GENDER TRENDS AND FEMALE STUDENTS' ENROLMENT IN TECHNICAL AND VOCATIONAL EDUCATION TRAINING INSTITUTES IN JINJA DISTRICT, UGANDA SINCE 2018 –2023

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A DISSERTATION SUBMITTED TO THE DIRECTORATE OF RESEARCH AND GRADUATE TRAINING IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A DEGREE OF MASTERS OF EDUCATION IN EDUCATIONAL FOUNDATIONS OF KYAMBOGO UNIVERSITY

OCTOBER, 2025

DECLARATION

I, Bakaaki Robert, hereby declare that the content of this dissertation titled ***"Gender trends and Female students' enrollment in Technical and Vocational education Training Institutes in Jinja District, Uganda since 2018 – 2023"*** is entirely my original work and has never been submitted to any other university or higher institution of learning for an academic award.

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APPROVAL

This is to certify that this research report by Bakaaki Robert titled ***"Gender trends and Female students' enrollment in Technical and Vocational education Training Institutes in Jinja District, Uganda since 2018 – 2023"*** has been under our supervision and is ready for submission with our approval.

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MR. SSEMANDA ENOSI

Date: …….

DEDICATION

This Dissertation is dedicated to my Mum, Dad and Children for the love and sacrifice showed during my life and career. May the Almighty God reward them abundantly!

ACKNOWLEDGEMENT

First, I thank and give glory to the Almighty God, for His protection and providence in all the circumstances I encountered during my career and academic journey so far and for enabling me accomplish this course at Kyambogo University.

In a special way, I would like to appreciate my Supervisors, Dr. Okello Benson and Mr. Ssemanda Enosi for their professional guidance, mentorship and support they accorded me during the entire process of carrying out this study.

Furthermore, I acknowledge the contribution of the Kyambogo fraternity at the School of Education and the Directorate of Research and Graduate Training for their support and encouragement that enabled me to complete the course. I am indebted to the Head, Foundations and Educational Psychology Department, Dr. Disan Mugenyi Kuteesa, the Dean. School of Education, Professor George William Kasule for their leadership and technical support.

I recall with gratitude the encouragement and good will extended to me by the Principals and staff of the former Kaliro Primary Teachers' College and that of all my colleagues in the Masters of Education (Foundations) class at Kyambogo University.

In the same way, I would like to thank my family members for the financial, moral and emotional sacrifice exhibited while I was undertaking my studies. I would like to thank my Mother Mrs. Alitwala Jane Mivule and my Father Mr. Mulwanyi Mivule Samuel for the parental love and care.

Lastly appreciations go to the respondents for their time and willingness to participate and provide valuable information used in this study. May God the Almighty reward you abundantly!

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ABSTRACT

This study focused on gender trends and enrollment of female students in vocational education training institutes in Jinja District, Uganda. The study was guided by three research objectives. First, to establish community's perception towards female students' participation in TVET training in Jinja District; to explore the available facilities that enable female students' participation in TVET training and finally to find out stakeholders' perspectives towards increased female students' enrolment into TVET institutions in Jinja District. A cross-sectional design was employed with population of 100 participants while the sample size was 36 participants. Data was gathered using self-administered questionnaires and interview guides for respondents in focus group discussions. Results from the study showed that community's perception on female students' enrolment into TVET changed gradually from 2018 to 2023. Remarkable increase in female students' enrollment for TVET courses was registered where some female students enrolled for traditionally male related trade TVET courses. Secondly the results also indicated that institutes have some physical structures like hostel facilities, lavatories, bathrooms, classrooms and workshops. Results further indicated that the teaching staff in the TVET institutions as well as parents had a positive attitude towards enrolling female students into TVET courses. Among the key recommendations is that the MoES should organize regular public sensitization about equalization of opportunities for all students and increase funding to the TVET sub-sector. TVET institution administrators should liaise with MOES to provide continuous guidance and counselling to female students. Students should be encouraged by their administrators and instructors to seek guidance and support on issues of concern from responsible resource persons, including peers.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This study focused on gender trends and enrolment of female students in Technical Vocational Education Training (TVET) Institutes in Jinja District, Uganda since 2018-2023. In many countries, there is a mismatch in the enrollment of the female vis-à-vis that of the male students for TVET disciplines, which was a matter of concern in this study. In this chapter, the researcher presents the background to the study, statement of the problem, purpose, research objectives and questions, significance, scope of the study as well as the limitations and delimitations.

1.1 Background to the study

1.1.1 Historical perspective

Globally, concerns about the education of the girl child featured prominently in international fora as the world sought solutions to the challenges of inequality prevalent between the females and males as far as access, retention and attainment in formal education was concerned. Skill-based education, closely related to practical education, was part and parcel of the indigenous education package promoted by the traditional systems of education since time immemorial (Ssekamwa, 2020). It enabled the learner to acquire functional knowledge and skills for his/her own benefit and the survival of society. It was therefore education for all, regardless of gender or other differences. It was against that background that the current Technical Vocational Education and Training (TVET) was anchored in modern education systems.

One of the cardinal goals of TVET was to prepare the leaners to pursue occupations which had employment capabilities instead of enrolling for academic and theoretical education in colleges and other tertiary institutions of learning. It should be noted that the promotion of formal education based on gender parity inspired the global reforms enshrined in the Education for all (EFA) Goals in 2000. The Dakar Framework

for Action advocated for immediate improvement in education especially for vulnerable and disadvantaged groups, including girls (UNESCO, 2000). This was followed by the Millennium Development Goals (MDGs) up to 2015 and subsequently the current Sustainable Development Goals (SDGs) whose targets are still on-going until 2030 (World Bank, 2024).

In the United Kingdom (UK), 87% of the gender issues had been traditionally defined with women's role linked to the home as was assumed by most members in the different communities that women could only find happiness and fulfillment as mothers and wives (Stephanie and Smyth, 2015). In Italy, discussion about vocational education of women and girls began from the 19thcentury developing modestly alongside male dominated education (ACFODE, 2015).

TVET is a vital aspect of education on the African continent during and after the colonial times, According to Anthony (2021), imparting vocational skills into the youth was aimed to making them self-reliant and productive members within their communities in Ghana. Addressing gender disparities in TVET enrollment and completion in Tanzania, Cornel and Vincent (2019) pointed out that the British colonial Government in Tanganyika passed an apprenticeship training law during the 1940s, which was intended to close the skills gap as the nation lacked both an industrial network and skilled workers capable of providing on-the-job training. After the colonial period, Tanzanians were partly inspired by the Education Philosophy of President Julius Nyerere, a teacher by profession. The country gradually took on TVET as an idealistic analogy to for self-reliance as a system that is functional and productive. This required all TVET institutions to respond to the different needs of learners from different social, economic, academic backgrounds and have them prepared for gainful employment and sustainable livelihood through apprenticeships and industrial attachments. In Kenya, there are varying societal attitudes towards girls' participation in technical vocational education and not having the necessary empowerment. However, some scholars noted that African women have been and are still hardworking and inventive when they engage themselves in various types of income generating activities such as processing of palm-oil and garri, soap making, weaving, sewing and pottery including food crop production, (Osinachi, 2021).

Vocational education was practiced in Uganda long before the introduction of formal education by the Christian missionaries (Okello, 2011) as evident from the skills that communities employed to harness nature. Furthermore, as noted by Lugujjo and Manyindo (1996), the African traditional education system placed a strong emphasis on teaching skills to young children. Girls were taught handicrafts and other crafts by their mothers, while boys were taught skills to support the family, such as hunting, by their fathers. After regaining political independence from the British in 1962, Uganda made recurrent effort to cater for disadvantaged groups, including females. This was done through the implementation of Education Commission's recommendations and Policies that were introduced from time to time (Okello, 2011). The cases in point include the Castle Education Commission Report (1963), the Education Policy Review Commission Report (1989) which provided the framework for the White Paper on Education of 1992 (G.O.U, 1992). In the same way, the introduction of legislation and related policies was meant to facilitate the implementation of reforms aimed at enhancing the gender agenda in Uganda. It was against that background that the 1995 Constitution was introduced that recognizes equality of all human beings and prohibits discrimination. In 1997 the Uganda Government developed the Gender Policy which among other things provided a framework and strategies aimed at addressing gender issues in the country. The Policy was partly a response to the constitutional reforms embedded in the 1995 Constitution which emphasized gender equality. This in turn gave birth to the 2008 BTVET Act, the Disability Act (2008), Child Amendment Act (2015), among others.

The BTVET Act (2008) was a basis for the provision, promotion, developing, coordination and regulating the principles governing Business Technical Vocational Education and Training. The focus was on the establishment of the institutional framework and establishment of the Uganda Vocational Qualification and provide for the financing of BTVET. However, the current BTVET Policy (2019) was meant to address some of the gaps discernible in the previous policy of 2008, which did not adequately address the shortage of practical skills required in the economy for income generation as it emphasized acquisition of academic

certificates instead of emphasizing the acquisition of the requisite skills and competencies needed in the world of work.

Wandera (2016), noted that every society trains and empowers its young generation with knowledge and skills for future employment prospects. With job crisis in the labour market prevalent in many countries, technical and vocational education took center stage because they were considered to have potential not only to empower the trainees with functional knowledge and skill but also create jobs and employment opportunities as well as enhancing social and economic advancement, among other benefits (UNESCO, 2016).

In 2010, the Government of Uganda adopted Vision 2040 as a landmark to support socio-economic transformation through a series of National Development Plans (NDPs), policy reforms that emphasize increased competitiveness, elicit human capital development and creation of skilled manpower for national development (MoES, 2019). Government through this policy introduced a TVET system which holistically had to address Uganda's skilling challenges in order to achieve the desired national goals of increased productivity, labour market efficiency, and technological readiness. Similarly, gender issues in Uganda were influenced by other initiatives including the Gender in Education Policy (GEP 2017) and National Strategy for Girls' Education (NSGE 2015-2019).

In Jinja District which was the focus of this study, the Uganda Government established two TVET institutes namely Jinja Vocational Institute and Kakira Technical Institute. Besides these, other TVET institutes were opened in the area by the private education sector and have continued to attract both male and female trainees on various courses advocated by the Skilling Uganda Project, (MoES, 2020). Among those TVET institutions are Tubalera-Kauma Vocational Skills Training Centre, Kakira Community Polytechnic and Young Men Christian Association (Okello, 2011). Despite setting up these institutions, Uganda Bureau of Statistics (UBOS, 2015) highlighted gender gaps in the vocational education system. Accordingly, the

report noted that students admitted into BTVET were predominantly male students compared to the female students who were only 7% in 2014.

1.1.2 Theoretical Perspective

This study was guided by the Stereotype Threat Theory of Claude and Steele (2009).Stereotype is the pressure individuals feel when they are at risk of performing a given task especially one which is against their domain (Beasley and Fischer, 2012). It was postulated that due to gender stereotype, people may habour feelings of anxiety, uncertainty, and discomfort. This discomfort stems from the knowledge that one's behavior might confirm a negative self-relevant stereotype. Hence, a consequence of experiencing discomfort often results into impaired performance compared to those who perform under less threatening conditions (Brooke, Mark, Jim, Max, 2007). This Stereotype Threat Theory underscores its effects in society with potential influence a person's competence in practical skills, entrepreneurship, leadership, communication, competitiveness and achievement (Russell, 2016). It was also advanced that stereotype threat affects working memory, cognition, and mental processing (Adam and Alter et. al., 2010) where an individual worries that their actions might reinforce negative stereotypes about him/her. Anybody with negative stereotypes might lack intellectual capacity in a certain field and find it more difficult to perform intellectually well in an educational context.

The Stereotype Threat Theory underpinned this study because females are stereotyped by society to pursue particular vocational courses. The prevailing belief in society is that specific courses and subjects are only appropriate for males or females. Society believes that TVET courses like carpentry, building and concrete practice, painting, mechanics can be trained by males yet tailoring and home economics are suitable for females. This has a significant impact on the desired national goals (Vision 2040) of increased productivity, labour market efficiency, and technological readiness.

