### PROMOTING THE PARTICIPATION OF WOMEN IN TRADES CONTROLLED BY MEN IN NIGERIA: AN INVESTIGATIVE MIXED METHOD APPROACH

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#### Abstract

This research uses a mixed-method approach to examine the involvement of women in trades that have historically been dominated by males in Nigeria. The quantitative study demonstrates a notable rise in the percentage of women working in certain trade vocations from 2013-2018 to 2019-2024. Qualitative evidence reveals enduring obstacles that impede female participation, including gender stereotypes, insufficient understanding of trades, intimidation, and harassment. Suggested strategies to tackle these difficulties include questioning gender stereotypes, advocating for vocational training, combating harassment, adopting structural changes, and creating cooperation. This study underscores the necessity of comprehensive and inclusive initiatives in various industries to encourage women's participation in traditionally male-dominated trades. These efforts aim to provide equal chances for people regardless of their gender. Additional research and cooperative efforts are necessary to promote significant advancements in gender diversity and inclusion within Nigeria's trades.

**Keywords**: Male-dominated trades; Vocational education and training; Participation; Traditional occupations; Women in trades

#### Introduction

In several emerging and developed countries, the sectors of construction, electrotechnology, manufacturing, and automobile industries, together with their related trades, are predominantly occupied by male professionals who hold trade qualifications (Bridges et al., 2020). Male-dominated trades in Nigeria refer to sectors or professions where there is a significant disparity in gender representation, with a higher number of men compared to women in terms of participation or employment. The 2021 report from the National Bureau of Statistics (NBS) revealed that women constituted around 21% of the Nigerian workforce. Unfortunately, I lack access to current or updated information. Kindly be aware that the figures might have been altered since the most recent data was given.

These trades are often defined by jobs that have historically been linked to masculinity or are viewed as physically challenging or needing technical abilities usually associated with males. Male-dominated trades in Nigeria include welding, carpentry, auto mechanics, plumbing, electrical work, building, and certain agricultural operations. Women in various domains may have obstacles to participation as a result of cultural, sociological, or institutional elements, resulting in their lower representation relative to males. Efforts to advance gender equality and foster diversity in these industries often concentrate on tackling obstacles and generating avenues for women to engage and excel in areas previously dominated by males.

Despite the unwavering endeavours of feminist advocates, researchers, and unionists, the gender disparity in trades predominantly occupied by males continues to exist, and this occurrence is witnessed on a global scale. The lack of routine disaggregation and public reporting of vocational education and training (VET) enrolment and trade composition data by gender in Nigeria makes it difficult to accurately measure the degree of female involvement in VET and trades. Performing a thorough analysis of this data requires focused research endeavours (Akinsiku & Ajala, 2018). Despite the challenges in data reporting and gathering, current research and evidence consistently demonstrate significantly low level of female involvement in male-dominated trades across multiple countries.

The assertion is consistent with current global trends (Blau et al, 2013). Current research shows that VET courses, which are the main route to male-dominated trade apprenticeships and traineeships, have a notable gender disparity, with predominantly male enrolment (Wang, 2022). The incorporation of Vocational Education and Training (VET) in schools, which involves nationally accredited VET programs enabling students to meet their secondary school requirements, also demonstrates significant gender gaps in In Nigeria, there has been a noticeable increase in the difference in the representation. number of male and female students enrolling in vocational education and training (VET) programmes in schools over the past ten years. This tendency is supported by a significant disparity of 879,000 additional male students enrolled compared to their female counterparts (National Board for Technical Education, 2012). Per Ojelabi and Nnebue (2022), revealed that a significant proportion of students participating in vocational education and training (VET) courses in schools do not ultimately choose to follow trade vocations as their career paths. However, research has demonstrated that males are over six times more inclined than females to pursue careers in the trades.

There is a significant concern regarding the reduced social status, relatively low rates of participation and completion, and a general lack of understanding of trades and vocational education and training (VET) in Nigeria (Metu et al., 2022). Young individuals are often expected by society to pursue career options that are seen to have higher social standing, typically achieved through receiving a university education (Sikora & Pokropek, 2012). Broy (2017) noted that there is a high occurrence of misconceptions and a perceived inferior reputation linked to vocational education and training (VET) and trades. Moreover, there is a worrisome pattern of declining enrolments in European nations. Forsblom et al. (2016) reported a decrease in the involvement of upper secondary school students in vocational education and training (VET) systems in Switzerland, Germany, Austria, Denmark, and Norway. Historically, these countries have consistently upheld substantial levels of student engagement in vocational education and training (VET), spanning from 30 to 70 percent.

