute awareness programs, and strengthen career counselling and mentorship programs for students. They should also seek to enhance collaborations with development partners and employers.

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LIST OF ABBREVIATIONS & ACRONYMS

BTVET	Business, Technical and Vocational Education and Training
CAGC	Careers Advice, Guidance and Counselling
CBET	Competency-Based Education and Training
CBM	College of Business and Management Science
CCTV	Closed Circuit Television
CDACC	Curriculum Development and Accreditation Certification Council
CET	Continuing Education and Training
CPEC	China- Pakistan Economic Corridor
CTE	Career and Technical Education
EFA	Education for All policy
EQF	European Qualifications Framework
EU	European Union
FET	Field- Effect Transistor
GER	Gross Enrolment Rate
HELB	Higher Education Loans Board
ICT	Information and Communication Technologies
IoT	Internet of Things

IT	Internship Training
KBTI	Kampala Business and Technical Institute
KIPPRA	Kenya Institute for Public Policy Research and Analysis
KNEC	Kenya National Examination Council
KUCCPS	Kenya Universities and Colleges Central Placement Service
LPTKs	Lembaga Pendidikan Tenaga Keguruan
NABTEB	National Business and Technical Examinations Board
NACOSTI	National Commission for Science, Technology and Innovation
NBTE	National Board for Technical Education
NEPO	National Education Sector Program
NITA	National Industrial Training Authority
NQFs	National Qualifications frameworks
NSF	National Skills Framework
NSQF	National Skills Qualification Framework
NVEQF	National Vocational Education Qualification Framework
NVQ	National Vocational Qualification
OIG	Office of Inspector General
OVAE	Office of Vocational and Adult Education

SAED	Skill Acquisition and Entrepreneurship Development
STEM	Science, Technology, Engineering and Math
TPO	Technical Publications Office
TTVE	Technical Training and Vocational Education
TVET	Technical and Vocational Education and Training institutes
TVET CDACC	Technical and Vocational Education and Training Curriculum Development, Assessment and Certification Council
TVETA	Technical and Vocational Education and Training Authority
UIBT	Uganda Institute of Business and Technology
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
US	United States
UTC	Uganda Technical College
VET	Vocational Education and Training
VTC	Vocational Training Centres
VTE	Vocational and Technical Education
WSC	World Skills Competition

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

This chapter provides a backdrop to the study, a description of the problem, the research objectives, the hypotheses, rationale for their use, their significance, their scope, their limitations, and their underlying assumptions. The operational definition of the term is given at the chapter's conclusion.

Career choice is essential among young people as it determines their prospective future; hence, careful consideration ought to be undertaken during the selection stage to make the right decision, including deciding on the institution where it is offered. One of the various educational establishments providing vocational and career-focused education is the TVET. TVETs are advanced levels of learning that aim to transform trainees' abilities and attitudes by equipping them with problem-solving skills and competencies that are demanded in the marketplace (Hassan & Awan, 2019; Dahalan et al., 2020). UNESCO (2018) and Heti (2013) define TVET as formal educational institutions that provide training in technology, entrepreneurship, sciences, research, and project management in order to give students practical, professional attitudes, aptitudes, knowledge, and skills in the areas specified by a given course.The establishment of TVET institutes can be traced to back periods after the French Industrial Revolution in the 19th century. The study noted that the first formal TVET was launched in Europe to produce new inventions for military use, after which they continued to grow and permeate during colonialism. Most countries introduced and continued to utilize TVET institutes to develop job-related information and

skills. Notably, different countries have adopted different names for TVET institutes. For instance, Technical Training and Vocational Education (TTVE) in Saudi Arabia, Internship Training (IT) in Germany and Australia, Business, Technical and Vocational Education and Training (BTVET) in Uganda, and Vocational and Technical Education (VTE) in China and Nigeria (Shahrun Nizam et al., 2018) are all examples of vocational and technical education.Despite the name given in different countries, TVET institutes are critical in developing the human resources required by the market. Therefore, enrolling in a TVET institute increases one's chances of getting employment and/or acquiring skills that would enable one to start a self-employment venture (Tamang, 2022). According to Omar et al. (2020), and Dahalan et al. (2020), TVET Colleges can nurture entrepreneurial skills among youth by developing their innovative and problem-solving capabilities. Consequently, TVET colleges play a role in alleviating a country's poverty levels, reducing unemployment rates, and improving the social and economic status, hence, accelerating the sustainable development of a country (Hassan & Awan, 2019).

The trainees who get access to practical skills offered in TVET institutions can quickly develop career ladders that help them grow. These skills can also become a source of employment for fresh graduates (Legusov et al., 2020). Indubitably, the technical skills and competencies gained form the basis of endowing natural resources in a country (Dahalan et al., 2020). Ngugi and Muthima (2017) noted that learners who are given technical skills become entrepreneurs, diligent workers, and informed citizens, all of which contribute to a country's economic prosperity. This further enhances social inclusion and human resource development in the country. As such, numerous TVET institutions provide various courses, most common across the board (Legusov et al., 2020), resulting in high

competition among them. Therefore, one wonders about a learner's criteria when selecting the specific TVET institution to pursue a course. Due to this rationale, the present study recognized the necessity to examine the determinants impacting students' choices when it comes to choosing Public TVET institutions within Nairobi County.

Mahangiru (2016) argues that the decision to take a course at a particular college is significant in an individual's life as his/her future career is built during the college years. Previous national and international researchers have found several characteristics that influence Vocational Education and Training (VET) institutions' enrolment. As an illustration, a study by Shahrun (2018) highlights that in Japan, the youth face restricted entry to vocational training institutes due to the perception that opting for such programs will constrain their future career prospects and educational options. Furthermore, parents are hesitant to counsel their children on career options because doing so does not guarantee that they will find a good job with a good salary.

Although the components that drive this process vary from person to person, some are shared by many: parents significantly influence their children's enrolment. The possibility of pursuing education and prospective eligibility for scholarship awards are among the institutional elements that have been studied as having an impact on a student's decision-making process. (Mahangiru, 2016). Notably, the learner’s choice of a TVET institution has forced many colleges globally to rethink their marketing strategies and revamp internal processes and systems. As such, many developed countries have introduced a variety of mechanisms; for example, funding conferences and workshops, providing scholarships, developing artificial intelligence technologies and marketing alternatives to enable learners

to make correct choices in joining technical institutes (Hong et al., 2023; Houngue et al., 2022; Pilz & Hao, 2021; Clement, 2014). Moreover, the attractiveness of TVET institutions has been promoted through conducting research and development, formulating TVET policies, integrating knowledge and technical skills, establishing standards for human resource development, and reviewing the sector curriculum and syllabi to accommodate market and employers' current needs (Jules, 2012; Winch, 2013; Hong et al., 2023). However, only a few countries have the resources to provide high-quality technical and vocational Education. Ethiopia receives only 0.5 per cent of its technical education budget, compared to 1%, 10%, and 12.7 per cent for Ghana, Mali, and Gabon, respectively (Atchoarena, 2018).

There are numerous factors determining the decision on the choice of a TVET institute. These factors consist of, but are not restricted to, economic influences, institutional considerations, political aspects, parental influences, social dynamics, cultural elements, peer pressure, and psychological aspects (Dahalan et al., 2020; Pilz & Hao, 2021; Tamang, 2022; Winch, 2013; Zhongming et al., 2021). On one hand, these factors and many others may present a dilemma to a prospective learner, complicating the selection decision. On the other hand, the TVET institutes may need help to develop responsive mechanisms to create a winning choice decision. Other challenging aspects faced by TVET in improving how prospective learners perceive them include; diminishing demand for TVET's graduates, little clarity, fragmented unity of purpose, weak TVET standardization measures, little government support, and attitude towards TVET institutions (Hong et al., 2023; Paryono, 2017). Peters (2021) challenged TVET institutes to upscale their competitiveness to attract more learners.

According to Ramamuruthy et al. (2021), the most competitive TVET institutions are evidenced by infrastructural development, various courses, graduating learners with competitive employability skills, infrastructural expansion, and marketing & promotional strategies in making a selection decision. Hilbig (2019) stressed that learners are looking for quality and satisfaction in their research, academic, technical, attitudinal, entrepreneurial, management and information needs. This underscores the need for TVET institutions to rebrand by providing the best education through skilled, competent and adequate human resources, developed physical facilities and other infrastructure (Hong et al., 2023).

In the United Nations, Philippines, Columbia and Thailand, TVETs have, for example, invested in ICT-based solutions and prioritized infrastructural development (Subramaniam & Bush, 2022; Hong et al., 2023). China has a well-developed network of government-sponsored vocational institutes and a wide range of training programs. It recently re-positioned its government-sponsored technical institutes by investing in simple marketing, adopting competency-based training, focusing on quality and empowerment, and impacting technical skills to learners (Jules, et al., 2020; Jules, 2012). Notably, skills grading systems are used in various placement strategies. Simultaneously, technical institutes, vocational schools, and secondary technical schools are anticipated to offer a diverse range of pre-employment initiatives, practical training opportunities, and career assistance (retraining) (Idris & Mbudai, 2017).

In Spain, Merino et al. (2021) explored the determinants of high school students' decision to pursue higher education opportunities and the relationship between the university and

the student. The findings demonstrated that the reputation of a training institution and the excellence and quality of its educational programs were the essential factors for Spanish students interested in Communication Studies. This implied that when it comes to finding information about colleges and their educational programs, Spanish communication students value the hands-on experience and quality of programs. It was also clear that public training institutes are preferred by Spanish students seeking a communications degree over their private counterparts.

Other strategies that have been adopted to win learners' choice for TVET institutions are the focus on regular revision of curricula to fit employer's needs, integrating technologies in training, deploying modern equipment and partnering with industry and secondary schools (Hong et al., 2023). Subramaniam and Bush (2022) and Gretch and Camilleri (2020) explain that students' interest in joining TVET institutes has been heightened by ensuring the education system promotes innovation among youths. Other notable measures include rebranding the institutes, acquiring appropriate technology, equipping workshops, libraries, and computer labs, and ensuring the professional development of staff.

In Malaysia, Pakistan, Bangladesh and India, several TVET institutions have suffered low enrolment, as noted by Omar et al. (2020), Association of Southeast Asian Nations (2022), Hong et al. (2022); Tognatta (2014), Lintel et al. (2014); Hong et al. (2021), and Azmi & Salleh (2021). This was attributed to competitiveness and shifting students' interest, parental / guardian influence, employers' negative impression of graduates, limited facilities in many institutions, limited competency among teaching staff, traditional

attitudes, negative societal attitudes and dismally equipped laboratories, workshops and infrastructure (Azmi & Salleh, 2021; Hong et al., 2022; Hong et al., 2021).

Despite the little attractiveness of TVET institutions, developing nations such as Africa cherish the value of TVET education in securing youth employment, gaining the country's economic development, and as a source of skilled labour (Yiga, 2022; Mumbe, 2020; Chitema, 2021). TVET in these nations has also experienced competitiveness in enrolment. Some notable aspects affecting learners' choice of TVET institutions include acquaintance, career sensitization programs, marketing and publicity and implementing policies (Sern et al., 2019; Yiga, 2022; Obwoge et al., 2016).

Adequate laboratory facilities, provision of competency-based skills and a market-responsive curriculum inform students' decisions in selecting TVETs in most African countries (Acakpovi & Nutassey, 2015; Kirior, 2017; Paryono, 2017; Mumbe, 2020; Yiga, 2022). Previous literature presented by Puyate (2017), Okwelle et al. (2018) and Sithole (2019) has underscored strategic reforms towards reviving and boosting the enrolment of trainees in these institutions. Some reforms include revisiting the TVET management structure, increasing access to funding, and deploying guidance and counselling to promote the relevance of studying in technical institutions.

Learners’ interest in joining TVET colleges in countries such as Ghana, Nigeria, South Africa, and Zimbabwe has declined due to the distressing history of graduating trainees who do not fit in the workplaces of many organizations (Acakpovi & Nutassey, 2015). Other challenges include a rigid curriculum, learners' attitudes, lack of funding models for

growing the institutional infrastructure and lack of performance monitoring and evaluation (Sithole, 2019; Beharry-Ramraj, 2016). Okoro (2017) noted that underfunding, lack of services, poor asset management, and lack of skilled staff in TVET institutions the ramifications of this situation on the caliber of education and training, which may affect the student's choice of a college. In Uganda, Okello (2015) reported that 30% of respondents said that negative attitudes towards TVETs existed in learners, and this was affecting their selection decisions.

Structural administration focuses on quality service delivery, equipping the colleges with relevant information and learning materials and implementing students' internal industrial attachment to ensure trainees acquire the required skills (Abdullahi et al., 2021; Audu et al., 2020; Mulenga & Chileshe, 2020). However, a country like South Africa is trying to address the above challenges by improving funding models, revamping TVET management structures, investing in career guidance and counselling and encouraging parental involvement (Puyate, 2017; Okwelle et al., 2018). Nigeria, Ghana and Zambia are also strengthening TVET management policies. According to Kingombe (2018), Ethiopia has the most significant rise in VET enrolment of 5.565 per cent between 1999 and 2007. It grew to 191,157 in 2007 and 371,347 in 2011 (Halu, 2016). Hailu (2017) says that Ethiopia ranks second among African countries regarding the number of training institutes.

In Kenya, the Ministry of Education oversaw TVET instructional management and established reforms to respond to current human resources and employers' needs in the marketplace (Kipngetich et al., 2022). In the Kenyan context, institutional-based factors have been established as critical determinats for achieving competitiveness, growth and

development, increased students' enrolments and successful trainees' graduation (Langat et al., 2021). Notably, conscious measures have been implemented, which includes the TVET Act, which guides on admission, registration of learners, curriculum development, administration, management and evaluation of the sector performance (TVET ACT, 2013).

The National Education Sector Program (NEPO) 2014-2018, the Vision of Kenya 2030, Session Report No. 2 of 2015 (formerly No. 14 of 2012), the Education and Training Policy Framework for Learning and Development Sector Reform in Kenya, and the 2013 Technical Publications Office (TPO) Law governing TPO reform are additional essential policy documents. The goal of obtaining and maintaining a Gross Enrolment Rate (GER) of 20% in TPO and providing adequate opportunities for accessible training based on competency are both stressed in the 2015 Session Report #2. The government has worked very hard to meet training and skill requirements, paying instructors to improve GER in VET (Kiplangat, 2020). The introduction of a Competency-Based Education and Training (CBET) curriculum in TVET institutions has also been a significant advancement (Mwagunga et al., 2020). The Technical and Vocational Education and Training Authority (TVETA) was also set up to oversee the implementation of the TVET Act, policies, and regulations as well as the CBET curriculum and to provide leadership in student admission (Korir et al., 2020; Mwagunga et al., 2020; TVETA, 2018; Kogo, 2022).

Moreover, career guidance offices have been established in most TVET institutes, while the HELB loan facility was expanded to TVET learners (Nawaji et al., 2022; Maiyo & Wasike, 2021; Sankale et al., 2017). Therefore, these reforms, institutional procedures and Ministry of Education directives are expected to enhance quality service delivery, attract

registration and enrolment of trainees, improve operational performance, and increase the competitiveness of TVET institutions. Despite these endeavours, some TVET institutions are still experiencing poor enrolment, while others have more than they can handle (Nawaji et al., 2022; Maiyo & Wasike, 2021; Ngware et al., 2022; Korir et al., 2020). This raises the question of aspects influencing learners' decision to select a TVET institute.

Numerous studies have shown that influences on students' VET decisions include student excitement, parental influence, and peer influence. These studies include Munyua et al. (2014) in Kenya; several issues have been noted across TVET institutions, even in Nairobi County, which could be affecting student enrolment are few infrastructures, inadequate learning resources, negative institutional culture, poor curriculum delivery, poor school environmental conditions, trainees' perceptions and negative attitudes (Muigai, 2021; Gichuki et al., 2019; Mwagunga et al., 2020; Ongulu & Ibrahim, 2021; Chepkoeach, 2021). Other challenges are social-cultural factors, institutional factors, family factors, student peer pressure and government placement requirements (Muigai, 2021; Gichuki et al., 2019; Ongulu & Ibrahim, 2021; Mwagunga et al., 2020). The difficulties were brought on by a shortage of tools, pensions, water, and electricity facilities, as investigated by Ronoh et al. (2014), who carried out a study on enrollment rates at polytechnics in the Kericho, Bureti, and Bomet regions of Kenya. Ineffective trainers, a curriculum that is not connected with labour market needs, and a lack of public knowledge of the need for technical Education, he stated, all contributed to the low participation rate. Most of these challenges seem multi-faceted, hence the focus of the current study which investigated the factors influencing students' decisions in selecting Public TVET institutions in Nairobi County, Kenya.

All TVET institutions work under a similar legal framework in Kenya; hence, their attractiveness in influencing students' selection decisions depended on factors other than what was stipulated in the law noted in the above discussion. The TVET institutions in Nairobi County were also experiencing similar conditions just like those in available other counties. The TVET Institutions in Nairobi County, too, need help for relevancy and competitiveness (Magut & Kihara, 2019). They have embarked on student retention strategies to foster successful completion rates. Student orientation, learners support strategies, HELB funding opportunities, treating learners as customers and learner involvement in managerial decision-making through their student leaders are among crucial initiatives noted in most TVET institutes in Nairobi County (Nason, 2021).

1.2 Statement of the Problem

The government of Kenya adopted the Education for All policy (EFA) to ensure students get equal opportunities for Education. Aligned with this objective, TVET institutions have been reinforced to offer young individuals opportunities to acquire the technical and practical competencies essential in the job market (Gichuki et al., 2019). Consequently, learners enrolled in TVET institutions are expected to make program choices and formulate long-term career aspirations (Bakshi & Maru, 2012).

In supporting this endeavour, the Ministry of Education developed the TVET Act in 2013, established TVET authority, and has continued to allocate substantial fiscal resources to enhance the role and growth of TVET institutions in Kenya (Gichuki et al., 2019; Kenya Institute for Public Policy Research and Analysis (KIPPRA), 2019; TVET Act, 2013; Omar et al., 2020). These reforms and consideration for the few opportunities to join universities, have resulted into many students wanting to join TVET institutions (Gichuki et al., 2019;

Shah & Nair, 2013). As such, through the KUCCPS, the Ministry of Education has established measures that allow a student to select TVET institutes and courses that one would wish to pursue. This exposes a prospective student to numerous courses offered at TVET institutions.

Even with the above reforms and standardizations, some TVET institutions have experienced an influx of students, where some have increased fourfold, while others are suffering due to low enrolment (Waruru, 2022). Behrandt and Frankline (2014) noted that some TVET students insist on enrolling in courses pursued by their friends in certain colleges, and in other instances, students join a program, but afterwards discover that they are not interested in that profession (Chireshe, 2013). Yet, in other cases, students request to transfer from one TVET institute to another (Mogendi, 2022). This raises the question of what influences students' decisions when selecting courses at public TVET institutions.

Factors such as support services, social-cultural factors, institutional factors, family, peer pressure, government factors and individual-related factors have been described as essential in determining the universities that a post-secondary school student can select (Gichuki et al., 2019; Simiyu et al., 2018; Omar et al., 2020). In that connection, the current study got concerned on the factors influencing students' decisions in selecting public TVET institutions. The research also recognizes the significance of governmental policies in giving strategic direction; hence, it was necessary to ascertain the degree to which it moderates the association between the identified factors and the student's selection decision for public TVET institutions. Failure to address this concern would negate the heavy investment made by the government in public TVET institutions.

Several past studies such as Obwoge et al. (2016), Omar et al. (2020) and Muigai (2021) focused on college branding, curriculum implementation, while others such as Gichuki et al. (2019), Simiyu et al. (2018) explored the dynamics of competition and resource allocation within TVET institutions. This study specifically examined how factors such as infrastructure, staff availability, trainee employability skills, available courses, and government policies impact students' choices when selecting public TVET institutions in Nairobi County, Kenya.

1.3 Purpose of the Study

To analyze factors influencing students' decision in selecting Public TVET institutions in Nairobi County, Kenya with a view of recommending best practices in college and course selection for post-secondary learners.

1.4 Research Objectives

To accomplish the research goal, the following research objectives guided this study.

i. Evaluate the influence of the physical facilities on students' decision-making process when selecting public TVET institutions in Nairobi County.
ii. Examine how staff adequacy influence to students' choice decisions for public TVET institutions in Nairobi County.
iii. Evaluate the influence of trainees' employability skills on students' choice decisions for public TVET institutions in Nairobi County.
iv. Determine influence of courses offered to students' choice decisions for public TVET institutions in Nairobi County.

v. Determine whether government policy moderates the identified factors and students' choice decisions for public TVET institutions in Nairobi County.

1.5 Research Hypotheses

The study tested the following null hypothesis.

- H_{01}: There is no statistically significant relationship between physical facilities and students' choice decisions for public TVET institutions in Nairobi County.
- H_{02}: There is no statistically significant relationship between staff adequacy and students' choice decisions for public TVET institutions in Nairobi County.
- H_{03}: There is no statistically significant relationship between trainees' employability skills and students' choice decisions for public TVET institutions in Nairobi County.
- H_{04}: There is no statistically significant relationship between courses offered and students' choice decisions for public TVET institutions in Nairobi County.
- H_{05}: Government policy does not moderate the identified factors and students' choice decisions for public TVET institutions in Nairobi County.

1.6 Justification of the Study

The Kenyan government, specifically the Ministry of Education, needs to act quickly to put policies in place that will have an effect on how students choose the Public TVET colleges in the nation. Analysing the factors that influence students' selection and decision-making process when choosing Public TVET institutions was of utmost importance in Nairobi County to inform and recommend areas requiring improvement on college and course selection decisions. The study also suggested applicable solutions regarding equipping, building infrastructure, increasing funding, curriculum revision and implementation. Investigating the internal factors among TVET institutions, such as

physical facilities, staff adequacy, employability skills for trainees, courses offered and government policies, will generate critical opinions to inform TVET principals, the Ministry of Education, TVET institutions' educational and curriculum planners and TVETA authorities on adopting competitiveness strategies. This will enable the sector to grow by experiencing an influx of registration and admittance of students into the institutes to pursue artisan, certificates and diploma courses.

1.7 Significance of the Study

Analyzing the factors that affect students' choices and decisions when choosing Public TVET institutions in Nairobi County was crucial. The goal of this study was to offer perceptions and suggestions for areas that need improvement in the selection of a college and courses. This research will bring up new knowledge which will provide a more profound comprehension of the various determinants impacting students' decisions when selecting Public TVET institutions in Kenya. By undertaking this research, technical, vocational and educational training institutes' stakeholders will understand the need to invest financially in TVET facilities and its human resources adequately and prioritize trainees' employability skills and courses as strategies for winning admission of more students in the institutions.

TVET institutes in Nairobi County will find the applicability of this research in many ways. For example, appreciating the need to upgrade, plan and build more physical facilities and infrastructure such as laboratories, workshops, classrooms, sporting facilities, libraries and recreational facilities will attract the development and growth of the institutions. Focusing on user needs such as investing in impacting the correct and quality employability skills amongst trainees will cause a shoot in student enrolment. The TVET administrators will

be better informed when developing the school budget, strategic planning, and managerial decisions. This will result from the envisioned findings upon application by experiencing improved internal efficiency, reduced teaching workloads and better performance.

The TVET Curriculum developers will also find this study valuable to them. The forthcoming results are expected to provide valuable insights into areas that necessitate enhancements in the oversight of the TVET curriculum implementation. This will be in line with the identified competitive courses which will attract the enrolment of students as presented. Moreover, in line with the expectation of trainees upon graduation that they will have been impacted with relevant and on-demand competitive employability skills, it will foster the curriculum's revision to suit these needs. This body will also embrace the development of institutional infrastructure such as laboratories, classrooms, libraries, workshops, computer labs, recreational facilities and sporting facilities.

Trainees admitted to these institutes will also benefit from this study. This is because they will obtain the best from the training institute by being attended to by adequate and qualified staff. Considering that the factors which attract students to prioritize seeking admittance to a TVET institution are related to adequate infrastructure, facilities, human resources and lucrative curriculum, these trainees will be adequately prepared by being impacted with marketable employability skills, which will make them stand out for self-employment or hiring.

The TVETA body under the Ministry of Education will also take advantage of the application value of this study. Noting that the TVETA body is mandated to oversee TVET institution's standardization, policy implementation and curriculum development, recommendations aired out will provide a bedrock for informing improvement in the

institutional policies on curriculum implementation, financial management, TVET competitiveness and human resource management. The study is also anticipated to have an impact on how Kenyan TVET institutions assess the execution of their curricula, manage their resources, and develop market-oriented approaches.

1.8 Scope /delimitation of the Study

This study analyses the factors influencing students' decisions in selecting public TVET institutions in Nairobi County. The results can however be generalized in TVET institutions in other counties. This research focused mainly on physical facilities, staff adequacy, employability skills for trainees, courses offered and government policies, and students' selection decision in selecting public TVET institutions in Kenya. Other internal and external factors likely to impact students' choice in selecting Public TVET institutions, such as cost of education, completion rates, parental influence, social factors, institutional marketing and future career advancement opportunities were not investigated. TVET principals provided information, teaching staff and trainees enrolled in various courses in these institutions in Nairobi County. The study did not incorporate opinions from non-teaching staff.

1.9 Limitations of the Study

This research depended on the opinions of the TVET principals, the teaching staff and trainees on the factors influencing students' decisions in selecting public TVET institutions in Nairobi County. This points out that the findings were biased toward the opinions of the sampled respondents. This was bridged by creating a conducive environment that fostered respondents' truthfulness, openness, thorough, detailed research tools, and explaining the purpose of the data collection exercise.

The study was also restricted concerning the methodology employed. Unlike in a longitudinal approach, where the factors influencing students' decisions in selecting public TVET institutions could be investigated and monitored over time, a cross-sectional methodology was employed to investigate the phenomena.

1.10 Assumptions of the Study

This study was done under the following presumptions:

i. Prospective trainees joining TVET institutions are knowledgeable about the public TVET institute in Nairobi. influential factors which determine their decision-making to enrol in a given
ii. All TVET institutions meet the expectations of the trainees.
iii. All institutions have developed an institutional policy for the admission and management of students
iv. Government policy possesses some degree of influence on the factors influencing students' choice in selecting Public TVET institutions in Nairobi County.
v. Students' decision variables under investigation are significant in illustrating the selection of Public TVET institutions in Kenya, Nairobi County.

1.11 Operational Definition of Terms

This section provides definition of terms as used in the study.

College Choice	College Choice involves selecting prospective students to attend one type of college over another.
Institutional Factors	These factors influence a student's decision to pursue many options, such as program availability, cost, and financial aid.
Module three students	These are trainers who are in year three of training pursuing diploma in a TVET institute.
Physical infrastructure	Consist of learning equipment, facilities, information resources, workshops, laboratories, libraries, playgrounds, buildings and structures for ensuring favourable teaching and learning.
Public TVET institutions	Refers to programs or institutions for Technical and Vocational Education and Training (TVET) that receive funding and are administered by government or public authorities. These institutions provide a variety of vocational courses and training programs with the goal of equipping individuals with practical skills and

	knowledge for different occupations and industries. Public TVET institutions are typically open to the general public and provide accessible education and training opportunities to a wide range of learners
Student choice	Refers to a decision made for furthering one's Education based on the institution of one's choice.
Student Qualifications	Refers to the basic requirements a student must meet to ensure the learning process runs smoothly.
Student selection	Refers to the decision to give preference to colleges for the possibility of further Education. It is understood that this decision was made to meet the needs, weigh the options, and consider the possible costs and benefits for their lives in the future.
Technical	Talents are obtained through practical, mechanical, artistic, or applied scientific training.
Technical and vocational education and training (TVET)	Refers to educational and training programs that equip individuals with the necessary practical skills, knowledge, and competencies needed for particular trades, occupations, or industries.

Technical Education	Refers to educational programs and courses that focus on providing practical skills, knowledge, and training in specific technical fields.
Trainees employability skills	Comprise of a range of values, inter-personal, negotiation, marketing, thinking, technical competencies, capabilities and abilities which enable a graduate to secure a job, perform better at work and also maintain their relevancy in the organization
TVETA Authority	This is a public, corporate agency mandated to oversee the maintenance of standards, quality and relevance in all dimensions for managing TVET institutions.
Vocational Education and Training (VET)	Describes tertiary educational institutions aiming to equip trainees with knowledge, attitudes, skills and competencies for solving technical, entrepreneurial and technological skills in various occupations in the labour market.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter's main focus is a thorough evaluation of relevant literature related to the important variables under investigation in the study that was gleaned from a variety of information sources. The study acknowledges that there can be several players that influence the decision made by a prospective student regarding the TVET institute that one joins for a career. These players include friends, family members, college officials, media, and policymakers, among others. However, the empirical literature in this study did not focus on the influence of players but concentrated on factors that influence the selection decision about TVET institutions. The chapter has therefore started by discussing literature based on the main variable, including students' choices for public TVET Institutions, physical facilities, staff adequacy, trainees' employability skills, courses offered, and government policy. In this study, the hypothesis was that government policy would function as a moderating factor in the correlation between the mentioned factors and the decision-making process of students when choosing an educational institution. As such, a government policy review provided information on the purported association. The chapter concludes by offering a discourse on the theoretical and conceptual basis.

2.2 Choice Decision of Public TVET Institutions by Students

The students' decision in selecting public TVET institutions refers to making a choice about which tertiary college one wants to join for a course. TVET is a training institution that deals with technical education. It plays a significant role in global education. Organizations like UNESCO and the World Bank have provided a rationale for investing

in TVET institutions owing to their tremendous contribution to developing the human capital needed for economic growth.

As noted in chapter one, the demand for TVET institutions has grown exponentially. Notably, most students prefer joining universities to further their education. However, there are few universities, making universities only accept applications from a few students who qualify by attaining prescribed entry grades. Since the other students want to continue learning, they enroll in TVET institutions. With the current market demands, many TVET institutions concentrate on technical and business courses to support manufacturing and entrepreneurship endeavors.

2.2.1 TVET Education, Enrolment and Attrition

Technical education is career-oriented, and students encounter several barriers when enrolling. Carr (2022) conducted a research study in the United States that explored the obstacles to enrolment in technical education, specifically focusing on New Hampshire's career and technical education system. The study emphasized the importance of career and technical education (CTE) in providing students with hands-on, skill-based training and opening doors to careers in high-tech and skilled trades. However, there is a severe labor shortage in the United States in fields including computer science, corporate management, construction, and automotive. Moreover, vocational institutes offering corresponding CTE programs have observed a substantial decline in student enrollments. Hence, Carr (2022) submitted that identifying the barriers students encounter when enrolling in CTE programs would address declining school enrollment. Carr (2022) identified that many students

dropped their programs before starting them, and the number of dropouts increased yearly. Students highlighted several challenges, including insufficient access to information or effective marketing strategies, limited availability of time within their schedules, and the influence of students' and parents' perceptions regarding CTE. These challenges significantly hinder students' enrolment in CTE programs, decreasing the number of employees in the high-tech areas. Therefore, Carr (2022) recommended the expansion of marketing, adding new programs, and aligning the school calendar. While this study identified the challenges students face in enrolling in CTE, its scope was small, that is, 54 school counsellors in New Hampshire.

The developing nations also have TVET education contributing to their economic development, and the TVET sector in these countries is also affected by many factors. Abdul-Aziz et al. (2020) carried out research in Malaysia exploring the push and pull factors influencing students' decision to enrol TVET programs offered at community colleges. The study comprised a randomized sampling of 377 students enrolled in 11 community colleges within the nation. The impact of various factors on students' enrollment in TVET was assessed using the average score. The results showed that push and pull factors both had a big impact on students' decisions to enroll in TVET institutions. In particular, it was found that professional prospects were the main pull element and that student interests were the main push factor. Like other developed and developing nations, the Malaysian government gives significant attention to TVET education. It has embraced contemporary technological advancement and ensures their TVET institutions comply with

the industry 4.0 requirements and international and domestic economic practices. As such, the Malaysian government has invested heavily in this sector.

Although career prospects and students' interests stood out as the main factors affecting learners' enrolment in TVET institutions, Abdul-Aziz et al. (2020) identified other factors that included the availability of learning resources. They established the main factors determining the student's enrolment in TVET programs in Malaysia, which were career prospects, programs offered, curriculum, training facilities, and instructors' competencies. Despite this conclusion, it needed to be clarified how these determinants influenced students' decisions in selecting public TVET institutions in Malaysia. The current study demonstrates how the push and pull factors affect students' decisions in choosing public TVET institutions in Nairobi County.

While many researchers focus on the factors affecting learners' enrolment in TVET institutions, they need to address the factors leading to attrition in TVET programs, yet these institutions experience significant attrition rates. In South Africa, Zulu (2018) presented a study on student attrition in TVET colleges focusing on Elangeni TVET colleges. Zulu (2018) attributed students' attrition to several factors. Zulu first asserted that a large number of students who left TVET programs were dissatisfied with how TVET institutions handled the National Students Financial Aid Scheme (NSFAS) because of bias. As a result, this program did not include students who were struggling financially (Zulu, 2018). This indicates mismanagement and unfair distribution of government funding to learners in TVET institutions, where the needy students lack the finances to enable them to pursue TVET programs. Secondly, Zulu (2018) established that many students

complained about the effectiveness of instruction and educational experience in TVET institutions in South Africa. According to Zulu, monitoring of education in Elangani TVET College was low; hence, poor-quality teaching and learning increased attrition rates to a great extent. It also results in decreased enrolment in these institutions because the enrolling students do not want to get low-quality education because they cannot give them the competence needed in the industry. The study by Zulu further noted that Elangani TVET College needed more infrastructure. With inadequate infrastructure, TVET institutions cannot produce the desired graduates, which will likely influence students' selection decisions of a TVET institutes.

The presence of science and technology programs offered by TVET institutions is crucial in aligning the competence required and offered by technology 4.0. Furthermore, the pertinence of the educational offerings provided by TVET institutions should correspond to the demands of the labour market and create opportunities for individuals to update outdated skills and acquire new ones. In Kenya's Nyanza region, Onyango et al. (2022) conducted research on the difficulties faced in delivering science and technology courses within TVET institutions. The scholars defined the provision of TVET education as the amount of education that educational stakeholders are willing to offer to learners.

In a study on the demand and supply of TVET education, Ibrahim and Nashir (2022) noted that the demand for TTVE education had increased significantly. Similarly, Onyango et al. (2022) reiterated that the supply of TVET education had rapidly increased even with scarce resources. Nevertheless, Onyango et al. (2022) submitted that the supply of TVET education is faced with several challenges because of teachers, infrastructure, students, and programs. The study noted that when TVET institutions had a considerable supply of

students, they faced the challenge of an inadequate supply of teachers, infrastructure, and TVET programs. Also, in the case of a low supply of learners, the situation is attributed to a low supply of teachers, infrastructure, and a lack of TVET programs. This is a significant challenge that affects enrolment in TVET institutions. In addition, many students want to enroll in science and technology programs. However, you will realize that such programs need to be improved in many TVET institutions so that they don't prevent these students from enrolling in TVET programs.

2.2.2 Students' Selection Decisions for TVET Institutions

Learners prefer joining some TVET institutions over others for several reasons. In the Massachusetts US, Dougherty and Harbaugh (2020) investigated whether growth in Science, Technology, Engineering and Math (STEM) availability in technical education can improve participation equality. Dougherty and Harbaugh (2020) reported that in the US, career and technical education serves as the main provider of vocational education at the secondary school level and shares similar objectives with TVET education worldwide. They also claimed that CTE had grown expressively in the past decade, emphasizing STEM subjects, Science, Technology, Engineering, and Mathematics, citing their contribution to the economy's growth. This frontier was likely to influence how students select technical colleges Dougherty and Harbaugh (2020) further established that males, students with disability, and low-income students had been historically overrepresented in STEM CTE programs.

Similarly, Najoli (2019) also noted a high number of males participating in STEM programs as compared to their female counterparts, despite decreased discrimination in STEM CTE programs. The lack of discrimination in these programs encourages learners

interested in STEM programs to enroll. Besides all these, it was clear that TVET institutions offering only STEM programs attracted few students. Although this study presented the factors influencing learners' participation in STEM CTE programs, it needed to demonstrate what can be done to attract more enrolment in STEM CTE programs. The current study demonstrates how TVET can be refurbished to strongly inform the decision that students make when choosing a TVET institute

While STEM subjects have been emphasized expressively, making them affect learners' enrolment in TVET institutions, Entrepreneurship programs also considerably impact learners' enrolment. Ismail et al. (2019) carried out investigative research in Malaysia to assess the effectiveness of entrepreneurship programs in nurturing entrepreneurial skills among competent graduates of TVET. Numerous TVET institutions prioritize and encourage involvement in entrepreneurship endeavours. Entrepreneurship is one employability criterion used to assess the quality of TVET graduates. Many TVET institutes have designed several entrepreneurship programs to develop learners' skills in strategizing their life after graduation. However, the impact of these programs has yet to be evaluated (Ismail et al., 2019). Their study, therefore, assessed the association between learners' perceptions of the effectiveness of entrepreneurship programs and entrepreneurial skills.

The study was primarily quantitative, with a population of 300 undergraduates who were selected randomly. Ismail et al. (2019) established that learners' perception of entrepreneurship courses positively impacted their perception of self-entrepreneurial skills development. This factor implies that when learners perceive the entrepreneurship

programs offered in TVET institutions as effective in developing entrepreneurial skills, they enroll in these programs in large numbers. Indeed, self-employment has been emphasized significantly in modern times; hence, entrepreneurial skills have become relevant in producing entrepreneurs from TVET institutions. As such, entrepreneurship programs in TVET institutions affect learners' choice of TVET institutions. Just like students interested in STEM subjects select TVET institutions with STEM subjects, as demonstrated by Dougherty and Harbaugh (2020), Ismail et al. (2019) demonstrated that learners interested in entrepreneurship and self-employment select TVET institutions with entrepreneurship programs.

The programs offered in TVET institutions also determine the choice of programs and corresponding TVET institutions in Africa. The impact of entrepreneurship education in TVET institutions on the entrepreneurial goals of female students, specifically in connection to their choice of TVET institutions, was the focus of a study carried out in Ghana by Padi et al. (2022). To accomplish this, a cross-sectional survey research methodology was utilized, sampling 376 participants. Data utilized in the study were gathered by means of a questionnaire and an interview guide. Padi et al. (2022) asserted that entrepreneurship programs had the potential to impact female students' entrepreneurial intentions positively. They contended that entrepreneurship education played a crucial role in enhancing the economic contributions of business individuals to global development and prosperity, particularly among women. The study argued that, in the developed world, females won approximately 30% of small enterprises. Therefore, many students are attracted to TVET institutions that offer entrepreneurial courses in Ghana, particularly women. Studies have demonstrated that, historically, women do not like pursuing STEM

courses but have had a high propensity to business courses, with entrepreneurship being a significant business course that develops their entrepreneurial skills. Therefore, Padi et al. (2022) concluded that female students prefer public TVET institutions offering entrepreneurship courses to enhance their entrepreneurial skills. Besides, they argued that this preference increases significantly when the TVET institutions offer social support to female students. As such, female students would choose TVET institutions which provide not only entrepreneurship courses but also social support.

Gender is a crucial aspect in selecting a college for a prospective student. This is because of the underlying perception of various courses, where some are perceived as favoring one gender and not the other. In that connection, female and male students have different factors that they consider when choosing public TVET institutions. Ngugi and Muthima (2017) presented a study in Kenya indicating a significant gender parity in Kenyan education, with female participation being significantly low, especially in college and higher education. This was described as unfortunate by Ngugi and Muthima (2017). They argued that the relationship between education and development is more pronounced when women are involved in education because it benefits them and those they care for.

Although there have been significant efforts to ensure equity, access, retention, completion rates, quality, and gender parity in Kenyan education, TVET education in Kenya continues to register low female enrolment. Besides, many TVET institutions focus on technical education, with a significant focus on STEM subjects which are traditionally known to attract few female students. Ngugi and Muthima (2017) attributed the low participation of female students in STEM subjects in TVET institutions to factors such as stereotypes,

negative attitudes towards the TVET sector, weak government policy on education, mismatch of TVET skills and market demands, outdated curriculum, gender bias in education, and the failure of the education system to support and motivate female students at the formative stage. Besides, even the few who enroll in TVET education do not choose institutions offering STEM subjects but prefer those with non-STEM subjects (Ngugi & Muthima, 2017). They recommended the need for government to increase female students' entrance into STEM subjects. One strategy noted was to increase female role models in higher learning levels and enhance gender learning responsive strategies to attract more female students. The study of Ngugi and Muthima (2017) concentrated on the female gender and provided hints to possible issues that are likely to influence their decision to select a given TVET institute; however, it negated the male gender. The current study explores factors influencing both genders.

While several studies have taken the approach of subjects and institutional factors as the elements affecting learners' choice of public TVET institutions, other factors exist and are equally crucial in determining the choice of TVET institutions. In the United States, Gauthier (2019) presented a study that focused on employability, family education background, rejection from universities, and socioeconomic factors as the influencers of TVET institutions' choices. Concerning employability, Gauthier's study revealed that students choose a TVET institution that will enhance their employability. One of the reasons that people pursue education is to find employment. Therefore, learners choose TVET institutions that will impart them with skills for employment and self-employment. Secondly, the study showed that family education background impacts learners' choice of community colleges or TVET institutions. The respondents reported that the family

members who influenced their choice of a community college had attained a high school diploma or less. Besides, the family career individuals played a role in finding employment quickly. Also, the study demonstrated that students from families without a solid educational background had no value for education. Therefore, they did not see the need for their children to pursue college or TVET education. Thirdly, the study established that rejection from a university or a four-year college influences students' choices for community colleges and TVET institutions. Indeed, TVET education and colleges are perceived to be lower academic institutions, with many learners preferring to enroll in universities as their first choice to pursue diplomas and certificates.

The other aspect noted by Gauthier (2019) was socioeconomic factors, which were instrumental in determining learners' community colleges and TVET institution choices. These institutions offer affordable means of higher education. The study noted that the students experiencing challenges raising tuition fees preferred TVET institutions and community colleges because they had lower tuition fees than universities.