Relating this theory and the study about gender trends and enrolment of female students in TVET Institutes, the Stereotype Threat theory reduces domain identification, job engagement, career aspirations and

receptivity of feedback (Russell, 2016). The individual could lack a strong sense of attachment and passion for the job at hand, and may not have ambition for further training and career growth. One of the traditional stereotypes with regard to gender was that enrolling for building or electricity installation was a preserve for males rather than females. It was considered unwise for a female to opt for those courses that were for men because they involved climbing ladders when building or repairing electricity wire lines. As such, female engagement in some of TVET programmes remained low due to traditional and cultural biasness.

1.1.3 Conceptual Perspective

The World Health Organization (WHO, 2019) asserts that gender is socially constructed roles, behaviors, expressions and identities of females and males. WHO (2019) also affirms that gender refers to the socially and culturally constructed roles, responsibilities and behaviour that are believed to belong to men and women, boys and girls in a given society. It can also be defined as the economic, social and cultural attributes and opportunities associated with being male or female (Ssemanda, 2019). This influences how individuals are perceived, expected to behave, and interact within society (Kabeer, & Subrahmanian, 2021). Connell & Pearse (2019) affirm that it is a social construct dimension which changes across cultures and historical periods that is created and reinforced through institutions such as family, education, religion, and media (Gender identity and expression). Society has varying attitude towards a vacation and vocation one takes leading to employment.

Gender is not determined biologically as a result of sexual characteristics of either women or men but is constructed socially. Gender Trends, in the context of this study, refers to the patterns derived from the indicators of students' enrolment in TVET institutions on the basis of gender, with specific emphasis on the female.

Cultural stereotyping about female domestic roles and employment capabilities seem to channel females into non-engineering occupations. This seemed to be real in line with the enrolment

registered in TVET institutions, as noted by Uganda Bureau of Statistics (2016- 2017). In support of this, Rose (2012) noted that for America, TVET was perceived as of low status and dominated by low-income students. This was related to Nigeria where Kazeem, Leif, & Shannon (2015) indicated that poverty, cultural beliefs and parents' preference of males over females were some of the causes affecting females' enrollment for technical education. In addition, Omoruyi and Osunde (2014) noted there were very few girls who enrolled for vocational courses because of the challenges they faced at school such as being stereotyped and lack of female role models in institutions. On the other hand, the National Strategy for girls Education in Uganda (NSGE, 2015-2019) noted that girls' access to education was high at the level of entry to P.1 with a ratio of 54 girls to 46 boys; though the BTVET report (2017) agreed that gender disparities existed as reflected by low enrollment in BTVET institutions. It was observed that O'level students who enrolled into technical institutions (2015) totaled to 4,230 of whom 3,520 were males and 710 females; a 32% drop in female enrolment from the previous year 2014.

Technical, Vocational Education and Training (TVET) is an umbrella acronym that encompasses a number of programmes which revolve around the teaching and learning of practical and skills based courses in schools and institutions. Vocational education is the study of technologies and related sciences and the acquisition of skills and knowledge aimed at discovering and developing the individuals to become job creators in various sectors of economic and social life.

Enrolment as used in the study refers to the number of students admitted and registered for a particular TVET course of study. Compared to males, females seemed to face more barriers in the choice of technology and engineering courses. This prompted the researcher to carry out a study on gender trends and enrolment of female students in technical vocational education training institutions in Jinja District, Uganda.

1.1.4 Contextual perspective

Universal Primary Education (UPE) was introduced in Uganda in 1997. Ten years later in 2007 Universal Secondary Education (USE) was also started. These programmes were a major step towards the effort to increase access and equity in education. Many girls and adults females were able to take advantage and go to school (MoES, 2020). In 2010 the Government of the Republic of Uganda adopted Vision 2040 as a landmark to support socio-economic transformation (MoES, 2019) of which the second National Development Plan (NDPs) prioritizes human development and creation of skilled manpower for national development. Government through this policy introduced a TVET system expected to holistically address Uganda's skilling challenges in order to achieve the desired national goals of increased productivity, labour market efficiency, and technological readiness. This policy attracts all citizens regardless of gender.

Besides, the Ugandan government's decision to refocus the "Skilling Uganda" development strategy to emphasize Science, Technology, Engineering, and Mathematics (STEM, 2015) courses was undertaken to give raise to economic development of mostly the youths (Mbabali, 2018) though it now reflects a high percentage of the unemployed. Furthermore, governments have promoted vocational education as a means of fostering youth self-sufficiency and the idea of producing a generation of job producers rather than seekers. However, the Ministry of Education and Sports (MOES/UPPET and UPOLET National Headcount Report of June 2015), UBOS (2016- 2017) revealed that eligible students in UPOLET technical institutions totaled 4,230 of whom 3,520 were male and 710 females, a number far below that of male. The following year, 8042 students joined BTVET after P.7 and of these 6,300 students were males and 1,742 females (5%). In technical courses National certificates there were more boys- 11,737 (80%) compared to girls 2,893 (20%). Reporting on the status of Girls' Education in Uganda, Enabel (2024) noted Enrollment to BTVET by 2008 was 27% female and 73% male opposed to 35.5% and 64.5% respectively in 2017.

In Jinja District where this study was conducted, Nkoole (2020) noted that between 2012- 2016 there were 35,879 candidates who sat Uganda certificate of education and of these 4,741 students (13.2%) enrolled for vocational education courses. Enrollment samples showed that from 2015- 2016 academic year, building construction had 46 male students with 1 female, 87 male students and 39 females in plumbing, 33 female students with no male in tailoring, 1 male and no female student in woodwork. This reflects a low intake of female students in TVET courses. The causes to such a low students' intake in TVET institutes which might lead to loss of economic productivity, competitiveness and consequently the high levels of unemployment was a matter of serious concern and contention. Secondly, one still speculates if it's other challenges like poor geographical distribution and location of TVET institutions; a case in Jinja District where this study was conducted there are only two public TVET institutes which are widely scattered from other sub-counties or communities that would benefit from them by taking their children to acquire the skills.

The prevailing situation in Jinja where there was low female students' enrolments or no females students enrolled for some courses needed quick attention. In the absence of any serious remedy to the situation, some courses like carpentry and joinery, brick laying and concrete practice, electrical engineering would continue to attract and enroll very few female students in those trades, thus widening the gender gaps in the TVET areas of specialization. This not only affects the females but also their male counterparts, parents, communities, and the MoES, among other stakeholders. Jinja District and the country at large stands to lose once many females in society remained unskilled or wallowing in related social and economic hardships in the communities where they live. The Government could in the same way be affected because its effort to promote skilling Uganda for national development would be compromised. These and related issues of concern generated the need to launch an in-depth study to track the patterns and dynamics related to gender trends and female enrolment in TVET institutions in Jinja, from around 2018 to 2023 and also seek answers to the fundamental questions related to the study.

1.2 Statement of the problem

The Uganda Business, Technical and Vocational Education and Training (BTVET) Strategic Plan 2011 – 2020, in addition to the civil rights campaigners, the government of Uganda and other stake holders came up with initiatives to popularize vocational education and training through community sensitization and establishing public Vocational Education Training institution in every District for the youths, both male and female to enroll and acquire these vocational skills. In spite of that, it was observed that the students' enrolment in vocational education training institutions in Uganda varied as far as gender disaggregation among the youths, both male and female was concerned. Furthermore, James et al (2019) observed that the low enrolment of girls and females in vocational colleges was registered in woodwork and plumbing as opposed to tailoring and catering which are regarded as women pursued courses. In an earlier study, Nkoole (2020) observed that the number of males and female students who enrolled for vocational education courses for the years between 2012 and 2016 was varied on the basis of gender. He reported that the students enrolled in 2016-2017 for building and construction had 46 males against 1 female, 87 males against 39 females in plumbing, 33 females in tailoring with 00 male student and 01 male student in woodwork and no female. However, prior to the study, the actual trend or pattern indicating the number of females and males students enrolled for specific TVET courses in Jinja District was a mystery. The need to explore the nature of gender trends and female students' enrolment in selected vocational education training institutions in Jinja District, Uganda, was the knowledge gap that this study sought to address.

1.3 Purpose of the Study

The purpose of the study was to explore the gender trends and enrolment of female students in technical vocational education training institutes in Jinja District, Uganda since 2018-2023.

1.4 Objectives of the Study

The study was guided by the following research objectives:

i. To establish community's perception on female students' participation in TVET training in Jinja District, Uganda.
ii. To explore the available facilities that enable female students' participation in TVET training in Jinja District.
iii. To find out stake holders' perspectives towards increased female students' enrolment in TVET institutions in Jinja District.

1.5 Research questions

The study was guided by the following research questions:

i. What is the community perception on female students' participation in TVET training in Jinja District, Uganda?
ii. What facilities are available to enable female students' participation in TVET training in Jinja District?
iii. What are the stake holders' perspectives towards increased female students' enrolment in TVET institutions in Jinja District?

1.6 Significance of the Study

The study was meant to benefit a number of stakeholders in education and related sectors. The cases in point include the Ministry of Education and Sport, TVET institutions, their Managers and Instructors, Students especially the females, Local Governments, Parents and Communities, Non-Governmental Organizations, among others.

The Ministry of Education and Sports will be able to utilize the findings and hence have concrete evidence regarding the challenges faced by the TVET institutions, School administrators, Instructors, Parents and

female trainees by the negative effects of gender disparities in students' enrolment and related stereotype issues. This could influence intervention measures and strategies to mitigate the challenges.

Administrators and Instructors in TVET institutions will benefit from the findings of this study by gaining insights into the specific challenges faced by the female students and how they could be resolved with support from other stakeholders. The study will also empower the students to venture into those disciplines which hitherto regarded as a preserve for either males or females. This knowledge will inform the development of tailored interventions and support mechanisms to better address the needs of the students and improve overall strategy of increasing their enrolment in the TVET institutions.

Community will use the findings of this study to share information on the importance of various courses and careers by all trainees regardless of their gender or other differences. This will encourage their children especially the girls to enroll for any course where they have interest and competence including mechanical and electrical engineering, building, among others. Similar sensitization would benefit the male students from these skills taught in vocational colleges to help them earn a sustainable living.

For Researchers and other scholars, the study will add to the existing body of knowledge on gender trends and female students' enrollment in TVET institutes, particularly in Jinja District. Besides, the study will highlight other underlying educational issues and their implication on the female students' TVET training as well as their careers in Uganda and beyond.

1.7 Scope of the Study

The study scope was categorized as content, geographical and time scope.

1.7.1 Content Scope

The study examined the gender trends and enrolment of female students in technical vocational education training institutions in Jinja District: 2018-2023. Whereas in 2010, the Government of Uganda adopted Vision 2040 as a major landmark to enhance socio-economic transformation through increased human

capital development and creation of skilled manpower for national development, the admission of trainees onto VET programmes endeavors to promote universal access to skills acquisition and enhancement so as to equip all persons in Uganda (regardless of gender) with the Competences they require to engage in a wide range of activities aimed at sustaining their livelihoods and welfare.

1.7.2 Geographical Scope

The study was conducted in Jinja District, Eastern Uganda. Jinja is located on the mainland of Lake Victoria just where River Nile picks up its footsteps and at approximately 81 kilometers (50 miles) by road, east of Kampala, the capital and largest city of Uganda. Whereas the BTVET Act (2008, 2011-2020 and Skilling Uganda Project 2015) prescribe instituting a TVET centre in every sub-county in Uganda, Jinja District has only two TVET centres (Kakira Technical Institute and Jinja Vocational Training Institute) serving all the six sub-counties, three town-councils and two divisions of the District. These two TVET centres were all undertaken as study areas because they have differences in geographical location. One TVET centre (Kakira technical institute is found along the high way to Iganga and the second one is found in the heart of Jinja town where there is very high population and network of roads for accessibility of the natives.