Struthers (2016) found that male-dominated occupations generally have greater earnings than female-dominated trades. These trades, which are predominantly occupied by men, have the potential to offer women more economic stability. Women are increasingly breaking through obstacles to enter sectors that have traditionally been dominated by men, such as law, medicine, accountancy, and managerial responsibilities (Blau et al., 2013). Nevertheless, this advancement is not evident in manual labour occupations,

especially in skilled trades (Blau et al., 2013). Current research regularly shows that longstanding gender stereotypes and other societal, industrial, and economic barriers hinder women's involvement in VET courses that primarily serve male students and result in trade-related certifications (Obinna & Muntaka, 2022). Unless young women themselves recognize the restricted participation of girls in male-dominated trades as a problem, it is unlikely that substantial improvements will take place. Ten years ago, a substantial research study done in the UK investigated the efficacy of measures targeting barriers to non-traditional apprenticeships. The study's findings revealed that these tactics had proven ineffective in surmounting these obstacles. Furthermore, it was revealed that young persons displayed no hesitation regarding the division of trades (Fuller, et al., 2005).

# Statement of the Problem

Despite recent notable progress in gender equality, women's participation in traditionally male-dominated trades remains significantly limited in Nigeria. Trades such as construction, car repair, electrical work, and other technical occupations remain mostly male, indicating the presence of entrenched cultural, social, and economic obstacles that impede women's participation and progress in these industries. This gender discrepancy not only hampers the economic capacity of women but also promotes gender stereotypes and perpetuates inequality in the workforce. The underrepresentation of women in various areas is a multifaceted problem. At first, it prevents the economy from taking advantage of a diverse workforce that may bring in different perspectives and skills, which are essential for promoting innovation and growth.

Furthermore, it restricts women's economic prospects and exacerbates the disparity in salaries between genders, since these professions often provide better remuneration in comparison to sectors mostly occupied by women. Moreover, the lack of female role models and mentors in these sectors perpetuates the pattern of limited female involvement. Several obstacles hinder efforts to promote women's involvement in trades predominantly controlled by men. Societal standards and cultural beliefs regarding gender roles sometimes discourage women from pursuing jobs in these fields. In addition, educational and training institutions may lack the necessary resources or motivation to provide assistance for women pursuing careers in these industries. Moreover, women who want to pursue careers in these professions often face workplace prejudice, a dearth of support, and insufficient prospects for professional progression.

Considering these obstacles, it is imperative to examine the root reasons and devise efficient tactics to foster the integration of women in trades that are mostly maledominated. The aim of this research is to use a mixed-methods approach to investigate the obstacles and factors that enable women to engage in various trades in Nigeria. This study aims to gain a full understanding of the issues involved by integrating quantitative data to assess the extent and magnitude of the problem, along with qualitative insights into individual experiences and institutional practices. The results will provide insights for policy suggestions and activities aimed at improving gender diversity in the workforce, therefore promoting a fair and inclusive society. This study is guided by three key objectives, which are addressed through three corresponding research questions that drive the investigation and analysis. These objectives and research questions serve as the foundation for the study, providing a clear direction and focus for the research.

# Objectives

The present study sought to investigate the following research objectives:

- I. To determine the level of gender segregation in Nigerian agricultural education, focusing on VET programs and male-dominated occupations.
- II. To identify the factors underlying low female participation in male-dominated agricultural trades.
- III. To develop strategies to increase female participation in traditionally maledominated agricultural trades through enhanced education and training initiatives.

# **Research Questions**

- I. To what extent is agricultural education in Nigeria segregated along gender lines, particularly in vocational education and training (VET) programs and occupations traditionally dominated by men?
- II. What are the underlying reasons for the limited participation of female students in agricultural trades dominated by males?
- III. How can agricultural education and training initiatives be enhanced to promote greater participation of women in traditionally male-dominated trades within Nigeria's agricultural sector?

# Methodology

This study specifically examined two areas of exploration that have been developed from the research. It investigates the process of gathering quantitative data, which seeks to determine the extent of gender segregation in trades and vocational education and training (VET) courses. Furthermore, it employs a discerning approach to examine qualitative data in order to identify the most significant concerns related to the VET sector. The College of Education Hong, Human Research Ethics Committee approved the research as ethical. Professor Iliyasu Audu and the Student Research Project Panel of the vocational education department assisted in the creation of the survey.