Motivation also has a vital role in determining students' selection of TVET institutions, mainly when they are in secondary schools. This is demonstrated by Omar et al. (2020), who presented a study on factors that affect students' decisions on TVET institutions among pre-secondary students in Malaysia. Their study observed that people knew less concerning learners' interests, knowledge, and motivation toward TVET. In the study, Omar et al. (2020) employed a quantitative descriptive study design, collecting research data from 64 pre-secondary school students using a questionnaire. The study noted that

many TVET positions still needed to be fulfilled despite the government's emphasis on filling these positions to have many TVET graduates in the country.

Obviously, for learners to understand the value of joining TVET institutions, they must be sensitized to the value of the same at the secondary school level. Omar et al. (2020) argued that they must also receive significant motivation from parents and educators to join TVET institutions. Other sources of motivation were teachers, social media, and friends. The study submitted that students need to hear or know about TVET institutions to have the motivation to join them. This underscored the value of awareness programs about TVET institutes and courses offered. Therefore, Omar et al. (2020) recommended that the Malaysian government create TVET awareness to motivate many learners to join TVET institutions.

TVET institutions create entrepreneurial readiness among individuals. Nonetheless, additional research is necessary to explore the impact of psychosocial factors on entrepreneurial preparedness within the context of choosing TVET institutions. Adeniyi (2021) conducted a study in Nigeria, which highlighted that recent scholarly work has emphasized the role of entrepreneurship-related factors in fostering entrepreneurial readiness for starting ventures. These factors encompass various aspects such as education, personal characteristics, and societal values. According to Adeniyi (2021), previous studies on entrepreneurship have identified discrepancies in the curriculum, teaching methods, and essential skills required for business establishment. Given the persistently high unemployment rates in Nigeria, it becomes crucial to identify the determinants of entrepreneurial readiness. Adeniyi's (2021) focused specifically on investigating the

psychosocial factors related to entrepreneurial preparedness, such as the influences of entrepreneurship education, individual entrepreneurial orientation, and entrepreneurship self-efficacy. The study established that many TVET institutions in Nigeria produced graduates who needed more skills to initiate business start-ups. This was attributed partly to the need for a practical approach to teaching in many TVET institutions in Nigeria. This situation discouraged learners from joining these institutions because they need to perceive the value of the same since TVET's graduates fail to acquire the skills necessary for starting and running a business by the end of the day. As such, the study emphasized entrepreneurial readiness at the exit level of a college learner. Another emphasis is on psychosocial factors like entrepreneurship self-efficacy and individual entrepreneurship orientation.

Career choices are also instrumental in determining TVET institution choices among learners. In Kenya, Obwoge et al. (2016) presented a study on the factors that impact learners' career decisions in TVET institutions. According to this study, career choice has always been a significant challenge for many learners as they transition from secondary schools to institutions of higher learning. However, the factors determining career choice are expected, including peer influence, self-motivation, parental influence, and high school performance. While these factors address a student's career choice, they also influence students' higher learning institutions choices, including TVET institutions. Conventionally, students have many demands that their institutions need to meet to accommodate them. These requirements are taken into consideration when choosing a TVET college. Students choose TVET institutions based on how well they meet their career needs. As Adeniyi (2021) illustrated, psychosocial elements are examples of such needs. Obwoge et al. (2016) also established that social, infrastructural, job market

dynamics and financial and marketing factors affected students' career choices in TVET institutions. The social, financial, and infrastructural factors lie within an institution, but they affect the TVET institutions students choose to enroll in. For instance, learners will choose to attend affordable institutions with infrastructural resources and one where they can get support services for their career aspirations (Obwoge et al., 2016).

2.3 Physical Facilities and Student's Selection Decision of TVET Institutions

The availability of physical facilities and maintenance is a key driver to education in a TVET institution. In the setting of this research, physical facilities are tangible educational structures and equipment that define the physical environment and are utilized to support the delivery of an academic program (Maduewesi & Onyeachu, 2017). This includes laboratories, tools, materials and infrastructures such as learning theatre, boarding facilities, classrooms, recreation facilities & equipment, workshops, studios (Bakare, 2019; Omotayo, et al., 2018) that are necessary for a TVET institution to and deliver a curriculum. They also comprise equipment and tools for students to practice their skills in a specific field. For example, a welding lab requires machines, tools, and safety equipment. Similarly, a carpentry workshop would need saws, drills, and hammers, among other tools. Some physical facilities such as recreational facilities such as sports grounds, gymnasiums, and swimming pools help to promote physical activities among students and provide them with a way of relaxing their minds (Washington, 2012).

The availability of physical facilities contributes promptly to the success of TVET institutions. Their provision, adequacy, use, and maintenance are critical in ensuring quality and consistency. It also determines the academic programs offered and the number

of learners that can be accommodated. In addition, they help learners to equip themselves with skills required for their specific profession (Nyanjom, 2012; Omotayo, et al., 2018). According to Kitui (2015), the accessibility of suitable and appropriate facilities to handle rapid technological expansion is an issue of concern even to the wealthiest nations. Therefore, planning, procuring, establishing, assigning, allocating, controlling and maintaining facilities in TVET institute is essential in supporting efficient teaching and meaningful learning (Ithuta, 2014).

The physical environment in a TVET institute must be comfortable and conducive to learning. To create a conducive physical environment, the facilities are expected to be properly maintained and updated. This includes regular maintenance and cleaning of all equipment and tools and keeping the building and its contents in good condition (UNESCO, 2016). Moreover, recognizing the value of libraries in a TVET institute is crucial. The library is an essential information centre supporting teaching and learning (Owoeye & Yara (2011). Therefore, the library procures, processes, and provides learners with access to books, journals, magazines, and other required information materials. It also provides essential information services to promote the gainful utilization of library products and services (Akinsolu, 2012).

In a TVET institute, classrooms are expected to be properly equipped with up-to-date resources, such as computers, projectors, whiteboards, access to technology and other audio-visual equipment. Additionally, it is essential that the classrooms are well-ventilated and equipped with comfortable seating and desks and adequate lighting. Another crucial physical facility in a TVET institution is well-equipped laboratories and workshops. In

these facilities, the learners can equip themselves with practical skills required for their specific trade or profession (Maduewesi & Onyeachu, 2017). In that connection, the laboratories and workshops must have the necessary tools and equipment to enable students to conduct experiments, practice skills, and gain knowledge. Another essential physical facility is the library. The library is a resource centre, provides students with a wide range of learning materials, such as textbooks, manuals, periodicals and e-resources (Ngure, 2013).

As TVET institutions are entrusted with the education of students in technical and vocational domains, it is their responsibility to ensure that the physical infrastructure adequately caters to the needs of the learners. These facilities enable students to acquire practical experience with various machinery, tools, and materials within a simulated real-world setting. Such hands-on exposure fosters the development of confidence and proficiency essential for success in their respective fields of study (Audu et al., 2013). There are many challenges affecting the availability of physical facilities not only in TVET institutions but also in universities. Examples of such challenges are inadequate space; lack of safety and security measures need for more finance It is worth highlighting that the majority of TVETs rely on government funding. Nevertheless, there is a need to enhance the allocation of government funds for these institutions, as private financing alternatives may not be readily accessible. The lack of funding can lead to a lack of resources to purchase critical equipment and maintain existing ones (Simiyu, 2009). The finance shortage also results in difficulties in attracting and retaining qualified faculty and staff. Another challenge is the need to keep up with changing technology. Technology is constantly changing, so TVET institutions ought to keep up with these changes to remain

competitive. This can be difficult for institutions that need more resources to purchase and implement new technology. In addition, the cost of maintaining and updating technology can be prohibitive. The availability of modern technology, such as computers and projectors, can attract students to a TVET institute. Physical facilities contribute a lot in defining the learning environment, which can affect the student's decision to join a particular institution (Washington, 2012). UNESCO (2016) asserted that TVET institutions should have adequate space to accommodate the students they plan to admit. The obvious expectation is that a TVET has well-equipped facilities to enhance effective classroom instructions.

The availability of modern technology, such as computers and projectors, can be desirable to students looking for a more engaging learning experience. The second consideration is the availability of resources for practical or hands-on training. This could include the likelihood of students enrolling in an institution increases when they have the opportunity to acquire the skills and practical experience required for their desired career path. Equipment for workshops and laboratories and access to the latest technology and tools. The third consideration is the availability of facilities for extracurricular activities. This could include sports fields, courts, and recreational and social spaces. According to Nyanjom (2012), these facilities appeal to students, which may interest them in joining a specific TVET institute.

Various research has been undertaken worldwide to determine the association between physical facility mobilization and educational institutions' internal effectiveness. A survey was conducted among current and past students at various TVETs in the USA to determine

the elements that influence their selection of TVET institutions. The survey results showed that facilities significantly influenced students' choices, especially those from low-income families (Zirkle & Martin, 2012). This led the Department of Education's Office of Inspector General (OIG) to evaluate the physical facilities of TVET institutions in the US in 2016. The OIG found that many colleges and universities had substandard facilities, which negatively affected their students' ability to learn and succeed. Many classes were taught in classrooms with broken equipment or no working computers; others needed more air conditioning or heating systems during hot summers or cold winters.

In some cases, these conditions posed a safety risk to students and instructors. The OIG's survey also found that many TVET institutions needed more facilities to match the students' numbers, while others held in non-purposed buildings. For example, some colleges with more than 1,000 students were located in buildings designed to house only 500 people.

The study also revealed the need for more appropriate technology, such as computers with internet access. Other schools had outdated or broken equipment in classrooms and laboratories, which affected the teaching of STEM courses. It was also noted that this state of physical facilities directly impacted the quality of education that students receive, and this was a significant drawback to students' success. OIG discovered that in recent years, many TVET institutions had been forced to make do with limited resources, leading to a need for more modern teaching materials and technology (Suyanta & Prianto et al., 2019). As a result, students often needed to be exposed to up-to-date information and skills in their courses. This caused many potential students to hesitate to pursue TVET education due to

a lack of confidence in the calibre of the education they will acquire. Furthermore, the physical condition of many TVET institutions was a major deterrent for prospective students. This led to a significant drop in applications to TVET institutions, as many students feel that the available learning environment needs to be more ready and conducive to pursuing their desired career goals. This state of affairs, therefore, informs students' selection decisions for a TVET institution. OIG attributed the inadequate physical facilities in TVET institutions to the ever-changing nature of technology, the demand for better services, and limited funding. The OIG suggested that the government enhance the level of financial support provided to TVET institutions, enabling them to adapt to evolving technologies and maintain modern facilities (Suyanta & Prianto et al., 2019).

Consequently, the United State (US) government purposed to improve the state of physical infrastructure in TVET in order to attract more students. There was a specific resolve to improve the physical facilities of TVET institutions within the enactment of the Career and Technical Education for the 21st Century Act in 2018.This law provides additional funding for states to upgrade the physical facilities of TVET institutions. It also creates a competitive grant program to help states upgrade the quality of their career and technical education programs (Suyanta, Prianto et al., 2019). The US government has also made TVET institutions more accessible to students. For example, the Department of Education's Office of Vocational and Adult Education (OVAE) grants states to improve the accessibility of TVET institutions to students with disabilities and other students with special needs. These grants are used to purchase special equipment and physically modify existing facilities to make them more accessible. This action presents opportunities to prospective students, impacting their selection decision when choosing a TVET institution.

The TVET institutions have also begun to invest in renovating and upgrading their physical facilities. These renovations ranged from minor improvements, such as installing new computers or furniture, to major renovations, such as constructing new buildings and laboratories. This is especially observed in states like California, Texas, and New York, which reported a surge in demand for TVET degrees (Suyanta, Prianto et al., 2019). Despite these investments, the physical facilities of many TVET institutions still need to improve in certain areas. For instance, many classrooms and laboratories are outdated and lack the modern technology to teach the latest skills effectively. Additionally, some equipment must be updated or more efficient, leading to low student enrolment (Suyanta, Prianto et al., 2019). This means that the TVET institutes that manage to overcome this challenge automatically become the first choice for prospective students.

South Asia's TVET institutions are essential in providing skills to the region's growing population. However, the quality of TVET institutions could be better due to the poor state of physical facilities and their inadequacy. Research carried out by Haolader et al. (2017) in several countries in South Asia to explore the issue of physical facilities in TVETs. The study checked on the facilities' quantity and quality, pointing out many challenges, one being that TVET institutions in South Asia need help with the underutilization of facilities. This was a common problem in many educational institutes, including universities and colleges. However, it was particularly acute for TVET institutions because they are often located in remote areas with few recreational or leisure options. As a result, many students stay away from TVET institutions even when they have the qualifications to enrol (Asian Development Bank, 2015).

The study also noted that most TVET institutes are housed in buildings that have reached the end of their life cycle and require urgent renovation. In addition, most TVET centres lacked adequate space for new equipment and modern teaching aids. This was linked to the reasons why there were relatively high dropout rates of learners at TVET institutions (Haolader et al., 2017). Many of the buildings are outdated and in need of renovation, while other buildings are in a state of disrepair due to a lack of continuous maintenance. This has an impact on the quality of education that students receive, as well as the safety of both students and staff. The lack of proper facilities there directly impacted students' enrolment in TVET institutions in South Asia. Students would therefore avoid TVETs with poor physical conditions in favour of those well-endowed with the required facilities. This reveals the magnitude and weight of adequate facilities in informing students' selection decisions for a TVET institution.

In India and Nepal, TVET institutions are generally overcrowded, under-resourced, and need more modern equipment (Tongnata, 2014). This is because most of the institutions receive limited funding from the government. As a result, the physical infrastructure is often in need of repair. For example, classrooms are often overcrowded, laboratories need to be better equipped, and libraries are often lacking information materials. In addition, there needs to be more accessible to modern technology such as computers, the internet, and other electronic equipment (Tongnata, 2014). A similar state of physical facilities was noted in Pakistan by Nooruddin (2017). Nooruddin reported the poor state of classrooms and laboratories that need to be better equipped. In addition, the libraries were noted as needing more essential books and other electronic equipment. Nooruddin had investigated

public TVETs hence. Limited government funding was blamed for poorly maintained physical infrastructure (Nooruddin, 2017).

Despite the challenge of physical facilities affecting TVET institutes in South Asia, there were notable responsive measures undertaken by governments in various countries. Examples of initiatives include modernizing physical infrastructure and providing funds for purchasing new computers, laboratory equipment, and other necessary materials. In addition, governments are also encouraging the public-private partnership (PPP) model to improve the physical infrastructure in public TVET institutions. The governments are also introducing safety and security measures such as closed-circuit television (CCTV) cameras, access control systems, and other necessary measures to ensure the safety of students and staff (Backes & Wolter, 2010; Nooruddin, 2017). Again, these situations point out elements that constitute students' selection decision criteria when considering TVET institutions.

Europe is a continent known for having most countries with well-developed TVETs and with many students enrolled in those TVETs in recent years. The study was conducted to investigate why TVETs in most European countries have many students each year, unlike in other countries on different continents. From the research, it was discovered that TVETs in European countries have well-established and modern physical facilities, which have enabled them to attract many students, thus leading to the success of those TVET institutions (Pirzada, 2020). The success story and demand for TVETs were attributed to the fact that the European Union ensures public TVET institutions are well-funded, hence,

modern facilities that enable computer-based training and access to the latest technology and materials.

Pirzada (2020) further noted that many European countries have extensive, modern physical facilities that accommodate various activities. For example, in Germany, the Netherlands and Belgium, several large state-run institutions provide technical education and training. These institutions are well-equipped with the latest in technological tools and equipment. However, the study noted that in Eastern Europe, physical facilities in some TVET institutions are often less well-developed and may need to be more modern and well-equipped than those in Western Europe. That notwithstanding, in some countries, such as Sweden and Finland, TVETs have recently invested heavily in green technology, making their facilities more energy efficient and environmentally friendly. This includes using renewable energy sources and green building materials, which reduce operating costs and ensure the environment is protected (Gyimah, 2020). The student's enrolment in TVET institutions that are endowed with state-of-art facilities, equipment and learning resources was comparatively high compared to their counterparts. This indicates that the facilities mentioned above, such as those noted in Western Europe, affect the students' selection decision for a TVET college.

Arkansas has several dedicated technical and vocational training centres with relatively good physical facilities. They have high-tech classrooms and equipment, including computers, software, and other technology. These centres also often have labs and workshops. Additionally, many of these centres have a library with relevant books and other non-print information materials (Suyanta et al., 2019). The good state of the physical

facilities of TVET in Arkansas has significantly impacted student enrolment. They have enabled students to gain a more comprehensive and in-depth understanding of their chosen field, encouraging them to enrol in TVET programs. Additionally, they can acquire practical experience and develop abilities that are in high demand on the job market. Students are more likely to enroll in TVET programs when they are aware that the resources and equipment are of a high caliber and can assist them progress their careers. Good facilities also cause joy to students. One is comfortable and proud to be affiliated with an institution that has good facilities. Undoubtedly, the comfortable and welcoming atmosphere in the classrooms and labs allows students to feel like they are in an environment where they can learn without feeling overwhelmed or intimidated (Audu et al., 2013). Therefore, this state of comfort manifested in physical facilities plays a key in influencing the students' selection decision for a TVET institution.

The state of physical facilities in Malaysia resembles that of European countries and Arkansas. Most TVET institutions have modern, well-equipped workshops, laboratories and other practical learning areas. They also have adequate teaching and learning resources, including books, magazines, journals, multimedia, and other educational materials. In addition, many institutions can access online resources (Mohammed et al., 2021). Mohammed and their colleagues noted a range of recreational and leisure facilities, such as sports and leisure centres, cafes, cinemas and other entertainment facilities. Another significant mileage is support services for students. These services include career guidance, financial assistance and counselling. These facilities and services are essential for providing students with a well-rounded educational experience and for helping to promote a sense of community among students. In addition, to fostering a sense of

belonging, the facilities and services make the students proud of the institution (Sulaiman et al, 2015). The aesthetic feeling goes a long way in enjoying a prospective student, hence informing the selection decision when choosing TVET institutions.

The rate of student enrolment in TVET institutions in most African countries is reasonable, mainly due to institutional-based and social-economic factors. Research works by Audu et al. (2013), Okoye et al. (2013), Edokpolor and Owenvbiugie (2017), Gadzekpo, Sapri and Amos (2022), Acquah et al. (2017), and Mesfin et al. (2019) in Nigeria, Ghana and Ethiopia have revealed desolate state of physical facilities in most public TVET institutions. The physical facilities in many TVET institutions are mainly inadequate or underdeveloped, while some need to be updated and better maintained, especially in rural areas. In other cases, classrooms are overcrowded and need more essential teaching materials such as computers and other technological equipment. The laboratories and workshops are often not well-equipped and lack the necessary tools and supporting peripherals. The lecture halls need to be improved, and facilitators need more office spaces. Other common issues ailing TVET institutions across most African countries are lack of accommodation and other social amenities such as transportation, recreational facilities, and health facilities; poor access to electricity, water and sanitation facilities; and lack of security for students and staff; inadequate learning resources, and lack of buildings explicitly designed for TVETs (Shibru et al., 2016). Other TVET institutes were noted to need more air conditioning and lighting (Tariku, 2018), while others have few teaching staff. This state of affairs has been the case for a long time and has affected the calibre of learning and development provided in TVET institutions. Since this status varies from one TVET to another, it informs the students' selection decision for TVET institution.

The study, however, noted some responsive measures that various governments are undertaking in addressing the state mentioned above of physical facilities at TVET institutions. For example, the Nigerian government has allocated N9.6 billion to the National Board for Technical Education (NBTE) to upgrade the physical facilities in the TVETs. It has also introduced several programs to improve the physical facilities in the TVETs. The Skill Acquisition and Entrepreneurship Development (SAED) program is one such program. This program aims to equip graduates of the TVETs with the skills and knowledge they need to be employable. This program also grants the TVETs to upgrade their physical facilities and equip them with modern tools and equipment (Edokpolor & Owenvbiugie, 2017; Okoye et al., 2013). The government has also established a TVET Revitalization Fund to provide financial support to the TVETs to upgrade their physical facilities, including new classrooms, laboratories and workshops. Other initiatives are the establishment of National Vocational Qualification (NVQ) and the National Business and Technical Examinations Board (NABTEB) to ensure that students are trained according to international standards (Lame & Yussof, 2013). Other measures noted are initiatives to improve support and guidance to the students (Acquah et al., 2017), construction of additional facilities in remote areas (Gadzekpo et al., 2022), and the installation of CCTV cameras (Mesfin et al., 2019).

Chichioke and Tambari (2017) investigated the challenges technical institute graduates in Ghana encounter when pursuing practical skills. The study employed a research design that was descriptive in nature, utilizing survey methodology. Insufficient training facilities and instructional materials were observed in the study to contribute to the ineffective transfer of skills to students. Amedorme (2013) pointed out a need for more training facilities due

to the poor status of workshop tools and equipment as a hindrance to skills acquisition among TVET graduates in Nigeria. Uko (2015) study involved 36 secondary schools from each of the 18 state local governments in Nigeria's Cross River State. The results revealed the significance of a supportive learning environment in enhancing accomplishments in the education process. Njebakal and Genevarius (2017) examined the relationship between institutional infrastructure and internal effectiveness. Data for analysis were gathered using both quantitative and qualitative research methodologies. The research discovered that institutional amenities considerably impacted the internal efficiency of secondary schools in central Yaounde, Cameroon.

Anindo (2016) emphasized the importance of improving and ensuring sufficient training equipment. With the recent introduction of CBET in Kenya, it is necessary to evaluate whether the government has constructed or refurbished workshops to facilitate effective teaching, particularly for individuals with disabilities, specifically the blind. The goal was to assess how the adaptation of CBET implementation facilities affected the development of employable skills among visually impaired students in Kenyan TVET institutions

Kenya suffers the same fate as many African countries, where most TVET institutions still need updated physical facilities. Many counties in Kenya have few students enrolling in public TVETs (Mango, 2015). A review of the literature regarding physical facilities in several counties in Kenya, for example, Busia County, Kakamega County, Makueni County, Mombasa County and Nairobi County, show that most TVET institutions need more basic infrastructures such as classrooms and labs. This is primarily attributed to insufficient funding. This has occasioned numerous challenges touching all aspects of a

TVET. The majority of TVET institutions need more infrastructure. Most classrooms and laboratories are generally outdated and ill-equipped, have too few tools and equipment in the workshops and laboratories, lack computers and access to the internet and other forms of modern technology needed to provide an effective learning environment; classrooms are not equipped with the necessary equipment such as desks and chairs; buildings are often old and dilapidated, while several others lack the necessary amenities such as proper plumbing, electricity, and ventilation (Patrick et al., 2015; Mulondanome, 2013; Onyango et al., 2022; Ngumba, 2012); Shiundu & Omulando, 2012). Poor physical facilities in TVETs in Kenya have directly impacted student enrolment (Shiundu & Omulando, 2012). Often, students select TVET based in urban centres rather than rural areas. As much as the concept of a student wanting to study away from their home is live, the state of physical facilities plays a role in the decision-making process of a prospective student regarding the TVET that one chooses to join for a course.

In a nutshell, the availability of updated physical facilities directly impacts students' enrolment in TVET institutions, as students need a comfortable and conducive learning environment. They also need quality teaching aided by modern physical facilities' availability. Students also need to feel secure in their institution and also TVET institutions.

2.4 Staff Adequacy and Student's Selection Decision of TVET Institutions

Staff are human resources and are usually regarded as an asset to an organization. Ameh and Aernyi (2016) describe the staff as critical to the organization's success. They have various jobs, talents, expertise, knowledge and skills which constitute institutional capacity. However, Maduewesi and Onyeachu (2017) note that staff efforts must be well

coordinated to achieve internal efficiency in the social, managerial, mechanical, and technological sectors and other areas of the economy. In an educational institution, staff play a critical role in curriculum implementation (Anindo, 2016; Yunusa, 2016); hence, they require enough preparation, motivation, and support to execute their responsibilities efficiently. Therefore, their sufficiency, competence, and productivity are important in assisting a company in achieving its goals. Adequacy in this study refers to the value or state of being sufficient in terms of quantity, quality, or number for acceptance or delivery service.

The quality of instruction offered dictates many factors that affect students' enrollment in TVET programs. The quality of a TVET institution includes adequately trained instructors and other professionals who jointly or separately equip trainees with marketable skills for the dynamic workplace environment. Quality training is influenced by staff adequacy (Abuel-Ealer, 2021); hence, they play a significant role in fostering high enrollment in TVET institutions. If a TVET institution has adequate and well-trained staff offering appropriate instruction, it improves its image and attracts more learners. Instructors, coordinators, and counsellors in TVET institutions are expected to be sufficient and distinguished in all aspects of their occupations and practice (Abdulkareem et al., 2021). They should teach and orient students on occupational skills and stimulate them to realize high enrolment in TVET institutions. Besides, the staff in TVET institutions should be adequate to attend to all enrolled students. If staff are inadequate, enrollment will decline because learners assume they will not get adequate and quality instructions.

From an institutional point of view, adequacy applies in various aspects, for example, economic, social, humanistic, and civic matters. One of the humanistic adequacy aspects is staff adequacy. Instructor adequacy encompasses many aspects, including knowledge, skills, and attitudes. In Malaysia, Minghat et al. (2022) presented a study on the issues facing the TVET instructor, focusing on these competency elements. TVET education involves formal and informal education that prepares young individuals with skills for employment.

A systematic review paper by Minghat et al. (2022) in Malaysia explored current issues affecting instructors in TVET institutions. The Internet of Things (IoT) and intelligent manufacturing, which are two characteristics of industrial revolution 4.0, presented serious difficulties for TVET instructors, according to the study. This is because industry 4.0 and intelligent manufacturing integrates operations and physical production with machine learning, digital technology, and big data for a holistic ecosystem (Minghat et al., 2022). For a TVET instructor to be competent, they must meet that high-end criterion to impart the technical skills fit for industry 4.0. The instructors who meet this criterion are few, hence, the inadequacy problem. Omar et al. (2021) stressed the instructor's competency needed to cope with the requirements of industry 4.0. Measures for ensuring the adequacy of competently qualified TVET instructors were also regarded indispensable. When students choose TVET institutions, they consider whether their instructors are competent enough to impart the industry 4.0 requirements; this means that they choose TVET institutions with staff with the competencies mentioned above.

Competency-based education is significant in increasing the likelihood of sufficiently prepared learners facing the workplace environment. This factor implies that the education system must be competency-based, having all the factors of education adequacy. In Ghana, Obinnim, (2018) submitted a study on the competency model's impacts on TVET instructors. Obinnim (2018) argued that the modern labour market has lifelong innovations and requires constant learning. Therefore, possessing a broad range of technical and vocational knowledge is less important than the capacity to adopt a competency-based approach to learning. This submission indicates that it is better to have a few technical courses in TVET institutions than to have many courses that will not adequately prepare learners. According to Obinnim (2018), current marketplaces require adequate preparation for long-term learning. Therefore, demand-driven vocational and technical education is valuable for imparting skills to learners. Hence, TVET staff must be competent enough to give students the necessary skills to flourish in the modern workplace environment. They must have significant knowledge of competency-based models in TVET to prepare students adequately. Besides, learners choose the TVET institutions with instructors who have demonstrated competence with their former students. For instance, if a TVET institution produces learners who take a long to find employment, the enrolment usually declines gradually because it is perceived as needing more competence. While this study demonstrated the need for competent instructors for increased enrolment in TVET institutions, it did not measure empirical linkage with students' selection decisions. The current study established an inferential relationship between the two constructs.

The nature of training that staff have is another crucial factor that is likely to inform the selection decision of a TVET student. According to Udofia et al. (2018), there is a

significant link between the instructor's quality and student skill growth at VET institutions in Nigeria. The findings indicated a gap in that the authors needed to specify the amount of academic qualification required of a VET teacher. However, because there is a significant correlation between the two variables, teachers must be trained and qualified to transmit work skills to their students.

A research on the efficiency of employee capacity building was carried out in Kenya by Kipngetich et al. in 2022. Kipngetich et al. (2022) offered several important recommendations, one of which was that TVET teaching staff be properly prepared to manage the CBET method at TVET institutions. When TVET staff have adequate training on CBET, they can support and manage the students' learning process. This implies that learners can shun enrolling in such institutions; instead of enrolling in TVET institutions with trained instructors.

The concept of staff adequacy also implies trainers being well-equipped with the required knowledge and skills to facilitate a program. If the trainer is not well equipped, he/she may feel inadequate. When students know such information, it may affect their selection decision for a TVET institute. Payne et al. (2018) focused on instructors' adequacy in the languages and culture of the environments in Brazil, where the respondents were foreign trainers. The study established that instructors only qualify for their training work when they are adequately prepared to teach using a language understood by learners. The study noted that the facilitators were required to be competent in English, local university culture, and training pedagogy. This kind of pre-requite enabled facilitators to feel adequate hence effective delivery of expected training, failure to which learners would decide to avoid

TVET institutes associated with the mentioned trainer's inadequacy. Payne et al. (2018) revealed that the United States needs more instructors for its higher learning institutions, including TVET institutions. However, for instructors to work in the US, they must have adequate skills in the English language and the local culture of the institution they wish to work of the study demonstrated the aspect of staff importation whose training skills adequacy was found paramount before one worked in the importing country. However, the magnitude of staff importation and its linkage with students' selection decision for a TVET institute should have been covered thus, a deficiency was identified and addressed by the present study.

In Pakistan, Bano et al. (2022) presented a study on the challenges facing TVET in CPEC, the chief of which needed more trainers. These researchers noted that Pakistan's skilled personnel gap had been increasing significantly. This happens despite the country's current policies for human resource development. For instance, in Pakistan’s TVET institutions, level 3 students were reported being taught by junior teachers in level 4 of their TVET education. The junior teachers lack the requisite abilities and have not been adequately prepared to handle students at level 4. Therefore, the need for adequate teaching staff in Pakistan's TVET institutions impacted the education quality. This situation will likely inform students' decisions for a TVET institution in Pakistan. Regarding this gap in human resources, Bano et al. (2022) recommended a need to increase trained teaching staff in all TVET institutions in Pakistan.

TVET institutions seek to provide adequate training to students to make them competent in the job market. This requirement calls for practical training with adequate resources and

staff in TVET institutions. But one of the challenges to the successful implementation of TVRT education in Nigeria is a lack of staff, which is only surpassed by a lack of funding. As a result of the two causes, fewer students are enrolling in TVET institutes (Chinedu-Ali et al., 2020). The study established that inadequate funds in TVET institutions was the reason why only a few instructors had been employed. Besides, inadequate funds affect almost all TVET institutions' aspects, including facilities, learning environment, and teaching equipment among others. According to the study's findings, the training quality in TVET institutions was at danger due to the inadequate teaching staff. Messy training standards in TVET colleges have a direct impact on students, which may have a big impact on admissions standards and enrollment figures.

The inadequate funding in TVDET institutions was also linked to poor working conditions, low salaries, lack of modern equipment, poor office conditions, insufficient learning materials and other infrastructures (Chinedu-Ali et al., 2020). According to Sanga (2016), inadequate financial investment has led to understaffing and a lack of physical facilities (workshops), and equipment, which has resulted in poor educational quality. This ultimately affects students' enrolment in a TVET institution. This situation ultimately leads to a demotivated workforce who may quit their jobs. Obviously, staff turnover leads to student attrition due to the lack of quality teaching and training in a given TVET institution. Finally, the institution will attract few learners. This means the situation described in the preceding discussion influences students' selection decisions for a TVET institution.

The issue of staff adequacy is also a common challenge affecting most TVET institutions in Kenya. As noted by Ongulu and Ibrahim (2021 teaching staff are part of the TVET asset

and a resource that ought to be handled cautiously. The teaching staff are required to be not only adequate but also qualified. Sang et al. (2011) had earlier reported that the majority of respondents thought instructors were insufficient to perform their teaching duties in their particular faculty, while others thought teachers were adequate. The need for teachers is one of the problems faced by state LPTKs in the country. Wakoli (2021) insists that all departments in a TVET institute should be fully staffed with adequate qualified teaching staff. The study by Mbugua et al. (2017) concurred that most TVETs in Kenya needed more teaching staff. This affects how well teaching and learning are done. As a result, common procedures for making up for the loss in teacher numbers included using part-time teachers, teaching in multiple classes, and interclassroom instruction. This impacts students' and teachers' ability to interact, resulting in poor instructional quality and skill acquisition.

According to Njoki (2014), the Nairobi County TVET institutions needed more staff, particularly in technical subjects, which often resulted in inadequate preparation of students for the current job market. Other issues noted were the need for industry participation and student guidance services. In order to improve the quality of education and training, Kitui Mango (2015) argued that it is necessary to hire knowledgeable trainers, upgrade facilities, and expand financial help for graduates from low-income families.

The results are typically negative when a school has a small teaching staff and a big number of students; instruction is rendered inefficient because of the difficulty of managing a small student body for a single instructor. This has a tremendous impact on staff productivity. Ongulu and Ibrahim (2021) were consistent with the findings presented by Madani (2019)

on education quality. Both studies argue that the UNICEF teacher-to-student ratio must adequately guide teachers. However, quality issues arise if these ratios are not met due to inadequate staff. Ongulu and Ibrahim (2021) demonstrated that staff adequacy affects student enrollment in TVET institutions.

In its Department for Education 2019, the UK's government intends to reinvigorate the higher education sector. James Relly et al. (2021) submitted that for the UK government to realize this goal had to learn from global insights, mainly on how other countries have developed and delivered technical excellence and the drivers they have used in this endeavor.

James Relly et al. (2021) noted the significant role of the WorldSkills Competition (WSC) in promoting and enabling skill development of the highest value besides building the UK economy. The study by James Relly et al. (2021) revealed that TVET institutions in the UK strive to have instructors who can inculcate technical skills in students. In addition, ccountries like Korea have also taken significant initiatives to develop their TVET sectors. One of the outstanding strategies noted by James Relly et al. (2021) in other countries such as Japan and Hungary was the issue of staffing, where the governments have hired competent instructors to develop professional knowledge in vocational education (Relly et al., 2021). It is expedient to note that an institution endowed with adequate and qualified instructors attracts more learners, hence higher enrolment. This automatically implies that the described situation influences students' selection decision for a TVET institution.

Another aspect related to the staff adequacy construct is instructors' competency. It goes a long way in determining learners' choice of TVET institutions. Omar (2020) described a

situation in Malaysia when teachers were called upon to restore the teaching profession to its noble standards in order to earn parents' trust. This demonstrates the value of knowledge and experience in TVET education and training. Developed countries like the United Kingdom, Germany, and the United States are economic giants with fast forward in many industries. Therefore, they ensure that TVET teachers are competent in technical areas that matter in their economies (Omar, 2020). Knowledge is emphasized as one of the primary factors in determining teachers' competency (Jafar et al., 2020). In Rwanda, Musobo and Gaba (2015) noted a shortage of qualified trainers due to poor incentive systems, inadequate facilities, weakness in the initial vocational training, poor management, and negative perceptions of TVETs. Anindo (2016) and Maingi (2019) found that the majority of TVET instructors in Kenya have a Master's degree and a diploma as their highest levels of education. The findings also demonstrated that TVET. In addition, most trainers had yet to receive formal training to acquaint them with new job skills required in the market.

TVET education is intended to increase learners' vocational competence and give them the tools they need to support themselves. Students can learn technical and vocational skills that can help them succeed in life. However, to effectively execute TVET education, functional classrooms and qualified teachers are required. In order to create the skilled workforce required to guide a nation's economic development, TVET institutions must ensure that its trainers and instructors are of high caliber and sufficient in number. According to Agabi (2022), technical instructors will always be required to educate learners through knowledge translation and learning facilitation, even though scientific advancements and innovation will continue to rule. Also, while it is essential to have qualified instructors, Agabi (2022) says that they must be in adequate proportion.

Nevertheless, while they could be highly competent and adequate, TVET instructors should be provided with the relevant tools and machines in the technical workshops for effective teaching and learning. However, Agabi (2022) established that underfunding in TVET institutions interferes significantly with TVET education. Therefore, the study recommended that where TVET institutions have less experienced staff, they should invite the experienced ones, mainly from the industry, to regularly facilitate students' technical skills in various areas of expertise. This also underscores the need for ensuring adequate and retaining experienced continuous staffing of TVET institutions.

Many success factors contribute significantly to the success of TVET education. One of the success factors is curriculum delivery. The study by Korir and Muchimuti (2022), which was conducted in Kenya, noted the weighty role shouldered on TVET instructors in ensuring effective curriculum delivery. In an ideal situation, instructors are expected to develop new curricula and update the existing ones to address emerging market and labour trends. However, Korir and Muchimuti (2022) found that institutional issues, one of which was the sufficiency of teaching staff, were having an impact on the continuity of curriculum delivery in TVET institutions in Kenya. The limited staff that was present in TVET colleges, according to Korir and Muchimuti, was totally focused on providing the curriculum. Therefore, they needed more spare time to improve or develop new ones. The resulting scenario would be an outdated curriculum, ultimately affecting students' selection decisions for a TVET institution.

2.5 Trainees' Employability Skills and Students' Selection Decision of TVET Institutions

Learners usually attend an education or training institution to be able to work in an organization or venture into self-employment. When an individual has the referenced ability, they are regarded employable. Therefore, the term employability is described as the readiness of an individual to work in the labour market (Ndile, 2018; Rowe & Zegwaard, 2017). From the context of this study, trainees' employability skills are skills that an individual needs to succeed in a workplace. These skills include communication, numeracy and literacy, problem-solving, decision-making, creativity, networking, teamwork, critical thinking, and time management. Employability skills are essential for any individual planning a career and can be developed through education and training programs. Employability skills allow trainees to take the initiative and be more effective in the workplace, which can lead to success in their careers and better job opportunities (Mengistu & Darge, 2022).

Employers look for individuals who can demonstrate their ability to think critically, communicate effectively, and work collaboratively. Trainees can acquire employability skills through a variety of activities. For example, they can take on-the-job training courses, participate in internships and volunteer opportunities, or take classes at school, a local college, or a university. Additionally, they can develop and practice these skills through self-study and practice, such as reading books, participating in online courses, and engaging in meaningful conversations with employers. Employability skills can also be developed and enhanced through involvement in extracurricular activities, such as sports, clubs, and community service. By developing and refining their employability skills,

trainees can become more attractive to potential employers and increase their chances of getting hired and advancing in their chosen field (Bong-Woo Woo et al., 2015).

Measuring trainees' employability skills is critical to assessing their readiness for the job market. Employability skills are typically evaluated through various methods, including interviews, observations, and standardized tests. During interviews, recruiters can ask open-ended questions to gauge a trainee's ability to think critically, solve problems, and communicate effectively. This type of assessment allows employers to better understand the individual's employability skills, for example, the ability to work in a team, take the initiative and handle pressure. Observations are also an effective method for measuring employability skills. Trainees can be observed in their work environment, either on the job or in a simulated environment, to assess their ability to adapt to changing circumstances, deal with challenging situations, and manage their time effectively. Standardized tests are another method used to measure employability skills. These assessments measure an individual's knowledge of the job market, including their understanding of relevant laws and regulations and their ability to apply this knowledge in a practical setting (Gill, 2018).

According to Tuan (2011), trainees' employability skills are critical for TVET institutions for several reasons. First, the employees who are in demand are those with the ability to perform various tasks and who have the skills and knowledge to succeed in their roles. This means that when employers recruit new staff, they are looking for the technical skills and qualifications of the applicants and the employability skills they can bring to the job. For example, employers may look for trainees who can work in a team, have good communication skills, demonstrate problem-solving skills, and are willing to learn and develop their skills. By equipping trainees with employability skills, TVET institutions can

ensure their trainees are better prepared for the job market. This means that they are more likely to be successful in the application process and can be more confident in the workplace when they secure a job.

By emphasizing the importance of employability skills, TVET institutions can create a positive reputation and attract more employers to their institutions. Furthermore, employers may be more likely to recruit trainees from TVET institutions if they have evidence that the institution provides adequate employability skills training and development. Such TVET institutions would ultimately become a preferred place for students, influencing their selection decision for a TVET institution.

Poor trainees' employability skills are attributed to various factors, including inadequate staffing. Most TVET institutions need more staff to train students, which can be blamed on the shortage of finance. Another reason for inadequate staffing in TVET institutions is a need for more qualified staff. There may need to be more qualified personnel to fill the positions needed, or the available staff may need to gain the needed skills or experience. Low salaries and benefits can lead to a lack of staff in TVET institutions. Without competitive compensation and benefits, the best and most qualified employees may not be willing to work in an institution. Poor working conditions can also lead to inadequate staffing. If the working conditions are unpleasant or unsafe, staff may not be willing to stay on (Kovacs, 2021). According to Dasmani (2019), the ultimate purpose of TVET institutions is to ensure that a learner acquires knowledge, attitudes, and job skills for long-term development. This requires effective and efficient teaching methods, standardized teaching materials, requisite facilities, appropriate curricula, and highly qualified facilitators.

When deciding on which TVET institution to attend, trainees consider how the institution can help them develop their employability skills. Many TVET institutions offer courses and programs focusing on developing employability skills. These courses may cover networking skills, conflict resolution, and communication strategies. Furthermore, many TVET institutions provide career services to help students find jobs after graduation. This can be an attractive option for trainees seeking employment after completing their studies.

Additionally, TVET institutions frequently give students the chance to get real-world experience. This might be accomplished through volunteer work, internships, or employment placements. The experiences acquired are crucial in assisting trainees in acquiring the abilities required to be successful in their chosen career. Trainees may also be attracted to TVET institutions that offer courses and programs that are specifically designed to help them gain employment. For example, some institutions offer courses focusing on specific industries, such as hospitality or IT. By attending these courses, trainees can gain the knowledge and skills required to work in these industries and the confidence to apply for jobs. Ultimately, the employability skills that trainees can gain from attending a TVET institution can be a significant factor in determining whether they choose to join that institution. By considering their needs and the opportunities available, trainees can decide which institution best suits their needs (Norain et al., 2018).

TVET institutions in India offer a variety of employability skills that can help students secure jobs after graduation. They offer technical skills that align with the industry or field of study. For example, students enrolled in a manufacturing course may learn about the latest production techniques, safety protocols, and machinery operation. Several others

have also started offering courses on entrepreneurship. This can help students gain the knowledge and skills to start their businesses. This can be especially beneficial for students looking to create new employment opportunities for themselves or others.

