

# Promoting Gender Equality in Technical and Vocational Education and Training (TVET): Strategies for Increasing Female Participation in selected universities in Delta State

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**Abstract:** *The study was on promoting gender equality in Technical and Vocational Education and Training (TVET): strategies for increasing female participation in selected universities in Delta state. A descriptive survey research design was used for the study. The sample population comprised of 300 female students (100 each) in 3 selected universities in Delta state. A structured questionnaire was used for collection of data. The questionnaire was subjected to face validation as well as pilot test using Cronbach Alpha which gave a reliability coefficient value of 0.88. Data collected from the study were analysed using mean scores. The study found that the importance of gender equality and female participation in TVET in universities were that it ensures that all individuals participate in the labour market and contribute to economic growth, and that it helps address skills shortages and mismatches in the labour market by diversifying the pool of skilled workers among others. The challenges that impede female participation and gender equality in TVET in universities are deep-rooted gender stereotypes, religious inclination, institutional barriers, and societal norms and cultural beliefs, among others. The strategies for increasing female participation and gender equality in TVET in universities are incorporating gender-sensitive content and teaching methods into TVET courses challenges traditional gender stereotypes and biases, provision of access to career counselling, among others. The study concluded that promoting gender equality in TVET programs is essential for achieving inclusive and sustainable development in Delta State, Nigeria, and beyond, hence, it was recommended among others that universities should develop and implement gender-sensitive policies and guidelines that promote equal access and opportunities for all students in TVET programs.*

**Keywords:** Gender equality; Technical and Vocational Education and Training (TVET); Female participation; Universities; Delta State

## 1. INTRODUCTION

Technical and Vocational Education and Training (TVET) is a capacity building programme for the development of employees' skills within an institution. TVET is a critical component of educational systems worldwide, aiming to equip individuals with practical skills and knowledge essential for employment in specific industries or sectors (Majumdar & Wittenberg, 2017). In Nigeria, TVET plays a vital role in addressing the country's developmental challenges by providing opportunities for skills acquisition, entrepreneurship development, and workforce empowerment (Ogundele & Oke, 2019). Within the Nigerian university educational sector, TVET tends to support staff with cognate skills needed for them to function optimally within the university system

Technical and Vocational Education and Training (TVET) programs in Nigerian universities are diverse, offering diploma, certificate, and degree courses tailored to meet the needs of various industries, including agriculture, engineering, healthcare, and information technology (National Universities Commission, 2012). The objectives and aims of TVET in Nigerian universities are multifaceted, encompassing the provision of practical skills training, fostering innovation and entrepreneurship, promoting industry-academia collaboration, and addressing societal needs and challenges. The objectives of TVET in Nigerian universities include the provision of practical skills training, fostering innovation and entrepreneurship, and promoting industry-academia collaboration (Ozoemelem, 2019). Similarly, the functions and importance of TVET in Nigerian universities extend beyond the mere impartation of technical skills, encompassing broader goals such as promoting sustainable development, social inclusion, and poverty alleviation. These functions further serve as a means for integrating theoretical knowledge with hands-on training and experiential learning, TVET programs in universities contribute to the holistic development of students and prepare them for successful careers in their chosen fields.

University staff members, including faculty, administrators, and support personnel, play a crucial role in the delivery and management of TVET programs in Nigerian universities. Their active participation and engagement are essential for ensuring the quality, relevance, and effectiveness of TVET initiatives, as well as for providing mentorship, guidance, and support to students throughout their educational journey. Universities have the mandate to provide TVET for their staff as it is noted by Adedokun and Oluyemi (2018) that the programs in universities contribute to the holistic development of staff skillset, competencies and expertise

needed for them to carry out their academic or non-academic tasks on their students, which can enable them to prepare the students for successful careers in their chosen fields.

Despite the importance of TVET in Nigerian universities, female participation in these programs remains low compared to male enrolment (Adedokun & Oluyemi, 2018). In some instances, female staffs are not provided with equal chances or slot as being done to their male counterparts. Most of the TVET programmes are targeted at specific skillsset that may cut out the female staff from participation. In this regard, gender disparities persist, reflecting societal norms, cultural stereotypes, and institutional barriers that limit women's access to and participation in TVET fields (UNESCO, 2017). Addressing gender equality in TVET is crucial for promoting social inclusion, economic empowerment, and sustainable development (Nwanna, 2018).