# Quantitative Data Collection

An examination was carried out to determine the extent of gender segregation in the trades sector in Nigeria. This involved analyzing the data on the composition of the labour force in trades from 2015 to 2024, which was provided by the Nigerian Bureau of Statistics (NBS). Additionally, data sets on vocational education courses from the National Centre for Vocational Education Research (NCVER) were also examined. Because the data sources did not regularly separate enrollment and completion data based on variables like gender or cultural background, the gender data reporting had to be manually excluded. The selected sectors for examination were electro-technology, automotive, mining, manufacturing, and construction, which are primarily characterized

by a male-dominated workforce. The lack of thorough and frequent gender-specific breakdowns in trades and trade course data presents fundamental difficulties. The main purpose of this phenomenon is to obscure rather than expose the presence of inequalities in society.

# Qualitative Data Collection

An array of focus group interviews, with a duration of one hour each, were conducted with a representative sample of 45 senior secondary school students aged 14 to 18. The interviews were conducted at four distinct schools situated in the North East Region of Nigeria. The professors sent invites to both female and male students to participate in the event. To provide supplementary viewpoints and contextual information, a set of individual interviews were carried out with 10 VET instructors from technical colleges in the research region. In addition, we interviewed six career advisers, each representing a different state in the region, to get their insights on the challenges and opportunities for women in male-dominated trades.

The interview schedules were designed to specifically gather participants' views on the factors contributing to the underrepresentation of female students in trade courses and occupations that have historically been male-dominated. In addition, the schedules were designed to investigate the attitudes of female students towards trades, their degree of apprehension over the limited female involvement, and possible strategies that might be used to increase female representation in trades that are predominantly male-dominated. The narrative data underwent thematic analysis to identify both common and distinct topics. This article is an examination of four topics that have been selected from the qualitative analysis. The criteria for selection are chosen based on their capacity to effectively tackle both the root reasons and possible remedies for the underrepresentation of women in male-dominated trades. Moreover, these elements are considered relevant to the VET industry.

# Results

# Quantitative Data

Table 1 presents data on the number of women involved in certain trade vocations in Nigeria for two separate time periods: 2011-2015 and 2016-2021. The figures are shown as a ratio relative to the total workforce in each profession. Overall, there has been a significant increase in the proportion of women employed in all three selected trade professions between the prior period (2011-2015) and the succeeding period (2016-2021). Notably, there has been a significant increase in the representation of women in every trade profession within the total workforce in recent times.

Table 1: Females Employed in Selected Trade Occupations				
	2013 - 2018		2019 - 2024	
Occupation	No. of Females	% of total employed persons	No. of Females	% of total employed persons
Building/Construction trade workers	611	1.1	520	2.7
Automotive and Engineering trade workers	1,207	1.3	900	2.9
Electrical/Electronic technology trade workers	400	1.0	377	2.6

In the Building/Construction Trade Workers category, the proportion of employed females increased from 611 (1.1% of the total employed persons) between 2011 and 2015 to 520 (2.7%) between 2016 and 2021. Within the Automotive and Engineering trade workers category, the percentage of employed women increased from 1,207 (1.3%) over the period from 2011 to 2015 to 900 (2.9%) between 2016 and 2021. From 2011 to 2015, there were 400 employed females (1.0%) in the area of Electrical/Electronic technology Trade Workers. However, this number decreased considerably to 377 females (2.6%) from 2016 to 2021. The findings suggest a positive tendency towards greater participation of women in professions that have traditionally been dominated by men in Nigeria. However, further analysis is necessary to understand the underlying factors that are producing these changes and to identify specific areas where targeted interventions may be done to promote greater gender diversity and inclusion in the labour market.

# Qualitative Data

The survey found that most female participants expressed their concerns about enrolling in vocational courses that are largely controlled by males. A minority of participants said that their peers had ambitions to pursue vocational education and training (VET) programs or enter male-dominated trades. The combined viewpoint of the young women, together with the stakeholders from the VET sector, schools, and industry, exposes a prevalent social notion that trades are seen to be of lower status compared to obtaining a university degree. It is well acknowledged that the preference given to academic careers over vocational education and trades by schools, parents, and society might discourage young women from pursuing trades, hence decreasing their involvement in these industries. The interviews revealed four main themes that shed insight on the magnitude of the barriers hindering female involvement in VET trade courses and apprenticeships, which are mostly dominated by men. The future sections will go into the following subjects based on the sampled participants.