Additionally, TVET institutions offer courses in the areas of finance and accounting. This can help graduates understand the financial aspects of any job and make informed decisions related to their careers. Other courses offered include digital skills as well as leadership and management. These courses help students understand how to manage people and motivate them to work towards common goals. Overall, the employability skills offered by TVET institutions in India are adequate for helping students secure jobs after graduation (Mansour & Dean, 2016).

The employability skills of trainees at TVET institutes have received significant attention in India. It has developed a number of initiatives and programs to improve training quality and make sure learners are equipped with current and relevant skills. These initiatives and programmes have included introducing various curricula tailored to the needs of industry and the latest technologies, as well as developing competency-based training programmes designed to prepare trainees for the job market. The Government of India has also established a National Vocational Education Qualification Framework (NVEQF) to provide a unified standard of qualifications for TVET trainees across the country (Mansour & Dean, 2016). These initiatives have played a role in making TVET graduates employable. The information about employability is usually spread among prospective students, hence determining the TVET one chooses to join after high school.

American TVET institutes provide trainees with a range of employable skills. These abilities will both help students get ready for the workforce and give them the tools they need to succeed in the workforce. The study by English et al. (2017) identified the most espoused employability skills provided by TVET institutions in the USA: technical, communication, and problem-solving skills. Technical skills are related to the skills needed for a particular job, such as programming, welding, or plumbing. Communication skills are essential for working with colleagues and customers and understanding how to give and receive feedback. Problem-solving skills help trainees become more creative and analytical, preparing them to tackle any challenges they may face in the workplace or business world. By providing trainees with these skills, TVET institutions have helped them develop their self-confidence, which is a significant factor in their success in the workplace. TVET institutions have also provided trainees with career guidance, which helps them understand their strengths and weaknesses and identify the right job. This guidance benefits trainees who may need a clearer idea of what job they would like to pursue. Overall, the employability skills offered by TVET institutions in the United States have positively impacted student enrolment in these institutions. These skills help students to gain the necessary skills and provide them with the guidance they need to make an informed decision about their career path (English et al., 2017).

In Australia, the rate of student enrolment in TVET institutions in Australia is growing steadily. The Department of Education and Training reports that during the previous ten years, more students than ever before have chosen to enroll in TVET programs in Australia (Kovacs, 2021). In 2020, more than 440,000 students were enrolled in TVET courses in Australia. This was the highest number of students enrolled in TVET courses in Australia

since the introduction of the sector in 1997 (Kovacs, 2021). The strong demand for skilled workers in Australia and the increasing recognition of the value of technical and vocational qualifications have driven the growth in student enrolment in TVET courses. Kovacs (2021) observed that Australia had recognized the importance of providing trainees with employability skills to help them succeed in the workforce.

The success of TVET in Australia is linked to government support. Notably, the government introduced the National Skills Framework (NSF). The NSF framework provides a clear structure for employers and governments to assess the skills and knowledge of trainees. It also sets out the standards of performance required to meet the requirements of the workforce. This system has enabled trainees to understand better the skills and knowledge they need to develop to gain employment (Gill, 2018). In addition, Australia has implemented the provision of mentoring, career guidance and counselling services in TVET institutions. These services are designed to provide trainees with the necessary support to gain employment, develop their skills, and succeed in the workforce. Australia has also developed industry-based competency-based training courses that provide trainees with the necessary skills and knowledge to gain employment. The courses are designed to provide trainees with the necessary qualifications and experience to gain employment and succeed in the workforce (Gill, 2018; Kovacs, 2021).

The student enrolment rate in Bangladesh in TVET institutions has increased significantly in recent years. The enrollment growth is primarily due to the Government of Bangladesh's efforts to increase citizens' access to vocational training and skill-development opportunities (Anonymous, 2021). This has increased demand for such programs, with

more and more students opting to pursue TVET courses. In addition, the government provide grants and subsidies to institutions and ensure that the curriculum of these institutions is up-to-date and relevant to the current job market. This has made TVET courses more attractive to students, leading to an increase in enrolment. The government has also encouraged employers to provide on-the-job training and apprenticeships to students in TVET institutions. This has increased the number of students who can gain employment after completing their courses. This has further increased the appeal of TVET courses among students, increasing enrolment (Anonymous, 2021). This implies that the TVET institutions with credible plans with the potential to attract more students, which means that such institutions form consideration criteria when students select TVET to enroll on a course.

According to Tuan (2011), the rate of student enrolment in TVETs in Germany is rising. This has been achieved through various initiatives, such as introducing the dual education system. This system allows students to gain practical experience in the workplace while simultaneously completing their formal studies. The number of students enrolled in TVETs has increased as a result of this approach. The German government has also put in place a number of financial incentives for students who decide to pursue a career in a technical or vocational subject, in addition to the dual education system. These consist of grants, scholarships, and waivers of tuition.

Furthermore, the German government has invested heavily in developing infrastructure for vocational training. This includes the establishment of dedicated vocational schools and colleges expansion of the existing ones. This has helped to ensure that students have access to quality vocational training and explicit employability skills, which has helped boost the

enrolment rate. Finally, employers in Germany have also become increasingly open to the idea of hiring students who have completed a vocational training program (Tuan, 2011). This has helped make TVETs even more attractive to potential students, as they know they are more likely to be hired by employers who value their skills.

The trainees' employability skills have become increasingly important in Japan due to the high competition for jobs there. With the influx of foreign workers and the shift in labour markets to more technology-driven roles, employers seek well-trained applicants with the necessary technical skills.

Maclean and Pavlova (2011) noted earlier that schools in Japan focused heavily on academic subjects, such as mathematics and science, rather than on developing soft skills. This led to only a few people having the required skills. The government purposed to change the situation and launched the "Skill Improvement Support Program" to develop the capabilities of trainees and enhance their employability. This program provides career counselling and guidance, study support, and employment-related guidance. The program also provides a variety of courses to aid learners in gaining the abilities and information required to succeed in the workplace. In addition, the government offers financial incentives to businesses that take on trainees and give them with job-specific training (Maclean & Pavlova, 2011).

With the increasing importance of employability skills, students in Malaysia have been turning towards Technical and Vocational Education and Training (TVET) institutions as a way to gain the skills and qualifications necessary for employment. TVETs allow students to learn the necessary skills and knowledge for the job market and gain exposure to the

various job opportunities available. This allows students to gain the employability skills needed to stand out in the job market and to improve their chances of searching for job opportunities.

The trainees' employability skills offered in TVETs in Malaysia have equipped trainees with the necessary knowledge and skills to transition into the job market. The government introduced a system of job-matching and career guidance services to help potential trainees find the right job or career path for them. It has also established an employability skills framework as part of the national qualification framework to ensure that employers recognize and accept TVET qualifications. Additionally, it has developed a system of trainee assessment and recognition of prior learning to ensure that trainees have the necessary skills and knowledge to successfully transition into the workforce (Mohammed & Ismail, 2019).

In France, TVETs are highly respected and allow students to gain employment in fields such as engineering, manufacturing, business, healthcare, and many others. The state of TVET institutions in cities in France is full of potential and possibilities. These institutions offer students various courses, from basic technical and vocational skills to more advanced courses in engineering and other related fields. According to Nugraha et al. (2020), the courses are made to give students the skills they need to succeed in the labor market. Students who successfully complete the courses will have the practical skills necessary to succeed in the employment market. The French government has taken a number of actions to address the skills taught to trainees in TVET institutions in an effort to enhance the employability skills provided by TVETs. According to Nugraha et al. (2020), the

government has launched a nationwide skills-based training programme for young people in TVET institutions. In addition, it provides funding for developing new curricula tailored to the needs of the modern workplace. These curricula focus on technical skills and developing the 'soft skills employers seek. The government has also created a network of employers and industry experts that collaborate to provide internships and apprenticeships that give young people the opportunity to gain work experience and develop the skills they need to be successful in the job market.

Similar circumstances exist in European nations like Austria, Germany, Finland, Italy, and the UK. They provide a variety of technical and vocational degrees intended to give students the knowledge and abilities needed to find jobs in particular economic and social development sectors. The qualifications may include short courses, apprenticeships, and full-time qualifications, such as diplomas and degrees (Koppinen, 2000). Koppinen noted that the employability skills offered by TVETs in Europe vary from country to country and to institution. Koppinen divided the skills into three main areas: interpersonal skills, such as communication, teamwork, and leadership; technical skills, such as computer literacy and knowledge of specific industry-standard software; and ‘soft’ skills, such as problem-solving and decision-making.

Tuan (2011) noted the tremendous support that TVET received from the European Commission, which implemented the ‘Erasmus’ Programme that grants students the “opportunity” to study P86 (2019) from a general perspective government in institutions across Europe. The programme aims to promote student mobility and boost employability skills, allowing young people to gain international experience and develop their skills. Moreover, the European Union's Horizon 2020 programme supports digitalization,

industrial modernization and energy transition research. This helps TVET institutions develop a range of programmes directly linked to employers' future needs. European Commission has also developed initiatives such as the European Alliance for Apprenticeships, which aims to increase the quality of European apprenticeships. By providing quality apprenticeships, TVET institutions can attract more students and ensure that they are equipped with the necessary skills and qualifications to succeed in the labour market (Tuan, 2011).

In addition, the European Union (EU) proposed modernizing the European labour market by introducing the European Qualifications Framework (EQF). This framework sets out the qualifications and skills required for various professions, allowing employers to efficiently identify the qualifications needed to work in their professions. By aligning TVET qualifications with the EQF, employers can quickly identify the skills and qualifications needed by potential employees.

Most TVET institutions from developing African nations have needed help developing human resources with technical skills to support growing economies and anticipated industrialization. The derail can be attributed to various factors ranging from the inadequacy of facilities, limited funding, inadequate staff, and weak linkages with industries, among others. For example, the quality of the programmes offered in Ethiopia’s TVET institutions is affected mainly by the issues mentioned above (Wudneh et al., 2022). However, the TVET sector in Ethiopia has witnessed a significant expansion in both enrolment and the number of institutions offering TVET courses. More than 690 TVET institutions are registered in Ethiopia, with an enrolment of more than 1.5 million students (Anonymous, 2019; Wudneh et al., 2022). The Ethiopian government had earlier developed

the National TVET strategy, which was adopted in 2012. The strategy outlined the government's commitment to improving the quality of TVET programmes and increasing the number of TVET graduates with employable skills (Wudneh et al., 2022).

Despite the high population in Nigeria, the country has the capacity to train about 200,000 TVET students each year. This means that only about 0.1% of the population is trained in TVET yearly. This is far below the estimated rate of approximately 1.5% to 2% of the population required to fuel the country's economic development (Ismael & Mohammed 2015). The desired growth of TVET institutions and production of graduates with employable skills in Nigeria is curtailed by inconsistent funding, which Ismael and Mohammed said was the reason for poor quality facilities, inadequate equipment, and inadequate staff in TVET institutions. Ismael and Mohammed also noted that most TVET institutions had an outdated curriculum, which does not adequately prepare students for the job market. Research conducted by Olojuolawe and Amin (2019) revealed that many students opt to drop out of institutions after witnessing their friends who had graduated from these institutions being unable to secure jobs, probably, because they lacked the required skills. This situation was affecting the students' decision to join TVET institutions.

According to Kamble (2021), trainees' employability skills have been a significant factor in influencing students' choice of TVET institutions in Uganda. However, TVET institutions have started to respond as guided by the curriculum framework for TVET developed by the Ministry of Education in Uganda. For example, Makerere University College of Business and Management Science (CBM) provides a range of courses that focus on developing employability skills, such as leadership, problem-solving,

communication, and teamwork. This has made CBM a popular choice for students seeking the necessary skills to enter the job market. Kampala Business and Technical Institute (KBTI) is another famous TVET institution in Uganda that offers a range of courses designed to help students develop their employability skills. KBTI offers courses in areas such as customer service and business skills. The Uganda Technical College (UTC) and the Uganda Institute of Business and Technology (UIBT) also offer a range of courses that focus on developing employability skills, such as entrepreneurship, business management, accounting, management, problem-solving, and communication. UTC also allows students to gain hands-on experience in their chosen field through internships and other practical activities. These courses are designed to equip students with the necessary skills to enter the job market and succeed in their chosen career paths. Consequently, students are increasingly choosing to enrol in these institutions. Similarly, Munishi (2016) said that the lack of specific skills needed by the labour market was the reason for many unemployed graduates in Tanzania.

In Kenya, the situation is comparable. Omwando and Ken (2014) observed earlier that TVET trainees in Mombasa County had low student enrollment and poor employability skills. Omwando and Ken also indicated that most trainees needed to be made aware of the available career paths and the type of skills needed for them to excel in their respective careers. Another reported issue was that Mombasa trainees needed more learning resources such as computer labs, internet access, and libraries. These learning resources must be improved for students to acquire the skills needed in the competitive job market (Omwando & Ken, 2014). The lack of proper training and guidance in TVET institutions in Mombasa

was also said to have contributed to poor employability skills, which can be influential to the students' selection of TVET institutions.

Weak trainees' employability skills were also reported recently among TVETs in Nakuru, County and Nairobi County, which host several polytechnics providing a range of courses and qualifications to the students (Magut & Kihara, 2019). This has caused many potential students to be discouraged from enrolling in the polytechnic. Muya (2016) blamed the above situation on inflexible and outdated TVET learning content, mismatches between skills taught and those required by industry, weak quality assurance mechanisms, and limited private and industry sector involvement in the design and development of appropriate curricula. Bank (2015) reported that the curriculum used in TVET institutions needs more connection to the labour market, jeopardizing the development agenda. Bank noted the need to inculcate employable competencies in training students in TVET to increase the employability of graduates.

From the above studies conducted in Kenya, it is clear that employers seek to hire skilled and competent individuals to perform specific tasks and roles. As such, prospective students are expected to join TVET institutions that help them to acquire relevant knowledge, skills and experiences to be competitive in the job market. However, the TVET Authority and the Ministry of Education in Kenya have proposed various reforms, chief of which are collaborations between TVET institutions and industry players in developing curriculums and establishing modalities where TVET institutes can come up with their examinations so that can customer skills and training to specific market requirements. This is envisaged to impact the selection of courses and TVET institutes, considering that

students prefer to study in institutions equipped with skills responsive to industry requirements.

2.6 Courses Offered and Students' Selection Decision for TVET Institutions

The choice and selection of higher education institutions is necessary to determine students' future prospects. Thus, a lot of effort is directed toward assisting students in this process; among them is career development events where students are prepared to venture into different careers (Lundry et al., 2015). In such circumstances, students are impacted with knowledge of the various courses offered in multiple institutions hence influencing students' choice of TVET institutions greatly. Nevertheless, the courses offered are determined by the availability of appropriate infrastructure, appropriate materials and competent instructors, among others (Mujumdar, 2015). Mujumdar further argued that if the input is not precise and correct and the process needs to be better organized and managed, achieving learning objectives and creating competent learners can be difficult.

Over the decades, TVET education has been embraced and improved significantly across many countries (Talley et al., 2017). The students' choice and enrolment in TVET institutions are key to building strong systems of education in the institutions. The courses offered in TVET institutions differ from one institution to another. The gender of a student and the cost of undertaking the course were found to be significant in influencing the students' choice of TVET institutions (Harmse, 2021; Rotich et al., 2020). Globally, studies such as Wasike (2021), Okolie et al. (2020), Padi et al. (2022) and others have investigated aspects of courses offered in TVET institutions from different perspectives and contexts. These studies show the exponential growth of TVET institutions across many nations. However, Harteis (2017) noted that as the number of TVET graduates increases annually,

the quality of the program being provided and the competency of graduates from the institutes still need to meet the expectations of employers or the general public. A few relevant studies were identified and interrogated. A discussion on the same is provided below.

Talley et al. (2017) study in Georgia covered diploma options, technical education and career. It reported that 11 states offered special education diplomas, while three states offered occupational diplomas for students with disabilities only. The study also analyzed the effects of the withdrawal of tiered diplomas and the difference between career and technical education (CTE) and legislation by federal and actual practice. The study's findings indicated that streamlining diploma options influenced students' choice in TVET institutions resulting in higher enrolment of students with disabilities. On many occasions, school counsellors in high school advise students about prospective courses in universities and tertiary colleges. Students hold school counsellors with high regard and, therefore, value and treasure their advice. As such, the school counsellors play a role in informing students' selection decisions for a TVET institution to some extent, considering that students listen to them and trust them. A case for reference was provided in a study by Pierce (2017), who investigated the influence of high school and middle school counsellors on career choice programs in higher education institutions in Mississippi. The study was based on Career and Technical Education (CTE). The study's findings indicated that the counsellors were tasked with providing knowledge on career programs to learners. However, school counsellors had average awareness of the career choices programs. They also needed to be better conversant with the specific courses offered by various CTE institutes and universities. They needed more time to utilize and implement the career

programs in the school. This indicated that students' choices in higher education were impaired at inception stages since school counsellors and students needed more knowledge on the courses offered in different CTE institutions. The study concluded that there was no substantial relationship between the type of counsellor and the students' choices of the courses offered in CTE.

The findings were consistent with another study done in Nigeria by Okolie et al. (2020), where the absence of careers advice, guidance and counselling (CAGC) in Nigerian TVET institutions resulted in poor students' choices, aspirations and career development (Okolie et al., 2020). The study recommended strengthening the school guidance and counselling system to foster students' choice and career development, focusing on universities and TVET institutions. The study by Okolie et al. (2020) was entirely qualitative, which sets it apart from the current study's use of a mixed-methods approach to research.Another closely related study was conducted at Sigalagala national polytechnic in Kakamega County on the students' determinants of career choice in tertiary institutions by Miheso (2020). It involved 303 teachers and students. The primary constructs were the influence of career counselling, peer pressure, gender, market demand and cost on career choices on career choice. Students' career choices were observed in three aspects; entry grade, remunerations and student passion. According to Miheso (2020), the predictor variables investigated significantly influenced learners' career choices. It was established that career counselling provided insights into the courses offered by the institutions, affecting students' career choices. The study recommended that TVET institutions and secondary schools embrace career counselling to enable learners to make good career choices that benefit the market industry.

A related study was also conducted by Lundry et al. (2015) in Oklahoma and focused on career development events (CDE) benefits. The study investigated the perceptions of agricultural education teachers towards CDEs. It was not very objective in the agriculture sector since it is believed to be the largest employer constituting over 24 million people. Career development events through agricultural education could lay the ground for students in over 300 careers in technology, science and business in agriculture. The study adopted the Delphi survey technique to investigate the phenomena. The study's findings highlighted that teachers perceived CDE as a program that supported the attainment of career and technical education, favouring the agricultural industry following the acquisition of life skills (Lundry et al., 2015). However, the study contradicted the current study by indicating that the agricultural education teachers disagreed on CDEs being a determinant of students' choices towards choices they make about learning institutions. The study was biased toward the agriculture sector, hence, differs from the current study, which took a holistic picture of a TVET and not one program.

In order to determine the amount to which they are increasing student enrollment at technical and vocational colleges in the United Arab Emirates, Neususess (2020) looked into aspects including guidance, career, social environment, media, and economic influences. These factors were empirically proved to have a statistically Signiant influence on the student's choice of vocational education. The career factor was the most influential, followed closely by a social or environmental factor. The economic factor was more influential to males than females, where males pursued different courses depending on their financial income. These findings indicate that the courses offered in technical and vocational institutions influenced the students' choice resulting in more students enrolling

on some institutions (Neuseuess, 2020). The study concluded that promotional channels such as social media are essential platforms for disseminating awareness information regarding technical and vocational institutions and courses offered.

The students 'selection decision for a TVET can either favour private or public institutions. Ko (2019) was interested in establishing factors influencing students' choice of private higher institutions in Yangon. Data were collected from 200 students from different disciplines and education levels drawn from five Yangon institutions. The results indicated that six variables influenced student choice of higher education institutions. These include social media influence, academic programs, job opportunities and internships, education facilities, location and cost of education. The academic program variable was found to have a higher Pearson correlation coefficient value than other variables. According to Ko (2019), all six constructs significantly influenced students' choice of higher education institutions. This meant that the courses offered in an institution informed, to a large extent, the decision of a prospective student about which institution to join.

A study involving 40 Malaysian polytechnic students wanted to assess how they made educational choices based on academic credentials. It also assessed the decision-making process and characteristics. The study used questionnaires and focus group discussions. From the collected data, Wei and Jamil (2019) categorized the factors influencing students' choice of tertiary institutions into students' characteristics, institution characteristics, decision-making behaviour and other related factors such as inadequate information and peer influence. According to Wei and Jamil (2019), the institutions' characteristics played a significant role in influencing students' choices regarding selecting a given tertiary

institution. Although this study's population was small, it provided important insights into aspects considered when designing data collection tools for the current study.

Gender issues have been adversely mentioned in social and hard science studies. They have been used to determine how male and female gender react to various matters and to assess the rationale for choices made on various social-economic phenomena. The underrepresentation of female students in engineering courses in South Africa was associated with inadequate advertisement of the courses offered in the institutions (Harmse, 2021). Harmse's study was based on South West Gauteng College, a technical vocational education and training institution (TVET). Interviews were conducted with women in engineering, hospitality and business studies courses. The findings indicated that women in engineering were required to be provided with equal opportunities with men. Harmse (2021) noted that institutions offering the courses should relay more information to the public to influence students' choices of TVET institutions. This envisaged enhancing the representation of females in engineering courses, eliminating gender stereotypes. This study was more inclined to female representation in TVET institutions negating the males. The current study collected data from both genders; hence, the views collected were deemed appropriate in providing a general and proper picture of the situation.

Dasmani (2021) linked the lack of student preparation for the labour market in Ghana to inadequate training facilities, large class sizes, a dearth of instructional resources, and a need for more connections to the local business sector. In TVET institutions, a study was done on how entrepreneurship education affected female students (Padi et al., 2022). Utilizing surveys and interview schedules, the study attempted to look into the intentions of female students to start their own business. The offered entrepreneurship course had an

impact on female students' entrepreneurial intentions, which in turn increased the number of female students enrolled in TVET colleges. According to Padi et al. (2022), the influence depended on the student's exposure to social support systems. This indicated that the course offered indirectly influenced the student's choice, where the two variables were mediated by social support systems put in place in TVETs. The study recommended that the courses available in institutions should be sustained and reviewed periodically. Promotional programs targeting women gender in entrepreneurship were also recommended.

Padi et al. (2022) urged the government to establish effective social support structures and systems in TVET institutions. This study's findings show that the strength of the promotion largely influenced female students' entrepreneurial intentions, exposure gotten through a course, and support systems. The interplay of these factors was anchored on a female student's decision. This suggests a strong underlying relationship between the courses offered, the exposure they provide and the students' selection decision to pursue a given course in a particular TVET institution.

Kidane (2022) used a Bayesian methodology to evaluate the variables influencing the academic performance of polytechnic students at Bahir Dar Polytechnic College in Ethiopia. According to Kidane (2022), the courses offered were found to be most influential in students' choices regarding TVET institutions, which further influenced their academic achievement.

The perception that one has is instrumental in decision-making. A study conducted in the Kampala district in Uganda investigated high school students' perception of vocational education (Kizza et al., 2019). Data was collected from 194 senior students. The researchers further consulted secondary sources to strengthen and defend points of view.

According to Kizza et al. (2019), students' perceptions of vocational education were positive and negative, as they still had apathy towards it. However, the communication channels for vocational education to students proved lacking and needed improvement. This further impacted students' choices of TVET institutions due to a lack of information on courses offered in such institutions. The study recommended that policy frameworks that would clearly indicate the transition from vocational education to further education and adequate information about vocational education, including the courses offered, be provided to facilitate informed students' choice of vocational education. When exploring the causes of low employable skills of TVET graduates in Tanzania Munishi (2016) identified ineffective curriculum as a critical impediment to skills acquisition. Nkwame (2015) observed that the curriculum in vocational and technical institutions needed to be revised to the requirements of the employers. The two studies recommended a review of the courses offered and respective curricula to make them appealing to the students and responsive to the market.

The enrolment of students in TVET institutions has been on the rise, doubling every five years in African countries. This is attributed to economic growth experienced in the education sector. However, in Kenya, challenges have been experienced in the supply of technology and science in TVET institutions (Onyango et al., 2022). This has impacted the kinds of courses that are offered and the consequent choice decision made by learners. (Onyango et al., 2022) did a study to look into the infrastructure of the program, the availability of teachers, the number of students enrolled, and the programs provided by TVET institutions in Nyanza. The study's conclusions showed that, among other things, the programs provided and consumer demand had an impact on the number of students that

the institutions could accommodate. The study noted that the challenge of student supply could be mitigated by improving marketing strategies and conducting outreach sensitization activities on the courses offered by the institutions (Onyango et al., 2022). The outcomes were regarded as critical in influencing students' choice of TVET institutions.

The above results were consistent with a large study conducted by Wasike (2021) on student enrolment in Bungoma County. Wasike noted aim was to establish the influence of the types of courses made available in TVET institutions based on age, gender and academic qualifications. The study's findings revealed that the enrolment of students in TVET institutions in the county differed with gender, age and academic qualifications. This indicated that the courses offered influenced students' choice of TVET institutions. Wasike (2021) further argued that the type of courses offered influenced students' enrolment, considering that different students had differing preferences on career paths.

A similar situation was also reported in the Butula sub-county, Busia County, by Ongulu (2018), which analyzed a variety of courses offered under five constructs: relevance, job availability, mode of training, availability of departments and curriculum content. Ongulu noted that the aspect of programs offered substantially influenced student enrolment (85.2%) compared to the other aspects. These findings indicate that the type of courses offered was likely to influence students' decisions when choosing a TVET institution.

Another study done in Kenya by Okinyi et al. (2021) adopted a mixed-method approach in exploring internal efficiency and enrolment rate in institutions in Kenya's public vocational

training centres (VTC). The study findings showed that internal efficiency was low and commensurate to low enrolment rates, high dropout and low completion rates of students. All these aspects emanated from within an institution and impacted the student population in VTCs in Kenya. Therefore, a direct relationship between courses offered and enrolment is evident; similarly, an indirect relationship between courses offered and the students' selection decision for VTCs can be deduced. First, the number of students registered is determined by the courses offered.

The courses offered in TVET institutions are expected to equip a learner with soft skills. Therefore the curriculum of a course should integrate life skills into the curriculum of TVET institutions. Examples of life skills include critical thinking, creativity, decision-making, problem-solving, good communication skills, and collaboration. According to Ondieki et al. (2019), life skills enable students to effectively and efficiently handle challenges and issues encountered in daily life. From the results, Ondieki et al. (2019) noted that life skills training among TVET students had a positive impact on student's choice of TVET institutions resulting; in something that motivated graduates to a great extent. This implies that the courses that integrated life skills into the curriculum were likely to attract more students. Meaning, such courses were formed as consideration criteria students considered when selecting TVET institutions.

Gender stereotyping has continued to be a challenge that affects female participation in vocational education. In this light, a study was conducted in the North Rift region of Kenya (Rotich et al., 2020). Another study by Rotich et al. (2020) investigated gender stereotyping, technological advancements, counselling and grades to determine how

female students' enrolment rates were impacted in TVET institutions. The study's findings indicated that the guidance provided to students at the high school level enlightened the learners on the courses offered at TVET institutions, greatly influencing students' choice of the institutions and consequently resulting in higher enrolment rates of female students (Rotich et al., 2020). The grades also played a positive and significant role in influencing the enrolment of female students into TVET institutions.

Additionally, gender stereotyping negatively influenced female students' enrolment in TVET institutions. Measures for addressing gender stereotyping were underscored and recommended at secondary school, where teachers and career counsellors were urged to encourage female students to consider all courses just like men. The availably of such initiative was regarded as playing a contributory role in influencing the decisions that students make when selecting a TVET institute to join.

Another element attached to courses offered in an institution is cost. This is because some courses are resource intensive of hence costly. The high cost usually puts off some potential, so they end up not enrolling for such courses, instead choosing the ones they can afford. A study conducted by Obwoge and Kibor (2016) in Uasin Gishu County confirmed this assertion. Obwoge and Kibor grouped the factors influencing students' choices into seven constructs. These included training facilities, advancement opportunities, role models, peers and parents, ICT integration, government policies, fees, levies and bursaries and institutional marketing. Although all seven factors were significant in influencing students' enrolment in a course, the fees, levies and bursaries factors were weighty in influencing the decision. This implied that it was not just the courses on offer but even the

cost associated with those that jointly determined the students' selection decision for TVET institution.

2.7 Government Policies and Students' Selection Decision of TVET institutions

A policy denotes the deliberate system of guidelines that direct people's decisions to achieve rational outcomes. It also refers to statements, ideas and plans about what to do in various situations agreed upon by individuals, business organizations, or other entities. Governments in different parts of the world are the entities that establish policies to govern their people. A country usually manages its people through three arms; the executive, legislature, and judiciary (Milne, 2019). From a general perspective, ggovernment policies represent a stand, intentions, and plans for a particular cause, like migration, education, business, agriculture, transport, and healthcare, among other areas. Education is a significant factor in society. It helps people acquire knowledge for steering their economies. Therefore, governments usually have a substantial interest in education. The interest is manifested through establishing policies about how education should be conducted (Madani, 2019). Among many areas addressed by policies is access to education and academic outcomes.

Government policies in TVET institutions play a significant role in preparing learners for their life after high school. Heyward (2020) submitted a study in the United States on how states can prepare their students for life after high school. In the study, Heyward (2020) argues that while state policies could be instrumental in helping learners acquire education after high school, they have shortcomings that prevent students from achieving higher education in TVET, colleges, and universities. For instance, Heyward (2020) established that many US states share several education policies with systematic weaknesses; for

example, little support for education districts that lack capacity, skewed credit award and financing policies that prevent practical learning, and weak career accountability and information systems. These weaknesses hinder higher education access. According to Heyward (2020), states should support education districts to form industry partnerships, conduct analysis, and innovate. The study established that states leave schools to identify programs for their students, hire teachers, and identify industrial partners. However, this undermines the educational competence of these institutions, making them produce weaker graduates. Therefore, Heyward states should establish policies that help institutions develop competent career programs to attract more students and produce competent graduates. However, many students will not join higher learning institutions if policies hinder higher education funding.

The study by Heyward (2020) points out the weaknesses in state policies concerning education in the US. The weaknesses reveal detrimental policy aspects influencing students' selection decisions for a TVET institution. Therefore, the current study tested the aspects to ascertain how much they influence the students' decision for a TVET institution. Governments establish education policies to ensure teachers are competent enough to handle students' needs at different academic levels. TVET institutions inculcate industrial skills and knowledge among learners. Therefore, teachers at this level are required to have industrial knowledge competence. In Malaysia, Jafar et al. (2020) presented a study on TVET teachers' professional competency per industry 4.0. Revolution 4.0, or what is known as the fourth industrial revolution, in a borderless globalization era. Undoubtedly, technological advancements in this era have revolutionized many aspects of life, education

institutions and other sectors of the economy, including TVET. Technology in vocational education denotes a paradigm shift in conventional learning towards tech-based learning. Learners in this era must therefore be equipped with the technical capabilities to address the needs in the industry, mainly in information and manufacturing technologies. This points out the need for the TVET teacher in this era to be professionally competent, havee the necessary industrial skills and can transfer the skills to learners (Jafar et al., 2020). As such, Jafar et al. (2020) urged governments to establish policies that ensure TVET educators have professional competencies like technical, non-technical, mental and personal competencies. Through such policy, the governments play a role in supporting the development of public TVETs by hiring only competent educators.

African governments are placing significant emphasis on TVET education as one of the factors for growing their economies. As such, they establish policies that support TVET education and promote access to the same. Okumu and Bbaale (2019) established that governments significantly influence TVET education in Uganda. Most profoundly, TVET financing and planning policies affect students' choice of TVET institutions in many ways. For instance, Okumu and Bbaale (2019) established that poor financing and planning of TVET institutions lead to constraints that lead to poor quality equipment, limited adoption of the CBET curriculum, and understaffing. An institution with these characteristics needs to be more attractive to students.

Moreover, Ahmed et al. (2020) noted that institutions that attract higher student populations have policy frameworks that consider the needs of different social groups like the youth, women, those living with disabilities, and the economically disadvantaged. This

aspect indicates that if an institution, for example, fails to consider people in this social segment, it will lose out on enrolment. Therefore, the availability of options and considerations of these social segments plays a role in influencing the students' choice of the TVET to enrol.

In addition, Okumu and Bbaale (2019) also considered the aspect of social justice in TVET institutions. They established that TVET institutions should have policies that accommodate students' well-being rather than focus on economic interests. Many Sub-Saharan African countries, including Kenya, have embraced TVET education to remedy the bothersome challenge of youth unemployment across the region. In 2018, Kenya gave TVET more attention and established policies that gave it a more significant budget allocation (Erima, 2021). For instance, the government implemented a plan to provide every TVET student with a $300 annual subsidy, available through the Higher Education Loans Board (HELB) (Erima, 2021). The policy led to a decrease in TVET institution tuition costs and an increase in public support for the development of the industrial skills necessary to guide the nation's economic growth.

The Kenyan government has embarked on a rigorous plan to address TVET institutions through institutional reforms and funding allocation (Republic of Kenya, 2022). For example, the 2012 TIVET Act sets out the expected legislation that governs the TIVET institutions (the Republic of Kenya, 2022). The government redesigned the VET curriculum for Competency-Based Education and Training (CBET) and provided student loans and scholarships during the first and second medium-term stages of Vision 2030. The Kenyan government enacted this policy following the World Bank's warning about the

increasing disparity between labour market skills demands and higher education institutions graduates (Nwajiuba et al., 2020). The enactment of this policy was a significant initiative that saw many students enrolling in TVET institutions in Kenya. Before this policy was enacted, TVET institutions in Kenya were expensive, and students needed help to afford them. However, Erima (2021) warned that this policy needs to be revised to keep TVET education alive in Kenya. The credibility of national policies on TVET is contingent upon the subjects and programs offered in these institutions. Erima (2021), therefore, urged the government to establish policies regulating the subjects and programs that TVET institutions offer learners.

In the study, Rosen et al. (2018) established that the federal and state governments in the United States have policymakers who see career and technical education as a factor in reducing education inequality and improving economic competitiveness. This has become one of the policies attracting bipartisan support in the United States, making the government gain significant strength in supporting access to postsecondary education, mainly in CTE or TVET institutions. Rosen et al. (2018) demonstrated that government policies are significant in alleviating challenges in the education system. They submitted that federal and state governments in the United States had established several policies that support enrolment in CTE institutions. For instance, in 2016, 42 states in the United States enacted approximately 140 CTE policies to support equitable access to postsecondary education in the United States. Rosen et al. (2018) also submitted that CTE programs differ, with some addressing employer or career needs, while others consider students' needs. However, today, governments have established policies to ensure that CTE programs balance student and employer needs. Open admission policies are instrumental in ensuring

learners choose institutions based on their academic and personal needs in the United States. Besides, they create policies for open admissions, where learners can freely choose the TVET institutions they wish to attend.

Although many researchers have investigated the issue of financing public TVET institutions in different countries, most of them have narrowed down to government policies. A study carried out in Kenya by Maina (2019) urged the governments to understand the relationship between TVET financing policies and enrolments to TVET institutions. Weak financing policies were also reported by Lee and Ogawa (2016) to have affected TVET institutions in Sri Lanka. Consequently, private TVET institutions have established effective funding policies that make them to flourish (Aryal, 2020).

Lee and Ogawa (2016) and Aryal (2020) urged a need for a policy to enable the government to establish partnerships with the private sector to facilitate the funding of public TVET institutions. In Kenya, the government funds public TVETs through its funding policies, while students fund private TVET institutions through fee payment. These policies affect learners' choice of TVET institutions, where economically privileged learners choose private TVETs while students who cannot afford private TVETs choose public TVET institutions. Governments must adopt laws that acknowledge the contribution of private donors to the funding of TVETs, particularly in Sub-Saharan Africa, according to Maina (2019). For instance, the World Bank has increased its support for TVET revitalization, which encourages government initiatives to provide funding for TVETs (Maina, 2019).

Although the two studies by Lee and Ogawa (2016) and Aryal (2020) have demonstrated the significance of government policies in TVET education, they still need to demonstrate

how these policies affect learners' choice of TVET institutions. The current study analyzed critical aspects of government policies intending to establish how they affect students' selection decision of public TVET institutions.

Quality is a significant factor in determining learners' choice of academic institutions, including TVET institutions. In a study in South Africa, Mpanza (2017) claimed that the South African government recognizes the plight of the many jobless youths in the country. Mpanza claimed that TVET institutions must maintain certain quality levels to be considered competent and attractive and to meet the demands of the job market. Their policies have to ensure customer satisfaction of students and other academic stakeholders. They also have to address cumbersome bureaucracies in the form of rules and regulations and introduce customer-centric policies to uphold learners' satisfaction. However, Mpanza (2017) warns that strict policies and adherence could create inconveniences. For instance, strict adherence to documentation requirements could reduce the number of enrolments in TVET institutions. Institutions with many requirements during admissions put off many students, making them prefer to choose institutions with friendly entry requirements. Mpanza's study did not demonstrate the empirical linkage of government policies and students' selection decisions but was instrumental in presenting quality consideration in the administration of administrative practices.

Teachers' qualifications are essential in determining students' choices of TVET institutions. Literature shows that governments in many countries have established policies guiding teachers' qualifications. Chakroun (2019) presented a study on a framework for TVET teachers' qualifications in France. The study submitted that more than 120 countries are

racing to reform their qualification systems to adopt outcomes-based frameworks. Consecutively, frameworks are evolving in an environment of increasing technological, demographic, and socio-economic changes. The changes include intensified internationalization and globalization of labour markets, advancements in digital technologies, migration, and climate change. These changes affect framework functions, mainly the pursuit of systems that compare qualifications and skills internationally. Developing TVET teachers' competence frameworks in line with National Qualifications frameworks (NQFs) can play an expressive role in addressing challenges like TVET systems fragmentation and TVET teaching staff diversity. As such, it is prudent for governments to establish policies for teachers' competence frameworks to ensure that teachers are duly equipped to produce students with skills matching the current industrial demands (Chakroun, 2019). Therefore, government initiatives are significant in ensuring that TVET teachers are competent enough to ensure quality education.

The Indian government also pays attention to skills TVET trainers. Mehrotra (2020) claimed that India’s TVET system is at a very rudimentary development level when measured against international standards. After the Indian government established the National Skills Qualification Framework (NSQF), it was to assume several roles in TVET. Its implementation would follow a schedule made of several steps over several years. NSQF was supposed to replace all other policy frameworks and give preferential funding to NSQF-compliant courses. After its third anniversary, the government would only fund NSQF complaint courses, and all recruitments would follow NSQF eligibility criteria. After the fifth anniversary of the framework, which was on 27th December 2018, all education programs were supposed to be NSQF compliant (Mehrotra, 2020). Among the

objectives of this policy was that India would move towards a competency-based curriculum. Government qualification policies affect learners' choice of TVET institutions in India because students can only choose NSQF-compliant courses to receive NSQF funding.

Governments establish structural adjustment policies in their education systems, including TVETs. Some of the structural adjustments that governments make revolve around teachers' qualifications. In South Africa, Beharry-Ramraj et al. (2020) studied structural adjustment focusing on TVET capacitation. They submitted that there is a significant need to ensure that the postschool system meets the requisite institutional capacity to meet its role of addressing the youth's job requirements. The study noted that the South African government has established qualification frameworks for teachers' qualifications to ensure competency in TVET institutions. These frameworks are established in the government's educational policies like the FET act of 1998, which addresses curriculum transformation, teachers' qualifications, learning and teaching, funding, and quality assurance in academic institutions in South Africa. Also, the Further Education and Training Colleges Act of 2006 and 2008 supports the vision of a modern TVET system. The Act outlines TVET teachers' qualifications. The policies have affected students' choices of TVET institutions, where learners choose institutions complying with government-specified qualification frameworks.

Since Kenya attained its independence, the government has committed to offering education to its citizens (Ackah, 2019). Besides, the world has globalized significantly, creating the need for responsible citizens. Also, changes in industries experienced through

scientific and technological development necessitate having people equipped with educational and technical skills. This has made the government of Kenya reform its education sector to increase the number of people with scientific and technical skills.

A robust policy framework has been one measure undertaken to strengthen reforms. Kenya has established several policies in the education sector to address academic matters. Some of these policies and educational agencies included Session Report No. 2 of 2015 (previously No. 14 of 2012), National Education Sector Program (NEPO) 2014-2018, Technical and Vocational Education and Training Authority (TVETA), the TVET Act of 2013, Kenya Universities and Colleges Central Placement Service (KUCCPS), and the Higher Education Loans Board (HELB). Session Report No. 2 of 2015 reports that education supports social mobility, socioeconomic development, and national cohesion. The government has also increased TVET institutions to allow the production of graduates with the skills the industry needs.

Institutions like KUCCPS and HELB have also been instrumental in supporting TVET education. KUCCPS is the higher education placement body in Kenya. It places students in universities and colleges under government sponsorship, and this help to subsidize the cost of education. Students who meet a particular cut-off point in their KCSE education are placed under government sponsorship, enabling them to join TVET and CBTE programs (Abdulrahman, 2020). The HELB institutions offer university and college students loans to support their learning. It is an important body in Kenyan education system because it helps underprivileged students by providing them with loans that are used to pay

tuition fees and support their livelihoods while learning (Abdulrahman, 2020). This body ensures that even underprivileged students can access TVET education.

2.8 Summary of Literature Gaps

A review of studies on the factors behind the students' selection decisions of TVET institutions shows similarities across countries. Although some aspects vary from one region to another, the extent of technological advancement and the country's state of development constitutes the denominator. The most prevalent elements that impact students' selection decisions for TVET institutions are media, parental preferences, peer influence, location, former students' experiences, costs, host country characteristics, policy framework, and environmental students.

The outstanding gap is the existing empirical studies have investigated the factors mentioned above from an attractiveness point of view. They did not link the same to the decision-making process for a prospective student. The interplay of government policy has also yet to be investigated to establish the extent to which it informs the decision-making process of a prospective TVET student. Since the available literature has described physical facilities, the sufficiency of staff, employability, and course offered, and government policy as essential elements of a public TVET institution, an investigation on the interplay between these factors and the students’ selection decision was therefore indispensable.