Gender equality in TVET participation entails ensuring equal opportunities, access, and treatment for individuals of all genders in the selection, enrolment, and completion of TVET programs (Khalifa & Okebukola, 2015). Addressing gender disparities in TVET requires a multifaceted approach that will factor in structural, cultural, and systemic barriers while promoting inclusive policies, supportive environments, and targeted interventions to empower women and girls in pursuing technical and vocational education. Strategies for increasing female participation in TVET include targeted recruitment efforts, provision of supportive learning environments, gender-sensitive curriculum development, and mentorship programs (Ozoemelem & Aniekwu, 2016). If universities must grow her workforce to be efficient and effective in service delivery, it must ensure that all slots and programmes relating to TVET engagement and participation must include equal chances for the men and women staff of the institution as this will minimize the factors that affect gender equality in TVET participation in Nigerian universities

Notwithstanding the benefits of female inclusion and gender equality in TVET participation in Nigerian universities, there are certain factors influencing gender equality in TVET participation in Nigerian universities which are complex and multifaceted, encompassing socio-cultural, economic, educational, and institutional dimensions. According to Khalifa and Okebukola (2015), these factors include societal perceptions and stereotypes, limited access to educational resources and opportunities, economic constraints, family responsibilities, lack of female role models and mentors, and institutional biases and discrimination.

In Delta State, Nigeria, efforts to promote gender equality in TVET are underway, with selected universities implementing initiatives to attract and retain female students in technical and vocational programs (Delta State Ministry of Higher Education, 2019). Policies are being worked out by the various agencies in collaboration with gender development and initiatives to ensure that women are pushed and positioned to better compete for opportunities in TVET as well as to participate. However, challenges persist, including societal attitudes, lack of awareness, and inadequate resources, highlighting the need for comprehensive strategies to address gender disparities in TVET participation (Ogundele & Oke, 2019). In view of these challenges, universities must be at the forefront of promoting gender equality in TVET participation as this is not only a matter of social justice and human rights but also a strategic imperative for achieving sustainable development and inclusive growth in Nigeria. By addressing the barriers and challenges that hinder female participation in TVET, Nigerian universities can unlock the full potential of their human capital and contribute to building a more equitable, prosperous, and resilient society. Therefore, this paper addresses promoting gender equality in TVET: strategies for increasing female participation in selected universities in Delta state.

In an ideal scenario, technical and vocational education and training (TVET) programs in Nigerian universities should be characterized by gender equality, with equal opportunities and access for both male and female students and staff. Women should be equally represented in TVET fields, benefiting from the diverse range of career opportunities and economic empowerment offered by these programs. However, the reality in some universities in Nigeria, paints a different picture. Despite efforts to promote gender equality, female participation in TVET programs remains disproportionately low compared to male enrolment. Women continue to face barriers and challenges that hinder their access to and participation in TVET, limiting their opportunities for skill acquisition, employment, and socioeconomic advancement. Similarly, previous studies on gender equality in TVET have identified several gaps and challenges, including societal attitudes, cultural norms, institutional barriers, and lack of targeted interventions (Adedokun & Oluyemi, 2018; Khalifa & Okebukola, 2015). However, these studies often lack a comprehensive examination of strategies specifically tailored to increase female participation in TVET programs in some universities in Nigeria. Most especially in Delta State, there are no known studies that have dealt with the promoting gender equality in TVET vis a vis correlating the workable strategies for increasing female participation in selected universities in Delta state. This has created a gap in literature. The motivation for this study stems from the recognition of the need to fill these gaps so as to expose the critical importance of gender equality in TVET and the need to address the persistent disparities in female participation in TVET programs.

### **Research Objectives**

1. To ascertain the importance of gender equality and female participation in TVET in selected universities in Delta state.

2. To identify the challenges that impede female participation and gender equality in TVET in selected universities in Delta state.
3. To determine the strategies for increasing female participation and gender equality in TVET in selected universities in Delta state.

## **2. REVIEW OF RELATED LITERATURE**

### **2.1 Gender Equality**

Gender equality refers to the principle of equal rights, opportunities, and treatment regardless of gender, ensuring that individuals of all genders have the same access to resources, opportunities, and decision-making processes in society (United Nations Entity for Gender Equality and the Empowerment of Women [UN Women], 2020). It encompasses the idea that all genders should be treated fairly and have equal opportunities for personal, social, and economic development, without discrimination based on gender identity or expression (European Institute for Gender Equality, 2020).