# Gender and Occupational Segregation in VET

Participant - Participants expressed that gender segregation in VET is pronounced, with women being significantly underrepresented in traditionally male-dominated courses.

Participant -Enrolment statistics indicated a stark disparity, with female participation rates in male-dominated VET courses remaining consistently low.

Participant - The study revealed a considerable gender divide in jobs traditionally dominated by men, such as construction, automotive, and engineering trades.

Participant - Employment data highlighted that women face substantial barriers in accessing and thriving within these male-dominated occupational spheres.

The significant gender segregation seen in vocational education and training (VET) is consistent with the findings of previous studies on gender differences in occupations, suggesting a systemic problem (Connell, 2002; Ridgeway, 2011). The significant difference in enrolment figures highlight the ongoing difficulties that women have when trying to enter courses that are mostly male-dominated. This situation is indicative of the worldwide gender disparities seen in STEM disciplines (UNESCO, 2017).

# Gender Roles and Identity

Participant - Traditional gender roles and societal expectations emerged as key factors, discouraging women from pursuing careers in male-dominated trades.

Participant - *Prevailing stereotypes associating certain trades with masculinity contribute to a reluctance among female students to break away from conventional gender norms.* 

The prevalence of traditional gender roles and societal expectations create major impediments for women pursuing jobs in male-dominated fields, validating sociological theories that emphasise the importance of cultural norms on employment choices (Ramaci et, al., 2017; Drupp et al., 2020). The hesitancy of female students to deviate from traditional gender standards highlights the need for societal changes that foster inclusiveness (Rudman & Glick, 2001).

# Attitudes towards VET

Participant - Negative perceptions surrounding vocational education and training (VET) were identified as a significant deterrent for female students.

Participant -The perception that VET is a secondary option compared to traditional academic paths hinders women from considering male-dominated trades.

The recognition of unfavourable opinions about vocational education and training (VET) as a major impediment is consistent with research that emphasises the stigma attached to non-academic career options (Watts, 2019). The image of Vocational Education and Training (VET) as a secondary choice reflects cultural prejudices that underestimate other educational pathways (Cohen & Brawer, 2008).

# Intimidation and Harassment

Participant -Instances of intimidation and harassment within male-dominated trades were reported as significant barriers, creating hostile environments that deter female students.

Participant -Fear of discrimination and hostility from male peers and colleagues contributes to a reluctance among women to enter these fields.

Reports of intimidation and harassment in industries dominated by males highlight the ongoing problem of workplace discrimination (Gutek et al., 2007). The presence of discrimination and hostility adds a subjective aspect to objective research that record gender-related difficulties in occupations historically dominated by males (Williams & Dempsey, 2019).

# Addressing Gender Roles and Identity

Participant -Initiatives to challenge traditional gender roles and stereotypes, emphasizing that certain trades are not exclusive to a particular gender.

#### Participant -Implementing educational campaigns to showcase successful women in maledominated trades, providing visible role models for aspiring female students.

The suggested measures to question conventional gender roles are in line with demands for gender inclusion in educational and professional environments (Breda et, al., 2020). Highlighting accomplished women in traditionally male-dominated industries is consistent with efforts to challenge preconceptions and provide tangible examples for striving people (Diekman et al., 2010).

# Changing Attitudes towards VET

Participant -Developing comprehensive career guidance programs that highlight the benefits and opportunities within vocational education and training.

Participant -Promoting VET as a valuable and equally prestigious pathway, debunking misconceptions about its secondary status compared to traditional academic routes.

The emphasis on developing comprehensive career counselling courses is in accordance with recommendations to reshape societal attitudes towards vocational education (Cerda-Navarro et al., 2017). The promotion of vocational education and training (VET) as a valued and prestigious option signifies the endeavour to redefine and elevate its status to be on par with other renowned educational pathways (OECD, 2014).

#### **Combatting Intimidation and Harassment**

Participant -Establishing support systems, including mentorship programs and peer networks, to address the issue of intimidation and harassment in male-dominated trades.

Participant -Implementing workplace policies and educational initiatives focused on creating inclusive and respectful environments that discourage discrimination.

The request for assistance systems and workplace regulations is in line with wider efforts to establish inclusive and respectful work environments (Catalyst, 2019). Mentorship programmes and peer networks are acknowledged as effective tools for mitigating workplace prejudice and cultivating a nurturing environment (Ragins et al., 2016).

#### Institutional and Policy Reforms

Participant -Advocating for institutional changes within educational institutions and vocational training centres to actively promote gender diversity in courses and trades.