2.9 Theoretical Framework and Model

This study was informed by three theories namely, human capital theory, the theory of comparative advantage and theory of dynamic capability. It also utilized the Jackson model of 1982. In this section, the three theories are first discussed followed by the Jackson model.

2.9.1 Human Capital Theory

The Human Capital Theory was developed by two economists, Gary Becker and Theodore Schultz in 1964 (Becker, 2009). The theory argues that education, training and knowledge acquisition by people improves their productivity, problem-solving abilities and decision-making. In their argument, Becker and Schultz regarded education and training critical in creating opportunity for increasing workforce relevancy and productivity. Human capital theory argues out that, the expected benefits that will come from a decision guide the choice of professional development (Becker, 2009).

Therefore, when related to TVET institution trainees, a student may opt to undertake a course in a particular institution after considering how the institution will better their talents, abilities, broaden their knowledge and capabilities which will make them outstanding in the job market. Therefore,

Human capital theory was applied in this study to understand the aspects that learners consider when choosing a particular course or to study in a specific college based. Basically, the TVET institute selected, determines the preparedness of a learner to fit in the ever changing job market. According to this theory, when one is selecting an institution to study, he/she will directly compare the benefits in terms of helping one to increase

productivity in job market; where, the institution that demonstrate highest alternative return is usully preferred (Becker & Schultz, 1964).

In this study, the human capital theory addresses the reasons which make students to choose to study in a given TVET institution. It may be as a result of the courses offered and employability skills and other factors. Therefore, it is approprriate in underpinning the choice for TVET institutions and the factors which influences student's decision including, employability skills for trainees, courses offered, physical facilities, staff adequacy and government policies. This is because, when related to TVET institution trainees, a student may opt to undertake a course in a specific TVET institution after considering how is relevant in enabling a prospective to build their talents, abilities, and broaden their knowledge in the context of the available teaching and non-teaching staff, physical and learning resources. .

Human capital theory is critiqued for assuming that the end product which is productivity justifies the decision. This may not be necessarily true at all circumstances, considering that other factors can influence the choice that one make for joining TVET institutions, such as, the academic performance attained and regulating policies in place. However, this limitation does not trash away the strengths possessed by this theory in explaining the factors which influence the decision for joining a TVET institution.

2.9.2 The Comparative Advantage Theory

The theory of comparative advantage was first developed by Ricardo in 1871 (Willis & Rosen, 1979). Later on, Roy developed the idea further in 1951. After Roy's work, other researchers such as Willis and Rosen progressed the theory in (1979). The key idea

propagated by this theory is how individuals go about making choices for occupations. The theory notes that in the field of economics, a workers' choice of employment depended on arbitrary reasons. Besides that, the ability of someone to select an occupation of interest had some effects which were that, at the end, the individual relatively got high returns in form of earnings (Roy, 1951).

Willis and Rosen (1979) did an analysis to verify the theory with respect to the choice of joining college education. They found that, the choice to join a college had implications of financial gain. Besides, the preference for a particular course was triggered by an interplay of factors such as competency, self-select and good performance. Moreover, the theory was also explicit in explaining why future incomes of various individuals who chose different courses differ after studying.

The current study emphasizes that the quest for students enrolling in colleges is due to the financial gain realized after completion of a course. Therefore, the comparative advantage theory is very relevant in informing the current study based on the fact that it agrees that the choice for selecting a college is as a result of influential factors which were investigated in this study. It specifically underpins the dependent variable; students' choice in selecting Public TVET institutions. Moreover, the factors which influence the choice for a TVET institutions such as physical facilities, adequacy of human resources, trainees' employability skills, courses offered and government policies are underpinned. As explained earlier by Roy (1991), a workers' choice of employment depends on arbitrary reasons, hence, this argument was adopted to explain why with the many developed and operating TVET institutions, and secondary school learners may choose to enrol in one institution and not the other.

2.9.3 The Theory of Dynamic Capability

The development of this theory was by Teece in 1997. The main ideology of this theory is to explain how organizations improve their capabilities. The theory explains that investment in the internal resources such as human resources, physical resources and infrastructure enables companies to effectively respond and adapt to the volatile environmental changes (Teece, 2007). Teece classified that organizational resources into whatever dimension played a key responsibility in influencing operational efficiency and productivity of the company.

The theorist came up with suitable dimensions that include: knowledge management, recruiting adequate human resources, advancing human resource knowledge through training and development, equipping physical resources and upgrading infrastructure were key strategies for assuring productivity and competitive advantage (Barreto, 2010). Apart from that, Treece disputed that threats and hindrances which tend to influence achievement of productivity and competitiveness need to be handled in order to achieve desirable outcomes.

Given that the theory of dynamic capability appreciates the role of physical resources, human resources, knowledge management and institutional capacity building, it was therefore adopted to address the factors that influence the choice for public TVET institution by trainees in Nairobi County. Noting the crucial role that infrastructure and resources play in improving productivity and competitiveness of TVET institutions; then other related factors, for example, adequacy of staff, physical resources, courses offered and competencies, are also underpinned. This theory further explains how TVET institutions may achieve increased enrolments of students by approaching identified threats

and hindrances to student choices that so as to influence growth and development of TVET institutions ; which may be the moderating role of government policy.

This theory is critiqued for assuming the role of a project manager who is central in guiding resource capacity building. Despite this drawback, this theory is still relevant based on the potential in underpinning the influence of physical resources, staff adequacy and government policy factors determine the selection decision of public TVET institution by trainees in Nairobi County.

2.9.4 The Jackson model

The Jackson model developed in 1982 was considered appropriate in guiding and informing this study. A detailed explanation and application of this model is provided in section 2.9.1. The model was found significant in underpinning the dependent, independent and moderating variables of the study.

Jackson's model was established to facilitate an understanding of how students make choices for joining universities and colleges (Hanson & Litten, 1982). Jackson initially focused more on the learner's behaviour during the decision-making process. Finally, Jackson identified the behaviour that influenced decision-making, categorized as a learner's economic and social factors. This conclusion on economic and sociological factors influencing learner decision-making led to the establishment of three main steps. These steps were: preference, exclusion and evaluation. (Jackson, 1982; Hanson & Litten, 1982). The three steps were meant to be essential in clarifying how learners arrived at a final choice got college or university.

In the first step (preference stage), Jackson's model concerned family, friends, aspirations and academic levels. The interplay of these factors and characteristics largely influences the choice of students' educational ambitions in colleges and universities. For example, graduate trainees, staff employed in the institution and the public at prominent positions rank their experiences about the TVET institution in their minds. When these people come across prospective students, they play a significant role in influencing them, especially if they are former students in a given TVET. Therefore, the preference stage poses some implications for TVET management regarding leadership and how it impacts students during their learning period. The public TVET principal and other members of management ought to preserve the school's image and reputation by offering good leadership.

According to Jackson (1982), among the aforementioned factors, academic performance was a forefront determinant that influenced the preference for a college or a university. This phase has implications for actor-based factors and other characteristics such as career aspirations and academic performance.

Secondly is the exclusion, which was indicated by the ability to gather information about a prospective college or university. At this time, a learner identifies the university's strengths and weaknesses. At the exclusion stage, some of the elements considered by Jackson (1982) were location, reputation, infrastructure and resources. Therefore, prospective students gather information for a public TVET about the availability and equipment of physical facilities, like laboratories, workshops, sports facilities and libraries. Moreover, prospective students learn more about the adequacy of teaching and learning

resources, for example, modern and well-stocked libraries and training resources. In this connection, students also get interested in learning about the teaching staff's availability, adequacy and competencies. Henceforth, at this same stage, wrong information about an institution influences bad decision-making and vice versa. TVET managers need to understand the intrigues of the exclusion stage and invest in the reputation of the public institution by developing the institutional infrastructure, physical, learning, teaching and human resources. Towards the expulsion/exclusion stage, a learner is fully decided on which college or university to enrol in and which is outside consideration.

Finally, in the last phase is the assessment/evaluation stage; here, the learner probes the chosen options further by critically seeking information about career opportunities, institution characteristics, learning cost, family factors and academic matters (Hanson & Litten, 1982; Jackson, 1982). The argument embedded in these three phases made Jackson conclude that the choice of a college or a university is influenced by various factors relating to family, social, economic, academic, political and environmental issues.

However, the Jackson model is critiqued for its weakness in the second phase, which depends on information gathered from different sources. This means that if a learner had access to a false report about a university, he was forced to neglect a good university due to the negative influence of the sources of information. The wrong information may not necessarily be true. Although this weakness exists in the Jackson model, it is still very significant in underpinning the variables investigated in the study.

The model is essentially helpful in addressing the interplay of the factors that influence the students' choice decision for a public TVET institution in Nairobi County. The model aids

in giving a clear demonstration of the relationship existing between the independent and the dependent variables of the study. It clarifies the relationship between the dependent variable (students' selection decision for a TVET institution) and the moderating variable (government policy). This is because government funding and management policies influence the successful development of public TVET infrastructure and resources. Apart from that, government policies intrigue the cut points for specific courses and academic qualifications attained by the learner noting that, in the preference stage, academic qualifications are a major determinant factor for student career aspirations.

The current study hypothesized that the student's choice for a public TVET institution in Nairobi County is influenced by specific institutional factors, including; physical facilities, staff adequacy, trainees' employability skills, courses offered and government policy. This denotes that the location, reputation, resources and available infrastructure may influence the choice of a preferred TVET institution. The choice to join a TVET institution may be traced to the learner's ability to evaluate the physical resources available, the employability of the trainee upon graduation, placement policies and courses offered in the institution. In that connection, these factors are critical, and hence, there was an indispensable need to establish the extent to which they influence the selection decision of a prospective trainee when considering public TVET institutes in Nairobi County in Kenya.

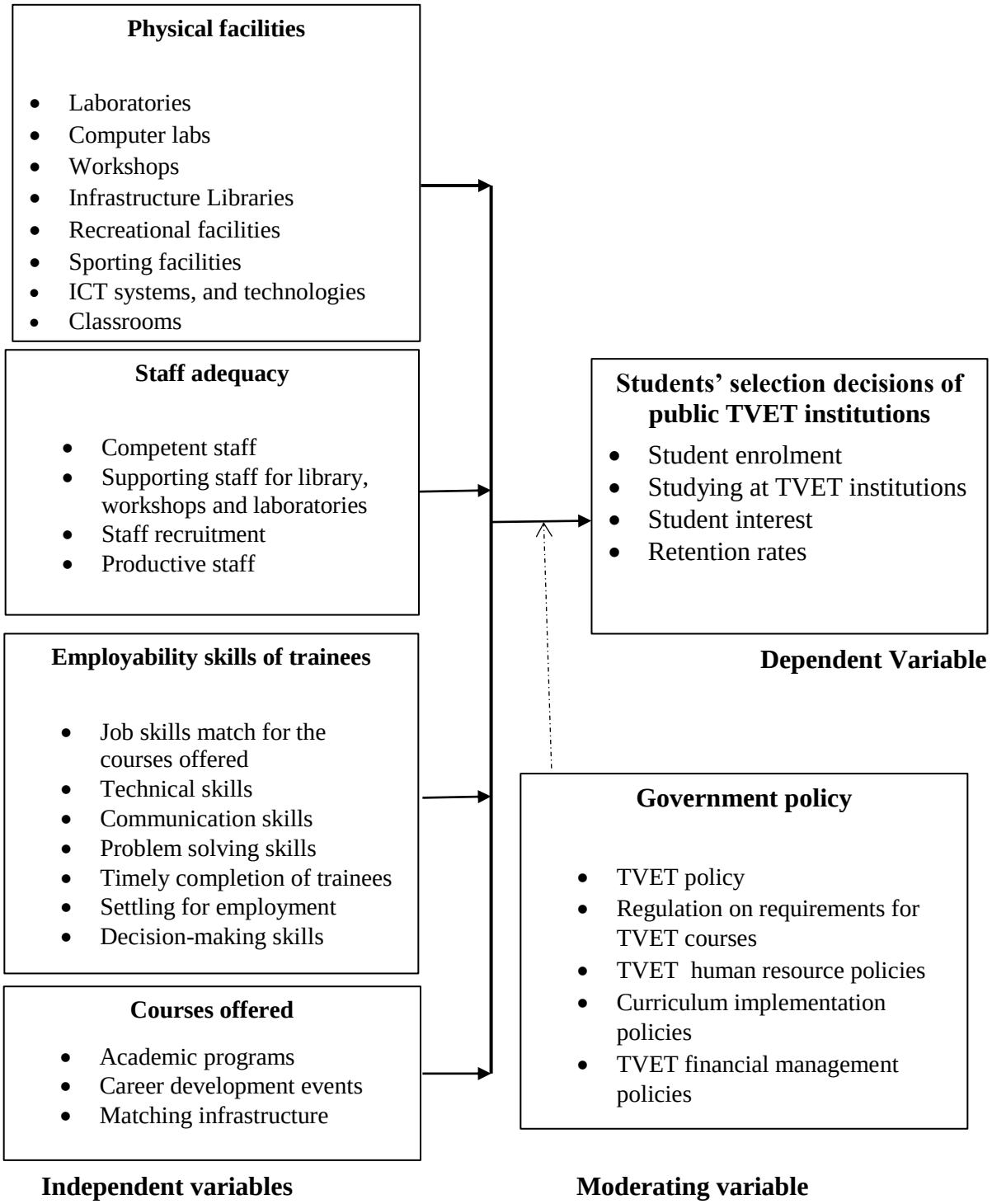
2.10 Conceptual Framework

The conceptual framework has been used in this to indicate the interrelationship on the factors influencing students' decision in selecting Public TVET institutions in Nairobi County, Kenya. The factors covered include physical facilities, staff adequacy, employability skills for trainees, courses offered and government policies. The framework

demonstrate how interplay of these factors influence the students' selection decision in Public TVET institutions in Nairobi County.

Figure 2. 1

Conceptual Framework



Source: Researcher

2.10.1 Description of the variables

The independent variables are the specific influential factors: physical facilities, staff adequacy, employability skills of trainees and courses offered. The choice of public TVET institution by trainees in Nairobi County, is the dependent variable while government policy will be the moderating variable purported to influence the relationship between the factors influencing students' decision in selecting Public TVET institutions in Nairobi County, Kenya.

The availability of well-equipped libraries, appropriately equipped computer labs, and practical workshops will serve as the physical facilities factor's defining characteristics. Apart from that, infrastructure and classroom buildings, available recreational facilities, sporting facilities, systems and technologies will be helpful in identifying the indicators of physical facilities. The staff adequacy will be comprised by the availability of adequate teaching staff, availability of non-teaching staff such as cooks, ground workers, laboratories technicians and drivers. Other indicators will be witnessed by staff professional, productivity, competencies, expertise, required skills and capabilities.

The ability of trainees to demonstrate job skills that align with the courses offered, as well as the acquisition of technical and problem-solving skills, will be characteristics of their employability skills. Furthermore, communication skills, problem-solving skills and decision-making skills will also indicate the possession of employability skills. Moreover, timely completion rates of trainees, innovative and credibility abilities depicted by learners and good history of early graduates settling for self- or organizational employment will as well indicate gain of correct employability skills. Course offered will be determined by

the variety of academic programs offered in the TVET institutions, appropriate course matching infrastructure and career development events.

The choice of public TVET institution by trainees in Nairobi County will be the dependent variable in this research and will be evidenced by the increase in enrolment of students in these academic institutions. Trainee's increased enrolments and studying in TVET institutions will relate to student choice for public TVET institutions.

Government policy will moderate the factors and the choice of public TVET institutions in Nairobi County. It will be comprised of indicators such as available regulation on specific requirements for each course, standards guiding selection criteria for TVET enrolments, availability of policies supporting human resource management, student curriculum development and implementation, financial management policies and physical facility development.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The research process and justification for the study are outlined in this chapter. It includes the methodological approach, study location, population under study, sample size, and procedures. It also looks at the accuracy and dependability of the instruments used to gather the data, as well as the strategies and procedures used to analyze the data. Finally, it highlights how strict ethical standards were followed throughout the study's execution.

3.2 Research Philosophy

Research philosophy is about the presumption of the researchers' knowledge, facts, details and ideas and how they wish the audience coming across their writing to understand it (Creswell, 2018). The chosen philosophical approach is meant to justify the basis for espousing a given school of thoughts, views, truth, prepositions and belief systems (Bryman & Bell, 2011). For Saunders et al. (2009), research philosophy is meant to guide research by giving clear procedures for describing, reporting, measuring, recommending and examining the variables being investigated in the research. Therefore, any adopted philosophy can anchor a study's research design, approaches, phenomena, conclusions and recommendations (Creswell, 2009; Gichohi, 2016).

This study adopted a pragmatism philosophy to underpin the approach and methodology. As put across by Creswell in 2009, a pragmatic worldview accommodates a combination of methods and techniques for understanding the underlying problem. In that view, it underpins mixed methods research. It has also been noted that pragmatic philosophies

possess more flexibilities, such as enabling triangulation, achieving multiple solutions to the problem, and enabling more than one research method.

Applying pragmatism philosophy helped the study understand the status of public TVET institutions in Nairobi County. Noting that the philosophy is flexible enough to accommodate mixed methods research, the data obtained was vital in informing, interpreting, reporting, concluding and recommending appropriate solutions (Creswell, 2018). Moreover, the strengths, coupled with the ability to test the study's questions and hypotheses, strengthened the reporting of the findings (Morgan, 2014).

Both qualitative and quantitative methodologies were used in this study, with questionnaires and interview guides used to gain viewpoints from both trainees and TVET trainers. The examination of descriptive statistics, narratives, and explanations was critical in understanding the elements that impacts students' decisions while choosing a public TVET institution in Nairobi County.

This was necessary to assure representativeness. It also revealed students' preferences for public TVETs and the interaction of the elements that influenced their judgments. This was only possible through the application of a pragmatic mindset.

3.3 Research Approach

The research approach constitutes various strategies adopted to facilitate data collection, making observations and deriving meaning from objects being observed. Creswell (2014) classifies research approaches into three; qualitative, quantitative and mixed methods. This research utilized a mixed methods approach, which integrates qualitative and quantitative methodologies. By utilizing both methods, including data collection, analysis, and

reporting techniques, a more comprehensive understanding of the factors influencing students' decision-making process when selecting public TVET institutions in Nairobi County was achieved.

A mixed methods approach was deemed appropriate and was hence adopted in the current study to help in clarifying the underlying dilemmas behind the student's choice decision to select public TVET institutions. Moreover, the connection between physical resources, staff adequacy, employability skills, and courses offered and selection decisions for a TVET institute, required a combination of qualitative and quantitative approaches to effectively obtain solutions for the problem at hand. Notably, none of the approaches was individually sufficient for exploring the underlying factors influencing selection decisions for students in public TVETs. Apart from that, a mixed method approach was endeavoured to provide a good understanding of the independent, dependent and moderating variables whose interplay was hypothesized to behave as a substantial influence on selection decisions made by students for public TVET institutions.

The same approach was needful given that the research was guided by the Jacksons model, inductive and deductive reasoning from the model was informative in uncovering important patterns regarding physical resources, staff adequacy, employability skills, courses offered, government policies and students' selection decision for TVET; while minding the role of TVET principals as leaders in charge of the institution management. This gave room for refuting and supporting the model based on the results of this research. Moreover, a mixed method design supports adopting a descriptive survey research design. Therefore, this approach was necessary to facilitate the understanding of the status of public TVET institutions, their readiness and efforts made towards physical resources, staff

adequacy, employability skills of trainees and courses offered. Besides, the extent of influence between the factors influencing the selection decision and the moderating variables was also established.

3.4 Research Design

A research strategy is described by Obwatho (2014) and Abutabenjeh and Jaradat (2018) as a general method, plan, structure or blueprint for carrying out a study to address a problem. A research design is meant to clarify the data collection tools, methods, techniques, analysis, presentation and sampling procedures to understand the research problem better (Creswell, 2013; Ranjit, 2011). This study employed a research design that was descriptive in nature, utilizing a survey methodology. which is advantageous in its capacity to depict and analyse the behaviour and perspectives of students (Gregory et al., 2015) when making choices regarding specific TVET institutions. The design aids in the creation of an operational strategy for the study's procedures and methods. In terms of effectiveness and cost, the descriptive survey research design performs better than any other technique (Gregory et al., 2015). The design helped determine whether there was a meaningful relationship between the factors considered by students and the selection decision for joining a public TVET institution. By adopting this design, the study clearly describes the indicators associated with each factor influencing the students' selection decision for a public TVET institution in Nairobi County, Kenya.

The study used the design since it helped solicit answers to the research questions such as what, how, when and why to understand the research problem. Apart from that, information concerning the current situation of the problem such as the descriptions of the status of

physical facilities, explanations of employable skills and government policy. In addition, it enabled the testing of the hypothesized assertions, which ultimately led to important recommendations. The design is also suitable since it depicts natural or man-made educational phenomena that policymakers and educators are interested in regarding technical education. Furthermore, the application of a research design that is descriptive in nature, utilizing a survey methodology facilitated the direct collection of data from TVET module three trainees, principals, and Admission officers. This data was gathered through questionnaires and oral interviews, respectively. This design has been successfully applied in previous studies such as Onyango et al. (2022) and Kipngetich et al. (2022).

3.5 Location of the Study

The study was conducted in Nairobi County, Kenya. The reason for emphasizing on TVETs in Nairobi County is that it is a cosmopolitan metropolis with solid infrastructure and a considerable number of enterprises where trainees are likely to make industry connections and develop practical skills.. Furthermore, unlike other counties in Kenya, this particular County stands out as it hosts a diverse range of TVET institutions, including National Polytechnics, Technical Training Institutes, and other similar establishments, Technical Vocational Colleges and Special Technical Institutions for people with special needs. Moreover, students have a notion of wanting to migrate from rural to study in urban centres; hence, there was a need to establish whether the identified factors influenced the decisions made by students when selecting public TVET institutions in Nairobi County.

The unprecedented distribution of student population among TVET institutions in Nairobi County indicates that there were other considerations. As such, it was expected to have a

balanced enrolment of students in the TVET institutions. However, despite this expectation, the preliminary information indicated areas for improvement in the choice decision made by students to join a public TVET institution in Nairobi County. This context served as the motivation for the researcher to examine the determinants that impact students' choices when selecting public TVET institutions in Nairobi County, Kenya to recommend best practices in college and course selection for post-secondary students. The specific factors covered were; physical facilities, staff adequacy, trainees' employability skills, courses offered and interplay of government policy.

3.6 Target Population

This term refers to the entire anticipated population that the research is interested in learning from to obtain essential information, generalizations and conclusions about them regarding a specific subject matter (Alvi, 2016). Ayub et al. (2017) describes it as an aggregate collection of people, events, or protests that have a distinctive feature. Ayub et al. (2017) also highlights that the more proficient we become at defining and elucidating the behaviour being studied, the more precisely the population of interest is identified. Therefore, the population must fit into the particular section that the researcher is considering. This study focused on module three trainees, principals and officers -in-charge of admission from the three types of TVET institutions in Nairobi County as described in Table 3.1.

Module three trainees are trainers who are in year three of training pursuing diploma in a TVET institute. They were the main respondents for the study because, as learners undertaking training in the respective TVET institutions, they had adequate information

regarding the school's physical facilities, staff adequacy, courses offered and employability skills acquired. Apart from that, these students were better placed to describe the information, aspects, or elements they considered when joining the institutions. For the officers in charge of Admission of students, they helped establish the total number of courses offered, the selection criteria for admitting students, and also turn out rates of selected learners for Admission. The principals were better placed in providing information on staff adequacy and the function of government policy in TVET and related information. Table 3.1 presents an overview of the designated population.

Table 3. 1

Target Population

Institution Category	Number of institutions	Module three trainees	Principals	Total officers in charge of Admission
National Polytechnics	1	2000	1	1
Technical Training Institutions	3	1200	3	3
Technical Vocational College	2	293	2	2
Total	6	3493	6	6

3.7 Sample size and Sampling Technique

According to Selvam (2017), sampling is defined as the selection of specific subjects from the overall research population. The sampling methods refer to the approaches employed to determine the appropriate number of participants included in the sample (Orodho, 2010). In this study, purposive sampling was utilized to specifically select principals and admission officers responsible for trainees. For students, a stratified random sampling was

applied in the first instance, where the six TVET institutions were categorized into three categories (strata) [National Polytechnics, Technical Training Institutions, and Technical Vocational College]. Trainees were also stratified into module one, two and three. After that, a simple random sampling technique was employed to sample module three trainees in each stratum. The combination of stratified and simple random sampling techniques ensured an adequate representation of the sample size for the study and increased the accuracy of parameter estimation.

Mugenda and Mugenda (2003)'s advice of a 10% to 30% sampling formula on sample size representation was used for the study's subset population. This was the case since the number of module three trainees were huge number (Mugenda & Mugenda, 2003). Consequently, 10% of the module three trainees were considered adequate in the research. Since the principals and officers in charge of Admission in the sampled TVET institutions were purposively identified, and were not a vast number; hence, the recommendation by Israel (2009) for the census was adopted. Therefore, a total of 12; six principals and six officers in charge of Admission were selected to participate in the interviews. This resulted in a total of 349 module three students, and 12 principals and officers in charge of Admission hence a sample size of 361 respondents.

Table 3. 2

Sample Size for Students

TVET (strata) Category	Population per stratum	10% of the target population	The sample size for principals	The sample size for officers in charge of Admission
National polytechnics	2000	200	1	1
Technical Training Institutes	1200	120	3	3
Technical Vocational Colleges	293	29	2	2
Total	3493	349	6	6

3.8 Data Collection Instruments

This research utilized questionnaires and interview guides to obtain information from the module three trainees. Principals and the officers in charge of Admission from the three categories of public TVET institutions in Nairobi County were interviewed. A description of the questionnaire and the interview guide used is provided in the subsequent sections.

3.8.1 The Questionnaires for Module Three Trainees

Questionnaires were administered to module three trainees from the sampled public TVET institutions. The choice of questionnaires was deemed necessary because the sample size for this population was 349 students, which is a huge number for an interview or focus group discussion. The use of questionnaire tool also enabled respondents to enjoy a level of privacy and confidentiality. It afforded them room to give detailed insights through the statements provided in the closed-ended questions regarding each variable of the study. The questionnaire was economical to print, use and administer, considering the number of sampled respondents, which were many. Another advantage of utilizing the tool was

allowing more excellent uniformity of questions. Also, the module three trainees had the advantage of filling out and returning the questionnaire at their convenience.

This tool was organized according to themes derived from variables of the study and as appearing in chapters one and two of the study. Each variable was labelled to represent a section starting with respondents' demographic details. The statements that were provided in each table and the open-ended questions in each section were derived from the indicators represented in the conceptual framework. The literature review provided in chapter two was equally valuable in supporting the same. There we seven sections, each represented by letter A to G, hereby referred to as section. Section A covered the demographic characteristics of the module three trainees enrolled in public TVETs in Nairobi County. Sections B, C, D, and E included inquiries pertaining to the physical amenities, staff adequacy, employability skills of trainees, and courses offered variables. Section F constituted questions on the students' decision to join public TVET institutions. The last section was G, which had questions regarding the moderating variable, government policy. The questions were predominantly closely-ended statements, with a few open-ended questions for each variable. All of the open-ended questions were graded on a 5-point Likert scale. The module three trainees who were therefore expected to indicate their rating by ticking their appropriate opinion inside the spaces provided in a table for each variable. Furthermore, responses in sentence form were required for the open-ended questions where filling spaces were provided in the questionnaires. The tool is in Appendix II.

3.8.2 Interview Schedule for Principals and Officers in charge of Admission

Adopting an interview guide for these respondents was advantageous in obtaining detailed information on admission requirements, selection criteria and government policy, physical

facilities, trainers and trainees' employable skills. The researcher utilized this tool as a guide during the one-on-one interview with principals and officers in charge of Admission in the selected participating schools. By using this tool, the researcher was also able to learn the interviewees' facial and non-verbal cues during the face-to-face interaction, which was informative and enriched the insights of the study. Conducting an interview also allowed the interviewee and interviewer to seek clarification for what was not understood. This boosted the reliability of the gathered facts.

On the organization part, the interview tool took the questionnaire format. The structuring of the guiding questions in sections A to G in line with the factors of the study was one of the commonalities adopted from the questionnaire instruments. Section A consisted of inquiries concerning the bibliographic information of the principals and officers responsible for student admissions. Sections B, C, D, and E encompassed the independent variables examined in the study, while section F comprised questions pertaining to the dependent variable. Finally, section G comprised inquiries addressing various aspects of government policy. The questions were few and concise. The development of the specific questions in the interview tool relied on the conceptual framework, literature review in chapter two and related studies previously done by Onyango et al. (2022) and Kipngetich et al. (2022). See Appendix III for the interview tool.

3.9 Pre-testing of Research Instruments

The research data collection instruments underwent a preliminary testing phase at the Kiambu Institute of Science and Technology. Doing so was essential in promoting the quality of the research tool by ensuring they were valid, reliable, accurate, appropriate and objective. This was possible because any challenges, ambiguities and lack of clarity that

were noticed during the pre-testing stage informed the rectification of the developed tools (Bryman, 2012).

The preference for Kiambu Institute of Science and Technology as a pre-testing site was based on its proximity to Nairobi County. Being an institute in neighbouring Nairobi County, this TVET institution had similar characteristics to the other TVETs. Among similar characteristics noted were a large number of module three students enrolled at the Kiambu Institute of Science and Technology. Another common feature was the variety of courses and certificate and diploma programs offered apart from the huge student population. Therefore, the factors influencing students' selection choices for TVET institutions were expected to exert influence in equal measure.

The participants in the pre-testing were the principal and one officer in charge of Admission, and 15 module three trainees. The simple random sampling technique was used to gather module three trainees, while the principal and one officer in charge of Admission were purposefully chosen.

3.10 Reliability of Research Instruments

The reliability of the research tools is portrayed when doing several trials on different people with similar characteristics (Mugenda, 2008; Wilson, 2010). When an instrument is used with similar participants in the same conditions, it helps to establish the extent of consistency in measuring what it is expected to measure. There are different methods for carrying out reliability tests. Some include; test re-test-based methods, alternative/parallel form methods and split-half methods. Apart from these ones, the most frequent internal measure of reliability is computing Cronbach's alpha coefficient. This study established

reliability by generating a Cronbach's alpha value on the pre-testing data using SPSS, and the results are provided in Table 3.3.

Table 3. 3

Reliability results

Constructs	Cronbach's Alpha
Choice of public TVET (Y)	0.781
Physical Facilities (X_1)	0.836
Staff adequacy (X_2)	0.789
Trainees' employability skills (X_3)	0.767
Courses offered (X_4)	0.862
Government policy (X_5)	0.901

The Cronbach's alpha values shown in Table 3.3 show that the coefficients were above 0.7 for all variables of the study. This meant that the elements included in the tools for each variable were dependable (Taber, 2018).

The current study adopted Taber's (2018) advice that a threshold alpha value of 0.70 is typically deemed appropriate and reliable.

3.11. Validity of Research Instrument

According to Riff et al. (2014), validity is the accuracy, meaning, and significance of conclusions drawn from a study's findings. The degree to which a tool checks out what it was meant to establish is known as validity (Remenyi, 2015). The content, face, and construct validity of the instruments used in this study were all evaluated. The study variables were divided into parts A through G to promote content validity. Upon doing so, each section had questions relevant to the variable being investigated alone. This ensured

the achievement of content coverage and organization of indicators regarding the aspects under discussion.

Moreover, in the course of carrying out the research, the researcher was allocated two supervisors who guided the researcher to cover all aspects of the subject exhaustively. This was received in the form of views, ideas and advice. Their contributions helped to improve the content validity of the study to a great extent. Moreover, the internal and external examiners who were allocated the proposal to correct provided insightful comments for improving the tools' content validity. When coming up with questions and statements in the sub-sections of the tools, the conceptual framework and literature review guided the study. This ensured the enhancement of content validity.

When designing the tools, a precise organization of the items, the inclusion of instructions to respondents and sub-sectioning improved their face validity. Moreover, the questions, statements and sentences were clear, precise and simple. Each table containing specific sentiments was well designed with clear spaces for ticking. Additionally, careful formatting was applied, which ensured uniformity of the questions in terms of font types, font sizes, spacing, and alignment. All these aspects boosted the facial validity of the tool.

Accordingly, construct validity was determined by pre-testing the tools, which was done at the Kiambu Institute of Science and Technology. Similarly, the critiques from supervisors and internal and external subject experts promoted the realization of construct validity. Lastly, the tools in the previous studies by Patrick et al. (2015) and Onyango et al. (2022) on institutional factors influencing the choice selection of TVET institutions were essential reference tools that helped improve the construct validity of the questionnaire used on trainees.

3.12 Data Collection Procedures

The researcher acquired an introductory letter from the Directorate of Postgraduate Studies at Kenya Methodist University, which facilitated the application for a research permit from the National Commission for Science, Technology, and Innovation (NACOSTI). Subsequently, the researcher obtained permission from the County Director of Education to collect data. The procedure for administering each tool is outlined in the following section.

3.12.1 Questionnaire Administration Methodology

The researcher moved on to make arrangements for the site, time, and day for issuing the questionnaires after receiving permission from the TVET principals to gather information from the module three trainees. Prior to the designated day, the researcher enlisted the support of four research assistants who received training from the researcher regarding the objectives of the study, how to handle respondents in the field, dressing code, communication skills and related etiquette. When administering the questionnaires, the respondents were notified of the research aims. They were also informed of other confidentiality, privacy and voluntary participation aspects. The questionnaires were collected either immediately after the exercise or at a later agreed upon time with the respondents. Once collected from the trainees, the filled questionnaires were sequentially numbered.

3.12.2 Interview Procedures

The researcher met the principals and admissions officers at the individual TVET institutions and invited them to freely engage in the interview session. Before meeting for the face-to-face interview, the interviewees were reminded through phone calls about the

interview itself, the agreed venue, day and time. The researcher conducted the interview according to the interview schedule. Notes and audio recordings via phone helped capture the insights of principals and officers in-charge of admission. The interviewees were requested their consent before recording the audio recording was done. The researcher appreciated each participant's time and the information they provided.

3.13 Operationalization of Variables

Table 3. 4

Operationalization of variables

Variable	Variable Type	Indicators	Measure the level of scale	Method of analysis
Choice of public TVET	Dependent	- Reputation - Location - Number of students enrolled - Trainees interests	Interval Nominal	Descriptive statistics
Physical Facilities	Independent	- Laboratory - Library - Workshop - Computer labs - Classrooms - Sporting facilities - Recreational facilities	Ordinal	Inferential statistics
Staff adequacy	Independent	- Education qualification - Professional experience - Staff skills - Staff and trainee ratio	Ordinal	Inferential statistics
Trainees' Employability Skills	Independent	- Work readiness skills - Interpersonal skills - Communication skills - Literacy skills - Technical skills - Problem-solving skills - Critical thinking skills - Decision-making skills - Time management skills	Ordinal	Inferential statistics

Courses offered	Independent	- Employable skills - Market demand - Perception of courses offered - Academic programs - Career development events - Matching accompanying infrastructure	Ordinal	Inferential statistics
Government Policy	Moderating	- Fees policy - Examination boards policy - Target enrolment and the institution's strategy on admissions - TVET policies	Ordinal	Inferential statistics

Source: Author

3.14 Data Analysis and Presentation

Quantitative and qualitative data were analyzed as described in the subsequent sub-sections.

3.14.1 The Analysis of Quantitative Data

Quantitative data in the study was mainly obtained from the module three student questionnaires. The returned questionnaires were sorted to isolate the uncompleted ones. Data from the valid and chronologically serialized questionnaire were keyed into the SPSS database. This facilitated the calculation of descriptive statistics and the execution of inferential analysis. The descriptive findings were reported using measures mean and standard deviation. These measurements were critical in exposing patterns and trends in students' decision-making processes when selecting public TVET colleges in Nairobi County. The study employed inferential analysis techniques, specifically Spearman correlation analysis and ordinal logistic regression, to examine the extent of influence and

relationship between the identified factors and students' decision-making when selecting public TVET institutions. The correlation analysis assessed the non-causal association between each factor and the dependent variable using correlation coefficients. Furthermore, the multivariate ordinal logistic regression analysis looked at the study's overall goal and investigated the moderating effect of government policy. The beta coefficient in the regression analysis indicated the magnitude of change in the independent variable associated with variations in the dependent variable. The logistic regression model used in the analysis is presented below.

$$\frac{P}{1-P} = b^{\beta 0 + \beta 1 X 1,\, 2,\, 3,\, 4}$$

Where:

$\frac{P}{1-P}$ = refers to the response variable Y, that is, the students' selection decisions for TVET institutes

b = is the base of the logarithm

$\beta 0$ = is the Y-intercept, the exponentiation of log-odds

β = are the parameter estimates of the model

$X_{1,\, 2,\, 3,\, 4}$= predictor variables (physical facilities, staff adequacy, trainees' employability skills, and courses offered)

The normality test, linearity test, heteroscedasticity test, autocorrelation test, and multicollinearity test were used to examine the validity of the regression analysis assumptions. Tables and figures were used to present the results of these testing. Descriptive findings were presented using tables and charts.

3.14.2 The Analysis of Qualitative Data

Qualitative data were gathered from the limited number of open-ended questions included in the questionnaires as well as from the interviews conducted. The inclusion of qualitative data enabled the researcher to conclude by systematically refining and affirming the findings from the interviewees (Creswell & Creswell, 2017). Qualitative information was analyzed by categorizing information gathered into emergent themes. The researcher utilized inductive and deductive analysis, through which emergent themes were identified from interview transcripts and then categorized in regard to the study variables. The transcript's content was first studied to help identify common themes. Second, the themes were further studied to establish patterns. The patterns noted were hence organized into categories. The results derived from the qualitative data were documented and showcased using identified themes and categories. Additionally, descriptive narratives and direct quotes from participants were utilized by the researcher in certain instances.

3.15 Ethical Considerations

Ethical considerations in research are meant to clarify, permit and allow the application of people's ideas and information while deliberating solutions to underlying problems. It entails the application of right, wrong, good, evil, transparency, accountability, confidentiality, and responsibility applied in conducting research (Bryman, 2012). The researcher got a letter of recommendation from the Directorate of Postgraduate Studies, which was followed by an application to NACOSTI for a research permission. Permission to engage TVETS institutions in Nairobi County was also facilitated by the head of TVET institutions in the County. Consequently, TVET principals in the sample institutions were informed concerning the same.

The researcher provided a clear explanation of the study's objective to all participants and assured them of the utmost confidentiality and integrity in managing the entire research process. Each respondent was asked to complete a consent form (see appendix I) before participating in the study. The consent form assured privacy, where the respondents had the right to withdraw from the research and or withhold information where one was not comfortable. The consent form also described the purpose, transparency, research outcomes, and absence of physical and psychological harm, involvement terms, and data collection exercise.

For privacy, the researcher ensured accessibility control of the filled tools and the notes taken were guarded. For interviews, recordings using a smartphone and taking down notes were only done after being allowed by a respective interviewee. To ensure anonymity, the module three students were explicitly instructed not to include their names in any section of the questionnaires, while the interviewees were assigned unique codes to protect their identities. All respondents were thanked one-on-one at the end of the data collection exercise.

During the reporting of the study findings, fairness and transparency was achieved by avoiding any form of fabrication and exaggeration of the data. Finally, all the sources that provided insights for the research were appropriately acknowledged and referenced following the guidelines outlined in the APA 7th edition referencing style manual. The researcher ensured that works cited from different sources were summarized and paraphrased accordingly to avoid plagiarism. The findings of the study were also shared in conferences having observed all research publication ethics.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This section offers a comprehensive examination of the collected data and explanations of the discovered results, and discussions. The data collection for this study took place from June 2022 to December 2022. The chapter is organized around the primary variables investigated in the research. It starts with the response rate and then moves on to background information on the respondents. Thereafter, are integrated results (descriptive, qualitative results and inferential statistical results) on students' selection decision of public TVET institutions, physical facilities, staff adequacy, trainees' employability skills, courses offered, and government policy. In this chapter, the findings related to the main objective of the study and the results of the moderation testing are presented.

4.2 Response Rate

This study collected data from two categories of respondents; module three trainees, principals and from officers in-charge of admission in TVET institutions in Nairobi County. Out of the 349 questionnaires distributed to the module three trainees, 289 were collected and considered valid, resulting in a response rate of 83%. As for principals and officers in charge of admission, the study had sampled 12 respondents, but 11 were available for interview session, representing 91.7%. This meant that the overall response rate was 87.4%. The achieved response rate in this study, which exceeded 60% as recommended by Stedman et al. (2019) for cross-sectional surveys at the individual level, was considered acceptable. Consequently, Mugenda and Mugenda (2003) further stresses the acceptability of the obtained return rate as postulated in their recommendation that 60% and 70% rates are good and excellent respectively. Miheso (2020) explained that

questionnaire have an ability to improve the return rate due to the ability to administer and recollect them soon after they are filled out while questionnaires required few people hence high proximity of turn up.

4.3 Trainees in Module Three's Demographic Information

The demographic information for module three trainees was sought to improve the interpretation and understanding of the study's factors. The specific demographic characteristics sought from module three trainees were on the gender, age, and education level of the respondents. The same is presented in Tables 4.1, 4.2, and 4.3.

4.3.1 Gender of TVET trainees

The module three trainees were requested to provide their gender, and their responses are presented in Table 4.1.

Table 4. 1

Gender of module three TVET trainees

Gender	Frequency	Percentage
Male	171	59
Female	118	41
Total	289	100

Based on the data presented in Table 4.1, it was observed that 59% of the participants identified as male, while 41% identified as female. These results indicate a higher representation of male respondents in the study. Comparably, Singoei (2021) noted that in western Kenya, the available TVET institutions had a gender disparity of 77.8% male and 22.2% female respectively. The findings were also a like to the report of Miheso (2020)

who noted that in Kakamega County, most of the TVETs are dominated by the male gender. In Teso North Sub-County, Munyite (2018) agrees with the presented findings indicating a domination of male gender among TVET institutions. This consistency in gender disparity and dominance is attributed to the initial agenda for the formation of TVETS; which was, offering science, technology, engineering and mathematics courses which according to UNESCO (2018) and Mwashighadi et al. (2020) underrepresent women.

4.3.2 Age of module three TVET trainees

The module three trainees were requested to provide their age, and the results are displayed in Table 4.2.