In the context of education, gender equality aims to eliminate gender-based disparities in access to education, retention rates, academic achievement, and participation in educational and vocational programs (UNESCO, 2019). It entails ensuring that both females and males have equal opportunities to pursue education and training in all fields, including traditionally male-dominated areas such as science, technology, engineering, and mathematics (STEM), as well as technical and vocational education and training (TVET) programs (European Commission, 2018).

Gender equality is not only about addressing existing disparities but also challenging gender stereotypes, norms, and biases that perpetuate inequality and restrict opportunities for individuals based on their gender (World Economic Forum, 2021). It requires transforming societal attitudes, beliefs, and structures to promote gender equity and create environments where all individuals, regardless of gender, can thrive and fulfill their potential (International Labour Organization, 2019).

### **2.2 TVET in Nigerian universities**

Technical and Vocational Education and Training (TVET) in Nigerian universities encompasses a broad range of educational programs aimed at equipping students with the knowledge, skills, and competencies needed for employment in various technical and vocational fields. TVET programs in Nigerian universities typically focus on practical, hands-on training in specific trades, professions, or industries, preparing students for careers in areas such as engineering, agriculture, healthcare, business, and information technology (Okebukola, 2008). Also, in universities, various TVET programmes includes electrical work, hands-on training in culinary arts and event planning, practical training in programming, hands-on training in farming techniques, construction management, carpentry, and plumbing.

These programs often combine classroom instruction with practical training, internships, or apprenticeships, allowing students to acquire both theoretical knowledge and practical skills relevant to their chosen fields. The curriculum of TVET programs in Nigerian universities is designed to meet the needs of industry and the labor market, ensuring that graduates are adequately prepared for the workforce and capable of contributing to national development (Adeyemi & Adeyinka, 2014). There were also welding, and other building trades, IT infrastructure management, network administration, database management, and troubleshooting of engineering systems in many university programmes that involves TVET

The objectives of TVET in Nigerian universities include promoting skill acquisition, entrepreneurship, and innovation among students, fostering economic development and self-reliance, reducing unemployment, and addressing the skills gap in key sectors of the economy (Okoro, 2017). These objectives align with the broader national goals of poverty reduction, sustainable development, and industrialization, highlighting the crucial role of TVET in Nigeria's socio-economic development agenda (Federal Republic of Nigeria, 2019).

TVET programs in Nigerian universities offer a wide range of services to students, including academic advising, career counseling, skills assessment, job placement assistance, and access to technical facilities and equipment (Adesoji & Adesoji, 2014). These services are designed to support students throughout their educational journey and facilitate their transition into the workforce upon graduation, enhancing their employability and job prospects (Okoro, 2017).

### **2.3 Gender disparities in TVET within universities**

Gender disparities in Technical and Vocational Education and Training (TVET) within universities are prevalent in many countries, including Nigeria. Despite efforts to promote gender equality, women continue to be underrepresented in certain fields of study and face various challenges in accessing and participating in TVET programs (Aderinoye & Adegbesan, 2019). One key factor contributing to gender disparities in TVET is societal perceptions and stereotypes regarding gender roles and occupations. Traditional gender norms often dictate that certain fields, such as engineering and technology, are more suitable for men, while others, such as nursing and caregiving, are considered more appropriate for women (Ezeani, 2015). These stereotypes influence students' educational and career choices, leading to a disproportionate representation of men and women in different disciplines within TVET.

Another factor is the lack of female role models and mentors in TVET fields, particularly in male-dominated industries. The absence of visible female leaders and professionals in these fields may deter women from pursuing careers in STEM (science, technology, engineering, and mathematics) and other technical disciplines (Olatokun & Afuwape, 2017). Additionally, women may face discrimination and bias from peers, educators, and employers, further discouraging their participation in TVET programs (Onyilo & Egbon, 2018). Limited access to educational resources and support services also contributes to gender disparities in TVET. Women may encounter barriers such as inadequate funding, lack of access to technology and equipment, and insufficient support for childcare and family responsibilities (Adeleke & Olatunji, 2019). These challenges can hinder their ability to enroll in TVET programs, complete their studies, and pursue careers in technical fields. Addressing gender disparities in TVET requires comprehensive strategies that promote gender equality and inclusivity in education and the workforce. This includes efforts to challenge stereotypes, provide mentorship and support networks for women in TVET, improve access to resources and opportunities, and create an enabling environment free from discrimination and bias (Abubakar & Kabilan, 2019).