1.7.3 Time Scope

The study on gender trends and enrollment of female students in technical vocational education training institutions in Jinja District, Uganda was conducted from July- September, 2022. The documents reviewed were majorly those for the years 2015 to 2025 because it is the time in which the implementation of the Business Technical Vocational Education Plan (2011-2020) was undertaken. Therefore, evaluation and follow up seem necessary concerning the gender trends and enrollment in vocational education training.

1.8 Limitations and delimitations

1.8.1 Limitations to the study

The study was limited to exploring gender influence on female students' enrollment in selected technical vocational education training institutions in Jinja District, Uganda. The study faced the following limitations:

Some of the respondents were out of their work places as they were invigilating UBTEB activities within the country. The researcher had to look up some instructors from the centres of UBTEB deployment in order to get the required information in time.

The researcher was given evening sessions for data collection from 4:00 p.m. for the programmed days. He therefore had to wait for long to get the required information from the students and instructors.

Some instructors did not return the questionnaires and preferred audio recordings; they postulated that it saves them time rather than writing. The researcher therefore had to go borrowing an audio recorder in order to collect the raw data.

1.8.2 Delimitations

The researcher accessed most participants during the study and got the required information regarding the study. The respondents and researcher's fluency in English language which was the major mode of communication enabled quick social interaction directly with participants. The researcher informed the participants about the issue of confidentiality and assured them that the study findings were only for educational research purposes and that the participant's identity was to remain disclosed. This gave them confidence to share the required information.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The focus of this study was to explore whether gender significantly influences female students' enrollment into selected vocational education training institutions in Jinja District, Uganda. This section has been presented under the following sub headings: Community's perception on female students' enrolment into selected TVET institutions in Jinja District, examining available facilities that support female students' participation in vocational education courses in TVET institutions in Jinja District and identifying stakeholders' perspectives to increase girls' enrolment into TVET institutions.

2.1 Community's perception on female students' participation in TVET training

Technical and Vocational Education and Training is guided by the need to promote the acquisition of applied, practical, creative and functional skills, as a foundation for societal growth. In the remote and recent past as well as the contemporary period, that education targeted and involved all learners regardless of gender or other differences. Since TVET does not enjoy widespread acceptance in society and a deeper comprehension of the social and environmental factors influencing its state, the development of public attitudes towards it is necessary. Consequently, the community perception on female students' access to TVET courses has remained a matter of controversy in many societies, for various reasons. Wangyogu (2017) made the observation that how boys and girls are socialized at home, the community, and school is influenced by the idealized roles and traits of women and girls. Girls and women are frequently explicitly protected and watched over because they are thought to be physically weaker and less capable than men. This includes threats to their bodily, sexual, mental and emotional safety.

Although the Uganda Government introduced various TVET programmes since 2000, many families are still interested in academic or literary rather than practical skills and vocational education among their children as observed from the Primary Leaving Examinations (PLE) and Uganda Certificate of Education

(UCE) among other higher levels. This was noted by a number of scholars and writers (Oketch, 2007; McGrath, 2012; McGrath, et. al., 2018). Thus, low intake into TVET courses in the country persisted over the years. A the same time, some courses like woodwork, block laying, metal fabrication and have continued to show apparent gender imbalance in students' enrolment (Nkoole, 2020). Statistics from the Ministry of Education and Sports (USE/UPPET and UPOLET National Headcount report, 2015), show less eligible female students enrolled for vocational technical education training. According to MOES records (Gender in Education Strategic Plan, 2015-2020), the number of boys who joined tertiary institutions in 2012 stood at 100,831 while girls were 78,738 indicating a gap of 22,093 in absolute numbers. This gender gap remains a big concern since the investments in tertiary education have greater returns and therefore matter the most.

A study conducted by UNESCO, revealed that Sub-Sahara Africa (SSA) accounts for 47% of the world out of school children and 54% of these groups are females (UNESCO, 2009). This is further confirmed by the 2012 global gender report, which rated SSA the least region in education gender parity (Hausmann, Tyson and Zahidi, 2012). Gloucestershire (2016) seems to accept the argument that in many parts of the world, enrolments of females in vocational education and training is low compared to the boys. If such a challenge continues to be harbored, less female student population shall be trained in TVET institutions.

Unfavorable group dynamics during team-based initiatives, according to a study by Uganda Women's Network (UWONET, 2015), may have reduced the industry's attraction and encouraged women to leave. This in turn makes women have a negative mindset towards vocational education training. In agreement with the views above, James et al. (2019), observe that the low enrollment of girls and women in vocational training colleges results from the low self-esteem towards woodwork and plumbing as opposed to either tailoring or catering which are widely regarded as women pursued courses. Although Foley (2018) does not refute the views above, he points out that inability to have self- confidence is another challenge in relation to the attainment of pupils' confidence in the realization of functional skills among learners.

TVET instructors as noted by Nkoole (2020), assert that few students actively choose to pursue it and many students do not appreciate or see the personal value of vocational education. Negative attitudes regarding vocational education are challenging to modify and might linger into adulthood, despite the fact that a growth mindset evolves throughout the school years once developed (Adams, 2021). This is witnessed from students who perform poorly in science subjects. James et al. (2019) attribute it to lack of female role models in schools and peer influence. These coincide with the views of Mwaa (2016) who affirms that factors to do with environment; personality and opportunity are seen to discourage female candidates from engaging in technical training courses. Nkoole (2020) agrees with Mwaa's views and he adds family background factors like career development, parents' socio-economic status (SES), their educational level and biogenetic factors such as physical size, gender, ability, and temperament also discourage female students' participation in TVET. Nakafeero (2024) postulates that Girls' education improves economic efficiency by removing barriers to girls' and women's development potential and levels the grounds for equal opportunities to shape development policies. However society seems to have few female role models. The EMIS (2017) shows female teachers in Primary (42.9%) in Secondary (24.6%), BTVET Instructors (29.6%).

According to Jatau and Davou (2000), Islam is typically linked to certain parents' ignorance of the sound teaching of Islamic Education in regards to female non-participation in formal education. Odoga (1995) asserts that some parents prefer enrolling their daughters in Qur'anic schools because they think that western education encourages attitudes and behavior that are odds with Islamic culture. Although affirmative action was introduced as a strategy to have increased enrollment of female students entering university and other tertiary institutions, for TVET institutions and in particular courses like woodwork, block laying and motor vehicle mechanics register less or no female students (UBTEB Enrollment Annual Statistical Report, 2020). This means much time is needed by government to assess the impact of Affirmative policy in TVET institutions.

Research by Holmes (2014), stressed that the major reason for gender disparity in technical colleges which results into few women applying for technical positions is laid towards the misconception that women are not strong enough to go about with technical subjects which require one to use plenty of energy. This makes girls feel less superior in attempting these subjects that would lead them into these vocational courses. In connection with the aforementioned, Ahmed Al-Sa'd (2007) reported that the Jordanian Ministry of Education introduced prevocational education courses for grades 1 through 10. The purpose of these courses is to raise awareness about vocational work among basic school students and to help them become productive, independent citizens by assisting them in discovering their interests and abilities at a young age. This encourages the development of favourable attitudes toward technical and vocational education. Similar to Uganda's academic programs are preferred by parents and students in Jordan over vocational ones because the former lead to a university education. The preference for academic education over vocational education has its historical roots in the socio-cultural development of our value system, which has elevated white collar professions like medicine, engineering, and law over blue collar jobs like mechanics, carpenters, bakers, and even farmers in terms of prestige and reputation. Our social relationships, traditions, and even marriages have been profoundly impacted by this harmful value system.

2.2 Facilities that enable female students' participation in TVET training

In pursuit of her dream towards promoting equity and access in education, the Uganda Government developed the Gender Policy (1990) which, among other things, provided a framework and strategies aimed at addressing gender issues in the country (GoU, 2017). As far as the facilities needed for TVET were concerned, variations existed among the institutions, depending on the courses offered, finance and other resources available as well as the requirements prescribed by the Ministry of Education and Sports and her agencies (MoES). Technical and Vocational equipment therefore, requires a wide range of tools and related resources. The cases in point include machinery, ICTs both in hardware and software form, electrical and electronic resources, among others (MoES, 2023). The Uganda Government introduced the skills development project in order to provide vocational training and education to disadvantaged groups,

including women. Consequently, effort was made to equip the TVET institutions with equipment in Agriculture, construction, hospitality, health care and ICT. However, the above venture was encumbered by inadequate funding, shortage of trained and competent instructors, among others (Ssemanda, 2022).

For Uganda to gain significant gains on enrolment at all levels and a positive legal and policy framework, elimination of the existing gender inequalities requires deliberate interventions with adequate resources allocated. Weak structures in TVET centres may attract low enrolments as cited by James et al. (2019) who observed that the low enrolment of girls and women in vocational training colleges results from low provision of some basic items for use during instruction and learning. The TVET curricula requires adequate provision of instructional and resources for hands on and minds on experiences. The cases in point include physical structures like hostel facilities, lavatories, bathrooms, classrooms and workshops which are so critical in the daily needs of the female trainee

The UNESCO report (2015) advocate for structural set-up for all BTVET centres to attract more students regardless of gender. This is important to allow students have room privacy. Weak structures in TVET centres may attract low enrolments as cited by James et al. (2019) who observe that the low enrolment of girls and women in vocational training colleges results from low provision of some basic items for use at institute. Addressing Gender differences in TVET Enrolment and completion in Tanzania, Cornel, and Vincent, (2019) noted that during and after the colonial period Tanganyika had not yet established an industrial network or a pool of trained instructors, capable of imparting knowledge to others on the job. Their country implemented an apprenticeship training law in an attempt to address the skills gap although there were few women at that time. However, this was encumbered by inadequate facilities and instructional materials and resources. Ssekamwa and Lugumba, 2018). According to Nyerere (2009), skills development encompasses a wide range of fundamental competences to prepare people for successful endeavors and job prospects and requires ready access to the requisite inputs in order to achieve its potential benefits among trainees. Females stand a big chance of being trained in such core skills because they are good at transfer of learning to those around them, including children and the youths. Thus, female students'

enrollment for TVET courses in all institutions can only realize their dreams and goals of overcoming the area boy syndrome by creating an enabling environment for them. This calls for the urgency to address the social and physical instructional challenges in the institutions and by so doing enhance their participation for effective skills development and learning as noted by Rendell et al., (2009).

The National Strategy for Girls Education in Uganda (NSGE, 2015-2019) noted an increase in the number of girls accessing education in the different post-Primary Education Training (UPPET), with females taking up 46% partly due to the Affirmative action policy that gave girls the advantage in 2015. Similarly, secondary school enrolment increased by 25 per cent from 814,087 in 2006 to 1,088,744 in 2008, with the girls constituting 46 per cent (NDP, 2010). Around 2015, the secondary school students who enrolled into TVET Institutions totaled to 4,230, majority being males (3,520) compared to 710 females (UBOS, 2019). Nevertheless, TVET courses gradually gained more ground in Uganda since that time and became popular and competitive with the traditional academic pathways, for both females and males. Consequently, many females joined TVET for skills acquisition to improve their livelihood in line with the national strategic plan (BTVET Strategic Plan, 2011/2022). However, increase in female enrolment in TVET institutions also posed more challenges as far as the provision of relevant materials and resources was concerned.

2.3 Stakeholders' perspectives towards increased female students' enrolment in TVET institutions

As noted by Nakafeero (2024), the Education Act defines the roles and responsibilities of families (parents) and communities, including creating awareness on the importance of Girl Child Education through community mobilization and mindset change and prevalence of negative norms and practices to girls like child marriages, FGM, teenage pregnancies. These practices account for 21% of girls dropping out of school (MoES, 2017).

The Ugandan government has demonstrated its commitment to gender equality and equity in vocational education by implementing several initiatives aimed at encouraging a higher percentage of female

enrollments. In order to encourage females to apply to TVET institutions, some examples include tuition bursaries for girls in TVET, preferential access to instructors' training for female graduates, and school tours that introduce females to the institutions (Mbabali, 2018).