Table 4. 2

Age of module three TVET trainees

Age of the respondents	Frequency	Percentage
• Under 20 years	70	24
• 20 - 29 years	97	34
• 30 - 39 years	35	12
• 40 - 49 years	10	4
• 50 - 59 years	32	11
• Above 60 years	45	16
Total	289	100

From the findings shown in Table 4.2, it is clear that 70(24%) of the module three TVET trainees indicate that they were below 20 years. The results show that the majority of the module three TVET trainees, 97 (34%) aged between 20 and 29 years, while, 35 (12%)

indicated age bracket of 30 – 39 years. This implies that most of the TVET trainees were in the age of 20 - 29 years. The summation of TVET trainees under age 39 show 202 (70%). This means that roughly three-quarters of TVET trainees are young and capable of contributing to the economy; thus, they must be provided with the necessary skills to operate in the labor market. Singoei (2021) also noted that tentatively, the dominate age bracket of learners enrolled in TVET institute in Western Kenya fall under the age bracket of between 21-24 years. In Sigalala institute, Kakamega County, Miheso (2020) noted closely related results where majority of the trainee's population comprised between 15-20 years. Munyite (2018) also reported a comparable trend regarding age bracket of schooling trainees in Teso Sub-County. This was an affirmation that most TVET institutes is dominated by young people who are developing career-wise; hence, a need for good practices for guiding selection decisions to join TVET institutions.

The study further noted 10 (4%) of trainees were in the age bracket of 40 – 49 years, 32 (11%) were in age of 50 - 59 years, while 45 (16%) indicated that they were above 60 years. A summation of aged TVET students from these statistics shows that 87 (31%), that is, nearly a third are from age 40 and above. This indicates that TVET training and education attract individuals of older age groups who have chosen to acquire specific skills for employment purposes or entrepreneurial endeavours. Munyite (2018) also noted the presence of mature students in Teso Sub-County which around 30 years. On the same, Mulondanome (2017) and Ongulu (2018) found similar trends among elder students pursuing some courses among TVETs in Kakamega and Busia Counties respectively. This mix up of trends dispels the stereotype that youth polytechnics are for the old people who missed out education in their early years. Findings also seem to agree that TVETs

institutions permits all kind of entrants although majority of the admitted trainees are those who are recently from secondary schools. The findings indicate that students enrolling in TVET institutions are old enough to make independent decisions on career choice and selection of an institution to study.

4.3.3 Level of education of module three TVET trainees

The participants were requested to specify their highest educational attainment. The results are presented in Table 4.3.

Table 4. 3

Level of education of module three TVET trainees

• Level of education	Frequency	Percentage
• Secondary	136	47%
• Diploma	17	6%
• Craft Certificate	113	39%
• Artisan Certificate	23	8%
Total	289	100

Based on the results, it was found that 136 respondents (47%) reported having completed secondary school education, 113 respondents (39%) had obtained a craft certificate, 23 respondents (8%) had an artisan certificate, and 17 respondents (6%) had a diploma level of education. These findings indicate that the majority of respondents had achieved a secondary school education, while others had pursued vocational certificates at different levels. The students' respondents had a good experience in the institution and therefore they would provide objective comments regarding various aspects of study variables.

Findings agree with the presentation noted by Ongulu (2018) which indicated a dominance of young entrants in TVET institutions, where majority had just come out of secondary school. Mwangunga et al. (2020) also found that a large number of trainees enrolled in TVETs had secondary school qualifications in Coast institute of Science and Technology, Taita Taveta County. This trend agrees with the circular by the Government of Kenya of 2012 that subsidy in secondary school education system was meant to increase enrolment of basic education graduates to TVET colleges and universities.

4.4 Results on Factors Influencing Students' Decisions in Selecting Public TVET Institutions

The factors influencing students' decisions when selecting public TVET institutions were examined as independent variables in this study. A combination of quantitative and qualitative data was analyzed to investigate these variables. Initially, descriptive statistics were computed and interpreted for the quantitative data, while the qualitative data from interviews were incorporated to enhance the understanding of the phenomenon under investigation.

The study involved TVET trainees from Module Three who were asked to express their opinions on the impact of physical facilities, staff adequacy, trainees' employability skills, courses offered, and government policy on their choice of public TVET institutions in Nairobi County, Kenya. The findings were interpreted based on the mean and standard deviation. The mean value indicated the level of agreement, ranging from 1 (lowest mean) to 5 (highest mean), while the standard deviation revealed the dispersion of the data from the mean. The results for each independent variable are presented, interpreted, and discussed in the subsequent sections.

4.5 Physical Facilities and Trainees' Choice Decision for Public TVET Institutions

The primary objective of this study was to investigate the impact of physical facilities on students' decision-making process when selecting public TVET institutions in Nairobi County. To assess this aspect, respondents were presented with a series of statements related to indicators of physical facilities and were asked to express their level of agreement. These statements focused on the significance and purposefulness of TVET learning and training facilities, the availability and adequacy of modern training facilities, the characteristics of buildings, classrooms, and related amenities, the availability of instructional materials, workshop tools, and equipment, as well as the relevance of infrastructures in supporting skill-based training. The findings are presented in Table 4.4.

Table 4. 4

Descriptive results on physical facilities and trainees' choice decision for Public TVET institutions

Statements on physical facilities (N= 289)	Min	Max	Mean	Std
• Facilities in the school enhances teaching and learning thereby making the process meaningful and purposeful in students' decisions in selecting Public TVET institutions	1	5	4.12	1.102
• Availability of adequate and modern training facilities influence students' decisions in selecting Public TVET institutions	1	5	4.26	1.069
• Availability of physical facilities encourages meaningful learning and teaching	1	5	4.13	1.159
• Availability of adequate school buildings, classrooms, chairs, desks and other facilities are necessary for the attainment of education objectives	1	5	4.00	1.152
• Inadequacy of instructional materials and training facilities contributed to the in effectual impartation of skills among the students	1	5	4.19	1.295
• Great controversy among TVET educators is the issue of the poor state of workshop tools and equipment in TVE institutions in Kenya.	1	5	4.17	1.221
• The lack of training facilities compromises the relevance of taught skills to market skill needs in industries and business organizations	1	5	4.04	1.263

Based on the findings, a substantial number of respondents agreed that the school facilities play a vital role in enhancing the quality of teaching and learning. This, in turn, contributes to a meaningful and purposeful educational experience, influencing students' decisions

when choosing public TVET institutions (mean = 4.12; SD = 1.102). The findings also show that the majority of respondents (mean = 4.260; SD = 1.069) believe that the availability of adequate and modern training facilities influences students' choices in selecting public TVET institutions. It was also evident that the availability of physical facilities promotes meaningful learning and teaching (mean = 4.13; SD = 1.159). Additionally, the findings indicate that having sufficient school buildings, classrooms, chairs, desks, and other facilities is essential for achieving educational objectives (mean = 4.00; SD = 1.152). The study also revealed that the inadequacy of instructional materials and training facilities hinders the effective acquisition of skills among students (mean = 4.19; SD = 1.295). Another observation was made on the poor state of workshop tools and equipment facilities (mean = 4.17; SD = 1.221).

Based on the findings, it is evident that the sentiments expressed by students had a high mean value (above 4) and a standard deviation (σ) of around 1. The affirmative responses indicate that although the condition of physical facilities in TVET institutions was lacking, they still had the potential to influence students' selection decisions. The principals and head of admissions also concurred during the interview sessions that the physical capacity was a significant challenge in most TVET institutions. Respondent 06 stated, "Our enrollment record shows a trainee population of over 9,000. This population frequently exceeds the physical capacity of the available facilities." This finding is consistent with Wausi (2018)'s study, which stressed the relevance of teaching and learning facilities in the training process. Physical facilities that are well-equipped, such as classrooms, staff offices, workshops, tools and equipment, furniture, energy supply, water supply, library, computers, computer laboratories, and internet access, considerably improve training

efficacy. Similarly, Obwoge et al. (2016) noted that the adequacy and availability of training resources and physical infrastructure, such as laboratories, were important factors to consider when choosing a career in TVET institutions. In conclusion, these findings were consistent with Jackson's adopted model of 1982, which highlighted the significance of facilities, resources, and infrastructure in learners' selection of a TVET institution.

During the interviews, the principals and officers in charge of admissions were asked to comment on the physical facilities at their respective institutions. Various comments were received, outlining the available physical facilities at different TVET institutions. From their responses, the study classified the facilities into two categories: first, high-quality and modern training equipment, new spacious classrooms, and workshops; second, old buildings that required refurbishing. This indicates the need to continue equipping TVET institutions with modern training facilities and implementing measures to upgrade the older ones to meet current and future requirements.

The above findings have implications for funding, which usually comes from the Ministry of Education, as public TVETs are financed by the government. The principals and officers in charge of admissions suggested the need to increase the development fund provided by the Ministry of Education to public TVET institutes. This would enable them to acquire modern training machinery, expand buildings, and establish more classrooms, workshops, and laboratories. This aligns with the study by Obwoge et al. (2016), which implied that physical facilities were important resources to consider, and that TVET management needed to heavily invest in their adequacy, availability, usability, and functionality, or risk losing students to well-equipped TVET institutions. The same observation was made by Ongulu and Ibrahim (2021), who reported that training facilities and resources influenced

student enrollment in TVET institutions in Busia County. Regarding Jackson's adopted model of 1982, the findings were relevant in demonstrating the consideration of resources, infrastructure, and the condition of laboratories, workshops, computer labs, classrooms, libraries, and sporting facilities during the second phase of the exclusion stage, where learners prefer a particular institution.

When asked during the interviews to describe how their institution had improved physical facilities, the principals and heads of admissions mentioned various initiatives, ranging from the purchase of desktops and laptops for staff and trainees, increased furniture, construction of modern training facilities, refurbishment of engineering workshops, laboratories, libraries, classrooms, walkways, and parking areas. Respondent 09 stated, "The institute has been increasing the number of buildings by constructing a new block that accommodates computer labs, two workshops, and classrooms." The creation of an appealing environment on the premises and facilities was also noted in several TVET institutions. These findings demonstrate the efforts made by TVET institutions using funds received from the government.

The results show that the government capitation funds allocated to TVET institutions were used for developing infrastructure, purchasing training equipment, employing staff, and refurbishing buildings. Ongulu and Ibrahim (2021) also recommended that county and national governments increase funding allocations to facilitate the upgrade of technological infrastructure to the latest standards. Moreover, the study found the need to improve the conditions of TVET facilities and resources to enhance their adequacy. Similarly, Ongulu (2018) noted that students were attracted to well-equipped laboratories, workshops, libraries, buildings, modern furniture, playgrounds, and classrooms, highlighting the need

for TVET institutions to invest in upgrading their physical facilities. This has implications for TVET management, funding policies, allocation, and timely disbursement of funds. Kosge (2015) also found that TVET infrastructure in Bomet County was not responsive to technological changes, as they were outdated and dilapidated. Kosge argued that the availability of classrooms, laboratories, libraries, and playgrounds was one aspect, but their renovation at regular intervals was also necessary.

4.5.1 Testing of Hypothesis One: Physical facilities and trainees' choice decision for Public TVET institutions

The results presented the above section and subsequently discussed, underscores the essence of physical facilities in the education of a trainer. The results also indicate unqualified existence of a relationship between physical facilities and trainees' choice decision for Public TVET institutions. The study therefore empirically tested this relationship using a null hypothesis, which stated: H01: There is no statistically significant relationship between physical facilities and students' choice decision for public TVET institutions in Nairobi County. A Spearman correlation analysis was conducted and results are shown in Table 4.5.

Table 4. 5

Correlation between physical facilities and trainees' choice decision for Public TVET institutions

		Choice decision for Public TVET institutions
Physical Facilities	Spearman Correlation	.120*
	Sig. (2-tailed)	.042
	N	287

Based on the findings presented in Table 4.5, there is a positive correlation between physical facilities and the trainees' selection of public TVET institutions in Nairobi County ($r = 0.120$, $p = 0.042$). The fact that the p-value is less than 0.05 suggests that the relationship between these two variables is statistically significant. As a result, the null hypothesis was rejected, and it was determined that there is a link between physical amenities and students' preferences for public TVET colleges in Nairobi County. These data suggest that the quality and condition of physical facilities influence students' decision-making while choosing public TVET institutions in Nairobi County. Correlation is significant at the 0.05 (2-tailed) level.

The findings from the principals and heads of admission concurred with the above findings. The interview question posed to them sought to understand how physical facilities had contributed to trainees' choosing to join a given institution. Two verbatim responses stated:

> *"Due to the improvements done including equipping, landscaping, refurbishment of facilities the enrolment has tripled. The trainees love taking selfies which they post on social media hence marketing the institute. This results to many students joining our institution."* – Respondent 10.
>
> *"Our modern workshops, laboratories and conducive tuition areas are important in offering quality training and learning environment. The improved physical facilities have greatly attracted prospective trainees to enrol in the institute for various course/programmes."* – Respondent 03.

The results have provided a convincing empirical data which demonstrate that the nature of physical facilities influence the students' choice decision for public TVET institutions. Findings agree with the observation of Ongulu (2018) who found that physical facilities and resources affected student enrolment rates in TVET institutions. They also agree with

the UNESCO (2012) report which underpinned that the adequacy, availability, usability and currency of school infrastructure as determinants to learner's choice for the institution, as well as the quality teaching and learning. Moreover, these findings were in agreement with the adopted Jackson's model which articulated infrastructure and physical resources in the second phase as key parameters for carrying out the exclusion criteria for TVET institutions by a prospective student. Knowledge about the state of the laboratories, workshops, sporting grounds, classrooms, buildings, teaching and learning resources informed their ability to join that particular institution or not.

4.6 Results on staff adequacy and Trainees' Choice Decision for Public TVET Institutions

The second objective of the study aimed to assess how staff adequacy relates to students' choice decision for public TVET institutions in Nairobi County. This construct was assessed as a latent variable where, several statements based on indicators regarding staff adequacy were presented to respondents, requiring them to indicate their level of agreement on those aspects. The statements presented to respondents were on adequacy of teaching staff, their qualification to train, competence, their background training, and quality of teaching. The findings are as indicated in Table 4.6.

Table 4. 6

Descriptive results on staff adequacy and trainees' choice decision on public TVET institutions

Statements on staff adequacy (N = 289)	Min	Max	Mean	Std
• Some of TVET teachers are diploma holders which make them have limited knowledge on labour market's needs, hence, making it difficult for the teachers to transfer the employable skills	1	5	4.03	1.242
• There is enough staff to train at out institution	1	5	2.71	1.083
• Incompetence among graduates fundamentally emanates from poor training resulting from incompetent and unqualified trainers	1	5	4.10	1.127
• Academic qualification of teachers expressively impacts the acquisition of employable skills by students	1	5	3.91	1.317
• Most TVETs operate within inadequate teaching staff which compromises the quality of teaching and learning	1	5	4.10	1.139

The findings presented in Table 4.6 highlight three factors perceived by trainees as influencing their choice of public TVET institutions in Nairobi County. Firstly, trainees expressed that TVET teachers with only diploma qualifications have limited knowledge on labor market needs, making it challenging for them to effectively impart employable skills (mean = 4.03; SD = 1.242). Secondly, competence among graduates was attributed to poor training resulting from incompetent and unqualified trainers (mean = 4.10; SD =

1.127). Lastly, the study found that inadequate teaching staff in most TVET institutions compromised the quality of teaching and learning (mean = 4.10; SD = 1.139). The findings further indicated that the academic qualification of teachers significantly influenced the acquisition of employable skills by trainees (mean = 3.91; SD = 1.317). Trainees described the staff as having low qualifications, primarily holding diplomas, which limited their understanding of labor markets and negatively impacted the quality of graduates from TVET institutions. These findings highlight the crucial role of teachers' academic qualifications in shaping the acquisition of employable skills among trainees.

The above findings from trainees were also consistent with views of principals and heads of admission in TVET institutions. Principal number 01 lamented,

> *"There is shortage of staff due to natural attrition and increased enrolment of trainees. This has forced the board of management at my institution to employ trainers on contract terms to stem the shortage. The government has also employed additional trainers"*

These findings confirm the shortage and less empowered trainers in TVET institutions in Nairobi County. In agreement, Kipngetich et al. 2022) also noted in their findings that the capacity building of TVET trainees was lagging behind due to lack of professional development in the job. Competencies, technological skills, knowledge and know-how was deemed necessary for effective teaching and learning in these institutions. Findings had implication on human resource strategy in terms of training and development. Similarly, Ndile (2018) noted that the competencies of teachers had an influence on the employability of the graduating trainees, and therefore stressed on the need for training and establishment of competencies of employees. The same was also advocated by Abdulkareem et al. (2021)

indicating that instructors, coordinators, and counsellors in TVET institutions are expected to be sufficient and distinguished in all aspects of their specialities and training practices. The findings also supported the argument presented in the Jackson model which informed the study. The model articulates that apart from the physical resources and facilities, prospective learners also get interested to learn about the adequacy of teaching staff and teaching proficiencies before selecting a TVET institution.

The research additionally majored in establishing the competency of training staff. Interview data gathered indicated vigorous capacity building initiatives conducted by TVETA to ensure the trainers had requisite training competencies. When asked to comment about the competency of teaching at their institution, the respondent 04 noted,

> "*The trainers in the institute, having gone through the technical training programme for trainers, are competent in training and course content delivery. The trainers are also accredited by TVETA to train in a technical institution".*

On the same query, respondent 06 submitted,

> *"A number of trainees are competent in their areas of specialization. Though others need to upgrade themselves through personal professional development, for example getting higher academic qualifications such as bachelor and master's degrees".*

The findings indicate noticeable measures taken by government to address the competency deficiency among trainers in TVET institutions. The capacity building programs are meant to prepare and equip trainer to implement CBC curriculum and conduct appropriate assessment. Mbugua et al. (2017) also noted some ongoing practices meant to mitigate teaching staff inadequacy and limitations in competencies. Some of the strategies such as employing part-time teachers, multi-class teaching, and interclass-room teaching. In

Pakistan, the findings by Bano et al. (2022) reported disparities in the VET trainer's qualification and adequacy. The noticeable remedies adopted to address the challenge was the development of human resource policies targeting to empower teaching staff by in-servicing trainers to ensure they had the required skills, knowledge and competencies. The findings also support the ideologies propagated by the Jackson model. This is because the model cherishes the adequacy, competency, availability and productivity of the human resources. Henceforth, student's choice decision for joining a TVET institution revolves around these factors, thus personal, institutional and government initiatives aimed at improving the adequacy of teaching staff is a positive stride toward attaining willingness of students choosing to join the TVET institute.

The principals and head of admission were also asked to suggest what should be done to ensure that TVET institutions in Kenya have adequate staffs. The responses received were narrowing down on two themes, government employing more training staff and establishment of incentives to attract more graduates to train as technical trainers. The respondent number 11 suggested the need for government to consider increasing the number of trainees in public institutions to take care of high enrolment, and to meet the recommended trainees-trainer ratio; while, respondent number 02 suggested,

> *"The government through the Ministry of Education should set aside enough funds to recruit new trainers to meet the ever increasing number of trainees and replace within the shortest time possible those who proceed on retirement. The scheme of service should also be reviewed to attract qualified and experienced staff even from the industry".*

The results are showing that there are few graduates who have trained as technical trainers in Kenya. This can be attributed to the perception towards TVET training and education. If people view working in a TVET institute as less prestigious, then, one may not have a desire to train on the same. Addressing this trends has implications on remuneration and career grading for staff working in TVET institutions in Kenya. Chinedu-Ali et al. (2020) concurred with the findings concerning the inadequacy of teaching staff among TVET institutions. Limited funding, according to Chinedu-Ali and his colleagues, is directly related to bad working conditions, low salaries, a lack of modern equipment, poor office settings, insufficient instructional materials, and a high student-teacher ratio.

Unlike in Kenya, the findings reported by Chinedu-Ali et al. (2020) in Nigeria illustrated a diminished turnaround of trainers in TVETs. Their findings show that Nigeria experienced these inadequacies due to high trainer turnover rates among the TVET institutions. Agreeably, Musobo and Gaba (2015) noted a shortage of qualified trainers due to poor incentive systems, inadequate facilities, weakness in the initial vocational training, poor management, and negative perceptions of TVETs in Rwanda. Wakoli (2021) concurred with the need for government to set aside funds to take care of the development of the human resources. Also, Wakoli (2021) presented the need to motivate available teaching staff by reducing their workload through employing adequate trainers.

4.6.1 Testing of Hypothesis Two: Staff adequacy and trainees' choice decision for Public TVET institutions

The results presented in the above section and subsequently discussed, stresses the essence staff adequacy in the training and education of a trainer. The results also indicate

unqualified existence of a relationship between staff adequacy and trainees' choice decision for Public TVET institutions. The study therefore empirically tested this relationship using a null hypothesis, which stated: $H_{02:}$ There is no statistically significant relationship between staff adequacy and students' choice decision for public TVET institutions in Nairobi County. The Spearman correlation analysis was conducted and results are shown below in Table 4.7.

Table 4. 7

Correlation between staff adequacy and trainees' choice decision for Public TVET institutions

		Choice of the Public TVET institutions
Staff Adequacy	Spearman Correlation	0.117**
	Sig. (2-tailed)	.031
	N	289

**. Correlation is significant at the 0.05 level (2-tailed).

According to the findings in Table 4.7, there is a positive association between staff adequacy and the trainees' choice decision for public TVET institutions in Nairobi County, r =.117, *p*= 0.031. In this case, the p-value is less than 0.05 and, therefore, the association between these two variables is statistically significant. As a result, the null hypothesis was rejected in the study, indicating a significant relationship between staff adequacy and students' choice of public TVET institutions in Nairobi County. Thus, it is evident that staff adequacy plays a role in influencing students' decision-making regarding TVET institutions. This finding aligns with the research conducted by Omar (2020), who also

observed the influence of staff adequacy, competencies, and skills on learners' choice of TVET institutions in Malaysia. Similarly, Ongulu and Ibrahim (2021) supported these findings by demonstrating that staff adequacy impacts student enrolment in TVET institutions.

The principals and heads of admission also concurred with the above findings. Respondent 10 said, *"When an institution is well staffed with qualified staff the trainees are highly likely to join that institution because they perform well and get properly skilled".*

Along the same, one principal opined:

> *"Prospective trainees are looking for institution that offers quality training and good performance. Adequate staff improves the quality of training. The trainer can spare more time with trainees and can adequately cover the syllabus and have more time to engage trainees in revision work, which eventually leads to quality training and improved performance.*" – Respondent 6

The results are not only indicating the need for adequate staff but also quality in terms of pedagogy and competencies. The three aspects are amplifying the essence of staff adequacy, their qualification and background training noting their contributory role in influencing the students' choice decision for public TVET institutions. This was also acknowledged in the findings of a study conducted by Kipngetich et al. (2022), which provided further insights into the effectiveness of enhancing staff capacity for TVET trainers. Kipngetich et al. (2022) insisted that training and professional development was necessary for enriching trainer's confidence, skills and competencies. This was also in collaboration with the Jackson model adopted in the study. Therefore, it is needful that

TVETS mind about the qualifications of the academic human resources since it is among the areas of considerations that influences student choice to join TVETs.

4.7 Results on trainees' employability skills and Trainees' Choice Decision for Public TVET Institutions

The third objective of the study focused on investigating the impact of trainees' employability skills on their choice of public TVET institutions in Nairobi County. This aspect was evaluated as a latent variable, and respondents were presented with a series of statements related to indicators of employability skills. They were then asked to indicate their level of agreement with these statements. The indicators covered various aspects such as communication, numeracy and literacy, problem-solving, critical thinking, time management, continuous development, employable skills training, TVET-industry linkage, and the value addition of employable skills. The findings of this analysis can be found in Table 4.8.

Table 4. 8

Descriptive results on trainees' employability skills and choice decision for public TVET institutions

Statements on trainees' employability skills (N = 289)	Min	Max	Mean	Std
• Employable skills are continually developed through practical application in the everyday life	1	5	4.07	1.122
• TVET institutions offer interpersonal skills which help students in the market space	1	5	4.21	1.041
• TVET institutions offer numeracy and literacy skills which help students in the market space	1	5	4.11	1.313
• TVET institutions offer critical thinking and problem-solving skills which help students in the market space	1	5	3.93	1.041
• TVET institutions offer time management skills which help students in the market space	1	5	4.02	1.041
• TVET institutions train students on communication skills which equip them with capabilities to communicate well	1	5	4.00	1.240
• Trainees employable skills training program helps to promote the employability of our graduates	1	5	4.06	1.221
• The employable skills training promote TVET- industry linkages	1	5	3.77	1.413

The results presented in Table 4.8 indicate a high level of agreement among respondents regarding all aspects related to trainees' employability skills. Each aspect received a high mean value, with the lowest being 3.77, and a standard deviation that was close to 1, indicating a small deviation from the mean for each indicator. The high agreement level

suggests that students are aware of the employable skills imparted to them and that graduates leaving TVET institutions are believed to possess these skills.

According to the findings, TVET institutions offer various employable skills such as interpersonal skills (mean = 4.21; SD = 1.041), numeracy and literacy skills (mean = 4.11; SD = 1.313), time management skills (mean = 4.02; SD = 1.041), and communication skills (mean = 4.00; SD = 1.240), which students believe help them in the job market. The findings indicate that TVET institutions are making significant efforts to develop capacity in students regarding employable skills.

These findings contradict Munishi's (2016) study, which focused on the factors that contribute to a lack of employable skills among TVET graduates. Munishi discovered that essential competencies were relatively low, particularly among graduates from TVET institutions. Similarly, Omwando and Ken (2014) found low student enrollment and poor employability skills among TVET trainees in Mombasa County. These findings illustrate the assessment and evaluation phase of Jackson's model, in which students assess the likelihood of career guidance, growth, and acquiring adequate human, communication, interpersonal, problem-solving, and technical skills required in the job market.

4.7.1 Testing of Hypothesis Three: Trainees' employable skills and trainees' choice decision for Public TVET institutions

The results presented and discussed in the above section, stresses the essence of trainees' employable skills. The results also indicate unqualified existence of a relationship between trainees' employable skills and trainees' choice decision for Public TVET institutions. The study therefore empirically tested this relationship using a null hypothesis, which stated: $H_{03:}$ There is no statistically significant relationship between trainees' employable skills

and students' choice decision for public TVET institutions in Nairobi County. A Spearman correlation analysis was conducted and results are shown in Table 4.9.

Table 4. 9

Correlation between trainees' employable skills and trainees' choice decision for public TVET institutions

		Choice of the Public TVET institutions in Kenya
Trainees' Employability Skills	Spearman Correlation	0.175**
	Sig. (2-tailed)	.003
	N	289

**. Correlation is significant at the 0.05 level (2-tailed).

According to the findings in Table 4.9, there is a positive association between trainees' employable skills and the trainees' choice decision for public TVET institutions in Nairobi County, r =.175, *p*= 0.003. In this case, the p-value is less than 0.05 and, therefore, the association between these two variable is statistically significant. As a result, the study rejected the null hypothesis and concluded that trainees' employable abilities influenced students' choice of public TVET institutions in Nairobi County. As a result, it was obvious that the trainers' employable skills influenced the students' choice of public TVET colleges in Nairobi County. Kamble (2021) discovered that trainees' employability abilities were a significant factor in influencing students' choice of TVET colleges in Uganda.

The study asked the principals and head of admission to explain how employable skills of trainees influence students' selection decision for TVET institution. The responses were

making reference to employment information which was described critical in information the selection decision regarding which TVET institute to join. Two verbatim taken from respondent read,

> *When trainees do their diligence, they would like to join TVET institutions where alumni got prestigious jobs. Hence, they talk to old graduates and find out which institution offers quality training and has well equipped workshops and labs. Armed with all this information they are able to select the appropriate TVET institution."* – Respondent 02."
>
> Another respondent explained,
> *"It is the expectation of the prospective trainees that they will be employable once they graduate with the relevant skills, and therefore, the trainees are influenced to select a TVET institution that offers the required employable skills".* – Respondent 04."

The results strengthened the assertion that employable skills are essential in informing the students' selection decision for a TVET institute. Kable (2021) agreed with the results of the study on the essence of developing employability skills, such as leadership, problem-solving, communication, and teamwork, customer service, business management and entrepreneurship in order to strengthen the skills, abilities and competencies of trainees.

4.8 Results on courses offered and Trainees' Choice Decision for Public TVET Institutions

The fourth objective of the study aimed to determine the influence of courses offered on students' choice decision for public TVET institutions in Nairobi County. This construct was assessed as a latent variable where, several statements based on indicators regarding courses offered, were presented to respondents, requiring them to rate their level of

agreement on those aspects. The statements presented to respondents focused on diversity of courses on offer, effectiveness of teaching methods to teach / train those courses, value in terms of help a learners to acquire employable skills, acquire knowledge, and attitude; market demand of the courses, and demand on courses by students. The findings are presented in Table 4.10.

Table 4. 10

Descriptive results on courses offered and choice decision for public TVET institutions

Statements on courses offered (N = 289)	Min	Max	Mean	Std
• Courses offered in TVET are very crucial in helping students to acquire employable skills.	1	5	4.00	1.259
• There is wide diversity of the courses offered at this institution	1	5	4.13	1.032
• Trainers employ effective teaching methods to teach / train the courses offered in our institution	1	5	4.01	1.150
• Students like the course offered in our institution	1	5	4.20	1.121
• Coursed offered meet the market demand	1	5	3.92	1.268
• There has been students' surge in our institution occasioned by market demand of the course offered	1	5	4.10	1.050
• Courses offered help students to acquire knowledge, and attitude	1	5	3.92	1.262

The results in Table 4.10, show a high agreement with all the aspects regarding courses offered. This is because each sentiment had a high mean value where the lowest was 3.77 and a standard deviation that is around the 1; meaning the deviation from the mean value was small for each indicator. The high agreement level indicated students were aware of the courses offered; hence one can deduce that there was a demand for the courses provided by TVET institutions in Nairobi County. The study established that there was a wide diversity of courses offered at TVET institutions in Nairobi County (mean = 4.13; SD = 1.032), and that students liked them (mean = 4.20; SD = 1.121). The finding on student

liking the courses offered, may explain why there was a surge in most TVET institution, which according to respondents, was occasioned by market demand of the course offered (mean = 4.10; SD = 1.050).

The students further indicated that trainers usually employ effective teaching methods to teach / train the courses offered in TVET institutions (mean = 4.01; SD = 1.150). Onyango et al. (2022) found contradicting results on the status of the courses offered in TVET institutions. Their study noted that most institutions lacked technology, required infrastructure, and trainees and henceforth few programs were offered in TVET institutions in Nyanza. Moreover, a decrease in student enrolment was noted and appropriate mitigation mechanisms such as marketing strategies and conducting outreach sensitization activities on the courses offered by the institutions were recommended. Okinyi et al. (2021) findings also disagreed, where they noted increased cases of drop-out and low completion rates of learners as a result of inflexibility, and lack of variety of courses in TVETs. The findings however agree with the adopted model of the study, where the academic programs and courses offered were a major determinant factor in the choice of a student to study in a particular TVET institution.

From students' perspectives the courses offered in TVET are very crucial in helping them to acquire employable skills (mean = 4.00; SD = 1.259), meet the market demand (mean = 3.92; SD = 1.268), and also help students to acquire knowledge, and attitude (mean = 3.92; SD = 1.262). These findings indicate the aptitude of the courses offered by TVET institutions; hence, the capacity to influence the student selection decision regarding the TVET one joins. In agreement, the results by Kidane (2022), implied that the courses offered were the most influential factor in students' choices regarding TVET institutions.

This further influenced their academic achievement. Wasike (2021) also established a positive correlation between the nature, type and the number of courses offered by TVET institutions, and student choice for vocational institutions. This findings anchor the model argument that a learners considers the courses on offer, the resources for undertaking that particular course, availability of adequate staff and infrastructure before joining any TVET institution to pursue their career.

The above findings are however inconsistent with Fryer (2014) who observed that many students had unfavourable view of the courses provided by TVET institutions. Fryer noted that the courses offered were developed for 9th grade dropouts; therefore, others felt left out. According to Fryer, the courses offered did not also meet the curriculum requirements including language, academic reading and writing abilities, and mathematical ideas.

Considering that TVET institutions offered various courses, the study wanted to know how the demand for the courses offered are determined. The information gathered from principals and heads of admission during interview indicated aspects of environmental survey where changes in legislations, polices, industry requirements and emerging trends were the predominant themes from the responses. Respondent 01 explained, *"The institute is able to determine the courses to offer by scanning market needs".* Obwoge and Kibor (2016) also agreed that Uasin Gishu County TVETs utilized institutional marketing, role models, peers and parents, ICT integration, government policies, fees, levies and bursaries to interest students to enrolling in their colleges and pursue their career path.

Respondent 09 argued that the engineering courses were in high demand, for example, electrical, mechanical, automotive, and information technology due to shortage of lower

cadre staff with technical skills in the market. The respondent argued that such courses are resources intensive but their demand in the market warrant consideration. The study noted that some TVET institutes consider growth in given industry sectors, for example tourism hence the offering of courses such as tourism and travel management as well as hospitality management to address this gap. Respondent 11 added,

> *"The GoK directed all institutions to employ qualified accountants and procurement officers; hence, courses like financial management, supply chain management, project management are offered to address the requirement."*

It was also clear that the training departments deeply involved in advising TVET institute management board on industry-driven skills which then inform the courses that should be offered and the required resources and facilities. This was not the case for Obwoge and Kibor (2016) who said that high cost of courses usually puts off some potential students, so, they end up not enrolling for such courses, instead, choose the ones they can afford. In the Jacksons' model, cost of learning and studying the course was among the considered when selecting a TVET institution, hence supporting the Jackson's ideology.

Another interview question posed to the principals and heads of admission was concerning the measures put in place to ensure prospective students were aware of the courses offered at TVET institutions. From the responses received, most TVET institutions were using print and electronic media, and road shows. They also identified social media such as Facebook, twitter, tiktok, and interactive website to reach the potential trainees. Respondent 08 said,

"The institute also organizes open days and invites high schools to show case innovations and give career guidance to them. The enrolled trainees are also our marketers back in their communities".

Other specific methods of creating awareness included, advertisement in local mass media, promotions, print and electronic banners, YouTube, videos, booklets, brochures; career fairs, educational talks, referrals by alumni, and social media. In agreement, in Nyanza, Onyango et al. (2022) recommended that student enrolment could be enhanced by improving marketing strategies and conducting outreach sensitization activities on the courses offered by the institutions. Moreover, Padi et al. (2022) also acknowledged the strength of investing in institutional promotion as a mechanism for influencing students' intentions and exposure about new courses.

Similar opinions by Kizza et al. (2019) indicate that implementation of policy framework that clearly indicate the transition from vocational education to further education was a key strategy in creating awareness about vocational education and training. This was in line with the Jackson model which explains how a prospective trainee gathers information from family, friends, TVET graduates, institution and other sources concerning the courses offered, infrastructure, staff adequacy and reputation of the college. This has great implication on the aspect of marketing, promotion, sensitization resource allocation and funding of each TVET institution so that students are made aware noting that learners seem to join an institute which they know.

4.8.1 Testing of hypothesis four: The courses offered and trainees' choice decision for Public TVET institutions

The results presented and discussed in the above section, have underscored the importance of the courses offered at public TVET institutions in Nairobi County. Information has also been provided on how the awareness of those courses is created to prospective students. The results also indicate unqualified existence of a relationship between courses offered and trainees' choice decision for Public TVET institutions. The study therefore empirically tested this relationship using a null hypothesis, which stated: $H_{04:}$ There is no statistically significant relationship between courses offered and students' choice decision for public TVET institutions in Nairobi County. The findings of a Spearman correlation analysis are reported in Table 4.11.

Table 4. 11

Correlation between courses offered and trainees' choice decision for public TVET institutions

		Choice of the Public TVET institutions in Kenya
Courses Offered	Spearman Correlation	0.155**
	Sig. (2-tailed)	.008
	N	289

**. Correlation is significant at the 0.05 level (2-tailed).

The results in Table 4.11 show that there is a positive association between courses offered and the trainees' choice decision for public TVET institutions in Nairobi County, r =.155, p= 0.008. In this case, the p-value is less than 0.05 and, therefore, the association between

these two variable is statistically significant. As a result, the study rejected the null hypothesis and indicated that courses offered had an impact on students' choices to attend public TVET colleges in Nairobi County. As a result, it was obvious that the courses offered influenced students' choice of public TVET colleges in Nairobi County. This concurred with the findings of Wasike (2021) who established a positive relationship between the courses being offered by TVET institutions and student choice elements for joining vocational institutions.

The above finding concurred with views collected from principals and heads of admission from public TVET institutions in Nairobi County. Responses received during interview indicated that the courses offered together with chances of getting a job upon graduating dominate the students' selection decision for a TVET institute. Respondent 05 explained,

> *"When potential trainees know that if they undertake a certain course there is high probability of getting employment or self-employment, they enrol in that course in a given TVET institute. When they also learn that an institution is collaborating with industries in training like the dual training, they also enrol in large numbers".*

These findings demonstrate that the students' selection decision is not only determined by the courses offered, but also the value added to the training, the mastery of competence and prospect for employment upon graduating. This was consistent with Miheso (2020) who found that career counselling, market demand and cost on career choices had an influence on career choice. Furthermore, the findings agree with the Jackson model that a variety of factors such as courses offered, cost, reputation, employability, nature of trainers,

infrastructure, facilities, family, friends, social and economic factors determined the choice of an institution.

4.9 Results on government policy and Public TVET Institutions

The fifth objective of the study aimed to determine the moderating effect of government policy on the relationship between identified factors and students' choice decision for public TVET institutions in Nairobi County. For this moderating construct, the quantitative and qualitative data was first analysed to provide basic understanding on the nature of government policy and how it guide operations of TVET institutions in Kenya. This construct was also assessed as a latent variable where, several statements based on indicators regarding government policy, were presented to respondents, requiring them to rate their level of agreement on those aspects. The statements presented to respondents focused on fee policy, harmonized examination policy, courses offered in a TVET institute, establishment of TVET institutions, efforts to make TVET a preferable choice, stigma and perception of TVET careers, policy on HELB, industrial attachment through NITA, and government policy of placing students to TVET colleges by KUCCPS. The findings are presented in Table 4.12.

Table 4. 12

Descriptive results on government policy and public TVET institutions

Statements on government policy (N = 289)	Min	Max	Mean	Std
• Fee policy guidelines are consistent	1	5	3.73	1.181
• The government has a harmonized examination policy for all TVET institutions	1	5	4.27	1.062
• Government has a policy guiding TVET on courses in a TVET institute	1	5	4.26	1.115
• Establishment and elevation of TVET institutions is guided by government	1	5	4.12	1.133
• The government intends to make TVET the preferable and rewarding choice for Kenyans.	1	5	4.09	1.275
• The Government policy is continuously changing the stigma and negative perception of careers in pursued in TVET institutions	1	5	3.99	1.337
• The government has a low fee policy to encourage more students to enrol in TVET institutions	1	5	3.85	1.294
• Our TVET sensitize students of government internship programs after they have graduated	1	5	3.95	1.105
• The qualification framework and guidelines by government assist TVET graduates to secure employment				
• Government policy on HELB is working for me	1	5	4.10	1.107
• Our TVET works with NITA in coordinating industrial attachment	1	5	3.62	1.091
• The government policy of placing students to TVET colleges done by KUCCPS is good for students	1	5	4.14	1.011

The results in Table 4.12, show a high agreement with all the aspects regarding government policy. This is because each sentiment had a high mean value where the lowest was 3.62 and a standard deviation that is around 1; meaning the deviation from the mean value was small for each indicator. The high agreement level indicated students' awareness of government policy and how it had impacted TVET education and training in Nairobi County.

There is a harmonized examination policy for all TVET institutions (mean = 4.27; SD = 1.062), and a policy that guides TVET on courses (mean = 4.26; SD = 1.115). In addition, there was a government policy of placing students to TVET colleges by KUCCPS (mean = 4.14; SD = 1.011), HELB loan policy existed for TVET trainees (mean = 4.10; SD = 1.107), low fee policy to encourage more students to enrol in TVET institutions (mean = 3.85; SD = 1.294), which students was regarded to have provided consistent guidelines (mean = 3.73; SD = 1.181). These findings show that a relatively strong policy framework existed and was guiding the operationalization of TVET institutions in Kenya.

The above findings were confirming the implementation of the rigours efforts put across by the government of Kenya on the redesigning of the VET curriculum for Competency-Based Education and Training (CBET), student loans and scholarships during the first and second medium-term stages of Vision 2030 (Republic of Kenya, 2022). The results also agree with Nganga (2018) findings, who noted the series of reforms initiated by government which were aimed at increasing TVET institution growth to 3.1 million students in five years, starting 2018. According to Nganga, the reforms are intended to improve learning quality in all TVET institutions and enhance access to post-secondary education in Kenya. Findings are in agreement with the adopted model guiding the study because, cut off points, qualifications for courses, development of infrastructure and redesigning of the curriculum relies on the government and TVET funding and management policies.

The study further noted that the government had established measures, expansion plan and guidelines on elevation of TVET institutions (mean = 4.12; SD = 1.133). It had also

embarked on a deliberate strategy of branding TVET institution afresh, so that they are viewed as preferable and rewarding choice for Kenyans (mean = 4.09; SD = 1.275). Moreover, there were some effort made by government to reduce stigmatization and negative perception of careers in pursued in TVET institutions (mean = 3.99; SD = 1.337). It was encouraging to note that the government was concerned of TVET students gaining practical skills through structured industrial attachment which is expected to be overseen by NITA (mean = 3.62; SD = 1.091). In addition, students admitted that their TVET usually sensitize them regarding government internship programs after they graduate (mean = 3.95; SD = 1.105). The results demonstrate the deliberate effort made by the government of Kenya to ensure policy guidelines which covers, establishment, operationalization, training, industrial attachment, qualification and internship. All these policy guidelines and framework are expected to demystify technical education. This is because TVET institution have been perceived to be of failures in the academics, hence the need to change the attitude. The policies are also expected to lead to creation of employment for graduates whose input is hence expected to stir social-economic development. Similarly, Mwangunga et al. (2020) noticed the existence of negative perception of TVETs by learners in Taita Taveta County. Mwangangi et al. observed that TVET institutions were perceived to be for the developing and non-developed nations, for the poorly academically performed learners, and for technical skills alone. Mwangangi et al. (2020) recommended the government and concerned bodies to use media in creating appropriate awareness.