#### **2.4 Factors Influencing Female Participation in TVET in universities**

Several factors influence female participation in Technical and Vocational Education and Training (TVET) programs within Nigerian universities, contributing to the gender disparities observed in these fields. Societal stereotypes and cultural norms often discourage women from pursuing non-traditional career paths in fields such as engineering, technology, and construction (Adesoji & Adesoji, 2014). These stereotypes perpetuate the perception that certain professions are more suitable for men, leading to limited opportunities and support for women interested in TVET. Furthermore, socio-economic factors such as poverty, limited access to education, and financial constraints disproportionately affect women's participation in TVET programs (Adeyemi & Adeyinka, 2014). Women from marginalized communities face additional barriers due to lack of resources and opportunities for skills development. These socio-economic disparities contribute to lower enrollment rates among female students in TVET programs compared to their male counterparts.

Gender biases and discriminatory practices within educational institutions also impact female participation in TVET programs. Studies have shown that women face challenges in accessing quality education and career guidance services, which may influence their decision to pursue TVET courses (Federal Republic of Nigeria, 2019). Limited access to information about available TVET programs and career pathways further restricts opportunities for women to explore and pursue their interests in non-traditional fields. Additionally, family responsibilities and societal expectations often place greater pressure on women to prioritize caregiving roles over education and career advancement (Adesoji & Adesoji, 2014). Cultural norms regarding gender roles and expectations may discourage women from pursuing TVET programs that are perceived as masculine or physically demanding. As a result, women may face internal and external barriers that hinder their participation and success in TVET fields.

#### **2.5 Strategies for Promoting female participation and gender equality in TVET in university**

Promoting gender equality in Technical and Vocational Education and Training (TVET) programs within universities requires a multifaceted approach that addresses systemic barriers and fosters an inclusive learning environment. One strategy is to implement gender-sensitive curriculum development, which incorporates diverse perspectives and experiences to challenge gender stereotypes and biases (Takala-Greenish, 2015). By integrating gender-sensitive content and teaching methods into TVET courses, universities can promote critical thinking and empower students to challenge traditional gender norms. Furthermore, universities can enhance support services and mentorship programs specifically tailored to female TVET students to address their unique needs and challenges (Dandison & Asiedu-Addo, 2014). Providing access to career counseling, skills development workshops, and networking opportunities can help female students build confidence, develop leadership skills, and navigate career pathways in non-traditional fields. Mentorship programs that pair female students with successful women professionals in TVET industries can also provide valuable guidance and support.

Additionally, universities can collaborate with industry partners to create internship and apprenticeship opportunities that promote gender diversity in TVET fields (Elueze & Anyadiegwu, 2017). By establishing partnerships with companies committed to gender

equality, universities can facilitate hands-on learning experiences for female students and expose them to career opportunities in male-dominated industries. Industry engagement also allows universities to stay abreast of emerging trends and technologies in TVET fields, ensuring that their programs remain relevant and responsive to market demands.

Another effective strategy is to promote female role models and celebrate the achievements of women in TVET fields through awareness campaigns and recognition initiatives (Chikasirimobi, 2019). Highlighting the accomplishments of female alumni, faculty members, and industry leaders can inspire current students and challenge stereotypes about women's capabilities in technical and vocational careers. Creating visibility for women in TVET fields helps to counteract negative perceptions and encourages more young women to pursue educational and career pathways in these areas.

Furthermore, universities can create safe and inclusive learning environments that promote respect, dignity, and gender equity for all students (Ochanje, 2019). Establishing zero-tolerance policies for gender-based discrimination and harassment and providing training on gender sensitivity and diversity awareness can help create a culture of inclusivity and mutual respect within university settings. By fostering a supportive and empowering learning environment, universities can attract and retain female students in TVET programs and contribute to greater gender equality in the workforce.

### 3. METHODOLOGY

A descriptive survey research design was used for the study. A descriptive survey design is a design that aims at collecting data on something and describing it in a systematic manner. This involves collection of data on a representative population of the target audience, on which generalization is made (Nworgu, 2015). The area of the study is Delta state. The sample population comprised of 300 female students (100 each) in 3 selected universities in Delta state namely: Delta State University Abraka, Dennis Osadebe University, Asaba, and University of delta, Agbor. A structured questionnaire on a four (4) – point Likert scale was used for collection of data for this study. The instrument was a questionnaire which was subjected to face validation as well as pilot test using Cronbach Alpha which gave a reliability coefficient value of 0.88. The study used on-the-spot method of distribution and data collection. Data collected from the study were analyzed using mean scores with a threshold of acceptance of 2.5.