Nguyen (2000) is in total support of the above and he suggests that the curriculum that favours female's students to join TVET courses boosts enrolment of females. Additionally, UNESCO (2015), advocated for the establishment of gender focal points, non-discrimination policies, institutional strengthening and training in science and gender development in TVET institutions.

UNESCO-UNEVOC (2010) support equitable opportunity by providing institutional support for gender mainstreaming into TVET institutions. Additionally, gender mainstreaming across all initiatives with the goal of ensuring women's equal participation, will enhance their competence, experiences and potentials in TVET programmes where men are predominantly represented by using particular courses of action (UNESCO, 2015).

Another study conducted by Uganda women's network (UWONET, 2015) stated that unfavorable team dynamics during projects had reduced the industry's attraction, causing women to depart. This in turn has made women to have a low growth mindset towards vocational education and training. In agreement with the views above, James et al. (2019), observes that the low enrollment of girls and women in vocational training colleges results from lacking career guidance while at school. He proposes for the recruitment of career master in schools so as to help students regardless of gender to develop positive opinions when making career choices and identifying any barriers that may hinder a student from progressing. Government should be committed to specific policy initiatives, have female role models in training/ teaching and administrative positions to enhance female participation in TVET institutions.

The UNESCO report (2015) asserts the need to campaign for lobbying and awareness raising as well as implementing legislation relating to gender. These are necessary to encourage more girls to enroll in TVET related courses. Women will work in TVET institutions if there are more female professors and teachers in

higher education. The way children are supposed to act, the kind of labour they undertake and even how they play are all influenced by the assumed gender roles and characteristics. For instance, girls aren't typically the ones taking family shopping, nor are they let to play outside the house for extended periods of time like boys (Khan, 2014). This prevents females from having the chance to explore and try out other circumstances and activities outside the house that can be valuable to them in technical curriculum. Being outside the home also enables one to improve social skills, gain more confidence, and have an edge when using the exploratory and participative approaches recommended for education (Replogle 2011).

Hausmann, et al., (2012), Ojo (2002) are in agreement with the views mentioned by the authors above and declare that the interest of women can be aroused through incentives to participate in TVET by giving them scholarship to girls who enroll in those TVET courses where there are very few females. This attracts more girls into such courses through sponsorship to enable them pursue careers in all VET courses. Into the bargain, Hausmann, et al., (2012) noted that if Africa must escape poverty and achieve sustainable development, then gender equality especially in TVET, every effort should be made to correct the gender imbalance in girls' enrollment in TVET institutions

Although there has been progress in the last ten years in improving access, equity, retention, quality, completion rates, and gender parity in Kenyan education and training, the Technical, Vocational, and Education Training (TVET) subsector still has low female enrollment in STEM-based courses (science, technology, engineering, and mathematics). This is according to Margaret and Purity (2017). Similar to this, Claire (2022) observed that the gender parity index (GPI) for pre-primary and primary education showed a balanced ratio of 50:50 between males and girls for net enrolment levels. But when the rate of enrollment at the lower levels rises, the enrollment ratios for young women change throughout secondary and higher education. The Gender Parity Index (GPI) for Business, Technical, and Vocational Education and Training (BTVET) is 0.25, according to the Uganda Bureau of Statistics (UBOS, 2012). This means that the ratio of male to female enrolment in BTVET is 100 to 25. This demonstrates the differential enrollment of young women in skill-oriented institutions.

2.4 Summary

Communities have varying perceptions on female students' enrolment in TVET courses. This is evidenced by low intake into VET institutions where some courses like woodwork, block laying, metal fabrication and cosmetology have less or no students of a particular gender (Nkoole, 2020). Gender differences in TVET Enrolment (Cornel, and Vincent, 2019) and analysing cultural values regarding economic developments need to be broken by empowering all categories of people in TVET skills (Nakafeero, 2024). The Ugandan government has demonstrated its commitment to gender equality and equity in vocational education by implementing several initiatives aimed at encouraging a higher percentage of female enrollments, the STEM program needs to accommodate all interested students more so the females. On the other hand, apprenticeship programmes for children with Special Educational Needs can be included in the Skilling Project in order to attract more skill trainees regardless of their academic performance.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter details the methodology employed to execute the study problem and explores the research design, area of study, study population, sample and sampling strategies, instruments of data collection and procedure, validity and reliability, data analysis techniques and ethical considerations.

3.1 Research design

The researcher used a qualitative research design due to the historical nature of the study which called for putting emphasis on words than on statistics in the data gathering and analysis to acquire the information for the study (Bryman, 2008). The researcher also employed a phenomenological approach to assess the lived experiences of the respondents in relation to the study and presented the results using a descriptive approach as presented in chapter four.

3.2 Area of study

This study focused on gender trends and enrolment of female students in Technical Vocational Education Training (TVET) Institutes in Jinja District, Uganda: 2018-2023. That was the area where the problem was detected. The study explored gender trends by analysis the female students' enrollment on TVET courses where gender roles and employment capabilities seem to channel females into non-engineering occupations (MoES, 2019). Rose (2012); Kazeem, Leif, & Shannon (2015) indicated that poverty, cultural beliefs and parents' preference of males over females were some of the causes affecting females' enrollment for technical education.

3.3 Study Population

A study population is a collection of people chosen using inclusion and exclusion criteria related to the variables being examined (Struthers, Strachan & Karen, 2019). The study population included college

Principals, Deputies Principals, Registrars, Instructors and Students from selected institutes. They were selected because of their direct relevancy to understanding the dynamics between gender trends and female students' enrolment in TVET institutes in the selected area and were therefore important sources of key responses.

3.4 Sample and Sampling techniques

According to Bryman (2016), a sample is a sub-set of the population that is actually studied. In this study, the researcher adopted purposive and simple random sampling techniques due to the numbers and specific roles of the respondents.

3.4.1 Purposive sampling

Purposive sampling is an important criterion for judging the merits of the study as it provides high texture information (Creswell, 2013). The researcher employed this technique to select Principals, Deputy Principals and Registrars as they had a direct hand in the selection and registration of the students into TVET institutions. The instructors were chosen for reasons that they are the actual implementers of the TVET curriculum and they also had wide knowledge and experiences in relation to the study.

3.4.2 Simple Random Sampling

Simple random sampling was used because it could enable the sample selection by giving any of the respondents in a category the same chance of being chosen to represent the full population as the other samples do (West, 2016). The researcher adopted simple random sampling to select students for the study because they were at the center of the study.

3.4.3 Sample size

The study was largely qualitative in nature and a small number was picked to represent a larger sample size. For the purpose of this research, the study was conducted in five (5) departments of two selected TVET institutions. The departments included; carpentry and joinery/woodwork (CJ), automotive mechanics,

block-laying, garment cutting, electric installation. The target population was 36 participants selected from two public TVET institutes where each involved 18 members as illustrated in Table 3.1 below:

Table 3. 1: Categories of population

Category	Sample size	Target population	Sampling technique
Principal	02	02	Purposive sampling
Deputy Principal	02	02	Purposive sampling
Registrars	02	02	Purposive sampling
Male instructors	10	03	Random sampling
Female instructors	10	03	Random sampling
Male students	38	12	Random sampling
Female students	38	12	Random sampling
Totals	100	36	

Source: Primary Data (2024)

3.5 Instruments of data collection

Data collection according to Quan-Hoang (2018) is the procedure of obtaining and measuring data on target variables in order to respond to pertinent research questions and assess results. Data was gathered using semi-structured questionnaires and interviewing respondents in focus group discussions in order to collect the required information.

3.5.1 Semi-structured questionnaire

Lavrakas (2008) noted that a semi-structured questionnaire refers to a survey tool designed to be completed by a respondent without interference from the researcher in the course of collecting data. Therefore, semi-structured questionnaires were prepared for the administrators (Principals, Deputy Principals and Registrars) and Instructors to enable the researcher gather data. This tool was selected because the

respondents could fill them at a time of their convenience and could be in a position to internalize the information they contained and respond freely.

3.5.2 Focus Group Interview Guide

A focus group discussion is a type of group interaction that depends on the exchange of ideas among group members about the subject that the researcher provides (Cohen et al. 2011). The group members are selected because they are expected to have been involved in particular circumstance and are asked about that involvement as a team (Bryan 2016). The technique was used by the researcher because it could give insights into how people think and provide a deeper understanding of the phenomenon being studied by the researcher and provide a deeper understanding of the phenomenon being studied.

3.5.3 Documentary Analysis

Document analysis was used in conjunction with other qualitative research techniques to enrich the content in the study through review of reports and relevant literature from books and online resources. Institutional records including admission lists, reports and minutes of the meetings were also analyzed to get a deeper insight into pertinent issues related to the critical aspects of the study.

3.6 Procedure for Data collection

The researcher sought permission from the relevant authorities and respondents after presenting a letter of introduction from Kyambogo University. He explained the purpose of the study and worked with the institutional administrators to identify the potential respondents and made schedules to interface with them. After making arrangements with the selected respondents, the researcher administered questionnaires to the targeted respondents and agreed with them on when to receive them back. Arrangement for oral interviews were also made with selected respondents to capture their views on the critical issues of concern as set out in the research questions, exploring in-depth their experiences, challenges, and perspectives related to the study. All data was recorded either through digital recordings or detailed note-taking, to ensure accuracy

and completeness. Participants were also assured of confidentiality and anonymity, thus maintaining their integrity throughout the study. Thereafter, the researcher embarked on data analysis process.

3.7 Validity and Reliability

3.7.1 Validity of the instruments

Validity is the ability of the research instrument to measure what it is intended to measure. In this study, this was ensured through several measures. First, the surveys and interview guides were developed based on established literature and theoretical frameworks related to the study. Each question was checked to ascertain clarity and conformity to the objectives of the study.

3.7.2 Reliability of the instruments

Martyn & Wilson (2019) define reliability as a degree of consistency of a measure to the effect that a test can give the same repeated result under the same conditions. A pilot study was carried out prior to data collection among selected participants in Jinja District. Pre-testing of the instruments was carried out to find out its reliability and validity (Cohen, et al. 2011). This was done using four participants considering gender balance. Thereafter, adjustments were made on the final instruments.

3.8 Data Analysis

Qualitative data analysis was the major procedure used through the transcription of interview recordings followed by thematic analysis. This process entailed identifying recurring patterns (themes) within the data to understand the experiences and perceptions of the respondents regarding their responses. This applied mainly to data obtained from interviews and Focus Group discussions.

3.9 Ethical Considerations

Ethical considerations help to increase the credibility of a study (Hoyle, Harris & Judd, 2002). Institutional authorities and participants of the study were informed and negotiation was made in advance to seek their

consent and uphold their rights to privacy. Participants were approached with full transparency regarding the study's objectives, procedures, potential risks, and benefits before obtaining their informed consent. Participation in the research was voluntary, ensuring that individuals can withdraw at any time without consequences. Confidentiality of participants' information was strictly maintained, with all data securely stored to protect their identities. During the study, the researcher guarded against any unethical practices that could arise during and after the study. The researcher was keen on observance of confidentiality procedures accordingly as no names or other forms of identity were required from the respondents.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 Introduction

The purpose of the study was to explore gender trends and enrollment of female students in vocational education training institutes in Jinja District, Uganda. This chapter covers the data presentation, analysis and interpretation. The study was guided by the following research objectives: to establish community's perception towards female students' participation in TVET training in Jinja District; to explore the available facilities that enable female students' participation in TVET training and finally to find out stakeholders' perspectives towards increased female students' enrolment into TVET institutions in Jinja District.

4.1 Demographic information of participants

Table 4. 1: Showing number of participants:

Category	Targeted number	Actual number interviewed
Principals	2	1
Deputy principals	2	2
Registrars	2	2
Male Instructors	3	3
Female Instructors	3	3
Male students	12	9
Female students	12	12
Totals	36	32

Source: Primary data (2024)

The researcher had planned to meet and interview thirty-six participants but interviewed thirty two participants who make a percentage of 89 thus; making the findings valid (Martyn & Wilson (2019).