The study moved on to ask the principals and heads of admission during the interview to identify the government policies which were contributing to the nature of the selection decision made by trainees when choosing a TVET institute. The responses covered policy

that addresses several areas. The policy include trainees placement services policy by KUCCPS, higher education fund policy by HELB, harmonized examination by KNEC, industrial attachment coordination policy by (National Industrial Training Authprity) NITA, and TVET accreditation policy, plus other policies from regulatory bodies such as pharmacy and poisons board, engineering board of Kenya. In addition, the fees paid by students in all public TVET institutions are subsidized. These findings show concurrency with those provided by students. They show existence of a relatively strong policy framework for public TVET institutions in Kenya.

In agreement, Beharry-Ramraj et al. (2020) noted that the South African government had established qualification frameworks such as VET act of 1998 and the Further Education and Training Colleges Act of 2006 which addresses curriculum transformation, teachers' qualifications, learning and teaching, funding, and quality assurance in academic institutions in South Africa. They further explained how these policies affected students' choices of TVET institutions, in that, learners chose to study in institutions that had complied with government-specified qualification frameworks. Existing literature on TVET policies in Kenya did not elaborate on the observed findings apart from the influence of government policies on improving funding allocation among TVET institutions.

The specific government policy direction regarding physical facilities, adequacy of staff, employable skills of trainees, and courses offered was sought from principals and heads of admission in public TVET institutes. For physical facilities, the study noted that the government provides the recommended trainee-facilities ratio for institution including the required standards. It was also clear that the government has been constructing a TVET College in every constituency and equipping them with modern machinery and other

requisite facilities. For infrastructural development, respondent 06 said, *"Our institute collaborate with development partners like World Bank, KFW, Canadians, GIZ the GOK in the reviewing of curriculum and in equipping the institutions with the required equipment*"

On staff adequacy, the study noted that the government is responsible of providing the training staff to institutions. It therefore employ, train and retain teaching staff. The government deliberate action on human resources was explained by respondent 03, that,

> *"The government transferred TVET trainers from TSC to Public Service Commission to improve their remuneration and attract qualified personnel to train learners. In the last four years, an addition of 3000 trainees were employed to address the staff shortage, and more have been factored in the current financial year".*

On employable skills of trainees, the study was able to learn that the TVET Act 2013, led to the establishment of a body known as TVET Curriculum Development and Accreditation Certification Council (CDACC) which was expected to develop market driven curriculum (CBET) to make TVET graduates more marketable and employable. For courses offered at TVET institutions, the study learnt that the government had directed institutions to do tracer studies to establish employability of its graduates. This is expected inform what courses should be offered and their marketability. In addition, principals and heads of admission also said that the government usually advocates for industry-driven courses/programmes. These results show that the government of Kenya has provided direction to TVET institutions in form of policy guidelines touching the main variables of

the study; physical facilities, adequacy of staff, employable skills of trainees, and courses offered.

The policies can be described essential in the operationalization of TVET Act and other related legislations. In agreement, Beharry-Ramraj et al. (2020) in South Africa noticed reforms in the technical training sector which were utilizing established frameworks which were clear on TVET curriculum transformation, teachers' qualifications, professional development, student enrolment, facilitation of learning and teaching, funding, and quality assurance. Comparably, the adopted model was supported in the current study which termed government policy as a backbone for managing student enrolment, funding, physical facilities development, placement of learners through KUCCPS and also the adequacy of teaching trainers.

4.10 Trainees' Selection Decision of Public TVET Institutions

The dependent variable in this study was trainees' choice of public TVET institutions. This construct, like the other study variables discussed in the preceding section, was assessed as a latent variable in which respondents were presented with several statements based on indicators regarding trainees' selection decision of public TVET institutions and asked to rate their level of agreement on those aspects. The claims supplied to respondents concerned reputation, trainee employable skills, location, courses offered, student support services, trainer adequacy, physical facilities, pleasant learning environment, and training quality. Table 4.13 summarizes the findings.

Table 4. 13

Trainees' selection decision of public TVET institutions

Statements on the trainees' selection decision of public TVET institutions (N = 289)	Min	Max	Mean	Std
• Students consider reputation when selecting a public TVET institute	1	5	4.03	1.204
• The employability skills of trainees determine the students' choice of a public TVET institution	1	5	4.21	1.110
• The location of TVET institution determines the students' choice of a public TVET institution	1	5	4.03	1.231
• Students consider conducive learning environment when selecting a public TVET institute	1	5	4.11	1.104
• Courses offered determines the students' choice of a public TVET institution	1	5	4.04	1.230
• Student support services determines the students' choice of a public TVET institution	1	5	4.01	1.221
• TVET institution with good physical facilities are a great determiner in students' choice	1	5	4.05	1.147
• Adequacy of trainers determines the students' choice of a public TVET institution	1	5	4.00	1.141
• The quality of training determine the students' choice of a public TVET institution	1	5	4.18	1.031

According to the findings in Table 4.13, there is a high agreement level on all indicators regarding trainees' selection decision of public TVET institutions. This is because each sentiment has a high mean value where the lowest is 4.00 and has a standard deviation that is around the 1; meaning the deviation from the mean value is small for each indicator. The high agreement level indicated students' awareness of government policy and how it had impacted TVET education and training in Nairobi County. The affirmative responses on all aspects posed to respondents show that the indicators had a weighty impact on the trainees' selection decision of public TVET institutions in Nairobi County.

From the findings, it is clear that the trainees' selection decision of public TVET institutions is informed by the employability skills of trainees (mean = 4.21; SD = 1.110), quality of training (mean = 4.18; SD = 1.031), conducive learning environment (mean = 4.11; SD = 1.104), good physical facilities (mean = 4.05; SD = 1.147), reputation (mean = 4.03; SD = 1.204), location (mean = 4.03; SD = 1.231), courses offered (mean = 4.04; SD = 1.230), student support services (mean = 4.01; SD = 1.221), and adequacy of trainers (mean = 4.00; SD = 1.141). These findings show the aspects that students consider when making a decision regarding the public TVET institute. The results agreed with the report of Miheso (2020) who found that career choice and selection decision of students was influence by technological, financial, family, social, reputation, curriculum, gender stereotyping and career guidance. Moreover, Obwoge and Kibor (2016) career choice in a TVET institute was influenced by social, infrastructural, financial, job market dynamics and marketing factors in North Rift region. This was also in agreement with the demonstration of the Jackson's model which validated the choice decision into three phases where in each stage, important factors such as cost, location, reputation, attitude, nature of infrastructure, staff available, courses offered and academic qualifications attained formed the main determinants for excluding prospective institutions.

The above findings were largely consistent with the views gathered from principals and heads of admission during interview. From 33 statements gotten from principals and heads of admission, the study narrowed them by categorizing identified determinants as follows: appealing infrastructure, well equipped learning facilities, adequate and qualified staff, co-curricular activities, access to sponsorship opportunities, quality of training, security, conducive learning environment accessibility of the institution (location), accommodation,

and recommendation from former students. These findings on determinants for students' selection decision for public TVET institutions reveals the decision making behaviour of prospective TVET students, and has provided critical aspects that should be considered by TVET institutes that endeavour to remain competitive in modern economies.

The findings point out the need for TVET to improve on their facilities, engage adequate staff, offer market driven courses ,engage in co-curricular activities, collaborate with industries to attract more students. The findings are consistent with different results reported by Wasike (2021), Obwoge and Kibor (2016), Miheso (2020) and Beharry-Ramraj et al. (2020); which, demonstrate the role of physical resources, courses offered, infrastructure, trainer competencies and government policies individually in influencing student selection decision to join TVET institutions for their career choices. The findings further agree with the adopted Jackson model that good reputation of the school fees, infrastructure, teaching resources, qualification of staff, and location of the institutions attract a learner to an institution. TVETs therefore, need to invest not only in road shows promotion and marketing, but also upgrade their physical resources, develop competencies of their hired trainers, offer a variety of courses, and adopt relevant policies since the study describe them as influential marketing elements for wooing students to undertake career choices in the colleges which meet their selection criteria.

When asked to suggest what should be done to enhance students' selection decision efficacy for a TVET institute, the principals and heads of admission provided various measures ranging from infrastructural development, employability, learning facilities to students' support services. Five heads of admission noted the need to create awareness and

establishment of career guidance services in secondary schools and sensitize parents on the same. Respondents 09 remarked, *"TVET institutions should have open days and career days to create awareness to students and the general public."* The respondent 12 added, *"The high school principal needs also to be sensitized so that they stop discouraging their students from joining TVET institutions".* There was also a need to improve the existing status and conditions of facilities in TVET institutions. Respondent 01 urged, *"TVET institutions should improve the quality of training, training facilities and equipment, reduce the skills gap and enhance the trainees' welfare in the institutes".*

The findings show that students' selection decision of a public TVET is crucial; hence measures to ensure efficacy of the same are indispensable. The measures noted entail sensitization of stakeholders, institutional-based actions, policy framework, and demystification programs to improve the perceptions of TVET institutions in Kenya. This results are in agreement with ideas noted from several studies independently; for example, Padi et al. (2022), Wasike (2021), Obwoge and Kibor (2016), Miheso (2020), Beharry-Ramraj et al. (2020), Ngugi and Muthima (2017) and Bank (2015). These studies recommend mechanism for implementing policies, adopting market driven courses, marketing and need for developing institutional infrastructure.

4.11 Evaluation of the Study's Overall Purpose

The purpose of this study was to look into the elements that influence students' decisions when choosing public TVET schools in Nairobi County, Kenya, in order to identify best practices in tertiary college and course selection for post-secondary students. The results presented in the previous sections demonstrated how each factor individually influence the

students' selection decision for public TVET institutions. The statistical significance of the relationship between each factor and the dependent variable was observed. To evaluate the overall objective of the study, a multiple regression analysis was conducted, and diagnostic tests were performed to ensure the suitability of the data for the analysis. Normality, linearity, autocorrelation, multicollinearity, and heteroscedasticity were all tested. The findings of these tests will be provided in the sections that follow.

4.11.1 Diagnostic Examinations

In social sciences, it is commonly assumed that the target population follows a normal distribution. However, this assumption may not always hold true, prompting the need for a normality test to assess any violation of this assumption. Because the population size was small, the Shapiro-Wilk test was used to assess the normality of the primary variables in the study. Furthermore, the study examined histograms, Q-Q plots, and box plots to confirm the normality assumption. Table 4.14 contains the P-value results.

Table 4. 14

Normality test on main variables of the study

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
X1	.105	289	.000	.979	289	.000
X2	.157	289	.000	.937	289	.010
X3	.117	289	.000	.963	289	.003
X4	.087	289	.000	.976	289	.000
Moderator	.108	289	.000	.977	289	.006
Y	.121	289	.000	.964	289	.023

a. Lilliefors Significance Correction

Based on the results presented in Table 4.14, it is evident that the P-values (Shapiro-Wilk) for each study variable are significant: Y = 0.23, X1 = 0.000, X2 = 0.010, X3 = 0.003, X4 = 0.000, and moderator (government policy) = 0.006 ($P < 0.05$). This indicates that the data was obtained from a target population that follows a normal distribution.

However, the results in Table 4.14 demonstrate that the Shapiro-Wilk P-values for all variables are significant (Y = 0.23, X1 = 0.000, X2 = 0.010, X3 = 0.003, X4 = 0.000, and moderator (government policy) = 0.006) at a significance level of less than 0.05. This indicates that the population did not exhibit a normal distribution, thereby violating the assumption of normality. Attempts were made to standardize the data using the log10 transformation, but it did not result in normalization (Gravetter et al., 2020). The study also utilized graphical methods, such as histograms, to further assess the normality conditions for the dependent variable (Y), which represents students' selection decisions on public TVET institutions. The findings are presented in Figures 4.1, 4.2, 4.3, and 4.4, respectively.

Figure 4. 1

Histograms on students' selection decision of public TVET institutions

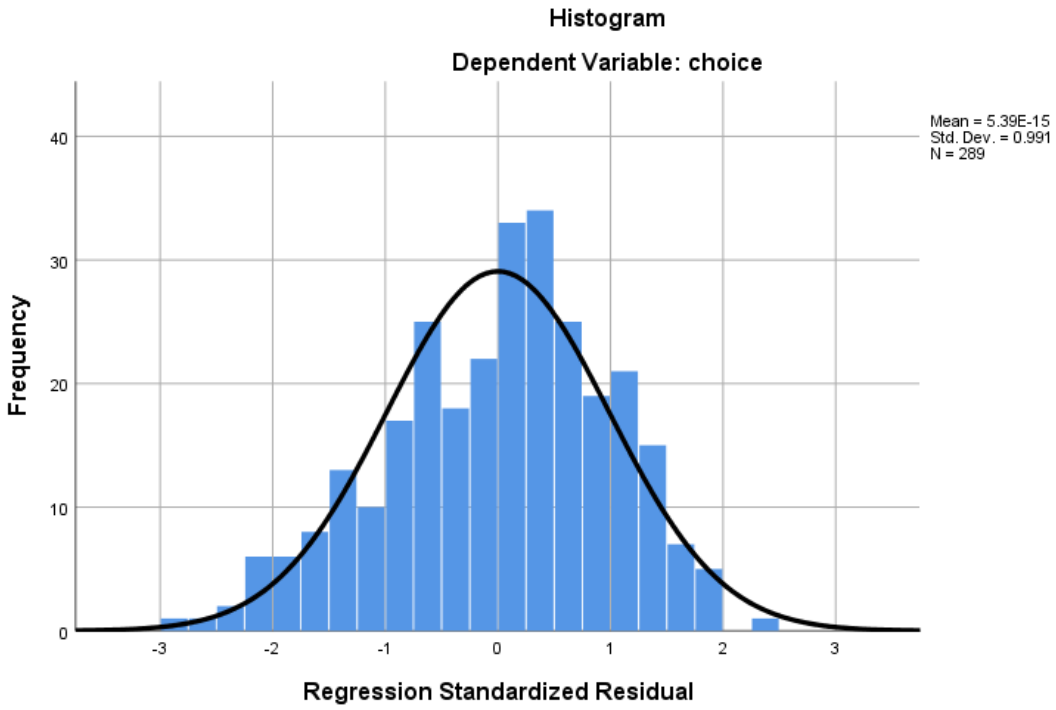


Figure 4.1 depicts the skewness of the data, indicating that the data was obtained from a population that was not regularly distributed. Figure 4.2 depicts the same circumstance using typical Q-Q graphs.

Figure 4. 2

Q-Q plots on students' selection decision of public TVET institutions

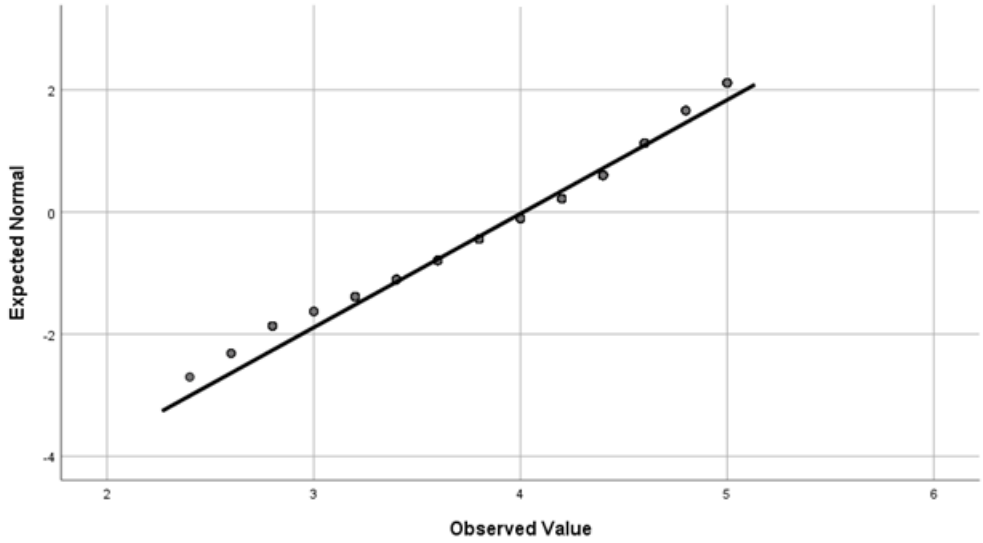
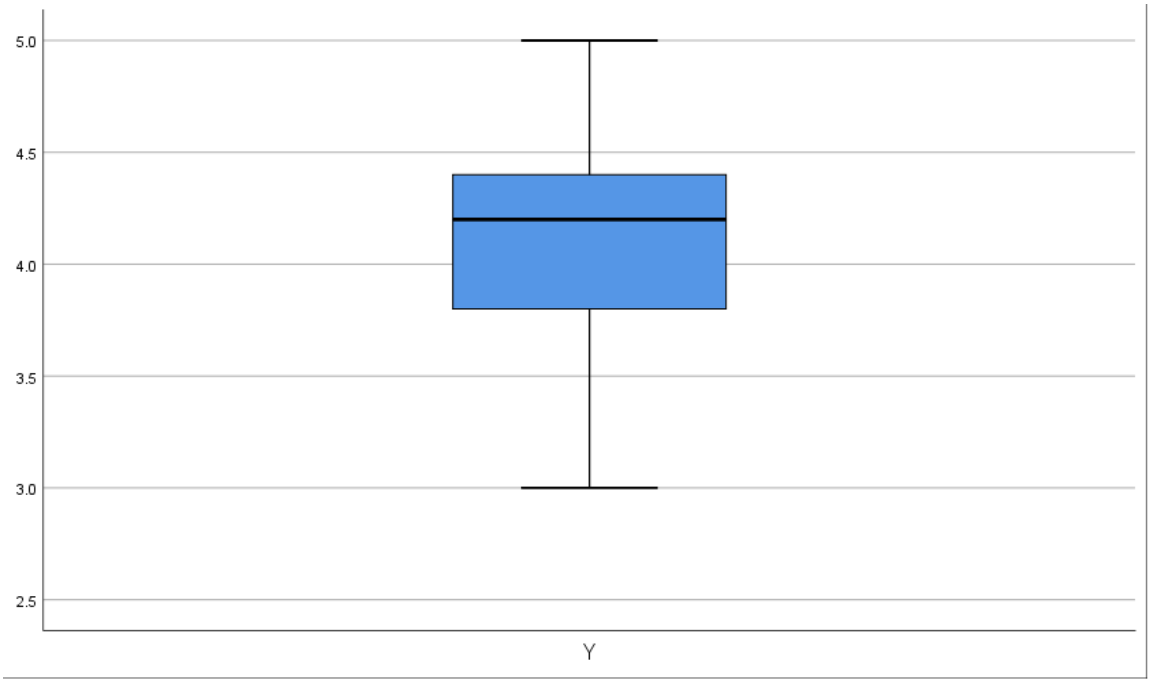


Figure 4.2 depicts a Q-Q plot with data points that closely coincide with the line of best fit. Several points, however, stray from this line, suggesting a violation of the normal distribution assumption. Furthermore, the data points along the line of best fit show a linear relationship, indicating that the independent variables (physical facilities, staff adequacy, trainees' employability skills, and courses offered) have a straight-line relationship with the response variable (students' decisions to attend public TVET institutions). Nonetheless, Figure 4.2 shows that several points do not adhere to the line of best fit, indicating that the data lacks linearity. This observation is also illustrated in the box plot in Figure 4.3.

Figure 4. 3

Box plot on students' selection decision of public TVET institutions



The whiskers on the box plots shown in Figure 4.3 indicate the existence of outliers. This indicates that the data was skewed and strayed from a normal distribution. As a result, it is possible to deduce that the data came from a non-normally distributed target population.

The study looked for potential breaches of other assumptions, including as autocorrelation, multicollinearity, and heteroscedasticity, in addition to normality. Table 4.15 contains the results of the autocorrelation and multicollinearity tests.

Table 4. 15

Autocorrelation and multicollinearity test results

Variables	R square change	Durbin-Watson	VIF
X1	.014	.865	1.000
X2	.000	.933	1.000
X3	.018	.951	1.000
X4	.004	.828	1.000
Moderator	.007	.944	1.000

The Durbin-Watson statistic was used to determine the presence of autocorrelation in the study variables. The correlation between values of the same variable across different observations is referred to as autocorrelation. Previous research by Waithima (2020), Singh (2007), and Gupta (2000) indicates that the least acceptable value for the Durbin-Watson statistic is 0.8, with a maximum of 2.

The Durbin-Watson values for each research variable are shown in Table 4.15: X1 =.865, X2 =.933, X3 =.951, X4 =.828, and moderator =.944. These values, which are more than 0.8, indicate that there are no autocorrelation difficulties in the predictor variables.

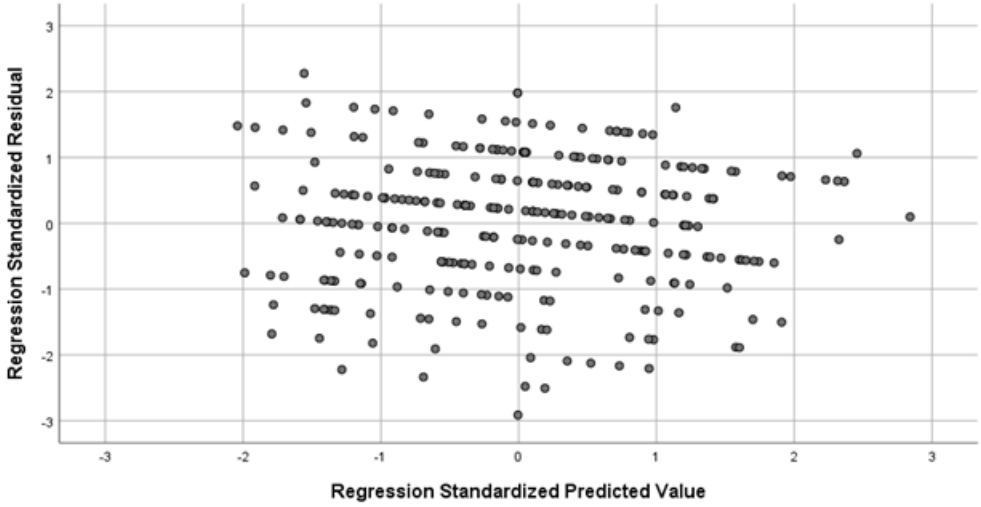
The study also analyzed the multicollinearity of predictor variables in order to guide the selection of an appropriate multivariate analysis technique. Waithima (2020) describes multicollinearity on predictor variables as a severe issue that complicates regression coefficient calculation. The VIF (Variance Inflation Factor) values in Table 4.15 show that all of the independent variables in the study had VIF values of 1.000, indicating that multicollinearity issues were not present. As a result, no indication of multicollinearity among the predictor variables was found.

The presence of heteroscedasticity in the data was the next assumption tested. The standardized expected residuals and mean standardized residuals were used to generate a

scatter graph. To satisfy the criteria of homoscedasticity, the points should be equally distant from the line as one proceeds from left to right. Figure 4.4 depicts the results of the homoscedasticity test.

Figure 4. 4

The residual and standardized predicted value, scatterplot: heteroscedasticity test



According to the scatter graph presented in Figure 4.4, the distance between the points varies as one proceeds from the left to the right side. The scatter points appear random, with no discernible pattern or shape. As a result, the data show no signs of heteroscedasticity. The findings and discussion support the use of non-parametric inferential statistics for the analysis, especially given the data's failure to meet the normalcy assumption. As a result, a non-parametric multivariate ordinal logistic regression analysis was used to investigate the overall goal of the study.

4.11.2 Multivariate ordinal logistic regression analysis on students' selection decision of public TVET institutions

To fulfil the overarching objective of the study, as illustrated in the conceptual framework depicted in Chapter two (Figure 2.1), it was necessary to examine the collective impact of the four predictor variables when analyzed together in a unified model. Therefore, a multivariate ordinal logistic regression analysis was chosen for this purpose.

In this research, the combined effects of the factors (physical facilities, staff adequacy, trainees' employability skills, and courses offered) on students' selection decision of TVET institutions were examined through a multivariate ordinal logistic regression analysis. The analysis utilized data obtained from the trainees, and the results have been presented, evaluated, interpreted, and discussed accordingly. The findings of the multivariate ordinal logistic regression analysis can be found in Tables 4.16, 4.17, 4.18, and 4.19.

Table 4. 16

Model fitting information on determinant for students' selection decision of TVET institutions

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	1234.410			
Final	1224.292	10.117	4	.039

Link function: Logit.

Based on the results presented in Table 4.16, the obtained P-value is 0.039, which is lower than the predetermined significance level (alpha) of 0.05. As a result, the null hypothesis, which suggests no significant difference between the baseline model and the final model, is rejected. The findings indicate that when all four constructs (X1, X2, X3, and X4) are included in the regression analysis, they collectively form a model with statistically significant predictive capability for the outcome variable (Y, students' selection decision

of TVET institutions). This meant that the combined variables on factors (physical facilities, staff adequacy, trainees' employability skills, and courses offered) statistically and significantly explain the variations in students' selection decision of TVET institutions in Nairobi County. The extent of prediction is demonstrated by computing Pseudo R-Square of the model. The results are presented in Table 4.17.

Table 4. 17

Pseudo R-Square Results

Cox and Snell	.334
Nagelkerke	.335
McFadden	.308

Link function: Logit.

The results presented in Table 4.17 demonstrate the predictive ability of the factors in accounting for the variations in students' selection decision of TVET institutions, as indicated by the Nagelkerke R-square values. The Pseudo R-Square shows that these factors have a prediction capacity of 33.5%.

To assess the goodness of fit of the model, the Pearson Chi-square goodness-of-fit test was employed. In the context of ordinal logistic regression, the null hypothesis is rejected when the P-value is less than 0.05, indicating that the observed data do not exhibit a good fit with the fitted model. Table 4.18 provides the results of the goodness-of-fit test based on responses obtained from principals, school bursars, and students' presidents.

Table 4. 18

Goodness-of-fit regarding students' selection decision of TVET institutions

	Chi-Square	df	Sig.
Pearson	3012.010	2889	.054
Deviance	1195.860	2889	1.000

Link function: Logit.

Table 4.18 shows the findings on goodness of fit of the model. The goodness of fit is, $\chi 2$ (df 2889) = 3012.010; p= .054). Consequently, the study failed to reject the null hypothesis that, the observed data had goodness of fit with the fitted model. This meant that the model fitted the data very well. This implied that the data on the identified factors were reliable and fit for predicting students' selection decision of public TVET institutions in Nairobi County.

Due to reliability of the model, the study went ahead to interpret the values in the parameter estimates table. The parameter estimates shows how each predictor variable is influencing the dependent variable in the combined model. The parameter estimates are shown in Table 4.19.

Table 4. 19

Parameter estimates on factors and students' selection decision of public TVET institutions

								95% Confidence Interval	
		Estimate	Std. Error	Wald	df	Sig.	Exp(B)	Lower Bound	Upper Bound
Threshold	[Y = 2.80]	-9.964	1.993	24.986	1	.000	.000	-13.871	-6.057
Location	X1	-.501	.256	3.820	1	.041	.606	-1.002	.001
	X2	.056	.178	.099	1	.753	1.058	-.293	.405
	X3	-.363	.198	3.375	1	.046	.695	-.751	.024
	X4	-.234	.216	1.172	1	.279	.791	-.658	.190

Link function: Logit.
Dependent variable: Y

Independent variables: X1, X2, X3, X4

From the results in Table 4.19, it is clear the physical facilities (X_1) and trainees' employability skills (X_3) were the most statistically significant predictor when all constructs were combined in one model, P = 0.041 and .046 respectively. The above results mean that, although all the four factors; physical facilities (X1), staff adequacy (X2), trainees' employability skills (X3), and courses offered (X4)) were jointly significant in influencing the students' selection decision of public TVET institutions in Nairobi County, only two variables were remained significant in the combined model. These were, physical facilities (X_1) and trainees' employability skills (X_3). In disagreement, Obwoge and Kibor (2016) concluded that institutional marketing, government policies and fees had a high extend of influence on career choice followed by physical facilities. In view of the above findings, the study came up with the following conclusive ordinal logistic regression statements:

- An increase in the physical facilities was associated with an increase in the odds of the students' selection decision of public TVET institutions, with odds ratio of .606 (95% CI, -1.002 to .001), Wald $\chi 2$ (1) = 3.820, $p < .005$.
- An increase in the trainees' employability skills was associated with an increase in the odds of the students' selection decision of public TVET institutions, with odds ratio of .695 (95% CI, -.751 to 024), Wald $\chi 2$ (1) = 3.375, $p < .005$.

This meant that all the four factors investigated in this study were crucial in the model whose components were statistically significant in informing that the students' selection decision of public TVET institutions in Nairobi County. However, among the four, it was the physical facilities and trainees' employability skills that were most crucial in the combined since the other two variables are suppressed. This means that physical facilities and trainees' employability skills were predominant factors in informing the students' choice decision for public TVET institutions.

The findings reveal the priority issues that should concern TVET institutions in Nairobi County. It can be deduced that when physical facilities are in place, they will be utilized to ensure students have acquired the employable skills needed in the market. The trainers and courses offered are both regarded as obvious pre-requisite in a technical training institute. This concurs with the recommendations put across by Wasike (2021) on the need to strengthen TVET policy frameworks which cover numerous aspects such as funding, hiring requirements, infrastructure development, curriculum implementation, and technology integration and student enrolment regulation. Additionally, Bank (2015) noted the need to inculcate employable competencies in training students in TVET to increase the

employability of graduates. Furthermore, Korir and Muchimuti (2022) results agreed on the aspects of adequacy of teaching staff as a key factor for balancing students' selection decisions for a TVET institution.

4.12 Results on Moderation of Government Policy

As noted in chapter one, the fifth objective of the study was to determine the moderating effect of government policy on the relationship between identified factors and students' choice decision for public TVET institutions in Nairobi County. To assess this effectively, the study had a null hypothesis, H_{05}: *Government policy does not moderate the relationship between the identified factors and students' choice decision for public TVET institutions in Nairobi County*. The same is presented and discussed below.

4.12.1 Testing of hypothesis five on moderating influence of government policy

In this study, the moderation effect of government policy on the relationship between relationship between the identified factors and students' choice decision for public TVET institutions in Nairobi County was conducted using a moderated multivariate ordinal logistic regression model. This was achieved by regressing the overall multivariate logistic regression model together with the moderator's interaction terms which was based on the government policy. The model fitting information which utilizes Chi-square likelihood ratio and goodness of fit were computed using SPSS. In moderated multivariate ordinal logistic regression model, the significant value in the model fitting information was expected to be less than 0.05 ($p = \leq 0.05$). The decision criteria used in assessing the goodness of fit was that the P-value to be greater than 0.05 ($p = >0.05$). The inclusion of moderator's interaction terms, that is, government policy in the multivariate ordinal logistic regression model was useful in determining the statistical significance arising from the

interaction term. The results helped the study to conclude whether government policy moderated the influence of the combined factors and students' selection decision for pubic TVET institution in Nairobi County. The results of the moderated multivariate ordinal logistic regression model are shown in Tables 4.20.

Table 4. 20

Model fitting information on moderated multivariate ordinal logistic regression

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	1261.796			
Final	1250.584	11.212	5	.047

Link function: Logit.

The findings in Table 4.20 show that the entire final model is significant, $\chi 2\ (5) = 11.212$, $p<0.05$ based on data from students. The model fitting information shows the significance of the predictive capacity of the overall model, which include the moderator interaction terms. This indicates that government policy has predicative capacity on students' selection decision for public TVET institution in Nairobi County.

The study also established the goodness of fit with the moderated multivariate ordinal logistic regression model. In this case, the Pearson Chi-square goodness-of-fit test was used to determine whether the model exhibit good fit of the data. The rule of thumb is to reject the underlying null hypothesis whenever P value is less than 0.05. The null hypothesis state that the observed data is having goodness of fit with the fitted model. Table 4.21 shows the result on goodness-of-fit for the moderated multivariate ordinal logistic regression model.

Table 4. 21

Goodness-of-fit on moderated multivariate ordinal logistic regression

	Chi-Square	df	Sig.
Pearson	3197.630	3119	.160
Deviance	1247.811	3119	1.000

Link function: Logit.

According to the findings in Table 4.21, the goodness of fit is, $\chi 2$ (df 3119) = 3197.630; p= .160. Consequently, the study failed to reject the null hypothesis that, the observed data had goodness of fit with the fitted model. This meant that the model plus the moderator interaction terms based on government policy fitted the data very well. This indicated that the data that contained moderator's interaction terms based on government policy was reliable and fit for predicting students' selection decision for public TVET institution in Nairobi County.

The study went ahead to interpret the values in the parameter estimates table. The parameter estimates shows how each predictor variable which include moderator's interaction terms based on government policy is influencing the dependent variable in the combined moderated multivariate ordinal logistic regression model. The parameter estimates of the model are shown in Table 4.22.

Table 4. 22

Parameter estimates on moderated multivariate ordinal logistic regression

								95% Confidence Interval	
		Estimate	Std. Error	Wald	df	Sig.	Exp_B	Lower Bound	Upper Bound
Model 1 - Without interaction terms	X1	-.501	.256	3.820	1	.041	.606	-1.002	.001
	X2	.056	.178	.099	1	.753	1.058	-.293	.405
	X3	-.363	.198	3.375	1	.046	.695	-.751	.024
	X4	-.234	.216	1.172	1	.279	.791	-.658	.190
Model 2 - With interaction terms	X1	-.574	.266	4.664	1	.031	1.007	-1.094	-.053
	X2	.007	.184	.002	1	.968	.1.123	-.353	.368
	X3	-.422	.206	4.181	1	.038	.792	-.827	-.017
	X4	-.233	.216	1.154	1	.283	1.017	-.657	.192
	Moderator_interaction_terms	.017	.016	1.080	1	.299	.563	-.015	.049

Link function: Logit.

From Table 4.22, the exponential Exp(B) column shows the odds ratios which indicate the multiplicative effect in the odds. An odds ratio that is > 1 suggests an increasing probability of being in a higher level on the dependent variable as values on an independent variable increases; whereas, the opposite is true. The estimates values and odd values together with their 95% confidence intervals in this case are critical in showing whether the model plus moderator interaction term influence the students' selection decision for public TVET institution in Nairobi County.

Results show that the odds ratio is > 1 based on physical facilities and trainees' employability skills. This indicates an increasing probability of falling on the higher level of the two variables on students' selection decision for public TVET institution without the moderator's interaction term (model one). When moderator's interaction term was added

in the second model, both odds ratio and p-values for the two variables became better; where, odds ratio for physical facilities increased from .606 to 1.007; p-value became stronger, from .041 to .031. For trainees' employable skills, odds ratio increased from .695 to .792; while p-value became stronger, from .046 to .038. This means that with a presence of a moderator in the second model, there is high probability of change in the likelihood of being in a higher category values on students' selection decision for public TVET institution. In that connection, the study concluded that government policy is partial moderator on the relationship between the identified factors and students' selection decision for public TVET institution in Nairobi County. This implied that the policy that were introduced by the government have played a role in revitalizing TVET education and training in Kenya. The impacts of such policies are significant and goes a long way in informing the selection decision made by students when choosing a public TVET institution.

Although there lacked studies which elaborated on the moderating role of government policy on the factors influencing selection decision, the potential of government policies were articulated in the Erima (2021), Maina (2019) and Beharry-Ramraj et al. (2020) studies. According to these researchers, policies in the TVET sector were very important because their application influenced redesigning of TVET curriculum, addressed TVET trainer's qualifications, infrastructural development, guided funding, brought standardization, quality assurance, and influenced courses offered in TVETs.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The current chapter provides a summary of the preceding chapter's study findings and discussion. It provides the study's conclusions, suggestions based on the findings, and the implications of the findings for theories, policies, and practices. The study's major goal was to investigate the factors influencing students' selection decisions for public TVET colleges in Nairobi County. This study's factors of interest included physical facilities, staff adequacy, trainee employability rates, courses offered, government policy, and students' TVET selection decisions. The Jackson model served as the theoretical framework for these variables. To investigate the identified phenomena, a descriptive survey research design and a mixed methods approach were employed. The data collection process involved self-administered questionnaires and interview schedules, with a total of 349 respondents participating in the study. Qualitative data were analyzed by grouping responses into emerging thematic aspects, while quantitative data was analyzed by computing mean and standard deviation as well as Spearman and ordinal logistic regression.

5.2 Summary of Findings of the Study

The overall response rate was 85.3%, with 289 out of 384 questionnaire respondents and 14 out of 16 interview respondents sampled. Following the indicated variables, the key findings were synthesized and presented thematically. First, a summary of the respondents' profiles is provided.

5.2.1 Background Information of Respondents

The findings on the background information of respondents indicated that module three TVET trainees were mainly male, 171 (59%), whereas female trainees were 118 (41%). The study further noted that 70 (24%) of the module three TVET trainees were below 20 years, 97 (34%) were between 20-29 years, and 35 (12%) were in age 30-39 years. This implied that module three trainees at TVET institutions was mainly under the age of 39, 202 (70%), which proved that they were young and in productive age and, hence, required to be equipped with skills needed in the labour market. The module trainees above 40 years were 87 (31%), indicating that TVET education attracted a significant number of older adults who needed to gain specific skills required in the market. The findings on the level of education of trainees noted that 136 (47%) of the respondents had attained secondary education, 113 (39%) had craft certificates, 23 (8%) had artisan certificates, and 17(6%) had diploma level of education. This implied that the trainees were informed, hence, provided helpful information for the study.

5.2.2 Physical Facilities and Trainees' Choice Decision for Public TVET Institutions

The study established that physical facilities in institutions enhanced the teaching and learning process, making the process meaningful and purposeful in informing students' choice decisions when selecting public TVET institutions. The students' respondents indicated that modern and adequate training facilities were necessary for effective learning and training delivery. However, the state of physical facilities in TVET institutions was wanting. This was because the available physical facilities in most TVET institutions were reported to be overstretched. Examples of overstretched physical facilities included classrooms, staff offices, workshops, furniture, a library, and computer laboratories. The

results show that the government funded the development of physical facilities in public TVET institutions. The study found a positive association between physical facilities and the trainees' choice decision for public TVET institutions in Nairobi County, r =.120, p= 0.042. The p-value was less than 0.05; therefore, the association between these two variables was statistically significant.

5.2.3 Staff adequacy and Trainees' Choice Decision for Public TVET Institutions

The study noted that most TVET teachers were diploma holders. Trainees described this as limiting and insufficient in imparting the employable skills required by labour markets. This scenario affected decisions made by some students regarding enrolling on some courses in public TVET institutions. The students and trainees respondents described the number of teachers in public TVET institutions as inadequate teachers. This was blamed for the compromised quality of teaching and training. The low qualification and incompetence of TVET trainers influenced students' decisions towards public TVET institutions. However, the information gathered from principals of TVET institutions indicated rigorous capacity building initiatives to ensure that trainers acquire the requisite training competencies. The Spearman correlation analysis showed a positive relationship between staff adequacy and the trainees' choice decision for public TVET institutions in Nairobi County, r =.117, p= 0.031. The relationship between the two variables was statistically significant because the p-value was less than 0.05.

5.2.4 Trainees' employability skills and Trainees' Choice Decision for Public TVET Institutions

The study's findings indicated that public TVET institutions offered various skills, including interpersonal, numeracy, literacy, communication, and time management skills. This provided evidence that public TVET institutions were making significant efforts to build capacity in students on employable skills. The most notable measure put in place to ensure the acquisition of employable skills was a dual training arrangement, where trainees go to the industry 50% during their training to acquire skills. TVET institutions were also encouraging trainees to have a positive attitude towards work. The overall results regarding this variable showed a positive association between trainees' employable skills and the trainees' choice decision for public TVET institutions in Nairobi County, $r = .175$, $p = 0.003$. The p-value was less than 0.05; therefore, the association between these two variables was statistically significant. Despite the efforts made by public TVET institutions in equipping trainees with employable skills, several setbacks were noted, including a skills gap between the training and industry requirement, lack of industry exposure, fewer opportunities for attachment and internship, and inadequate training facilities to cater for the increasing number of trainees.

To ensure that public TVET institutions produce employable graduates, respondents provided suggestions for industry-driven courses, maintenance of industry-set standards, keeping abreast with current industry requirements, educational field trips, the establishment of training-industry linkages and collaborations through attachments, internships, in-service training (for trainers); and engaging career and industrial liaisons

offices to guide trainees on matters related to industrial attachment, internships, career options and progression.

5.2.5 Courses offered and Trainees' Choice Decision for Public TVET Institutions

The study's findings indicated that public TVET institutions offered diverse courses to the liking of trainees, and as a result, there was a surge in most TVET institutions. The surge was also attributed to government reforms in secondary and post-secondary education. The trainees further confirmed that TVET trainers had been trained on CBET delivery pedagogy and training methods. The courses offered enabled the trainees to acquire employable skills, meet the market demands and acquire knowledge and a positive attitude. Thus, the courses offered influenced students' choice of public TVET institutions, as evidenced by a positive association between courses offered and the trainees' choice decision for public TVET institutions in Nairobi County, $r = .155$, $p = 0.008$. In this case, the p-value was less than 0.05, so the association between these two variables was statistically significant.

The findings further showed that TVET institutions determined the demand for courses offered by analyzing changes in legislation, policies, industry requirements and emerging trends. They had also instituted measures to ensure students were aware of the courses offered in public TVET institutions. This was through the use of print, electronic media and road shows. Social media platforms such as TikTok, Facebook and Twitter were also interactive platforms to reach potential trainees. Other specific methods of creating awareness included advertisements in local mass media, promotions, print and electronic banners, YouTube videos, booklets, brochures, career fairs, educational talks, referrals by alumni, and social media.

5.2.6 Government policy and Public TVET Institutions

The study further investigated the moderating role of government policy on the relationship between the discussed factors and students' choice decisions for public TVET institutions in Nairobi County. The results from the study noted that a relatively strong policy framework existed and was guiding the operationalization of TVET institutions in Kenya. It was also clear that the government had put down a measure that ensures a harmonized examination policy for all TVET institutions and a policy that guides TVET on courses offered. In addition, there was a government policy on placing students in TVET colleges which the KUCCPS executed. Other notable initiatives were the HELB loan policy for TVET trainees and the low fee policy to encourage more students to enrol in TVET institutions.