### 4. Analysis and Discussion of Findings

#### 4.1 Research Question 1: What are the importance of gender equality and female participation in TVET in selected universities in Delta state?

**Table 1:** Responses on the importance of gender equality and female participation in TVET in selected universities in Delta state

S/N	Items	Mean	Decision
1	Gender equality in TVET programs ensures that all individuals, regardless of gender, have access to the skills and knowledge needed to participate in the labor market and contribute to economic growth	3.13	Agree
2	Increasing female participation in TVET helps address skills shortages and mismatches in the labor market by diversifying the pool of skilled workers	3.02	Agree
3	Gender equality in TVET promotes social inclusion by providing equal opportunities for all individuals to access education and training	3.15	Agree
4	Access to quality education and training opportunities, including TVET, is a key driver of poverty reduction and social mobility	3.22	Agree
5	Gender diversity in TVET programs enhances creativity, innovation, and problem-solving by bringing together diverse perspectives, experiences, and talents	3.10	Agree
6	Gender equality in TVET is essential for achieving broader development goals, including the Sustainable Development Goals (SDGs)	3.05	Agree

**Source: Field Survey, 2024**

In Table 1, the importance of gender equality and female participation in TVET in selected universities in Delta state were that gender equality in TVET programs ensures that all individuals participate in the labour market and contribute to economic growth, helps address skills shortages and mismatches in the labour market by diversifying the pool of skilled workers, promotes social inclusion by providing equal opportunities for all individuals to access education and training, access to TVET training opportunities is a key driver of poverty reduction and social mobility, enhances creativity, innovation, and problem-solving by bringing together diverse perspectives, experiences, and talents, and that gender equality in TVET is essential for achieving broader development goals, including the Sustainable Development Goals (SDGs). This result is in line with the findings of Abubakar and

Kabilan (2019) who state that gender equality and female participation in TVET in universities is very important as it can help break the cycle of poverty and inequality, thereby empowering individuals and communities to improve their livelihoods and well-being. It can equip women with technical and vocational skills to meet the evolving needs of industries and sectors that require a skilled workforce when they get engaged into a workforce. Adesoji & Adesoji, (2014) in their own view state that the importance of gender equality can enable female participation in TVET which can create more inclusive learning environments that empower women and girls to pursue their educational and career aspirations.

#### 4.2 Research Question 2: What are the challenges that impede female participation and gender equality in TVET in selected universities in Delta state?

**Table 2:** Responses on the challenges that impede female participation and gender equality in TVET in selected universities in Delta state

S/N	Items	Mean	Decision
1	Deep-rooted gender stereotypes often discourage females from pursuing technical and vocational fields perceived as traditionally male-dominated	3.13	Agree
2	Female students in many religious inclination may face barriers to accessing supportive education that prioritize male education	3.02	Agree
3	Traditional gender roles often discourage female students from participating in educational settings, including workshops	3.15	Agree
4	Female students may face barriers such as sexual harassment to accessing quality support and facilities to learn	3.22	Agree
5	Female students may lack access to career guidance and support services that encourage them to explore non-traditional career pathways in technical and vocational fields	3.10	Agree
6	Female students in TVET programs may experience gender-based discrimination in educational settings, including internships	3.05	Agree
7	Female students often face institutional barriers with unequal access to resources in a male-dominated institution	3.32	Agree
8	Societal norms and cultural beliefs often discourage females from pursuing technical and vocational fields	3.41	Agree

Source: Field Survey, 2024

In Table 2, the challenges that impede female participation and gender equality in TVET in selected universities in Delta state are deep-rooted gender stereotypes, religious inclination, traditional gender roles, sexual harassment, lack access to career guidance and support services, gender-based discrimination, institutional barriers, and societal norms and cultural beliefs. This result is in line with the findings of Aduloju and Aina (2019) who found that the female participation and gender equality in TVET has been affected by religious beliefs and certain forms of culture that are tied to the beliefs of most female respondents who are interested and would have participated in TVET in Nigerian universities. Deep-rooted stereotypes perpetuate the belief that certain careers are more suitable for men, while others are more suitable for women, limiting opportunities for female participation in TVET Aduloju and Aina (2019) in support of this results attested that in some universities, there are cases of gender stereotypes and institutional barriers which have impede female participation and gender equality in TVET in universities. Hostile learning environments can undermine female students' confidence and motivation, leading to decreased retention rates and higher dropout rates

#### 4.3 Research Question 3: What are the strategies for increasing female participation and gender equality in TVET in selected universities in Delta state?