Table 4. 2: Categorization of participants by sex

Participants by categorization	**Sex**		**Total number of respondents**
	Female	Male	
Administrative staff	-	4	4
Academic staff	3	4	7
Students	12	9	21
Totals	15	17	32

Source: Primary data (2024)

In connection to gender of participants as shown from the table above, findings indicated that among the participants, in both technical institutes, all the administrators were males. There are four male and three female instructors seen in both institutes except for the departments of fashion, design and garment cutting and catering where there was no male instructor found. As for students, nine males participated compared to twelve female students. The male students participated slightly less than the female students because most of the female students turned up for data collection compared to the male students.

Table 4. 3: Showing age ranges of participants

Participants	Participants' age range in years				Total Respondents
	20-30	31-40	41-50	50 and above	Total number of respondents
Administrative Staff	-	-	1	1	2
Academic staff	2	3	3	1	9
Students	18	3	-	-	21
Totals	19	7	4	2	32

Source: Primary data (2024)

The table above indicated that there is no administrator who fell neither between the age ranges of 20-30, 31-40 nor 41-50. One administrator fell between age ranges of 51 and above. As for academic staff, two instructors fell between the ages ranges 21-30, four fell between 31-40, three fell between 41-50 and one fell between 51 and above. Regarding the students, seventeen students fell between age ranges 21-30, one student fell between 31-40 and no students fell in the age ranges 41-50, 51 and above respectively.

Table 4. 4: Participants working experience

Participants	Years of working experience			
	1-10	11-20	21-30	31-40
Principals	-	1	-	-
Deputy principals	-	1	1	-
Registrars	1	1	-	-
Instructors	2	2	2	-

Source: Primary data (2024)

The table above indicated that one principal had a working experience of age range 11-20 years followed by two deputies who had varied experience of 11-20 and 21-30 years respectively. The two registrars also

had varying experiences with one having an experience of 1-10 years and the other having 11-20 years. The implication is that most of the administrative staff had spent adequate time implementing policies and programmes of the institutes, hence; having a wide experience to effectively manage matters concerning administration and the affairs of students in the institutions. Concerning the academic staff, there were differences in their years of service; two instructors had served between 1-10 years, other two instructors for a period between 11-20 years and the latter two instructors for a period between 21-30 years. The implication is that they had the capability to effectively manage both theory and practical as required by the BTVET policy and were conversant with the institutions' operation and systems.

The following Pseudo names were used to safeguard the confidentiality of the respondents. P1- Principal one, DP1-Deputy principal one, DP2-Deputy principal two, R- Registrar, BCP- Building carpentry and concrete practice, FDG- Fashion Design and Garment cutting, AMV- Auto-motive mechanics, EI-electrical installation, Ag- Agriculture, PL- Plumbing, CHM- Catering and hotel management, I- Instructor, f-Female and m- male.

4.2 Responses on community perceptions on female students' enrolment in TVET training

4.2.1 Community's Perception

The research findings indicate that community's perception on female students' enrolment into TVET has improved especially from the last three years. Eight out of nine instructors (89%) noted an increased intake in the departments like building construction, plumbing and electrical installation among other TVET courses. These respondents said, "*It has been low but for the last three years the trend is changing, we have gotten even some girls in building construction, plumbing, electrical installation and so on,"* (Respondents EI 1, BCP, DP 1, 26/10/2022). This shows that instructors have a positive view regarding girls' enrolling for TVET courses and can enroll all academically able students regardless of gender. This was confirmed by one administrator who said, "*The staff is sensitized about the importance of engaging girls and boys in TVET courses."* (R1). Furthermore, P1 noted that community's perception is positive for such courses

branded to be women-based like agriculture, catering and tailoring and negative for other courses like building, motor vehicle mechanics and electrical installation (P1)

On the same note, 17 students out of 20 (85%) revealed that parents have a positive attitude towards female students enrolling into TVET. One respondent noted that, *"For me my parents support by encouraging me to do well that I can make it and do better than some boys,"* (BCP, f,). This gives hope to all other female students that they can perform and attain practical skills through training. On the other hand, DP1 argued that "In most cases parents tend to prioritize the males to enroll for vocational courses than the females because the work is laborious and requires plenty of time of which ladies were given the other responsibilities of caring for children at home.

4.2.2 Parents' Support

On the issue of Parents support, the researcher established that 83% of the parents give support to their children who enroll for TVET courses. Outstanding respondents revealed that *"Parents help so much to cater for the female students by clearing all institute requirements, personal effects, counseling and guidance, moral and spiritual support,"* (BCP (f), FDG, Ag (f) and CFP. If parents support their children by giving them all the school requirements and social guidance regardless of gender, it is a good trend that BTVET was taking.

On the other hand, one respondent (4.7%) noted that parents still hold the mentality of their children having white collar jobs. This respondent said,

> *Parents perspective is still low in that there is much need for sensitization on significance of technical and vocational training and most parents still carry on with that mentality of their children having collar jobs* (FDG I (B).

For DP1 argued that *"In most cases parents tend to prioritize the males to enroll for vocational courses than the females because the work is laborious and requires plenty of time of which ladies cannot given the other duty-bound responsibilities of caring for children at home. Such parents therefore will continue to have their children with fear to join BTVET courses".*

DP1 further argued that "*normally female students are few on recruitment, this indicates that parents prioritize to offer male students vocational courses than females,"* (Respondent DP 1, R1, 2/10/2022). This implies that female students are likely to experience serious stressful moments in their career deriving from the notions that parents have in respect to TVET courses which in turn will influence on the number of female technicians.

On the issue of social support and female student' participation, the administrators noted good perception of instructors towards female students. This was represented by 5/6 (83%) of the administrators sampled. *"Instructors have good perception towards female students and more females are actually encouraged to enroll,"* (DP 2,). (DP1) acknowledged that female students have good performance as males, *"Female students relatively perform as male students do".* From the quotations above, it is evident that the positive response of instructors towards female students participating in the male related TVET courses enables the equalization of opportunities for all students entering into vocational training institutions irrespective of their sex. This is an implication that admitting more girls will help demystify the notions that different communities have in respect to vocational professionalism within and outside the institution.

In support of the above, one other respondent pointed out that both male and female students do share willingly both in class and outside activities. He narrates, *"In this institution, boys are sharing very well with girls' ideas in case doing the same course and more so in Tech-Mathematics,"* (AR 1, EI).

4.2.3 Institutional-based Perception

Along this line of instructors' perception towards female students' participation in TVET, the researcher realized that female students were very cheerful because of the good support they have from their instructors. One asserts that, "*Male students encourage female students to try all courses because it possible for them to excel in all the programs,"* (P1).

Four male students in one department agreed that females can also perform well like men and can serve as role models to the rest.

> *It is good to have females in such courses. These girls who join traditional male related trade work as role models and inform the community that what a man can do even a woman can,* (BCP (M).

Three female students reported that their parents gave them insight to join BTVET courses as they were always challenging them not to become "married-beggars. The welcoming instructors are therefore helping these students to unfold their unknown TVET skills.

Furthermore, findings indicated that studying with females in TVET courses motivates the boys. One recounts their fast practical lesson they had with girls about mixing sand and cement,

> *It is a motivational prospect to boys and that it creates competition in the departmental courses offered. I cannot forget the fast day the instructor took us for a practicum and asked each of us to mix sand. The two groups that had girls even performed better than those without girls, (BCP M).*

However, one student mentioned that he was uncomfortable sitting with female students in TVET classes, emphasizing that;

> *It is rare for girls to engage in these types of courses for sure. Girls who venture and participate in such courses are always looked at as misfit in their own ways. Who can dare marry that one yet they at times get their choices from here, (AM)*

He furthermore affirms that the theory science-mathematics content they are taught seem not to favor the female students who have Arts related concepts. Despite him being pathetic, it is clear that ladies are also active in all courses and are competing favorably.

From a cultural point of view, the dressing code for both men and women depict what each of them is supposed to do within the community. However, when they go out in the field for their internships putting on trousers, overalls, some people look at the females with reservation because of their attire when they climb poles which is abominable to traditional culture" (EI, 1)

4.3 Responses on facilities that enable female students' participation in TVET training

4.3.1 Institutional facilities

The following facilities were identified by the respondents: Positive social environment, Physical structures, Ministry support and Mindset change, among others. On the issue of a positive social environment, it was noted that parents have a positive perceptive towards their daughters who wish to enroll into technical vocational education training institutions. One noted that,

> *"Previously the enrolment was low but to date parents have involved to take the girl child to join Technical vocational training to get skills across all the courses e.g., civil, plumbing, electrical*." (IE1).

Furthermore, it was noted that these institutions have supportive social environments that attract both male and female students. In an interview with one participant, he recounted:

> *The instructors have no problem with female students getting into the male related TVET courses as some of the staff are female engineers, plumbers, electricians and they are free with them"* (P1).

This gives a good learning and social environment amongst students and instructors and further creates hope amongst the female students by copying examples from the instructors. Finding out the boys' perception towards girls' participation in male related trade in TVET, it was identified that they do share ideas among themselves, in case doing the same course and more so in Tech- Mathematics. Therefore, there is high social interaction amongst all these learners which is academically developmental.

Respondents also emphasized the importance of Physical structures. Instructors BCP I, EI 2, FDG I (2) and PL I affirmed that institutes have physical structures like hostel facilities, lavatories, clean bathrooms, classrooms and workshops where we attend lectures, demonstrations and tutorials or even self-practice in a desired skill. This was confirmed by R 2, who observed that, *"Students have a nurse who gives fast aid and treatment for simple ailments like malaria, females have matrons yet males have wardens*."

4.3.2 Ministry's support to females in TVET

On the role played by the Ministry of Education and Sports, it was reported that the ongoing policy of UPPOLET is trying to reduce gender inequalities of students' enrolment in institution. Some respondents noted that,

> *"Female students cut off points into TVET institutions were lowered in order to encourage more acquire vocational skills education and relatively out compete males," (*P 1, DP1, DP2).

This means that if these entry points into TVET institutions are lowered for the girls, more will be attracted to join the labour market.

Others observed the need for mindset change. The case in point included P1, DP1 and DP2 who said that "*Parents mindset which is negative affects the female students' recruitments into TVET,*" EI 2 also noted that mindset was poor among some parents towards TVET .One other respondent (EI,) pointed out that "*negative belief that TVET is for failures, lack of career guidance and lack of sensitization still exist especially among the parents and year one students."* This means that parents who have negative attitude towards TVET hardly take their daughters for skill training in TVET institutions.

4.4 Responses on Stakeholders' perspectives towards increased female students' enrolment into TVET institutions

4.4.1 Divergent perception

From the feedback, respondents had divergent perspectives as ongoing institutional guidelines and actions, sponsorship and future plans towards raising enrolment of female students' in TVET institutions. One of the issues mentioned was the experiences in Field-Work Placements for Students.

It was observed that there were injustices faced by female students during their industrial training and internships. Not only were employers reluctant to take on a female employee, but some of them were even against the idea of having women in such positions (BCP, f). The main source of this perspective was gender preconceptions about women's innate aptitude for staying in the workforce or completing specific duties. Additionally, employers would exclude women from traditionally female-dominated fields like hotel management, catering, and tailoring. In order to ensure that the females produced high-quality work, there were also times when they needed extra supervision. A female student at Technical A who is now enrolled discussed her experience in the field.

Girls are disregarded. For instance, girls are not permitted to work on repairs at industrial training unless a boy is present to oversee them. (EI, f. FDG, 2).

4.4.2 Institutional guidelines

Besides that was the issue of on-going institutional guidelines and actions. The researcher realized a number of institutional based guidelines followed to have female students enroll for TVET as asserted by DP 2 that, *"Any one is free to enroll for any course of their choice without discrimination, treating all students equally in terms of theory and practical lessons and awarding marks."* This gives equal opportunity for all learners to have access to TVET.