The study further noted that the government was responsible for developing modern physical facilities and employing adequate and competent staff in public TVET institutions. Furthermore, the government had established measures to ensure students acquire skills during their training through structured industrial attachment overseen by NITA. Besides, the government-initiated internship programs in most national county departments for TVET graduates. The courses offered in public TVET institutions were also reviewed and accredited by relevant government organs to ensure they meet the market requirements.

5.2.7 Trainees' Selection Decision of Public TVET Institutions

Trainees' Selection Decision of Public TVET Institutions was the dependent variable. The affirmative responses from the trainees on all the factors (physical facilities, staff adequacy,

trainees' employability skills, and courses offered), and the interplay of the awareness of government policy, indicated that they wedged weighty influence on students' choice decision for public TVET institutions in Nairobi county. Other influential related aspects were quality of training, conducive learning environment, reputation, location, courses offered, and student support services. The findings on determinants for students' selection decisions for public TVET institutions revealed critical aspects that should be considered by TVET institutes that endeavour to remain competitive. The results show that students' selection decision for a public TVET is crucial; hence, measures that underpin their efficacy are indispensable. The measures noted in this study were sensitization of stakeholders, institutional-based actions, policy framework, and demystification programs to improve the perceptions of TVET institutions in Kenya.

5.2.8 The study's overall goal

The major goal of this study was to investigate the factors that influence students' decisions while choosing public TVET institutions in Nairobi County, while also addressing the moderating influence of government policy on the link between these factors and students' decisions. The findings of the study demonstrated a positive and statistically significant link between all of the independent variables and the dependent variable. According to the findings of the multivariate ordinal logistic regression analysis, the combined variables had a strong and favorable impact on students' selection decisions for public TVET colleges in Nairobi County. This showed that the factors had a considerable impact on the students' decision to attend public TVET institutions in Nairobi County. Physical facilities and trainees' employability skills, on the other hand, were prominent factors influencing

students' choice judgments on public TVET institutions in Nairobi County in the combined model.

5.3 Conclusions

The interplay of independent variables (physical facilities, staff adequacy, employability skills and courses offered were empirically confirmed to have significant weight in informing the students' selection decision for public TVET institutions in Nairobi County. The manner in which factors mentioned above relate to the students' selection decision for public TVET institutions in Nairobi County was proven to be moderated by the government policy. The conclusion made in reference to each variable is provided below.

The study noted a significant influence of physical facilities on students' decisions in selecting public TVET institutions in Nairobi County. The physical facilities are crucial antecedents to practical training and learning. They also determine the efficacy of curriculum implementation and achievement of training outcomes. Their availability, adequacy, quality, and currency constitute essential aspects considered by prospective TVET students.

Although staff adequacy was reported to positively and substantially influence students' selection decisions for public TVET institutions in Nairobi County, it is a severe challenge across several TVET institutes. The main concern regarding trainers was narrowed down to adequacy, knowledge and competency. The study also noted that apart from curriculum delivery, TVET staff play a crucial role in imparting knowledge to learners and influencing their attitudes towards life and work. Despite the fact that the value contributed by trainers, challenges in compensation and retention of TVET trainers were noted.

The study established that trainees' employability skills were a crucial determinant in the choice decision made by students when selecting TVET institutions. Moreover, TVET trainees were gaining various employability skills, which were interpersonal skills, numeracy and literacy skills, communication skills and time management skills. However, attaining these skills in public TVET institutions experienced some setbacks but were tackled by providing industry-driven courses, maintaining industry-set standards and keeping abreast with current industry requirements.

A variety of courses were offered in public TVET institutions to the trainees' liking. The courses offered enabled the trainees to acquire employable skills and gain positive attitudes. Consequently, the courses provided significantly influenced students' selection decisions for public TVET institutions. Clearly, the courses offered at TVET institutions had a significant and positive influence on students' choice decisions for public TVET institutions in Nairobi County.

In the connection of moderating factors of government policy, the study concluded that government policy is a partial moderator on the relationship between the identified factors and students' selection decisions for public TVET institutions in Nairobi County. The impacts therefore indirectly inform the selection decision made by students when choosing a public TVET institution. Consequently, the government's policy was significant in revitalizing TVET education and training in Kenya.

5.4 Recommendations

Based on the findings, the study provides recommendations and discusses the implications of the results on theories, policies, and practices.

5.4.1 Recommendations based on the Findings of the Study

The recommendations arising from the study's findings were organized according to the variables of the study.

5.4.1.1 Recommendations on Physical Facilities

The importance of physical facilities in influencing students' selection decisions for public TVET institutions in Nairobi County cannot be emphasized. The study recommends the government avail funds to develop new and modern physical facilities, while TVET institute management should implement a maintenance plan for old facilities.

5.4.1.2 Recommendations on Staff Adequacy

The incompetence and inadequacy of staff in public TVET institutions in Nairobi County hindered their progress. Since their adequacy is central to the students' selection decision, the study recommends The Ministry of Education ensure all public TVETs have adequate and qualified staff. It should further institute capacity-building programs to equip existing and new trainers with the requisite skills for implementing CBET and assessments. The results pointed out the need to improve staff compensation and remunerations. Therefore, the Ministry of Education should review the scheme of service in public TVET institutions to attract and retain qualified and experienced teachers from the industry.

5.4.1.3 Recommendations on Trainees' Employability Skills

The trainees' employability skills were among the most significant factor in influencing the students' selection decision for a public TVET institute. The study recommends a concerted effort from TVETA, KICD and the Ministry of Education in revising the

curriculum review guidelines to accommodate new technological changes in a continuous manner. The TVETA should collaborate with public TVET management for effective enforcement and establishing follow-up mechanisms to ensure industry linkages during the training. The Ministry of Education should expand the mandate of NITA and decentralize its function to every sub-county. These measures are envisaged to improve industrial attachment experience and enhance the applicability of knowledge and skills acquired in college. The study further recommends TVET management institute tracer studies and disseminating the findings every year so that the information can aid prospective students when selecting public TVETs.

5.4.1.4 Recommendations on Courses Offered

The courses offered wield a powerful influence on the students' selection decision for public TVET institutions owing to the information-searching behaviour of youth nowadays. Given this vital role, the study recommends upgrading the advertisement methods and techniques used to promote courses offered at public TVET institutions. The TVET management should strengthen students' support systems that cover career counselling and mentorship programs. Furthermore, through the Ministry of Education, the government should endeavour to accredit the courses offered in public TVET institutions to ensure the skills obtained meet the market demands. This, in turn, encourages and attracts new trainees to enrol and produce competent and competitive graduates.

5.4.1.5 Recommendations on Government Policy

Government policies were noted to have a partial role in the interplay of factors that influence students' selection decisions for public TVET institutions. The study

recommends the Ministry of Education revise the TVET Act and other applicable legislations to accommodate new and emerging technology and labour market issues. The government should continue to establish and implement strategies to demystify TVET education and training with a view to changing public and industry perceptions of technical education and training.

5.4.1.6 Recommendation based on the overall purpose of the study

The study recommends that the government and TVET management institute measures to improve facilities, engage adequate and competent staff, offer market-driven courses, engage in co-curricular activities, and collaborate with industries to attract more students to public TVET institutions. In addition, the TVET management should strengthen the awareness of courses offered at TVET institutions. Moreover, the Ministry of Education should liaise with TVETA and secondary school management to establish detailed secondary school career guidance to sensitize parents and trainees on TVET education and disseminate information on courses available at public TVET institutions.

5.4.2 Implications of the Findings on Theories, Practices and Policies

The study concluded that the physical facilities, staff adequacy, trainees' employability skills, and courses offered positively and substantially influenced students' selection decisions for public TVET institutions in Nairobi County. These findings supported the argument drawn from Jackson's model that underpinned the end product of a decision which is expected to be attractive to the actors. Jackson's model categorizes the factors influencing the students' selection decisions into economic and sociological factors. The current study noted some factors that can be classified as institutional; for example,

physical facilities, staff adequacy and courses offered. It also sees the students' selection decision as a process with three phases: preference, exclusion and evaluation.

The interplay of physical facilities, staff adequacy, trainees' employability skills, courses offered, and government policies were central to this study. These factors are spread across the above-mentioned three phases of the decision-making process; hence, their influence on prospective students is very significant. For instance, the study noted that prospective students gather information for a public TVET about the availability and equipment of physical facilities, like laboratories, workshops, sports facilities and other infrastructure. They also inquire more about the adequacy of teaching and learning resources, such as modern and well-stocked libraries and other training resources. In addition, they gather information regarding the teaching staff's availability, adequacy and competencies. The information obtained may elicit interest in joining a particular public TVET institute. The model aids in giving a clear demonstration of the relationship existing between the dependent and the independent variables of the study. It further clarifies the moderating role of government policy. Therefore, the roles played by physical facilities, staff adequacy, trainees' employability skills, courses offered and government policies in influencing the selection decision are weighty and require serious consideration. The study, therefore, confirmed the theoretical argument propagated by Jackson's model. However, it suggests expanding the categorization of factors to include institutional-based elements.

These study findings have practical implications that cut across infrastructural development, teaching pedagogies, internal processes, managerial practices and industry linkages. For example, the modernization of public TVET institutions require funds to

refurbish old workshops, laboratories, library, tuition rooms, walkways, and parking areas and aid the construction of modern training facilities. This implies funding from the government, which is the main financier of public TVET institutions through the Ministry of Education. The government capitation for developing infrastructures, purchasing training equipment, employing staff, capacity building, and maintenance of facilities should be increased every year. The negative attitude towards TVET training and education has led to few students training as technical trainers. Addressing this challenge has implications for remuneration, career grading, and progression for staff working in TVET institutions in Kenya. This will make TVET attract and retain qualified TVET trainers. It will also enhance the rate at which trainees are attracted to TVET training and education.

The envisaged shift and changes have implications for policy on human resources at public TVET institutes. The human resources policy will enable TVETs to attract and retain a cadre of staff with the required knowledge, competencies, and experience to support effective curriculum delivery. Currently, most TVET institutes are attracting fresh graduates as trainers. This is unfortunate mainly because new graduates need more industry experience and exposure and may be limited in imparting the skills required by the labour market. Therefore, policy improvement in human resources is inevitable and will enable TVET institutions to fulfil their mandate and enhance the students' selection decisions.

The ageing and outdated facilities and tools in TVET laboratories and workshops feature prominently in this study. This implies a need to revise the funding policy for public TVET institutions in Kenya. Aspects of marketing and promotion also featured in the findings. Considering that the largest population of students in TVET institutions are youth, it

dictates the marketing techniques, platform and methodologies. TVET institutes management should devise outdoor advertisement and promotion strategies and policies to accommodate emerging technologies and changing information-seeking behaviour. Internally, the management of TVET institutes should revise policy to strengthen students' support systems, mentorship programs and career counselling. Externally, the TVET institutes management should revise the existing policy to enhance linkages with industries. The policy should also seek to strengthen collaborations with TVET institutes, other development partners and employers.

5.5 Recommendations for Further Studies

This thesis focused on a few factors (physical facilities, staff adequacy, trainees' employability skills, courses offered and government policies) influencing students' selection decisions for public TVET institutions. These factors account for a 33.5% variation in students' selection decisions for public TVET institutions; hence, there are other influencing factors which were not covered by the current study and, therefore, an opportunity for further research.

The units of analysis in this thesis were public TVET institutions. Therefore, a further study can be conducted in private TVET institutions to ascertain the practices and impact of the said factors, as mentioned earlier, to suggest best practices across the board. A comparative study can also provide helpful information to enhance the experience of TVET trainees and trainers.

It is one thing for a student to select a public TVET institution, but retaining and having them graduate on time is different. Further studies are recommended to establish the effect size of determinants for students' retention and graduation rates of TVET students. This will be critical in informing internal mechanisms and processes.

REFERENCES

Abdul-Aziz, S. N., Zulkifli, N., Nashir, I. M., & Karim, N. A. H. A. (2020). Pull and push factors of students' enrolment in the TVET programme at community colleges in Malaysia. *Journal of Technical Education and Training*, *12*(1), 68-75. https://www.academia.edu/download/86529425/322581570.pdf

Abdullahi, M., Othman, N., Abdullahi, M., & Othman, N. (2021). Influence of Different Learning Environments in the Implementation of Technical Vocational Education and Training policy in Nigeria Influence of Different Learning Environments in the Implementation of Technical Vocational Education and Training policy in. *Int. J. Acad. Res. Progress. Educ. Dev*, *1*(2), 687-702. http://eprints.utm.my/id/eprint/96856/1/NoorainiOthman2021_InfluenceofDifferentLearningEnvironmentsintheImplementation.pdf

Abutabenjeh, S., & Jaradat, R. (2018). Clarification of research design, research methods, and research methodology: A guide for public administration researchers and practitioners. *Teaching Public Administration*, *36*(3), 237-258. https://journals.sagepub.com/doi/abs/10.1177/0144739418775787?journalCode=tpaa

Acakpovi, A., & Nutassey, K. (2015). Adoption of competency-based education in TVET institutions in Ghana: a case study of Mechanical Engineering Department, Accra Polytechnic. *International Journal of Vocational and Technical Education*, *7*(7), 64-69. https://academicjournals.org/journal/IJVTE/article-full-text/A6917D654367

Acquah, P. C., Frimpong, E. B., and Borkloe, J. K. (2017). The competency-based training (CBT) concept of teaching and learning in the technical universities in Ghana: challenges and the way forward". *Asia pacific of advanced research (APIAR), 3(2),* 172-178. https://apiar.org.au/wp-content/uploads/2017/07/14_APJCECT_v3i2_Edu-172-182.pdf

Adeniyi, A. O. (2021). *Psychosocial determinants of entrepreneurial readiness: the role of TVET institutions in Nigeria* (Doctoral dissertation). https://ukzn-dspace.ukzn.ac.za/handle/10413/20102

Agabi, O. G. (2022). Planning the provision of facilities and instructors for effective implementation of school-based technical and vocational education in Delta State, Nigeria. http://www.ijilpm.com.ng/assets/vol.%2C-4(2)-agabi%2C-o.-g.pdf

Ahmed, A., Wadood, A., & Mohammad, N. (2020). Tracer study of socio-economic and demographic impacts of technical and vocational education and training (tvet) for women in Baluchistan. *DOI: https://doi. org/10.35484/pssr*, *58*. https://www.researchgate.net/profile/Aziz-Ahmed-6/publication/346579992_Tracer_Study_of_Socio-economic_and_demographic_Impacts_of_Technical_and_Vocational_Education_

and_Training_TVET_for_Women_in_Baluchistan_Corresponding_Author/links/5fc88ac345851568d13656c2/Tracer-Study-of-Socio-economic-and-demographic-Impacts-of-Technical-and-Vocational-Education-and-Training-TVET-for-Women-in-Baluchistan-Corresponding-Author.pdf

Alvi, M. (2016). *A manual for selecting sampling techniques in research*. https://mpra.ub.uni-muenchen.de/70218/

Amedorme, Sherry & Fiagbe, Yesuenyeagbe. (2013). Challenges facing technical and vocational education in Ghana. *International journal of scientific & technology research, 2(6)* https://www.ghanaskills.org/sites/default/files/2017-04/Challenges-Facing-Technical-And-Vocational-Education-In-Ghana.pdf

Ansah, Samuel & Kissi, Ernest. (2013). Technical and vocational education and training in Ghana: A tool for skill acquisition and industrial development. *Journal of Education and Practice, 4(1),* 172-180. https://www.researchgate.net/publication/305475999_Technical_and_Vocational_Education_and_Training_in_Ghana_A_Tool_for_Skill_Acquisition_and_Industrial_Development

Aryal, B. P. (2020). Financing of Technical and Vocational Education and Training in Nepal. *Journal of Education and Research*, *10*(1), 58-80. http://www.kusoed.edu.np/journal/index.php/je/article/view/448

Asian Development Bank (2015) Innovative strategies in technical and vocational education and training for accelerated human resource development in South Asia: Bangladesh. Mandaluyong City. https://www.adb.org/sites/default/files/publication/167320/tvet-hrd-south-asia-bangladesh.pdf. Accessed 29 Apr 2020

Audu, R., Umar, I. Y., Atsumbe, B. N., Maaji, S. A., & Adedokunn, D. (2020). Assessment of Workshop Facilities in Mechanical Engineering Trade Programmes in North Central States, Nigeria. *Journal of Information, Education, Science and Technology*, *6*(1), 34-40. http://repository.futminna.edu.ng:8080/xmlui/handle/123456789/4782

Audu, Rufai & Umar, Muhammad & Idris. (2013). Facilities provision and maintenance: necessity for effective teaching and learning in Technical Vocational Education. *Journal of Research Method in Education, 3(1),* 28-32. http://www.iosrjournals.org/iosr-jrme/papers/Vol-3%20Issue-1/E0312832.pdf

Ayub, H. (2017). Parental Influence and Attitude of Students towards Technical Education and Vocational Training. *International Journal of Information and Education Technology, 7*(7), 534–538. https://doi.org/ 0.18178/ijiet. 2017. 7.7.925

Azeem, N., & Omar, M. K. (2019). Students 'interests in technical and vocational Education and training (TVET) program: A systematic review. In *International conference on educational research and practice* (pp. 158-165).

https://www.researchgate.net/profile/Muhd-Omar/publication/336768182_Students'_Interests_in_Technical_and_Vocational_Education_and_Training_TVET_Program_A_Systematic_Review/links/5db9587aa6fdcc2128ebf86b/Students-Interests-in-Technical-and-Vocational-Education-and-Training-TVET-Program-A-Systematic-Review.pdf

Backes-Gellner U, Wolter SC (2010). The economics of vocational education and training policies. *Int J Manpow 31(1)*, 193-203. https://doi.org/10.1108/ijm.2010.01631eaa.001

Bano, N., Yang, S., & Alam, E. (2022). Emerging challenges in technical vocational education and training of Pakistan in the Context of CPEC. *Economies*, *10*(7), 153. https://www.mdpi.com/2227-7099/10/7/153

Bazezew Mengistu, A., & Darge Negasie, R. (2022). Evaluating the employability and entrepreneurial skills and the impact on employment of public TVET graduates. *Education Journal*, *11*(3), 85. https://doi.org/10.11648/j.edu.20221103.11

Becker, G. S. (2009). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago press. https://books.google.co.ke/books?hl=en&lr=&id=9t69iICmrZ0C&oi=fnd&pg=PR9&dq=Becker,+G.(1964).+Human+Capital.+A+Theoretical+and+Empirical+Analysis,+with+Special+Reference++to+education.+Chicago:+The+University+of+Chicago+Press.+&ots=WyCsiXQumU&sig=dWY4lwwSxIGzwN2-_nKFVuDCtFc&redir_esc=y#v=onepage&q&f=false

Beharry-Ramraj, A. (2016). *Challenges to management practices in public technical and vocational education and training colleges in the KwaZulu-Natal Province* [Doctoral dissertation, University of KwaZulu-Natal]. South Africa. https://ukzn-dspace.ukzn.ac.za/handle/10413/15814

Beharry-Ramraj, A., Amolo, J., & Mashau, P. (2020). Structural adjustment for South African technical and vocational education and training (TVET) college's capacitation. *Gender & Behaviour*, *18*(1). https://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=15969231&AN=144348050&h=Ld5VqgLHE4VVILn9oYf1tJdY7vQbQYO8G%2BU6RjTX6kjrbzSQLz9kARgRD3G2%2BaRXq6EU0N%2FJ9yBuKwGt8RzWVw%3D%3D&crl=cChinedu-Ali, N. P., Abang, F., Ameh, A. O., & Agwu, N. M. (2020). Perception of Vocational Education Stakeholders on Hindrances to Effective Implementation of TVET Policies in Nigeria. *Vocational and Technical Education Journal*, *2*(1). https://acjol.org/index.php/votej/article/view/382

Bong-Woo Woo, 윤동열, & Jeong-Jae Seo. (2015). A study on the relationships among TVET service, training satisfaction, and employability of unemployed vocational trainees. *Productivity Review*, *29*(1), 229–252.

https://doi.org/10.15843/kpapr.29.1.201503.229

Bryman, A., & Bell, E. (2011b). *Business research methods.* (3rd.ed.). Oxford University Press.

Carnevale, P.A., Gulish, A. & Strohl. J. (2018) .Educational Adequacy in the Twenty-First Century. https://tcf.org/content/report/educational-adequacy-twenty-fi rst-century/.

Carr, P. (2022). *An Investigation into the Barriers to Enrollment in New Hampshire Secondary Career and Technical Education* (Doctoral dissertation, Plymouth State University). https://search.proquest.com/openview/4382f97f649abd8ab40316dea724d8ce/1?pq-origsite=gscholar&cbl=18750&diss=y

Chakroun, B. (2019). National Qualifications Framework and TVET teacher competence frameworks: A neglected dimension of qualifications reforms? *European Journal of Education*, *54*(3), 370-388. https://onlinelibrary.wiley.com/doi/abs/10.1111/ejed.12359

Chinedu-Ali, N. P., Abang, F., Ameh, A. O., & Agwu, N. M. (2020). Perception of Vocational Education Stakeholders on Hindrances to Effective Implementation of TVET Policies in Nigeria. *Vocational and Technical Education Journal*, *2*(1). https://acjol.org/index.php/votej/article/view/382

Chitema, D. D. (2021). Technical and vocational Education and training (TVET) in Botswana: implications for graduate employability. *The Education Systems of Africa*, 371-389. https://link.springer.com/referenceworkentry/10.1007/978-3-030-44217-0_16

Clement, U. (2014). Improving the Image of Technical and Vocational Education and Training: A synthesis by Prof. Dr. Clement based on three substudies by Prof. Ute Clement, IPC Frankfurt, Ewald Gold, Prof. Dr. Klaus Rütters and Klaus Schneider. https://d-nb.info/109758691X/34

Creswell, J. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches.* Sage Publications.

Creswell, J. W. (2018). *Research design: Qualitative, quantitative and mixed methods approaches.* Sage Publications

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches.* Sage publications. https://www.amazon.com/Research-Design-Qualitative-Quantitative Appro aches / dp/1506386709

Creswell, J.W. (2009). *Research design: qualitative, quantitative, and mixed methods approaches*. Sage Publications Inc.

Dahalan, D., D'Silva, J. L., Ismail, I. A., & Mohamed, N. A. (2020). Entrepreneurship readiness among students of Technical and Vocational Education and Training (TVET) Institutions in Malaysia. *International Journal of Academic Research in Business and Social Sciences, 10*(15), 164-175. https://d1wqtxts1xzle7.cloudfront.net/81547074/entrepreneurship-readiness-among-students-of-technical-and-vocational-education-and-training-tvet-institutions-in-malaysia-libre.pdf?1646196030=&response-content-disposition=inline%3B+filename%3DEntrepreneurship_Readiness_among_Student.pdf&Expires=1674571996&Signature=EbtYlb0xY9R4uo8kV4tKja5YpMdBRJSvv5q5OO1q1vixL5oQqmaGDCL8YV66nxfYjczmWdVn-zPCUw6Khb6N1-XOWDv77Mc4X8mpA-XLMxc6yp7b~4sn-r94XLOGoBDE-fAsMpTkhkJgSo4sC82H1XYtaW89J0P0WzXceW54OFYhgUFfyXaFgqZJgFU-Yrt6foV9RbFlDuuVB3sb0hvuTQSQPIaTXCPX7OZpASxee0U~8Z9OryHJtku1fgwYM9KvYBcqQyQROZWMDkxH1OIyzSmIi8r0405-rtIMTW2omG1V3Hr8FzJpcMQyZf0b0p1QUjX2M4YZXFgllM8k~XSRvg__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA

Dougherty, S. M., & Harbaugh Macdonald, I. (2020). Can growth in the availability of STEM technical education improve equality in participation? Evidence from Massachusetts. *Journal of Vocational Education & Training*, *72*(1), 47-70. https://www.tandfonline.com/doi/abs/10.1080/13636820.2019.1578818

Edokpolor J. E., Owenvbiugie R. O. (2017). Technical and vocational education and training skills: An antidote for job creation and sustainable development of Nigerian economy. *Problems of Education in the 21st Century*, 75(6), 535–549. http://www.scientiasocialis.lt/pec/node/1092

Edwin Obwoge, M., & James Kibor, S. (2016). Factors Influencing Trainee Career Choice in TVET Institutions in North Rift Kenya. *IRA-International Journal of Management & Social Sciences*, *3*(3), 476-485, http://dx.doi.org/10.21013/jmss.v3.n3.p9

Erima, G. E. (2021). Placing greater emphasis on vocational education in Kenya. *Open Science Journal*, *6*(2). https://osjournal.org/ojs/index.php/OSJ/article/view/2080

Gadzekpo, A. A., Sapri, M., & Amos, D. (2022). The effect of facilities management services on the physical learning environment of technical universities in Ghana. *International Journal of Academic Research in Business and Social Sciences. 12(5)*, 1460 – 1481. https://hrmars.com/papers_submitted/13238/the-effect-of-facilities-management-services-on-the-physical-learning-environment-of-technical-universities-in-ghana.pdf

Gauthier, T. (2019). Factors influencing enrolment in community college career and technical degree programs. *Community College Journal of Research and Practice*, *43*(12), 934-937. https://www.tandfonline.com/doi/abs/10.1080/10668926.2018.1556135

Gichohi, P. M., Onyancha, O. B., & Dulle, F. W. (2018). A model for public Libraries' support in the development of small-scale business enterprises in Meru County,

Kenya. *Public Library Quarterly*, *37*(1), 81-102. https://www.tandfonline.com/doi/full/10.1080/01616846.2017.1391033

Gichuki, K., Mwaura, P., & Kiprop, S. (2019). The Influence of Competition on Market Performance Of Privately Owned TVET Colleges In Kenya. Proceedings of the Kabarak University International Conference on Business and Economics. 17th –

Gill, R. J. (2018). Building employability skills for higher education students: An Australian example. *Journal of Teaching and Learning for Graduate Employability*, *9*(1), 84. https://doi.org/10.21153/jtlge2018vol9no1art739

Government of Kenya (2012). *Sessional Paper No 14, Reforming Education and Training sectors in Kenya*. Government printers.

Graduate Employability: Perception of Graduate Students on Soft Skills towards Employability in Bangladesh. (2021). *Journal of International Business and Management*. https://doi.org/10.37227/jibm-2021-03-87/

Gravetter, F. J., Wallnau, L. B., Forzano, L. A. B., & Witnauer, J. E. (2020). *Essentials of statistics for the behavioral sciences*. Cengage Learning. https://books.google.co.ke/books?hl=en&lr=&id=aizldwaaqbaj&oi=fnd&pg=pp1&dq=essentials+of+statistics+for+the+behavioral+sciences&ots=ef-mmp0kmm&sig=eiwqovfrjemmvmdt2zlnfr63_em&redir_esc=y#v=onepage&q=essentials%20of%20statistics%20for%20the%20behavioral%20sciences&f=false

Gretch, A., & Camilleri, A. (2020). The digitization of TVET and skills systems. https://policycommons.net/artifacts/1427947/the-digitization-of-tvet-and-skills-systems/2042751/

Gyimah, Nathaniel. (2020). Assessment of Technical and Vocational Education and Training (TVET) on the development of the World's Economy: Perspective of Africa, Asia and Europe. *SSRN Electronic Journal, 10(1)* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3541072

Hagos, Atakilt & van Kemenade, Everard. (2013). Effectiveness of technical and vocational education and training. Insights from Ethiopia's reform. *TQM Journal*, *25(1*) 492-506. https://www.emerald.com/insight/content/doi/10.1108/TQM-11-2012-0099/full/html

Hanson, K. H., & Litten, L. H. (1982). Mapping the road to academe: A review of research on women, men, and the college selection process. *The undergraduate woman: Issues in educational equity*, 73-97. https://www.scirp.org/(S(351jmbntvnsjt1aadkposzje))/reference/ReferencesPapers.aspx?ReferenceID=1683751

Haolader FA, Foysol KM, Clement CK (2017) Technical and Vocational Education and Training (TVET) in Bangladesh – systems, curricula, and transition pathways *Springer International Publishing 24(1)* 201–227 https://www.academia.edu/39080737/Technical_and_Vocational_Education_and_Training_TVET_in_Bangladesh_Systems_Curricula_and_Transition_Pathways

Harmse, L. G. (2021). Exploring the underrepresentation of female students in engineering studies at a TVET college, https://uir.unisa.ac.za/handle/10500/27196

Hassan, R. H., & Awan, S. M. (2019). Identification of trainees enrollment behavior and course selection variables in technical and vocational education training (TVET) program using education data mining. *International Journal of Modern Education and Computer Science*, *11*(10), 14-24. https://j.mecs-press.net/ijmecs/ijmecs-v11-n10/IJMECS-V11-N10-2.pdf

Heyward, G. (2020). How States Can Better Prepare Students for Life after High School. *Center on Reinventing Public Education*. https://eric.ed.gov/?id=ED610040

Hong, C. M., Ch'ng, C. K., Roslan, N., & Raihana, T. (2023). Predicting Students' Inclination to TVET Enrolment Using Various Classifiers. *Pertanika Journal of Science & Technology*, *31*(1) 13-21. https://doi.org/10.4135/9781544304533

Houngue, P., Hountondji, M., & Dagba, T. (2022). An Effective Decision-Making Support for Student Academic Path Selection using Machine Learning. *International Journal of Advanced Computer Science and Applications*, *13*(11), 727-735. https://www.proquest.com/openview/dc5c0371c74dc042f2c3e07f3eb74a2e/1?pq-origsite=gscholar&cbl=5444811
https://doi.org/10.7176/jesd/10-5-02

Ibrahim, A., & Nashir, I. M. (2022). Demand-supply Mismatch in TVET Academic Programmes: What Is It and What Should It Be? *Journal of Technical Education and Training*, *14*(2), 177-189. https://publisher.uthm.edu.my/ojs/index.php/JTET/article/view/10870

Idris, A., & Mbudai, Y. (2017). Technical and vocational Education: Challenges towards youths empowerment in Kano state-Nigeria. *Journal of Technical Education and Training*, *9*(1), 1–12. https://penerbit.uthm.edu.my/ojs/index.php/JTET/article/download/1281/1109/5887

Ismail, A., Adnan, W. N., Masek, A., Hassan, R., Hashim, S., & Ismail, M. E. (2019). Effectiveness of entrepreneurship programmes in developing entrepreneurship skills towards quality TVET graduates. *Journal of Technical Education and Training*, *11*(1). http://penerbit.uthm.edu.my/ojs/index.php/JTET/article/view/3222

Ismail, S., & Mohammed, D. S. (2015). Employability skills in TVET curriculum in Nigeria federal universities of technology. *Procedia - Social and Behavioral Sciences*, *204*, 73–80. https://doi.org/10.1016/j.sbspro.2015.08.111

Jackson, G. A. (1982). Public efficiency and private choice in higher education. *Educational evaluation and policy analysis*, *4*(2), 237-247. https://journals.sagepub.com/doi/abs/10.3102/01623737004002237?journalCode=epaa

Jafar, D. S. A., Saud, M. S., Hamid, M. Z. A., Suhairom, N., Hisham, M. H. M., & Zaid, Y. H. (2020). TVET teacher professional competency framework in industry 4.0 era. *Universal Journal of Educational Research*, *8*(5), 1969-1979. https://www.academia.edu/download/64331546/UJER34-19515454.pdf

Jafar, D. S. A., Saud, M. S., Hamid, M. Z. A., Suhairom, N., Hisham, M. H. M., & Zaid, Y. H. (2020). TVET teacher professional competency framework in industry 4.0 era. *Universal Journal of Educational Research*, *8*(5), 1969-1979. https://www.academia.edu/download/64331546/UJER34-19515454.pdf

James Relly, S., Robson, J., Emms, K., Laczik, A., Randhawa, A., Aizawa, I., ... & Zlock, Z. (2021). Drivers of technical excellence in the skills economy. https://ora.ox.ac.uk/objects/uuid:9e4c4607-b5df-4d64-a7c5-3437eb17c49c

Kamble, P. (2021). Improving employability skills among engineering students. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3777059

Kamble, P. (2021). Improving employability skills among engineering students. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3777059

Kidane, A. G. (2022). A Bayesian Approach to Investigating Factors Influencing Polytechnic College Students' Academic Achievement. *Education Research International*, 1-10, https://doi.org/10.1155/2022/6181800

Kipngetich, K. W., Kapkiai, M., & Chumba, S. K. (2022). Effectiveness of Staff Capacity Building on Integration of CBET Approach in TVET Institutions in the North Rift Region, Kenya. *Africa Journal of Technical and Vocational Education and Training*, *7*(1), 29-42. http://afritvet.org/index.php/Afritvet/article/view/137

Kipngetich, K. W., Kapkiai, M., & Chumba, S. K. (2022). Effectiveness of Staff Capacity Building on Integration of CBET Approach in TVET Institutions in the North Rift Region, Kenya. *Africa Journal of Technical and Vocational Education and Training*, *7*(1), 29-42. http://afritvet.org/index.php/Afritvet/article/view/137

Kipngetich, K. W., Kapkiai, M., & Chumba, S. K. (2022). Effectiveness of Staff Capacity Building on Integration of CBET Approach in TVET Institutions in the North Rift Region, Kenya. *Africa Journal of Technical and Vocational Education and Training*, *7*(1), 29-42. http://afritvet.org/index.php/Afritvet/article/view/137

Kipngetich, K. W., Kapkiai, M., & Chumba, S. K. (2022). Effectiveness of Staff Capacity Building on Integration of CBET Approach in TVET Institutions in the North Rift Region, Kenya. *Africa Journal of Technical and Vocational Education and Training*, *7*(1), 29-42. http://afritvet.org/index.php/Afritvet/article/view/137

Kirior, H. (2017). Improving the TVET Curriculum as a Strategy for Better Performance. *Africa Journal of Technical & Vocational Education & Training*, *2*(1), 22-30.

https://d1wqtxts1xzle7.cloudfront.net/75844626/pdf-libre.pdf?1638858328=&response-content-disposition=inline%3B+filename%3DImproving_the_TVET_Curriculum_as_a_Strat.pdf&Expires=1674829142&Signature=ShODZaa-VVsY3pq-Es2~LFuLh1jXgGm5ZtFOSzfR8erFeIB8OxmVepZn5lf0r11bdaYcwJ1RYOtj6mfdsXBIlpfEWPYPMQq6CzykQA7~k7uqCaOdo3zpinGjtGtgKiO-8JRFADt6u1xWQjTEnkcumvr3eLvok9dUOIKRMvC-pLxarhGM2Klri7Z3umLkxVR7p~prTrsykVy8FXFx0iqZGNNVku0Ui~0SWIQ-CuWas9aHRYhCvuuf5LJdKPLdKzjSEoxHY2X5MPoxHJjky~NjwRl4UxwTVGI14K7TLZZyg9uUic5y0Fng4lq~OFBgDflHhgfT8LWRbp32fdwDPK1XeQ__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA

Kizza, J., Damba, A. & Kasule, W. (2019). The Perceptions of Secondary School Students towards Vocational Education: A Case Study of Kampala District. *International Journal of Research and Innovation in Social Science (IJRISS), 3*(6), 100-112, https://unik.ac.ug/wp-content/uploads/2020/10/The-Perceptions-of-Secondary-School-Students-by-Kiiza.pdf

Ko, Z. K. (2019). A study of factors influencing on choice of private higher education institutions in Yangon, https://files.eric.ed.gov/fulltext/EJ1293432.pdf

Kogo, W. K. (2022). *Assessment Of Integration Of Competency Based Education And Training Approach For Quality Education: A Case of Technical and Vocational Education and Training Institutions in North Rift Region, Kenya* [Doctoral dissertation, Kisii University). Kenya. http://library.kisiiuniversity.ac.ke:8080/xmlui/handle/123456789/1170

Koppinen, J. (2000). Big changes facing vets in Europe. *Australian Veterinary Journal, 78*(7), 441–441. https://doi.org/10.1111/j.1751-0813.2000.tb11847.x

Korir, C. B., & Muchimuti, E. (2022). Employee Communication and Curriculum Delivery in Technical Vocational Education and Training Institutions in North Rift Region, Kenya. *Journal of Advances in Education and Philosophy, 6*(3), 143-153. https://saudijournals.com/media/articles/JAEP_63_143-153c.pdf

Korir, C. B., Lelan, J. K., Kosgey, Z., & Wamutoro, M. (2020). Employee Communication and Curriculum Delivery in Technical Vocational Education and Training Institutions in North Rift Region, Kenya. *International Journal of Multidisciplinary and Current research, 6*(3), 143-153. http://ijmcr.com/wp-content/uploads/2020/11/Paper9739-746.pdf

Korir1, B., & Muchimuti, E. (2022). Critical success factors, institutional culture and curriculum delivery in public TVET institutions in North Rift Region, Kenya. https://saudijournals.com/media/articles/JAEP_63_143-153c.pdf

Kosge, J. C. (2015). *Factors influencing completion of infrastructure projects in public youth polytechnics in Bomet County, Kenya* [Doctoral dissertation, University of Nairobi]. Kenya. http://erepository.uonbi.ac.ke/handle/11295/90458

Kovacs, I. (2021). Digital marketing soft skills and university students' perceptions of employability. *GiLE Journal of Skills Development*, *1*(1), 25–36. https://doi.org/10.52398/gjsd.2021.v1.i1.pp25-36

Lame S. M., Yusoff W. F. (2013, December 5). The perception of students towards entrepreneurship courses: An empirical study of Nigerian polytechnics students [Conference session]. 2nd International Conference on Technology Management, Business and Entrepreneurship, Melaka, Malaysia. https://www.researchgate.net/publication/352374212_Perception_of_Students_on_Entrepreneurship_Education

Langat, K., Omboto, D. B., Ambuli, A. M., & Ngeno, J. K. (2021). The effect of trainer competencies on training effectiveness: a survey of public TVET institutions in Kenya. *The Kenya Journal of Technical and Vocational Education and Training*, *4*(2), 1-190. https://www.tveta.go.ke/wp-content/uploads/2022/07/KJ-of-TVET-Vol.-4.pdf#page=10

Lee, K. S., & Ogawa, K. (2016). Financing Technical and Vocational Education and Training in Sri Lanka. *ASR CHIANG MAI UNIVERSITY JOURNAL OF SOCIAL SCIENCES AND HUMANITIES*, *3*(1), 27-34. http://cmuj.cmu.ac.th/asr/full/132017061495532.pdf

Legusov, O., Raby, R. L., Mou, L., Gómez-Gajardo, F., & Zhou, Y. (2022). How community colleges and other TVET institutions contribute to the United Nations sustainable development goals. *Journal of Further and Higher Education*, *46*(1), 89-106. https://www.tandfonline.com/doi/full/10.1080/0309877X.2021.1887463

Lundry, J., Ramsey, J. W., Edwards, M. C. & Robinson, J. S. (2015). Benefits of career development events as perceived by school-based, agricultural education teachers. *Journal of Agricultural Education, 56*(1), 43-57 https://www.jae-online.org/attachments/article/1885/2014-0921-Lundry.pdf

Luongo, K. (2009). Carswell, Grace. – Cultivating success in Uganda. *Cahiers d'Études Africaines*, *49*(195), 847–849. https://doi.org/10.4000/etudesafricaines.14059

Lwal, N. M. (2019). *Technical vocational and education training and entrepreneurship development among graduates of Karen technical training institute for the deaf-Nairob* [Doctoral dissertation, University of Nairobi]. Kenya. http://erepository.uonbi.ac.ke/handle/11295/108773

Maclean, R., & Pavlova, M. (2011). Skills development for employability (TVET) in higher education: issues and challenges. *Journal of Asian Public Policy*, *4*(3), 321–330. https://doi.org/10.1080/17516234.2011.630226

Madani, R. A. (2019). Analysis of educational quality, a goal of education for all policy. *Higher Education Studies*, *9*(1), 100-109. https://eric.ed.gov/?id=EJ1203706

Magut, C. K., & Kihara, D. A. (2019). Influence of student retention strategies on

performance of TVETS in Nairobi County, Kenya. *Journal of Business and Strategic Management*, *4*(1), 1–24. https://doi.org/10.47941/jbsm.279

Maina, G. R. (2019). *Influence of Financing on Performance of Technical, Vocational Education, and Training Programs in Kenya: a Case of Nairobi County* [Doctoral dissertation, University of Nairobi]. Kenya. http://erepository.uonbi.ac.ke/handle/11295/108595

Maiyo, J. K., & Wasike, J. N. (2021). Utility of government initiatives in technical, vocational and training institutions on student enrolment in Bungoma County, Kenya. *European Journal of Education Studies, 7*(12), 771-782. http://41.89.175.45/handle/123456789/2539

Mango, K. (2015). Factors Influencing Access to Technical and Vocational Education and Training in Bungoma East Sub-County, Kenya. Nairobi: *University of Nairobi*. http://erepository.uonbi.ac.ke/handle/11295/90799

Mansour, B. and Dean, J. (2016) Employability skills as perceived by employers and university faculty in the fields of human resource development (HRD) for entry level graduate jobs. *Journal of Human Resource and Sustainability Studies*, **4**, 39-49. https://doi.org/10.4236/jhrss.2016.41005.