**Table 3:** Responses on strategies for increasing female participation and gender equality in TVET in selected universities in Delta state

S/N	Items	Mean	Decision
1	Incorporating gender-sensitive content and teaching methods into TVET courses challenges traditional gender stereotypes and biases	3.03	Agree
2	Universities can provide access to career counseling, skills development workshops, and networking opportunities tailored to female TVET students	3.22	Agree
3	Collaborating with industry partners to create internship and apprenticeship opportunities to expose female students to career pathways in male-dominated industries	3.45	Agree

4	Highlighting the achievements of female alumni, faculty members, and industry leaders can inspire current students and challenge stereotypes about women's capabilities in technical and vocational fields	3.12	Agree
5	Establishing zero-tolerance policies for gender-based discrimination and harassment	3.10	Agree
6	Providing women with equal slots on all TVET interventions	3.25	Agree
7	Providing training on gender sensitivity and diversity awareness to help create a culture of inclusivity and mutual respect within university settings	3.33	Agree

Source: Field Survey, 2024

In Table 3, the strategies for increasing female participation and gender equality in TVET in selected universities in Delta state as agreed by the respondents are incorporating gender-sensitive content and teaching methods into TVET courses challenges traditional gender stereotypes and biases, universities can provide access to career counseling, skills development workshops, and networking opportunities tailored to female TVET students, collaborating with industry partners to create internship and apprenticeship opportunities to expose female students to career pathways in male-dominated industries, highlighting the achievements of female alumni, faculty members, and industry leaders can inspire current students and challenge stereotypes about women's capabilities in technical and vocational fields, establishing zero-tolerance policies for gender-based discrimination and harassment, providing women with equal slots on all TVET interventions, and providing training on gender sensitivity and diversity awareness to help create a culture of inclusivity and mutual respect within university settings. This result is in line with the findings of Dandison and Asiedu-Addo (2014) whose study revealed that universities can enhance support services and mentorship programs specifically tailored to female TVET students to address their unique needs and challenges. By integrating diverse perspectives and experiences, universities can promote critical thinking and empower female students to pursue non-traditional fields. Additionally, Elueze and Anyadiegwu (2017) asserted that universities can collaborate with industry partners to create internship and apprenticeship opportunities that promote gender diversity in TVET fields. Takala-Greenish (2015) stated that a good strategy is to implement gender-sensitive curriculum development, which incorporates diverse perspectives and experiences to challenge gender stereotypes and biases.

## 5. Conclusion

This paper can be concluded on the premise that promoting gender equality in Technical and Vocational Education and Training (TVET) programs is essential for achieving inclusive and sustainable development in Delta State, Nigeria, and beyond. Firstly, acknowledging the importance of gender equality in TVET is crucial. Gender disparities in TVET participation not only limit opportunities for women but also hinder economic growth and development. By recognizing the value of gender diversity in TVET programs, universities can prioritize initiatives that promote equal access and opportunities for all students, regardless of gender. Also, addressing the factors that influence female participation in TVET such as social and cultural norms, stereotypes, lack of awareness about TVET opportunities, and limited access to resources and support can enable stakeholders to identify and mitigate these barriers in universities so as to create a more inclusive and welcoming environment that encourages female students to pursue TVET education and careers. In this view, implementing specific strategies to promote gender equality in TVET, such as targeted recruitment and outreach efforts, gender-sensitive curriculum development, mentorship and support programs, and promoting female role models in TVET fields, can make a significant difference. These initiatives can help to break down gender stereotypes, build confidence and self-esteem among female students, and create pathways for their success in TVET.

## 6. Recommendations

From the data analysis and conclusion of the study, it can be recommended that:

1. Universities need to develop and implement gender-sensitive policies and guidelines that promote equal access and opportunities for all students in TVET programs. These policies should address issues such as recruitment, admissions, curriculum development, and support services to ensure a conducive environment for female participation.
2. Universities need to conduct targeted outreach and awareness programs to promote TVET opportunities among female students. This may include organizing career fairs, workshops, and information sessions specifically tailored to address the needs and interests of female students and their parents or guardians.
3. Universities need to establish mentorship and support programs to provide guidance and assistance to female students pursuing TVET education and careers. These programs can pair female students with mentors who can offer advice, encouragement, and support throughout their academic journey and beyond.
4. Universities need to integrate gender mainstreaming principles into the development and delivery of TVET curricula. This involves ensuring that course content, teaching methods, and learning materials are gender-sensitive and inclusive, reflecting the diverse needs and experiences of all students.

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