Respondent DP1 postulates that, "*Students cut off points for females were lowered in order to encourage more females acquire vocational skills education and relatively out-compete males,"* .P1 seems to agree with the information above when he adds that *"it is intended to attract more girls to join TVET centres*." From the quotation above, it is clear that parents' interest regarding TVET courses for their daughters contribute to the number of female students participating in TVET.

4.4.3 Entry scores ito TVET colleges

Some respondents E1 2 and PL 1 propose that "*Pass mark for female students especially for science subjects from O'level should be lowered compared to males.*" This means that some instructors are not aware of the existence of the above institution-based guidelines and actions.

R1 affirms that slots for ladies who make TVET a fast priority from O'level are given sponsorship. He regrettably mentions that these applicants are always few. This means institutions are actively trying to increase on the enrollments in TVET institutions but maybe communities are not aware.

4.4.4 Sponsorship

Sponsorship was another issue raised in the study. The researcher noted that giving sponsorship to female students will enhance their enrollment in TVET institutions. This was affirmed by P1, (0n 27/10/2022), yet DP1 talked of having lower tuition for the girls in order to attract more females. DP2 seems to agree with DP1 as he mentions that "*the courses are expensive for poor girls from poor communities."* The same information about sponsorships is given by EI 2, EI 1, R1, and PL 1. It was emphasized by FDG 2 sponsoring female students in courses like fashion and garment cutting and hotel management is a future investment for them and their families. Findings also revealed that female students need financial assistance in order to attract high enrollment for TVET education at all levels of training.

4.4.5 Future plans

Focusing on Future plans, the findings revealed that institutions have opened a number of trends in order to increase the female students' enrollment as stipulated by R2 that, "*All ladies who make TVET a fast priority be given government sponsorship, increase on the slots for female students and have more radio/ TV talk shows."*

In the same way, PL 1 observed that lowering pass-mark when joining TVET can also help to increase the enrollment of female students. One unidentified administrator said, "*Let there be a lower tuition set for females different from that of males in order to encourage more to be enrolled*".

Besides sponsorship, P1 reported that "*recruiting a fulltime counselor to address challenges of female students may greatly help to increase female students' enrollment in TVET*."

Meanwhile one other respondent suggests that technical education can be boosted by introducing it at lower levels like primary and secondary, (EI1,).

On the other hand, respondents EI and R2 noted that setting up a dining hall, reading library, providing institute bus to ease transport for staff and students, providing modern tools and equipment are some of the other facilities that the researcher realized should be advocated for. This means that TVET institutions need to solicit for more resources to have a much safer learning environment for all the students.

Furthermore, P1 asserted that, "*Provision of accommodation with cubicles for privacy, water-borne sanitation facilities and independent and secure study room at night are vital key welfare items we need."* Similarly, PL 1 asserts that "*Providing good computer rooms, improving on female students' sanitation, improving on health facilities and providing more workshop rooms,"* should be considered. This means that students are missing some important provisions like room privacy, good sanitation and study rooms. These are key items that breed high student enrollment in TVET institutions.

CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

The purpose of the study was to explore gender trends and enrollment of female students in vocational education training institutes in Jinja District, Uganda. This chapter presents the discussions, conclusion and recommendations. The study was guided by the following research objectives: to establish community's perception towards female students' participation in TVET training in Jinja District; to explore the available facilities that enable female students' participation in TVET training and finally to find out stakeholders' perspectives towards increased female students' enrolment into TVET institutions in Jinja District.

5.1 Discussions

5.1.1 Community's perception towards female students' participation in TVET training

The results from interviews and focus groups were conducted with parents and educators to understand how beliefs about gender and their career choices highlighted that some parents hold traditional views suggesting boys are naturally better at TVET courses than girls. However, the research findings indicate that community's perception on female students' enrolment into TVET has improved especially for the last three years and some female students are seen in traditionally male related trade courses like building construction, plumbing and electrical installation among other TVET courses. However, the number of female students enrolled on the programmes was still low compared to that of the males (MOES, 2022). The Gender in Education Strategic Plan, 2015-2020) that recorded a gender gap of the number of boys who joined tertiary institutions in 2012(100,831) while girls were 78,738 indicating a gap of 22,093. Furthermore, the Uganda Bureau of Statistics (UBOS, 2012) noted a Gender Parity Index (GPI) for BTVET as 0.25 (i.e., the proportion of male to female enrolment in BTVET as 100 to 25). This indicates young women's unequal enrolment in the skill-oriented institutions. In support of the above, Gloucestershire (2016) reveals that in many parts of the world, enrolments of females in vocational education and training

are low compared to the boys. The researcher is in full agreement with these authors' views and notices a standing gender gap in the BTVET sector in Uganda and it needs serious attention to narrow it.

The highest number of student respondents noted that parents have a positive attitude towards female students enrolling into TVET. One administrator (DP1) argues that most parents tend to prioritize the males to enroll for vocational courses than the females because the work is laborious and requires plenty of time of which ladies cannot given the other duty-bound responsibilities of caring for children at home. Hausmann, et al. (2012) noted that if Africa must escape poverty and achieve sustainable development, then gender equality especially in TVET, should be made to correct the gender imbalance in girls' enrollment in TVET institutions. The view presented seems to be correct because females can easily grasp vocational skills and there are many young people who are energetic and ready to serve to replace the older ones. This gives hope to all other female students that they can perform and attain practical skills through training.

Findings revealed that most students who enroll for TVET are given support by their parents like giving them school requirements, social guidance regardless of gender, allowing them time to go for internships and paying their tuition. Wangyogu (2017) made the observation that how boys and girls are socialized at home, community, and school is influenced by the idealized roles and traits of women and girls. Providing scholastic materials to students in tertiary intuitions is real and expected from a responsible parent or guardian so as to enable a student live a settled life while on skill training. Furthermore, concerning social support and female students' participation the researcher noted good perception of instructors, parents and peer support towards female students. The parents were reported to give female students insight to join BTVET courses as they were always challenging them not to become "married-beggars yet the welcoming instructors help these students to unfold their unknown TVET skills. Nkoole (2020) calls upon parents to give help to their children if the children are to succeed in TVET. The researcher is in line with all the social support revealed by the respondents and believes that the positive response of instructors towards female students participating in the male related TVET courses will enable the equalization of opportunities for all

students entering into vocational training institutions irrespective of their sex. This is supported by Margaret and Purity (2017).

Some respondents noted that girls who engage in TVET courses are always looked at as misfit in their own ways claiming no man dares marry a female who can climb electric poles or make stands to build a house. From a cultural point of view, the dressing code for both men and women depict what each of them is supposed to do within the community. Hausmann, Tyson & Zahidi, (2012) agree with these views that moslem girls find it hard to get suitors especially when seen dressing on trousers yet it is abominable in their religious belief. The researcher doesn't agree with the act of marrying off girls but advances mindset change to the community to accommodate all the dressing code for leisure, religion, work and domestic affairs so as to have girls feel free to train in any TVET course of choice. In a nutshell, the researcher concurs with the findings presented in this study and also affirms the findings by other scholars and writers cited above.

5.1.2 Available facilities that enable female students' participation in TVET training

On the second research objective and questions, results from chapter four indicate that institutes have some physical structures like hostel facilities, lavatories, bathrooms, classrooms and workshops. The UNESCO report (2015) advocate for structural set-up for all BTVET centres to attract more students regardless of gender. This is important to allow students have room privacy. Weak structures in TVET centres may attract low enrolments as cited by James et al. (2019) who observe that the low enrollment of girls and women in vocational training colleges results from low provision of some basic items for use at institute. The researcher realized no student with disability was enrolled in both institutes. This contradicts with the BTVET act (2008) which aims at narrowing the gender gap across primary, secondary, and higher institutions through popularizing girls' participation in BTVET.

Inequalities were also encountered by female current students during their industrial training/placements. In addition to being reluctant to recruit a woman, several employers objected to the idea of having a woman

in such a position. According to Claire (2022), certain employers occasionally refuse to allow women to participate in industrial training. In order to ensure that the females produced high-quality work, there were also times when they needed extra supervision. Gender stereotypes regarding women's inherent skills to perform specific tasks and last in the workforce, as well as the appropriate attire for work, are the main sources of fuel for this perspective. The researcher pushes for a shift in perspective to provide women in society the same possibilities as men.

Although government has come up with various TVET programmes, many families are still interested in numerous first grades at summative levels like PLE, O'level, other than practical skill development among their children. Okello (2012) identifies the challenges facing TVET in Uganda and brings out this parental demand for first grades from children. McGrath (2012) confirms that most parents in Africa are interested in their children's academic performance at particular progressive levels that take them to universities. This is evidenced by low intake into TVET institutions where some courses like woodwork, block laying, metal fabrication and cosmetology have less or no students of a particular gender (Nkoole, 2020). The researcher agrees with these authors' views as well as the findings from the study.

5.1.3 Stakeholders' perspectives towards increased female students' enrolment into TVET institutions

Findings from chapter four further revealed that teaching staff have a positive attitude towards enrolling female students into TVET courses. This was revealed by the impromptu visits held to one institute and found out that ladies where equally involved in such courses branded to be women-based like agriculture, catering and tailoring, BCP and EI. This is a good gesture that ought to continue to breed more female students in the colleges. Findings from this study show that TVET is a viable sector that can benefit women and provide opportunities for them to gain knowledge and skills that they can use to live a good life. The respondents shared a few successes since joining TVET institutions such as positive attitudes by their

instructors, supportive parents, finding work in their fields, and increasing their confidence to take on new challenges in the workplace.

The National Strategy for girls Education in Uganda (NSGE, 2015-2019) noted that girls' access to education was high at the level of entry to P.1 with a ratio of 54 girls to 46 boys. It was discovered that parents tend to prioritize the males to enroll for vocational courses than the females. This is in line with findings by Okou, (2001); Fellow (2002) in the BTVET report (2017) that gender disparities existed as reflected by low enrollment in BTVET institutions. The researcher is in full agreement with these findings as presented by Gender in Education Strategic Plan (2015-2020) indicating the lowest enrolment of females in the technical colleges, theology and survey institutions.

Numerous opportunities have been generated for women to pursue higher education and to take up more male-dominated career paths such as science and engineering. However, women are still under-represented in these courses, fields, and careers. These fields/courses are stereotypically referred to as masculine fields and, as such, females are considered transgressors of the current gendered boundaries (Mbabali, D.M, 2018). Despite the existing social expectations, the few women in technical vocational education and training pathways have managed to crack the ceiling. They are not inhibited by the societal preconceived notion that they do not belong; they have set their sights on this path and do not look back. The researcher feels that these females already in TVET are role models to the new ones joining and need to be positioned for all other others to cope with equalization of opportunities.

However, despite the BTVET Act (2008), Affirmative Action and other policy and legal documents that advocates for equalization of opportunities for persons with disabilities (PWDs), the researcher's findings reveal that 'NO' student with disability whether male or female was seen around any of the two institutes. This could be a signal that PWDs in the area were probably marginalized or not adequately supported with opportunities to try out their abilities to train in TVET skills like agriculture, fashion design and gamete

cutting or any other course of their choice. The researcher concurs with the findings presented in this study and also affirms the views by other scholars and writers cited above.

5.2 Conclusions

Based on the findings of this study, the following conclusions are drawn, aligned with each of the set objectives:

Results from the study as presented show that community's perception on female students' enrolment into TVET has improved especially in the recent past and some female students are seen in traditionally male related trade courses like building construction, plumbing and electrical installation among other TVET courses. The highest number of student respondents noted that parents have a positive attitude towards female students enrolling into TVET. However, the number of female students compared to that of the males is still low (MoES, 2022).

Secondly the results from chapter four indicate that institutes have some physical structures like hostel facilities, lavatories, bathrooms, classrooms and workshops. The UNESCO report (2015) advocate for structural set-up for all BTVET centres to attract more students regardless of gender. This is important to allow students have room privacy. Weak structures in TVET centres may attract low enrolments as cited by James et al. (2019) who observe that the low enrollment of girls and women in vocational training colleges results from low provision of some basic items for use at institute.