Mehrotra, S. (2021). India's National Skills Qualifications Framework and employment: The promise and the reality. In *India Higher Education Report 2020* (pp. 169-195). Routledge India. https://www.econstor.eu/handle/10419/242868

Mehrotra, S. K. (2020). *The national skills qualification framework in India: the promise and the reality* (No. 389). Working Paper. https://www.econstor.eu/handle/10419/242868

Merino, R., Valls, O. & Sánchez-Gelabert (2021). Comprehensive school and vocational training in Spain. A longitudinal approach from the transition from lower to upper secondary Education. *Educ. Sci.*, *11*(3), 101- 110. https://doi.org/10.3390/educsci11030101

Mesfin, & Ducalie, Demissie & Ducalie, Mesfin. (2019). Analysing the practice and challenges of technical, vocational, education and training colleges at SNNPRS, Ethiopia. https://www.researchgate.net/publication/353418223_

Miheso, E. I. (2020). Determinants of students' career choice in tertiary institutions in Kakamega county, Kenya: A case of the Sigalagala national polytechnic, http://erepository.uonbi.ac.ke/handle/11295/154572?show=full

Milne, A. J. M. (2019). Political obligation and the public interest. In *On Political Obligation* (pp. 1-25). Routledge. https://api.taylorfrancis.com/content/chapters/edit/download?identifierName=doi&identifierValue=10.4324/9780429273186-1&type=chapterpdf

Minghat, A. D., binti Mustakim, S. S., & Shahroni, N. (2022). Current issue in the Technical Vocational Education and Training (TVET) instructor. *ASEAN Journal of Science and Engineering Education*, *3*(2), 117-126. https://ejournal.upi.edu/index.php/AJSEE/article/view/48206

Mogendi, F. (2022). Five reasons why students opt to apply for KUCCPS Inter-University transfer. https://educationupdates.co.ke/five-reasons-why-students-opt-to-apply-for-kuccps-inter-university-transfer/

Mohammad Hussain, Mohd Azlan & Mohd Zulkifli, Rafeizah & Kamis, Arasinah & Threeton, Mark & Omar, Muhd. (2021). Industrial Engagement in the Technical and Vocational Training (TVET) System. *International Journal of Learning, Teaching and Educational Research. 20(12), 19-34.* https://ijlter.org/index.php/ijlter/article/view/4481

Mohammad, D. S., & Ismail, S. (2019). Comparative analysis between Nigeria and Malaysia education policies and employability skills in TVET curriculum. *Open Journal of Science and Technology*, *2*(2), 1–5. https://doi.org/10.31580/ojst.v2i2.912

Morgan, D. L. (2014). *Integrating Qualitative and Quantitative Methods: A Pragmatic Approach*. Thousand Oaks, CA: Sage Publications.

Mpanza, N. M. (2017). *Evaluation of quality administrative practices in three selected Technical and Vocational Education and Training colleges in KwaZulu-Natal* (Doctoral dissertation). https://openscholar.dut.ac.za/handle/10321/2934

Mugambi, M. M., Kyalo Makato, B., & M. Kalai, J. (2022). Socioeconomic determinants of trainees' enrolment and participation in public TVETS in Nakuru County, Kenya. *International Journal of Scientific Research and Management*, *10*(12), 2664–2680. https://doi.org/10.18535/ijsrm/v10i12.el04

Mugenda, O. & Mugenda, A. (2003). *Research methods: quantitative and qualitative approaches.* Act Press

Mugenda, O., & Mugenda, A. (2003). *Research Methods Quantitative and Qualitative Approaches.* Acts Press.

Mulenga, I. M., & Chileshe, E. K. (2020). Appropriateness and Adequacy of Teaching and Learning Resources and Students' Industrial Attachment in Public Colleges of Technical and Vocational Education in Zambia. *East African Journal of Education and Social Sciences (EAJESS), 1*(2), 30-42. http://dspace.unza.zm/handle/123456789/6567

Mulondanome, E. (2017). *Socio-economic Factors Influence on Students' access to Youth Polytechnics in Kakamega County, Kenya* [Doctoral dissertation, University of Nairobi]. Kenya. http://erepository.uonbi.ac.ke/handle/11295/101414

Mumbe, K. (2020). *Institutional factors and the acquisition of employable skills among students in technical, vocational education and training institutions in Kilifi County, Kenya* [Doctoral dissertation, University of Nairobi]. Kenya. http://erepository.uonbi.ac.ke/handle/11295/153714s

Munguti, S.M. (2016). Learning resources and students' academic performance in geography in Makueni county, Kenya. https://ir-library.ku.ac.ke/bitstream/handle/123456789/15318/Learning%20resources%20and%20students%E2%80%99%20academic.pdf?sequence=1&isAllowed=y

Munyite, E. M. (2018). *Factors influencing access rates to youth polytechnics, technical and vocational education and training in Teso north sub county, Busia County, Kenya* [Doctoral dissertation, University of Nairobi]. Kenya. http://erepository.uonbi.ac.ke/handle/11295/104111Doctoral dissertation, University of Nairobi]. Kenya.

Mutuku Ngulu, O., Riechi, D. A., & Obae, D. R. (2022). influence of training programmes on access to county vocational education and training institutions in Makueni County, Kenya. *International Journal of Scientific Research and Management*, ors*10*(12), 2622–2639. https://doi.org/10.18535/ijsrm/v10i12.el01

Mwagunga, M. P., Wanjala, K. B., & Kisilu, K. (2020). Trainees' perception on the CBET curriculum in Kenya: The case of TVET institutions in coast region. *African Journal of Education, Science and Technology, 6*(1), 49-61. 1http://erepository.uoeld.ac.ke/handle/123456789/1430

Mwagunga, M. P., Wanjala, K. B., & Kisilu, K. (2020). Trainees' perception on the CBET curriculum in Kenya: The case of TVET institutions in coast region. *African Journal of Education, Science and Technology, 6*(1), 49-61. http://erepository.uoeld.ac.ke/bitstream/handle/123456789/1430/Mwashighadi%20Mwagunga%20et%20al.pdf?sequence=1&isAllowed=y

Mwaura, A. N., Mugwe, M., Edabu, P., & Thinguri, R. (2022). Effectiveness of industrial attachment exposure in developing trainees' employability skills from TVET institutions in Nairobi County. *East African Journal of Education Studies, 5*(2), 275–285. https://doi.org/10.37284/eajes.5.2.771

Najoli, E. K. (2019). The effectiveness of wited programme on enrollment of women in technical and vocational education and training (TVET). *EURASIA Journal of Mathematics, Science and Technology Education, 15*(3), em1682. https://www.ejmste.com/article/the-effectiveness-of-wited-programme-on-enrollment-of-women-in-technical-and-vocational-education-7637

Nason, V. (2021). Changing Strategies in Student Recruitment among Selected TVE T Institutions in Machakos County, Kenya. *Africa Journal of Technical and Vocational Education and Training, 6*(1), 26-34. http://www.afritvet.org/index.php/Afritvet/article/view/120

Nawaji, M. S., Barasa, J., & Manasi, E. (2022). Analysis of Adequacy of Infrastructural Facilities and Access to Technical Vocational Education and Training in Trans Nzoia County, Kenya. *International Journal of Innovative Research and Development, 11*(3), 174-181. https://www.sfimarresearchreview.org/index.php/ijird_ojs/article/view/169301

Ndile, L. M. (2018). *The Influence of competency based technical training on youth employability: a study of technical training institutions in Nairobi County* [Doctoral dissertation, Strathmore University]. Kenya. https://su-plus.strathmore.edu/handle/11071/6069

Neususess, V. L. (2020). An investigation on the factors influencing UAE Nationals to undertake technical and vocational education. *Technium Social Sciences Journal, 9*, 95-113, https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/techssj9&section=10

Ngugi, M. & Muthima, P. (2017). Female Participation in Technical, Vocational Education and Training Institutions (TVET) Subsector: The Kenyan Experience. *Public Policy and Administration Research, 7*(4), 9 – 23. https://iiste.org/Journals/index.php/PPAR/article/view/36735

Ngugi, M., & Muthima, P. (2017). Female participation in technical, vocational education and training institutions (TVET) subsector. The Kenyan experience. *Public Policy and Administration Research*, *7*(4), 9-23. https://iiste.org/Journals/index.php/PPAR/article/view/36735

Ngumba J.K (2012). Factors influencing youth enrolment levels in public youth polytechnics in Mombasa County University of Nairobi, http://erepository.uonbi.ac.ke/handle/11295/7203

Ngure, S.W. (2013). Where to Vocational Education in Kenya? Is analysing training and development needs the answer to the challenges in this sector? *Journal of Education and Vocational Research, 4 (6),* 193-204. https://core.ac.uk/download/pdf/288023913.pdf

Ngware, M. W., Ochieng', V., Kiroro, F., Hungi, N., & Muchira, J. M. (2022). Assessing the acquisition of whole youth development skills among students in TVET institutions in Kenya. *Journal of Vocational Education & Training, 2*(3), 1-26. https://www.tandfonline.com/doi/full/10.1080/13636820.2022.2029544

Njenga, M. (2023). TVET teacher mentoring in Kenya: valued but poorly implemented. *International Journal of Mentoring and Coaching in Education*, (ahead-of-print). https://www.emerald.com/insight/content/doi/10.1108/IJMCE-04-2022-0028/full/html

Nooruddin, Shirin. (2017). Technical and vocational education and training for economic growth in Pakistan. *Journal of Education and Educational Development*, 4(1), 130. https://www.researchgate.net/publication/317564040_Technical_and_Vocational_Education_and_Training_for_Economic_Growth_in_Pakistan

Norain Jaafar, S., Zakaria, N., & Abd Rasheid, N. (2018). Career choice and employability skills for vocational college students. *Journal of Physics: Conference Series, 1049,* 012050. https://doi.org/10.1088/1742-6596/1049/1/012050

Nugraha, H. D., Kencanasari, R. A. V., Komari, R. N., & Kasda, K. (2020). Employability skills in technical vocational education and training (TVET). *Innovation of Vocational Technology Education, 16*(1), 1–10. https://doi.org/10.17509/invotec.v16i1.23509

Nwajiuba, C. A., Igwe, P. A., Akinsola-Obatolu, A. D., Ituma, A., & Binuomote, M. O. (2020). What can be done to improve higher education quality and graduate employability in Nigeria? A stakeholder approach. *Industry and Higher Education, 34*(5), 358-367. https://journals.sagepub.com/doi/pdf/10.1177/0950422219901102

Nyanjom, J. O. (2012). Determinants of students' enrollment for engineering coursesin Technical, Industrial, Vocational and Entrepreneurial Training Institutionsin Nyanza region-Kenya. (MA Project).*University of Nairobi. Kenya.* http://erepository.uonbi.ac.ke/handle/11295/6671

Obinnim, E. (2018). The impact of competency models on TVET instructors in apparel pattern making processes in Ghana: A qualitative study. *Researchers World, 9*(4), 122-136. https://www.researchgate.net/profile/Elizabeth-Obinnim/publication/329068907_The_Impact_of_Competency_Models_on_TVET_Instructors_in_Apparel_Pattern_Making_Processes_in_Ghana_A_Qualitative_Study/links/5cb0dc6c4585156cd7932c79/The-Impact-of-Competency-Models-on-TVET-Instructors-in-Apparel-Pattern-Making-Processes-in-Ghana-A-Qualitative-Study.pdf?_sg%5B0%5D=started_experiment_milestone&origin=journalDetail&_rtd=e30%3D

Obwatho, S. (2014). *Academic Research Writing: The Logical Sequence*. Starbright Services.

Obwoge, M. E. & Kibor, S. J. (2016). Factors influencing trainee career choice in tvet institutions in North Rift Kenya. *IRA-International Journal of Management & Social Sciences, 3*(3), 476 - 485. http://dx.doi.org/10.21013/jmss.v3.n3.p9

Okinyi, R. A., Nyerere, J. K. & Kariuki, S. I. (2021). Internal efficiency of public vocational training centres in Kenya. *African Educational Research Journal, 9*(2), 375-384, https://files.eric.ed.gov/fulltext/EJ1297097.pdf

Okinyi, R. A., Nyerere, J. K., & Kariuki, S. I. (2021). Internal Efficiency of Public Vocational Training Centres in Kenya. *African Educational Research Journal, 9*(2), 375-384. https://eric.ed.gov/?id=EJ1297097

Okolie, U. C., Nwajiuba, C. A., Binuomote, M. O., Osuji, C. U., Onajite, G. O. and Igwe, P. A. (2020). How careers advice and guidance can facilitate career development

in TVET graduates: The case in Nigeria. *Australian Journal of Career Development. 29*(2), 97-106. https://doi.org/10.1177/1038416220916814

Okoye, Kelechi & Okwelle, Paulinus & Dibua, Emmanuel. (2013). technical and vocational education and training (TVET) in Nigeria and energy development, marketing and national transformation. *Journal of education and practice, 4(1)* https://www.iiste.org/Journals/index.php/JEP/article/view/6808

Okumu, I. M., & Bbaale, E. (2019). Technical and vocational education and training in Uganda: A critical analysis. *Development Policy Review*, *37*(6), 735-749. https://onlinelibrary.wiley.com/doi/abs/10.1111/dpr.12407

Okwelle, L., Chijioke, C., & Agwi, V. (2018). Strategies For Improving Female Studentsâ€™ Enrolment in Technical and Vocational Education Programmes Through Public Relations Activities In Nigeria. *STRATEGIES*, *4*(1), 1-13. https://www.ijaar.org/articles/Volume4-Number1/Arts-Humanities-Education/ijaar-ahe-v4n1-jan18-p3.pdf

Olojuolawe, S. R., & Amin, F. N. B. (2019). Determination of employability skills required by electrical technology students in colleges of education in Nigeria. *International Journal of Engineering Education*, *1*(1), 57–66. https://doi.org/10.14710/ijee.1.1.57-66

Omar, M. K., Ismail, K., Abdullah, A., & How, S. P. (2021). The Development of Engineering TVET Instructor Standard Teaching Competency Framework for Vocational College. *Development*, *15*(10). https://ww.ijicc.net/images/Vol_15/Iss_10/151018_Omar_2021_E1_R.pdf

Omar, M. K., Rauf, M. A., Ismail, N., Rashid, A. M., Puad, H. M., & Zakaria, A. (2020). Factors on deciding tvet for first choice educational journey among pre-secondary school student. *European Journal of Molecular & Clinical Medicine*, *7*(3), 609-627. https://www.researchgate.net/profile/Muhd-Omar/publication/346199349_Factors_On_Deciding_TVET_For_First_Choice_Educational_Journey_Among_Pre-Secondary_School_Student/links/5fbcc76e458515b797645854/Factors-On-Deciding-TVET-For-First-Choice-Educational-Journey-Among-Pre-Secondary-School-Student.pdf

Omar, M. K., Zahar, F. N., & Rashid, A. M. (2020). Knowledge, skills, and attitudes as predictors in determining teachers' competency in Malaysian TVET institutions. *Universal Journal of Educational Research*, *8*(3), 95-104. https://www.researchgate.net/profile/Muhd-Omar/publication/340175226_Knowledge_Skills_and_Attitudes_as_Predictors_in_Determining_Teachers'_Competency_in_Malaysian_TVET_Institutions/links/5e7c7d4a458515efa0a91919/Knowledge-Skills-and-Attitudes-as-Predictors-in-Determining-Teachers-Competency-in-Malaysian-TVET-Institutions.pdf

Omwando, B. N., & Ken, I. B. (2014). Students' satisfaction with module II academic

programs offered by public universities in Mombasa: A comparative study. *IOSR Journal of Business and Management*, *16*(4), 91–108. https://doi.org/10.9790/487x-164291108

Ondieki, C. M., Kahihu, N. & Muthoni, S. (2019). Integration of soft skills into the TVET curriculum in Kenya. *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*, *6*(9), 10704-10715, http://www.jmest.org/wp-content/uploads/JMESTN42353117.pdf

Ongulu Meshack (2018). Factors influencing students' enrolment in Technical, Vocational Education and Training institutions in Butula sub-county, Busia county, *University of Nairobi Faculty of Education (FEd) [5903]*. http://hdl.handle.net/11295/104162

Ongulu, M. (2018). *Factors influencing students' enrolment in Technical, Vocational Education and Training institutions in Butula sub-county, Busia county* [Doctoral dissertation, University of Nairobi]. Kenya. https://irjp.org/index.php/IRJSEH/article/view/30

Ongulu, M., & Ibrahim, K. (2021). Influence of adequacy of teaching and learning resources on students 'enrolment in technical, vocational education and training institutions in Butula sub-county, Busia County. *International Research Journal of Social Sciences, Education and Humanities*, *2*(1), 1-14. https://irjp.org/index.php/IRJSEH/article/view/30

Onyango, N. O., Gogo, J. O. & Sika, J. O. (2022). Challenges in the supply of science and technology education training programs in the TVET institutions in Nyanza region, Kenya. *European Journal of Education Studies*, *9*(10), 196-214, https://oapub.org/edu/index.php/ejes/article/view/4517

Orodho, J. A. (2009). *Techniques of writing research proposals and reports in education and social sciences*. Kanezja publishers

Padi, A., Dzisi, P. S., & Eshun, P. J. F. (2022). Entrepreneurship education in TVET institutions and entrepreneurial intentions of female students in Ghana: the social support factor. *Cogent Business & Management*, *9*(1), 2137954. https://www.tandfonline.com/doi/abs/10.1080/23311975.2022.2137954

Paryono, V. (2017, September). The importance of TVET and its contribution to sustainable development. In *AIP Conference Proceedings* (Vol. 1887, No. 1, p. 020076). AIP Publishing LLC. https://aip.scitation.org/doi/abs/10.1063/1.5003559

Patrick, L..., Maureen, O.A., & Lucas, O.O. (2015). Enrolment trends in youth polytechnics in West Pokot County , Kenya. *Journal of Education and Practice, 6*, 110-117. https://files.eric.ed.gov/fulltext/EJ1081648.pdf

Payne, G., Cooper, B., Hu, X., Figueiredo, B., & Felix, G. (2018). A Flexible Professional Development Program for International Instructors and its Suitability for a Brazilian Context. *Electronic International Journal of Education, Arts, and Science (EIJEAS)*, *4*(9). http://eijeas.com/index.php/EIJEAS/article/view/134

Pierce, C. R. (2017). Mississippi choices and the influence of career and technical education, 1-24, https://core.ac.uk/download/pdf/301298528.pdf

Pilz, M., & Hao, T. (2021). Attractiveness of VET in China: a study on secondary vocational students and their parents. *Journal of Education and Work, 34*(4), 472-487. https://www.tandfonline.com/doi/full/10.1080/13639080.2021.1946492

Pirzada, Gouhar. (2020). Importance of 21 st century TVET skills for developing countries: a lesson from Europe. https://www.researchgate.net/publication/347935595_Importance_of_21_st_century_TVET_skills_for_developing_countries_a_lesson_from_Europe

Puyate, S. T. (2017). Strategies for Improving Female Students' Enrolment in Technical-Vocational Education and Training (TVET) Programmes in Rivers and Bayelsa States. *Journal of Education in Developing Areas, 25*(1), 65-74. https://www.researchgate.net/profile/St-Puyate/publication/323203249

Ramamuruthy, V., Alias, N., & DeWitt, D. (2021). The need for technical communication for 21st century learning in TVET institutions: Perceptions of industry experts. *Journal of Technical Education and Training, 13*(1), 148-158. https://publisher.uthm.edu.my/ojs/index.php/JTET/article/view/5963

Ranjit Kumar (2011). *Research Methodology, a Step-by-Step Guide for Beginners* (3rd ed.). Sage Publishers Ltd

Remenyi, N. P. (2015). Book review-'A dictionary of research concepts and issues' by Dan Remenyi. https://uobrep.openrepository.com/bitstream/handle/10547/346543/Book+Review+-+A+Dictionary+of+Research+Concepts+and+Issues.pdf?sequence=1

Riff, D., Lacy, S., & Fico, F. (2014). *Analyzing media messages: Using quantitative content analysis in research*. Routledge.

Rosen, R., Visher, M., & Beal, K. (2018). Career and Technical Education: Current Policy, Prominent Programs, and Evidence. *MDRC*. https://eric.ed.gov/?id=ED590008

Rotich, R., Wanyeki, P. & Dimo, H. (2020). Influence of occupational stereotyping on enrolment in technical courses: A case of female students in technical training institutions in North Rift Region, Kenya. *African Journal of Education, Science and Technology, 5*(4), 249-256, https://ajest.info/index.php/ajest/article/view/437

Sang, K.A., Muthaa, M.G. & Mbugua, K.Z. (2012). Challenges facing technical training in Kenya. *Scientific Research Creative Education., 3(1)* 109-113. Doi: 10.4236/ce.2012.31018.

Sankale, J., Sakwa, M. M., & Ndegwah, D. J. (2017). Technical and vocational skills competitiveness as a determinant of demand for technical and vocational training among the youth in Kajiado County, Kenya. *African Journal of Education and Practice, 2*(2), 17-34. https://www.iprjb.org/journals/index.php/AJEP/article/view/464

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*, (5th Ed.). Prentice Hall Financial Times. https://www.studocu.com

Selvam, S. (2017). *Empirical research: A study guide.* Paulines Publication Africa. https://www.sahayaselvam.org

Sern, L. C., Adamu, H. M., & Salleh, K. M. (2019). Development of competency framework for Nigerian TVET teachers in tertiary TVET institutions. *Journal of Technical Education and Training*, *11*(1), 11-18. https://publisher.uthm.edu.my/ojs/index.php/JTET/article/view/3250

Shibru, A., Osivu, M. & Aklilu, M. (2016). Higher agriculture education in Ethiopia: Current status and future prospects. *African Journal of Rural Development, 1(2*). https://10.22004/ag.econ.263565

Simiyu, J. W. (2009). Factors influencing the attractiveness of a technical and vocational education and training institution: A case study of a Technical Institute in Kenya. Level 3, 7(1) https://arrow.tudublin.ie/cgi/viewcontent.cgi?article=1053&context=level3

Simiyu, J. W. (2018). *Factors influencing the attractiveness of a Technical and Vocational Education and Training Institution: A case study of a Technical Institute in Kenya. MA Project). Moi University. Kenya*. ARROW Publishers. https://arrow.tudublin.ie/level3/vol7/iss1/5/

Singoei, J. (2021). *Career choice in information technology by students in technical vocational education and training (TVET) institutions in western Kenya* [Doctoral dissertation, University of Eldoret]. Kenya. http://erepository.uoeld.ac.ke/handle/123456789/1180 http://erepository.uonbi.ac.ke/handle/11295/104162

Sithole, M. D. (2019). *Enhancing management structure at the TVET colleges: a case study of uMgungundlovu TVET College* (Doctoral dissertation, University of Kwazulu Natal]. South Africa. https://ukzn-dspace.ukzn.ac.za/handle/10413/19054

Stedman, R. C., Connelly, N. A., Heberlein, T. A., Decker, D. J., & Allred, S. B. (2019). The end of the (research) world as we know it? Understanding and coping with declining response rates to mail surveys. *Society & Natural Resources*, *32*(10), 1139-1154. https://www.tandfonline.com/doi/full/10.1080/08941920.2019.1587127

Sulaiman, Norlisa & Mohd Salleh, Kahirol & Mohaffyza, Mimi & Lai, Chee sern. (2015). Technical and vocational education in Malaysia: policy, leadership, and professional growth on Malaysia women. *Asian Social Science, 11(24)* https://www.researchgate.net/publication/283040256_Technical_and_Vocational_Education_in_Malaysia_Policy_Leadership_and_Professional_Growth_on_Malaysia_Women

Suyanta, & Prianto, Eko & Ismara, I & Fitrihana, N & Syauqi, Khusni & Wardoyo, Siswo & Marwanti, & Darmono, & Siswantoyo, & Wijaya, A & Dwandaru, Wipsar. (2019). Facility standards of vocational schools: comparison of existing and modern facility designs. *Journal of Physics 1273(1)* https://www.researchgate.net/publication/337181096_Facility_standards_of_vocational_schools_comparison_of_existing_and_modern_facility_designs

Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education, 48*(1), 1273–1296. https://doi.org/10.1007/s11165-016-9602-2

Talley, A. D., Fain, A. C. & Head, C. (2017). Issues with career and technical education and diploma options in the united states: a deeper look into Georgia. *Research Highlights in Education and Science*, 7-19, https://www.isres.org/issues-with-career-and-technical-education-and-diploma-options-in-the-united-states-a-deeper-look-into-georgia-52-s.html

Tamang, J. (2022). Level of Determinants of TVET Career Choice and Relation to Locale: A Study on Diploma Level Engineering Students. *Journal of Education and Research*, *12*(2), 94-111. http://kusoed.edu.np/journal/index.php/je/article/view/627

Tariku Geremew Zeleke (2018). The social perception of technical and vocational education and training in Ethiopia, *International Journal of Research Publication, 3(1)* http://ijrp.org/paper_detail/83 https://100315201882

Teece, D. J. (2007). Explicating dynamic capabilities: the nature and micro foundations of (sustainable) enterprise performance. *Strategic management journal*, *28*(13), 1319-1350. https://onlinelibrary.wiley.com/doi/abs/10.1002/smj.640

Tognatta, Namrata. (2014). Technical and Vocational Education and Training in India - A Study of Choice and Returns. https://repository.upenn.edu/cgi/viewcontent.cgi?article=3284&context=edissertations

Tripney, J.S., Hombrados, J.G. (2013). Technical and vocational education and training (TVET) for young people in low- and middle-income countries: a systematic review and meta-analysis. *Empirical Res Voc Ed Train* **5**, 3. https://doi.org/10.1186/1877-6345-5-3

Tuan, N. M. (2011). Vietnamese students' employability skills. *International Education Studies*, *4*(4). https://doi.org/10.5539/ies.v4n4p175

UNESCO. (2016). TVET, higher education and innovations: Policy review Namibia. Paris: UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000245818

Waithima, A. K. (2020). *Inferential statistics and data analysis for decision making.* CLC Kenya Authors Collaboration.

Wanna, L. (2008). The current status of vocational/technical education in Ethiopia: Problems and prospects. Quality education in Ethiopia: Visions for the 21st century. in Amare et al (eds). Addis Ababa: AAU/IER https://www.researchgate.net/publication/228818974_Higher_Education_in_Ethiopia_the_Vision_and_Its_Challenges

Waruru, M. (2022). World Bank support sees enrolment soar at TVET institutions. https://www.universityworldnews.com/post.php?story=20220221183027711

Washington, H. (2012). Effective use of assistive technologies for inclusive education in developing countries: Issues and challenges from two case studies. *International Journal of Education and Development, 6(4)* 5-26. https://files.eric.ed.gov/fulltext/EJ1085011.pdf

Wasike, J. N. (2021). Courses offered in Technical Vocational Educational Training institutions: Implication on student enrolment in Bungoma county, Kenya. *East African Scholars Journal of Education, Humanities and Literature, 4*(1), 16-22, https://www.easpublisher.com/get-articles/1882

Wasike, J. N. (2021). Courses offered in Technical Vocational Educational Training institutions: Implication on student enrolment in Bungoma County, Kenya. *East African Scholars Journal of Education, Humanities and Literature, 4*(1), 16-22, https://www.easpublisher.com/get-articles/1882

Wei, F. J. & Jamil, H. (2019). TVET Educational Choice of Malaysian Polytechnic Students. *Jurnal Pendidikan Malaysia, 44*(1): 65-76, http://dx.doi.org/10.17576/JPEN-2019-44.01-08

Williams, J. (2018). Science self-efficacy in the primary classroom: Using mixed methods to investigate sources of self-efficacy. *Research in Science Education*, *48*(5), 939-961. https://link.springer.com/article/10.1007/s11165-016-9592-0

Willis, R. J., & Rosen, S. (1979). Education and self-selection. *Journal of political Economy*, *87*(5, Part 2), S7-S36. https://www.journals.uchicago.edu/doi/abs/10.1086/260821

Wilson, T. D. (2010). Fifty years of information behavior research. *Bulletin of the American Society for Information Science and Technology*, *36*(3), 27-34. https://www.researchgate.net/profile/Tom-Wilson-17/publication/227984743_Fifty_years_of_information_behavior_research/links/5c9654a745851506d72750ae/Fifty-years-of-information-behavior-research.pdf

Winch, C. (2013). The attractiveness of TVET. *Revisiting global trends in TVET: Reflections on theory and practice*, 86-122. https://unevoc.unesco.org/fileadmin/up/2013_epub_revisiting_global_trends_in_tvet_book.pdf#page=96

Wudneh, L., Seifu, A., & Dagnew, A. (2022). Practices of cooperative training in the Amhara regional state TVET colleges and companies, Ethiopia. *Cogent Education*, *9*(1). https://doi.org/10.1080/2331186x.2021.2020608

Yiga, S. (2022). Assessment methodologies and determinants of employability and skills level among Technical and Vocational Education Training (TVET) graduates in Central Uganda. *International Journal of Vocational and Technical Education*, *14*(2), 40-47. https://academicjournals.org/journal/IJVTE/article-full-text/5F148BD70050

Zaloom, C. (2019). *Indebted: How families make college work at any cost*. Princeton University Press. https://books.google.com/books?hl=en&lr=&id=98eXDwAAQBAJ&oi=fnd&pg=PP7&dq=Education+systems+in+modern+democratic+capitalism+must+balance+the+intrinsic+value+of+human+flourishing+and+the+external+economic+value+of+jobs+that+provide+access+to+vast+middle-class+earnings+&ots=VWf4ovTE4u&sig=BpFXtVasIp-y9QBcb85J1pzpltw

Zhongming, Z., Linong, L., Xiaona, Y., Wangqiang, Z., & Wei, L. (2021). *Technical and Vocational Education and Training in the Philippines in the Age of Industry 4.0.* http://resp.llas.ac.cn/C666/handle/2XK7JSWQ/321213

Zirkle, Chris & Martin, Lindsey. (2012). Challenges and opportunities for technical and vocational education and training (TVET) in the United States. https://www.researchgate.net/publication/285690455_Challenges_and_Opportunities_for_Technical_and_Vocational_Education_and_Training_TVET_in_the_United_States

Zulu, W. V. (2018). *Students' attrition in TVET colleges: a case study of Elangeni TVET College in South Africa* [Doctoral dissertation, University of Kwazulu Natal].South Africa. https://ukzn-dspace.ukzn.ac.za/handle/10413/17521

APPENDICES

Appendix I: Consent to Participate in the Study

Glory Kambanja Mutungi

Kenya Methodist University

P.O. Box 267 – 60200.

Dear respondent,

I am writing to request for consent to participate in my study which will help me to actualize my academic research that investigates on ***Analysis of Factors Influencing Students' Decisions in Selecting Public TVET Institutions in Nairobi County, Kenya.*** This research hope to improve the college selection experience by prospective students among TVET institutes in Nairobi.

Procedure to be followed

The specific questions in the questionnaire and interview is organized into sections ranging from section A to I. Section A covers the introduction part constituting the biographical information of the sampled respondents. Sections B, C, D and E, contain questions regarding the independent variables, while section F constitutes questions on the dependent variable. The last section, that is, G contains questions on moderating variables. Most questions in the questionnaire are closed-ended, and a few open-ended ones for each construct. All sentiments in the questionnaire are in 5 points Likert scale. In total. It takes approximately 10 to 15 minutes to complete the questionnaire and 30 minutes to respond to interview questions. The respondent is under no obligation to complete the questionnaire or to answer all questions presented or participate in the interview. If one comes across a question which one don't wish to answer, simply skip it.

I hope you will be willing to participate in this study in your capacity as one of key respondent identified for the study.

Discomforts and risks

In this study, there is no risks of participating in the research. The reputation of the participant will also not be injured. The respondent is welcome to discontinue participation in the study at any time, should one wish to do so due to discomfort.

Benefits

If you participate in this study you will help us to improve the competitiveness of TVETs in Nairobi County and beyond. Your input is therefore critical in generating new knowledge and will go a long way in students' selection decision for TVET institutes.

Rewards

There is no reward for anyone who chooses to participate in the study. The participation is entirely voluntary. Each participants is asked to avail information freely as part of contribution to community development.

Confidentiality

Your participation in this study will remain strictly confidential. No name will be recorded on the questionnaire or attached to any of the data you provide. The data collection will be kept in a confidential location after collection and in future and, moreover, will not have anything to identify you.

Contact Information

Should you have questions regarding your participation, please contact me on gkmutungi@gmail.com. You may also contact my research supervisor at kibaara.tarsilla@kemu.ac.ke

I am kindly asking you to sign the consent form (below) indicating agreement for you to participate in this study.

Participant's Statement

The above statement regarding my participation in the study is clear to me. I have been given a chance to ask questions and my questions have been answered to my satisfaction. My participation in this study is entirely voluntary. I understand that my records will be kept private and that I can leave the study at any time. I understand that I will not be victimized at my place of work whether I decide to leave the study or not and my decision will not affect the way I am treated at my work place.

Name of Participant…… Date……..

Signature…….

Investigator's Statement

I, the undersigned, have explained to the volunteer in a language s/he understands the procedures to be followed in the study and the risks and the benefits involved.

Name of interviewer……Date…….

Interviewer Signature……

Appendix II: Questionnaire for Module Three Trainees

Introduction

This questionnaire is designed for research purposes aimed at analyze factors influencing students' decision in selecting Public TVET institutions in Nairobi County, Kenya with a view to recommend best practices in college and course selection for post-secondary students. The information you will give in this questionnaire will be treated very confidentially and will be utilized for the purposes of research only.

Instructions

Please do not indicate your name anywhere on this questionnaire. Instead, you are requested to read the questions carefully and respond accordingly by either ticking (√) or filling in the blank spaces appropriately.

Section A: Bio-Data

1. Gender (Tick One)

Male ☐

Female ☐

2. Kindly give your age

Under 20 years ☐

20 - 29 ☐

30 - 39 ☐

40 - 49 ☐

50 - 59 ☐

Over 60 years ☐

4. Level of education (Tick one)

Secondary ☐

Diploma ☐

Degree ☐

Post graduate ☐

Section B: Physical Facilities

Respond by putting a tick (√) in the appropriate spaces below using the following scales:

5 Strongly Agree (SA)

4 Agree (A)

3 Neutral (N)

2 Disagree (D)

1 Strongly disagree (SD

	Scale	**SA**	**A**	**N**	**D**	**SD**
	Attributes	**5**	**4**	**3**	**2**	**1**
a)	Facilities in the school enhances teaching and learning thereby making the process meaningful and purposeful in students' decisions in selecting Public TVET institutions					
b)	Availability of adequate and modern training facilities influence students' decisions in selecting Public TVET institutions					
c)	Availability of physical facilities encourages meaningful learning and teaching					
d)	Availability of adequate school buildings, classrooms, chairs, desks and other facilities are necessary for the attainment of education objectives					
e)	Inadequacy of instructional materials and training facilities contributed to the in effectual impartation of skills among the students					
f)	Great controversy among TVET educators is the issue of the poor state of workshop tools and equipment in TVE institutions in Kenya.					
g)	The lack of training facilities compromises the relevance of taught skills to market skill needs in industries and business organizations					

Section C: Staff Adequacy

Respond by putting a tick (√) in the appropriate spaces below using the following scales:

5 Strongly Agree (SA)

4 Agree (A)

3 Neutral (N)

2 Disagree (D)

1 Strongly disagree (SD)

	Scale	**SA**	**A**	**N**	**D**	**SD**
	Attributes	**5**	**4**	**3**	**2**	**1**
a)	Some of TVET teachers are diploma holders which make them have limited knowledge on labour market's needs, hence, making it difficult for the teachers to transfer the employable skills					
b)	There is enough staff to train at out institution					
c)	Incompetence among graduates fundamentally emanates from poor training resulting from incompetent and unqualified trainers					
d)	Academic qualification of teachers expressively impacts the acquisition of employable skills by students					
e)	Most TVETs operate within inadequate teaching staff which compromises the quality of teaching and learning					

Section D: Employability

Respond by putting a tick (√) in the appropriate spaces below using the following scales:

5 Strongly Agree (SA)

4 Agree (A)

3 Neutral (N)

2 Disagree (D)

1 Strongly disagree (SD

	Scale	SA	A	N	D	SD
	Attributes	**5**	**4**	**3**	**2**	**1**
a)	Employable skills are continually developed through practical application in the everyday life					
b)	TVET institutions offer interpersonal skills which help students in the market space					
c)	TVET institutions offer numeracy and literacy skills which help students in the market space					
d)	TVET institutions offer critical thinking and problem-solving skills which help students in the market space					
e)	TVET institutions offer time management skills which help students in the market space					
f)	TVET institutions train students on communication skills which equip them with capabilities to communicate well					
g)	Trainees employable skills training program helps to promote the employability of our graduates					
h)	The employable skills training promote TVET- industry linkages					

Section E: Course Offered

Respond by putting a tick (√) in the appropriate spaces below using the following scales:

5 Strongly Agree (SA)

4 Agree (A)

3 Neutral (N)

2 Disagree (D)

1 Strongly disagree (SD)

	Scale	SA	A	N	D	SD
	Attributes	**5**	**4**	**3**	**2**	**1**
a)	Courses offered in TVET are very crucial in helping students to acquire employable skills.					
b)	There is wide diversity of the courses offered at this institution					
c)	Trainers employ effective teaching methods to teach / train the courses offered in our institution					
d)	Students like the course offered in our institution					

e)	Coursed offered meet the market demand					
f)	There has been students' surge in our institution occasioned by market demand of the course offered					
g)	Courses offered help students to acquire knowledge, and attitude					

Section F: Government Policy

Respond by putting a tick (√) in the appropriate spaces below using the following scales:

5 Strongly Agree (SA)

4 Agree (A)

3 Neutral (N)

2 Disagree (D)

1 Strongly disagree (SD)

	Scale	**SA**	**A**	**N**	**D**	**SD**
	Attribute	**5**	**4**	**3**	**2**	**1**
a)	Fee policy guidelines are consistent					
b)	The government has a harmonized examination policy for all TVET institutions					
c)	Government has a policy guiding TVET on courses in a TVET institute					
d)	Establishment and elevation of TVET institutions is guided by government					
e)	The government intends to make TVET the preferable and rewarding choice for Kenyans.					
f)	The Government policy is continuously changing the stigma and negative perception of careers in pursued in TVET institutions					
g)	The government has a low fee policy to encourage more students to enrol in TVET institutions					
h)	Our TVET sensitize students of government internship programs after they have graduated					
i)	The qualification framework and guidelines by government assist TVET graduates to secure employment					

j)	Government policy on HELB is working for me					
k)	Our TVET works with NITA in coordinating industrial attachment					
l)	The government policy of placing students to TVET colleges done by KUCCPS is good for students					

Section G: Students' selection decision for Public TVETs

Respond by putting a tick (√) in the appropriate spaces below using the following scales:

5 Strongly Agree (SA)

4 Agree (A)

3 Neutral (N)

2 Disagree (D)

1 Strongly disagree (SD)

	Scale	SA	A	N	D	SD
	Attribute	5	4	3	2	1
a)	Students consider reputation when selecting a public TVET institute					
b)	The employability skills of trainees determine the students' choice of a public TVET institution					
c)	The location of TVET institution determines the students' choice of a public TVET institution					
d)	Students consider conducive learning environment when selecting a public TVET institute					
e)	Courses offered determines the students' choice of a public TVET institution					
f)	Student support services determines the students' choice of a public TVET institution					
g)	TVET institution with good physical facilities are a great determiner in students' choice					
h)	Adequacy of trainers determines the students' choice of a public TVET institution					
i)	The quality of training determine the students' choice of a public TVET institution					

Appendix III: Interview Schedule for Principals and Officers in-charge of Admission

Section A: Background

1. Does your institution have adequate physical facilities?

   Yes **[ ]**

   No **[ ]**

2. Explain how the institution has improved on the physical facilities……...

3. How has physical facilities influenced trainees' choice of the Public TVET institutions in Kenya ……...…….....…. .....

4. Does the institution have adequate staffs?

   Yes **[ ]**

   No [**]**

5. Explain how staff adequacy Influence trainees' choice of the Public TVET institutions…….....…… ….....

6. What do you think should be done to ensure that TVET institutions in Kenya have adequate staffs…….....…….....…… .....

7. How can TVET institutions ensure that students who they produce are employable..... ……..

8. What are challenges facing employability of students from TVET institutions in Kenya…….....…….. .....

9. Do students enroll in the course they choose?

   Yes **[ ]**

   No [**]**

10. If no what are reasons for students for not enrolling in the course of their choice……
….....

11. Do government policies Influence trainees' choice of the Public TVET institutions?

    Yes **[ ]**

    No [**]**

12. How has government ensured that public TVET institutions are ensured that Public TVET institutions are functional and preferred by students…….....…….....
.....

13. Which government policies are contributing to trainees' choice of the Public TVET institutions…….....
.....

Section B: Physical facilities

14. What is your comments regarding the physical facilities at your institution
…….....…….....

15. Explain giving examples, how your institution has improved the physical facilities
…….....…….....

16. Explain how the physical facilities have contributed to trainees' choosing to join this institution ……....…….....….

Section C: Adequacy of staff

17. What is your comments regarding the adequacy of staff at your institution
.....

18. Explain how staff adequacy influence trainees' choosing to join this institution

……..……

19. What is your comments regarding the competency of teaching at your institution

……..……

20. What do you think should be done to ensure that TVET institutions in Kenya have adequate staffs

.....

Section D: Employable Skills of Trainees

21. Explain how TVET institutions can ensure that students who they produce are employable

……..……

22. Explain the specific measures undertaken by your institution to equip your students with employable skills

.....

23. What are challenges facing employability of students from TVET institutions in Kenya……...……..

24. Explain how employable skills of trainees influence students' selection decision for TVET institution

……..……

Section E: Courses offered

25. Explain how your institution determine the demand for the courses that it offer.

.....

26. Explain how courses offered influence students' selection decision to join your institution

……..…….....

27. Explain the measures put in place to ensure prospective students are aware of the courses offered at your institution.

……..…….....

Section E: Government policies

28. Which government policies are contributing to the nature of the selection decision made by trainees when choosing a TVET institute?

……..…….....

29. What is the government policy direction regarding each of the following:

a) Physical facilities……..

b) Adequacy of staff……..

c) Employable Skills of Trainees……

d) Courses offered……..

30. In what ways do government policies influence trainees' choice of Public TVET institutions?

……..…….....

Section F: Students' selection decision for TVET institution

31. Describe what you think students consider when selecting TVET institutions in Nairobi County

    .....

32. What is your comment regarding how students make the selection decision for a TVET institutions in Nairobi County

    .....

33. What do you think should be done to enhance students' selection decision efficacy for a TVET institute

    .....

Appendix IV: NACOSTI Research Permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **511685**

Date of Issue: **22/October/2022**

RESEARCH LICENSE

This is to Certify that Ms.. GLORY KAMBANJA MUTUNGI of Kenya Methodist University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: ANALYSIS OF FACTORS INFLUENCING STUDENTS' DECISIONS IN SELECTING PUBLIC TVET INSTITUTIONS IN KENYA , A CASE STUDY OF NAIROBI COUNTY for the period ending : 22/October/2023.

License No: **NACOSTI/P/22/21292**

511685

Applicant Identification Number

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