Results indicate that the teaching staff in the TVET institutions as well as parents had a positive attitude towards enrolling female students into TVET courses. The Ministry of Education and Sports believes that TVET is a viable sector that can benefit women and provide opportunities for them to gain knowledge and skills that they can use to live a good life (MoES, 2022). The students also shared a few successes since joining TVET institutions such as positive attitudes by their instructors, supportive parents, finding work in their fields, and increasing their confidence to take on new challenges in the workplace.

5.3 Recommendations

In light of the findings and the conclusions presented, the following recommendations were made, with a view of improving the critical issues identified:

5.3.1 Recommendations for MOES and TVET Department

The MoES through the TVET Department should organize and conduct regular public sensitization about equalization of opportunities for all students, clearly emphasizing the BTVET Act, Affirmative Action for females and Persons with Disabilities on regional radio stations, T.Vs and Newspapers. This will awaken the lost opportunities of parents and children with disabilities, thus increased students' enrolment in these institutions.

The MoES should liaise with other line Ministries, especially the Ministry of Finance, Planning and Economic Development to increase funding for TVET department and institutions so as to improve on physical structures like buildings; and equip them with new technologies to fit the modern world and attract PWDs. More students will be attracted into TVET since they will be trained in modern methods of applying technology and ICT in the present world.

The TVET Department should train instructors in Special Needs Education and its application in TVET institutions so as to enable instructors accommodate all sorts of students with learning needs but with zeal to have practical skills. Similarly, the TVET Department should liaise with Kyambogo University Faculty of Special Needs Education and Rehabilitation to retrain the existing instructors in elementary skills application for PWDs. This will not only attract ordinary girls to these institutions but even those other students (both girls and boys) with different learning needs so as to enable the implementation of Affirmative Action and Skilling Uganda Project.

5.3.2 Recommendations for TVET institution administrators

There is need for TVET Institution administrators like principals, deputy principals, instructors and members of the governing council to sensitize parents and the general community to become gender responsive and appreciate vocational education and training, through Affirmative action, BTVET Act and other documents that are calling for equalization of opportunities for females' participation into TVET. This can be done on local radio talk shows, meetings with those stakeholders sending brochures through students.

The above TVET Institution administrators too should identify new attractive provisions that call for equalization of opportunities like enrolling PWDs into TVET institutions for skills training. They should therefore liaise with the MOES to employ instructors trained in SNE who will closely work with them to teach PWDs.

TVET institution administrators should liaise with MOES to recruit professional fulltime counselors to help in managing stereotype encountered by female students during their course of studies. These counselors will be in charge of drawing counseling sessions to lure confidence, hope and excellent performance among female students.

The administrators, especially the Principals, Deputy Principals and Procurement officers should be guided by the TVET Department to make timely procurement for classroom stock, libraries and workshop tools.

5.3.3 Recommendations for instructors

Academic registrars, heads of departments BCP, EI, FDG, Agric, etc., instructors and all members taken as support staff at TVET institutions should always inculcate a spirit of confidence, hope and skill reliability among students more so the female to enroll for courses of their preference. This should be done during lectures, assemblies, meals and practicum sessions.

The HODs/Sections should work with the Institute administrators to identify and invite resource persons and conduct seminars to share experiences with students and give them guidance on career and change of mindset towards TVET courses and their potential on the job market as well as gender issues.

5.3.4 Recommendations for students

Students should be encouraged by their administrators and instructors to seek guidance and support on issues of concern from responsible resource persons, including peers.

5.4 Area for further Research

Special Needs Education: Future research should explore the perception of students with special education towards TVET programmes and training in Jinja District during a period spanning about five years.

REFERENCES

Adam L. Alter et al (2010). Experimental Soc. Pyschol. 166. *Rising to the Threat*: Reducing Stereotype Threat by Reframing the Threat as a Challenge, 46 J.

Adams, R. (2021). Overhaul of Skills and Vocational Education to Focus on Employability. *https://www.theguardian.com/education/2021/jan/21/overhaul-of-skills-and-vocational-education-to-focus-on-employability*.

Adelakun, O., Oviawe, J., & Barfa, G. (2015). Strategies for Enhancing Female Participation In Technical Vocational Education And Training. *Advancesin Social Science Research Journal*, 2(4).DoI:10.14738/assrj.24.1041.

Asian Cultural Forum on Development (ACFOD, 2015). General Directorate of Vocational Training. National Institute for Vocational Training.14th floor, office Building of the Ministry of Labour-Invalids and social affairs alley no-7, *ton That Thuyet Street*, Cau Giay District Hanoi.

Beasley & Fischer, (2012). Why They Leave: The Impact of Stereotype Threat on The Attrition of Women and Minorities from Science, Math And Engineering Majors. *Social Psychology of Education*. Exit Link Disclaimer 2012; 15(4):427-448.

Bracha, A; Cohen, A; Conell-Price, L (2013) : Affirmative action and stereotype threat, Working Papers, No. 13-14, *Federal Reserve Bank of Boston*, Boston, MA

Brinkmann S. & Kvale S. (2015). *Interviews*: Learning the Craft of Qualitative Research Interviewing SAGE Los Angeles.

Brooke V, S., Mark D. S., Jim. B., Max, W. (2005).The effect of gender stereotype activation on challenge and Threat motivational States. *Department of Psychology*, Whitman College, 345

Boyer Avenue, Walla Walla, WA 99362, USA, Department of Psychology, University at Buffalo, The State University of New York, Park Hall, Buffalo, NY 14260- 4110, USA Department of Psychology, University of California. Santa Barbara, Santa Barbara, CA 93106, USA, Department of

Psychology, Tufts University, 490 Boston Avenue, Medford, MA 02155, USA. Revised 1 September 2006-- *journal of experimental social psychology*, Available online 27 February 2007

Bryan, A. (2016). Social Research Methods, 5th Edition, *Oxford University Press*, New York.

Bryman, A. (2008). Qualitative Study Methodology: Study design and implementation, 3rdEdition, *Oxford University Press*, New York.

Casad, B.J., and Bryant, W.J (2016) Addressing Stereotype Threat is Critical to Diversity and Inclusion in Organizational Psychology. *Front. Psychol.* 7:8. doi: 10.3389/fpsyg.2016.00008

Claire, L. S. (2022).Women's Empowerment in Technical Vocational Education and Training. Exploring the Unique Perspectives of Females from Vocational Institutes: *A Case Study of Nakawa Vocational Training Institute (NVTI),* Dalhousie University Halifax, Nova Scotia

Claude, S. (2009). Stereotype Threat and Inflexible Perseverance in Problem Solving. *Journal of experimental social Psychology*, 2009- Elsevier.

Cohen, L. Manion, L. & Morrison, K. (2011). Research Methods in Education. *Routledge,* New York.

Connell, R., &Pearse, R. (2019). Gender: In world perspective (4th ed.). *Polity Press*.

Cornel, J. &Vincent, L. (2019). Gender Differential Effects of Technical and Vocational Training: *Empirical Evidence for Tanzania*, Credit Research Paper, No. 19/04

Creswell, J. (2012). Qualitative Inquiry & Research Design: Choosing Among Five Approaches, 3rd ed. London: SAGE Publications, Inc.

Creswell, J. W. (2013). Research design: Qualitative, quantitative, and mixed methods approach. Sage publications.

Enayet, E. and Supinit, M. (2016). Handbook of Qualitative Research. Thousand Oaks, CA: Sage publishers.

Federal Republic of Nigeria (2018). National Policy on Education. Lagos, Federal Ministry of Education. London: https://www.surveygizmo.com.

Foley, B. (2018). What is Purposive Sampling? London: https://www.surveygizmo.com.

Gloucestershire, B. (2016). Why Engineering is Male Dominated. London: ftd.

Government of the Republic of Uganda (2008): BTVET Act. ACTS SUPPLEMENT No.7 18th July, 2008, to the Gazette no. 37 volume C1. Printed by UPPC, Entebbe.

Government White Paper on Education (1992).Education for National Integration and Development. Government of Uganda, Kampala.

Guest, G. Bunce, A. & Johnson, L. (2006): How many interviews are enough? An experiment with data saturation and variability. *Field methods, journals*. Sagepub.com

Guest, Hagaman& Wutich (2017). Sample sizes for saturation in Qualitative Research: A systematic review of empirical tests.

Hausmann, R., Tyson, L. D. & Zahidi, S. (2012). Global Gender Gap Report 2012. *World Economic Forum http://www3.weforum.org/docs/WEF_GenderGap_Repor*t.

Holmes, R. (2014). What's Really Behind Gender Imbalance in Tech Careers. London: Linkeldin. ISSN 2224-5731(Paper) ISSN 2225-0972(Online) Vol.7, No.4, 2017

Wilson, G. K., James K., & Andrew D. (2019). Conducting Qualitative Research. The Perceptions of Secondary School Students towards Vocational Education. *Journal of career and Technical Education,* 22 (2).3rd edition. International Journal of Research and Innovation in Social Science PP 2454-6186 www.rsisinternational.org.

Kabeer, N., &Subrahmanian, R. (2021). Gender equality and women's empowerment: A critical analysis. *Gender & Development, 29*(3), 435–45https://doi.org/10.1080/13552074.2021.1987535

Kazeem, A., Leif, J., & Shannon S. (2015). School Attendance in Nigeria: Understanding the Impact and Intersection of Gender, Urban-Rural Socioeconomic-c Status (Unpublished).

Khan (2014): Why Students Enroll into TVET. The voices of South African FET College Students. *Paper presented at the Journal of vocational Education and training (JVET) Conference*, Oxford 2013.

Kothari, C. R. (2004). Research Methodology, Methods and Techniques. Second revised Edition, New age international publishers.

Krejcie, R.V., & Morgan, W. D. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement, 30*, 607-610.

Lavrakas, P. J. (2008). Self-Administered Questionnaire. London: Sage Publishers.

Lugujjo, E. & Manyindo, B. (1996).The Development of Technical and Vocational Education in Africa: *Case Studies from Selected Countries. http://www.nzdl.org/cgi-bin/library?e=d-*

Margaret, N. &Purity, M. (2017) Female Participation in Technical, Vocational Education and Training Institutions (TVET) Subsector: The Kenyan Experience. Laikipia University, P.O. Box 1100-20300, Nyahururu, Kenya, Kenyatta University, P.O. Box 43844 – 00100, Nairobi, *Kenya Public Policy and Administration Research Www.Iiste. Org*

Mbabali, D.M, (2018, November 18th). Skilling Uganda: Are the objectives being met? *Daily Monitor.https://www.monitor.co.ug/uganda/news/education/skilling-uganda-are-the-objectives-being-met—1790544*

McCombes, S. (2019). Research Design. Washington DC: *retrieved from https://www.scribbr.com.*

McGrath, S. (2012). Vocational Education and Training for Development: A policy in need of a theory? *International Journal of Educational Development*, 32(5), 623-631.https://doi.org/10.1016/j.ijedudev.2011.12.001

McGrath, S., Alla-Mensah, J. & Langthaler, M. (2018). Skills for decent work, life and Sustainable Development*: Vocational Education and the Sustainable Development Goals*. ÖFSE Briefing Paper No. 18. http://hdl.handle.net/10419/182458.

Ministry of Education (1989), Education for National Integration and Development, *Report of the Education Policy Review Commission*, Kampala

Ministry of Education and Sports (2015-2019). National Strategy for Girls' Education (NSGE) in Uganda. Published by Ministry of Education and Sports, with support from UNICEF, *the UN Programme on Gender Equality (UNJPGE) and the UK Aid.*

Ministry of Education and Sports (2019). The Business Technical Vocational Education Training Policy. P.O Box 7063, Kampala – Uganda, Plot 9-11 King George IV Way, Embassy House Tel: +256-41-234 451/4 Fax: + 256-41-234 950 http://www.education.go.ug

Ministry of Education and Sports (2020). The Technical Vocational and Training Policy. *Implementation Standards UPPC Entebbe*.

Ministry of Education, Science, Technology and Sports (2020). The Gender in Education Strategic Plan 2015-2020. *Plan International Uganda*, Plot 126 Luthuli Avenue, Bugolobi, P.O.box12o75, Kampala.

Mwaa, M. A. (2016). Parental factors influencing career choice among High School students in Nairobi County. Nairobi.

Nakafeero, A. (2024): Status of Girls' Education in Uganda. Enabel; Connect & Learneducaid. Be, Brussels.

Nkoole, G. (2020). Determinants of Students choices of vocational subjects at ordinary level in Jinja District. Unpublished dissertation.

Nyerere, J. (2009). Technical &Vocational Education and Training (TVET) sector mapping in Kenya For the Dutch Schokland TVET programme Edukans Foundation. Zero Draft https://schoklandtvet.pbworks.com/f/Microsoft+Word+-+Mapping+report+final

Odoga, A. (1995). Girls and School in Sub-Saharan Africa FUCMA Action, Washington D. C. the World Bank, 25. Olaitan Issues in Vocational and Technical Teachers Education for Self-Reliance Nigeria in Anya Kola, Et al (Eds) Vocational Technical Education and Self-Reliance, Nsukka; *University of Nigeria Press*.

Okello, B. (2011). Factors influencing the negative attitude towards technical vocational education and training in the post-colonial Uganda. PHD thesis Kenyata University, Nairobi: Kenya.

Oketch, M. O. (2007). To Vocationalise or not to Vocationalise? Perspectives on Current Trends and Issues in Technical and Vocational Education and Training (TVET) in Africa. International *Journal of Educational Development, 27(2), 220-234.https://doi.org/10.1016/j.ijedudev.2006.07.004*

Omoruyi, F. E.O. and Osunde, A.U. (2014). Evaluating the Effectiveness of the national youth employment and vocational skills acquisition programme in mid-western Nigeria, in adult education and development; lIZ, DW 62:33-42.

Osinachi, A. O. (2021*).* Inspiring Women's Participation in Technical, Vocational Education and Training for Sustainable Development in Africa. Department of Vocational Education, Nnamdi Azikiwe University. *NAM Institute of the Empowerment of Women (NIEW) Journal vol. 6, PP. 45 – 56*

Quan-Hoang, V. (2018). Data Collection and Analysis. New York: Prentice hall Publishers.

Rathidevi1, D &Sudhakaran M.V. (2019).Attitudes of Students towards Vocational Education With Reference to Chennai City. *The International Journal of Indian Psychology ISSN 2348-5396 (E)* | ISSN: 2349-3429 (P) Volume 7, Issue 3, DIP: 18.01.011/20190703 DOI: 10.25215/0703.011 Http://Www.Ijip.In

Rendell, S. K. & Gergel, D. R. (2009). The education of girls in Africa. Opening Address Presented at the Federation of University Women of Africa Conference, Lagos, Nigeria. *Retrieved from www.ifuw.org/fuwa/docs/Education_of_Girls_Africa.*

Replogle, S. (2011). The emergence of gendered participation styles in science-related discussions: Implications for women's place in science. *Journal of Women and Minorities in Science and Engineering*, vol. 5 issue 15(1) pp. 53-75.

Richards, C., Bouman, W. P., & Barker, M. J. (2020). Genderqueer and non-binary genders. *Routledge*.

Rose, M. (2012). Rethinking Remedial Education and the Academic –vocational divide. Mind, *Culture and Activity*, 19 (1), 1-16.

Russell, A. (2016) Helping Our Students Reach Their Full Potential: The Insidious Consequences of Stereotype Threat: *McClain University of Maryland Francis King Carey School of Law,* rmcclain@law.umaryland.edu

Ssekamwa J.C. (2020), History and Development of Education in Uganda**.** Fountain Publishers, K'la

Ssekamwa J.C. (2018), Lectures in History of Education. Unpublished Pamphlet

Ssemanda E. (2022), The Crisis and dilemma in Education in Uganda- A Historical Perspective (Unpublished)

Ssemanda E. (2019), Contemporary issues in Education, African Virtual University (AVU), Nairobi.

Stephanie, S. & Smyth E. (2015). Vocational Training and Gender Segregation across Europe. Research Gate, 2.

Struthers, Kare & Strachan, Glenda (2019).Attracting women into male-dominated trades: Views of young women in Australia. Published by European Research Network in Vocational education*: https://ideas.repec.irg>zbw>ijrvet*

UBTEB (2020). Statistical report of UBTEB candidates submitted to ministry of education and sports headquarters, Kampala: Uganda.

Uganda Bureau of Statistics (2015) the National Population and Housing Census 2014 – Education in the Thematic Report Series, Kampala, Uganda.

Uganda Government (2019) Gender Policy and women empowerment in Uganda. Kampala UPPC

Uganda Women's Network (2015). Prospects of women's involvement into Technical Vocational Education and Training. A situational analysis of girls and women joining Technical Education annual report presented to FOWODE 3rd conference on women employment at Speak resort hotel, Munyonyo, Kampala: Uganda.

United Nations Education Scientific Cultural Organisation (2015).World Declaration on Higher Education for the Twenty-First Century: *Vision and Action World Conference on Higher Education.* Retrieved 17 September 2020 from https://bice.org/app/uploads/2014/10/unesco.....pdf

United Nations Education Scientific Cultural Organisations (2016). Strategy for TVET (2016-2021) in alignment with Sustainable Development goal 4

United Nations Education Scientific Cultural Organisation-UNEVOC (2010). Case Studies of TVET in selected Countries. Improving the participation of Female Students in TVET Programmes Formerly Dominated by Males: *The Experience of Selected Colleges and Technical Schools in the Philippines. Nehema, M.* New age international publishers.

Wandera, A. (2016). The Influence of Social Media on collaborative Learning in Cohort Environment. *Interdisciplinary Journal of e-skills and Lifelong Learning* .DOI: 10.28945/3452

Wangyogu, H. (2017). Talking about leaving: Why undergraduates leave the sciences, Boulder, CO, *Westview Press*.

World Bank (2024), Education in remote and isolated communities: Promoting Sustainable Development Initiative in Sub-Saharan Africa, New York, World Bank.

World Health Organization. (2019). *Gender and health*. WHO. *https://www.who.int/health-topics/gender*

APPENDIX

APPENDIX I: SEMI-STRUCTURED QUESTIONNAIRE FOR INSTITUTE ADMINISTRATORS

Dear respondent,

I am Bakaaki Robert, a student of Kyambogo University, pursuing a Masters Degree in Educational Foundations. I am conducting this academic research on: ***"Gender trends and Female students' enrollment in Technical and Vocational education Training Institutes in Jinja District, Uganda since 2018 – 2023."***

You are kindly requested to fill in this questionnaire carefully, giving sincere information on various issues raised. Your responses will be kept confidential. Thank you.

SECTION A: BACKGROUND INFORMATION

i. Name of Institute: ……..

ii. Type of Institution: Day ☐ Boarding ☐

iii. Sex: Male ☐ Female ☐

iv. Designation? Principal ☐ Deputy Principal ☐ Registrar

v. How old are you? ……\……

vi. What is your highest Professional qualification?

PhD ☐ Masters Degree ☐ Bachelors ☐ Diploma ☐ Certificate ☐

Others (Specify)……..

SECTION B: Community's perception on female students' enrolment into TVET institutions in Jinja District, Uganda

Section B: Community perception on female students' participation in TVET training

1. Do parents or sponsors encourage female students to apply and enrol for the courses offered in this institution?.....
2. If yes, how do they support the female students to join and stay on their academic work?

……

……..

3. If no, why?.....

4. Do instructors and administrators give the female students enough attention during teaching and learning? …….
5. Please explain why…….
6. In your opinion, do female students have equal chances to learn the skills from the trades they take?.....
7. . Please explain why…….

Section D: Available facilities that enable female students' participation in TVET training

8. Mention the trades offered in the various areas of specialisation.

……..

9. What teaching and learning materials/resources do the female students need to study those trades?

……

10. Please explain whether or not those materials/resources are available in the institute.

Give reasons for your answer…….

Section D: Stakeholders' perspectives towards increased female students' enrolment in TVET institutions

11. In your opinion do the following categories of people support the need to increase the number of female students in TVET institutions?

a) Ministry of Education and Sports…….

b) Community …….

c) Parents …….

d) Students?.....

Please explain why…….

…….

…….

Thank you

APPENDIX II: SEMI-STRUCTURED QUESTIONNAIRE FOR INSTRUCTORS

Dear respondent,

I am Bakaaki Robert, a student of Kyambogo University, pursuing a Masters Degree in Educational Foundations. I am conducting this academic research on: ***"Gender trends and Female students' enrollment in Technical and Vocational education Training Institutes in Jinja District, Uganda since 2018 – 2023."*** You are kindly requested to fill in this questionnaire carefully, giving sincere information on various issues raised. Your responses will be kept confidential. Thank you.

SECTION A: BACKGROUND INFORMATION

i. Name of Institute: ……..

ii. Type of Institution: Day ☐ Boarding ☐

iii. Sex: Male ☐ Female ☐

iv. Designation? Senior Instructor ☐ructor Other (Specify).☐…….

v. How old are you? ……\……

vi. What class do you teach?

vii. What trade/area of specialization do you facilitate?.....

viii. What is your highest Professional qualification?

PhD ☐ Masters Degree ☐ Bachelors ☐ Diploma ☐ Certificate ☐

Others (Specify)……..

SECTION B: Community's perception on female students' enrolment into TVET institutions in Jinja District, Uganda

1. Do parents or sponsors encourage female students to apply and enrol for the courses offered in this institution?.....

2. If yes, how do they support the female students to join and stay on their academic work?

……

……..

If no, why?.....

3. Do instructors give the female students enough attention during teaching and learning? …….

4. Please explain why…….

5. In your opinion, do female students have equal chances to learn the skills from the trades they take?.....

6. Please explain why…….

Section C: Available facilities that enable female students' participation in TVET training

7. Mention the trades offered in the various areas of specialization.

……..

8. What teaching and learning materials/resources do the female students need to study those trades?

……

9. Please explain whether or not those materials/resources are available in the institute. Give reasons for your answer…….

Section D: Stake holders' perspectives towards increased female students' enrolment in TVET institutions

10. In your opinion do the following categories of people support the need to increase the number of female students in TVET institutions?

a) Ministry of Education and Sports…….

b) Community …….

c) Parents …….

d) Students?.....

Please explain why…….

……

……

Thank you

APPENDIX III: FOCUS GROUP INTERVIEW GUIDE

Preamble

The researcher introduces himself to the respondents, explains the purpose of the interview and make them feel welcome. The responses are recorded for further analysis.

Section A: Background Information

i. What is the name of this institution?
ii. What is the age bracket or range of the students in this institution?
iii. Are the majority of the students male or female? Why?
iv. Who sponsors the education of students in this institution?
v. What are the common occupations/sources of income of the sponsors?
vi. What is the highest level of education for most students in this institution?
vii. What trades/areas of specialisation do students offer?

Section B: Community perception on female students' participation in TVET training

1. Do your parents or sponsors encourage female students to apply and enrol for the courses offered in this institution?
2. If yes, how do they support the female students to join and stay on their academic work?
3. If no, why?
4. Do instructors and administrators give the female students enough attention during teaching and learning? Please explain why.
5. In your opinion, do female students have equal chances to learn the skills from the trades. Please explain why.

Section D: Available facilities that enable female students' participation in TVET training

1. Mention the trades you offer in your areas of specialisation.
2. What teaching and learning materials/resources do the female students have? Why?

Section D: Stake holders' perspectives towards increased female students' enrolment in TVET institutions

In your opinion do the following categories of people support the need to increase the number of female students in TVET institutions?

a) Ministry of Education and Sports

b) Community

c) Parents

d) Students? Please explain.

Thank you for your participation