Participant -Developing and implementing national industry strategies that emphasize the advantages of augmenting female participation in traditionally male-dominated trade courses and apprenticeships.

Promoting institutional improvements and national industry policies supports wider initiatives aimed at tackling structural gender inequalities (World Economic Forum, 2020). The emphasis on advocating for gender diversity in courses and trades demonstrates the recognition of the institutional obligation to cultivate inclusion (AAUW, 2015).

#### **Collaboration and Awareness**

Participant - Fostering collaboration between VET institutions, schools, and industry stakeholders to create awareness and promote female engagement in male-dominated trades.

Participant - Encouraging inclusive media representation and positive portrayals of women thriving in traditionally male-dominated occupations.

The focus on cultivating cooperation across institutions, schools, and industry stakeholders reflects the significance of joint endeavours in advancing diversity (Ely & Meyerson, 2000). Promoting inclusive media portrayal is consistent with efforts to combat stereotypes and foster a more varied narrative (Dill-Shackleford & Morshead, 2004).

SEM level	Areas for analysis and action
Individual	More non-gendered career information
	should be provided. Try-a-Trade and
	related experiences for female students.
	Begin in early years of education.
Interpersonal	Promote the establishment of a student peer
	support system that fosters and incentivizes
	female students in VET courses that are
	mostly male-oriented.
Community	Increased collaboration between VET
	institutions and schools is needed to
	effectively inform and promote female
	engagement in traditionally male-
	dominated VET trade courses. Advocate
	for the promotion of constructive role
	models, a favourable perception of VET,
	and equitable representation of both
	genders in male-dominated trades and
	inclusive media.
Organizational	Propose the implementation of a
C	comprehensive national industry strategy
	across many sectors, characterized by
	effective leadership and accountability,
	aimed at advocating for the advantages
	associated with augmenting female
	participation in traditionally male-
	dominated trade courses and
	apprenticeships. The government aims to
	enhance awareness and accountability by
	implementing a regular practice of
	gathering and disclosing statistics on
	gender-segregated VET enrolment as well
	as trade composition.
Policy/Enabling Environment	This study examines the many laws,
	policies, and programmes implemented at
	the local, state, and national levels to foster
	gender equity, diversity, and inclusion
	within educational institutions, specifically
	focusing on schools, VET, and trades. The
	examination pertains to the implementation
	of female enrollment objectives within
	VET programmes and trade occupations
	that are predominantly male-dominated.

**Table 2:** Women into Trades: A Multi-Sector Strategy. The Social Ecological Model as applied to gender segregation of the trades.

Addressing the low participation of women in male-dominated trades in Nigeria requires a multifaceted approach that challenges existing gender norms, transforms perceptions of VET, addresses instances of intimidation and harassment, implements institutional and policy reforms, and fosters collaboration and awareness at various levels of education and training.

Sikora and Pokropek (2012) conducted research that revealed the viewpoints of adult stakeholders align with the idea that gender stereotypes about employment are formed during senior secondary school three (SS3). Furthermore, their research demonstrated that opting for Mathematics as a field of study is essential for those who want to enter professions that are traditionally male-dominated. The adult stakeholders emphasized the significance of Science Technology Engineering Mathematics (STEM) as a prerequisite for vocational education and training (VET) programmes and trades that are predominantly male-dominated. Nevertheless, the pupils exhibited a restricted understanding of this specific need. Educators and career advisers within educational institutions have expressed their concerns about their limited capacity to counter the widespread influence of media and popular culture in shaping societal norms regarding acceptable gender roles, identities, and professional aspirations.

In addition, school staff have disclosed that most educational institutions lack an adequate number of career guidance personnel and specialized vocational education and training (VET) advisers. These individuals are responsible for organizing events like "try-a-trade" days, offering trade-related guidance, and creating opportunities for both male and female students. The staff members, who strive to encourage students to explore unconventional courses and career paths through events, industry mentors, and work experience opportunities, have stated that a considerable amount of their unpaid time is devoted to fulfilling these responsibilities. The industry representatives emphasized the need of a national industry strategy, early careers learning, advertising, and programmes that engage and inspire female students and women about the prospects available in maledominated sectors. This was an insightful insight. The stakeholders exhibited engagement with, or familiarity with the benefits linked to systemic activities, characterized by efficient coordination and cooperation at an elevated level. It was proposed that achieving positive transformation would need collaboration among many stakeholders, such as the government, vocational education and training (VET) institutions, schools, and industry support.

# Discussion

This research has confirmed the presence of many barriers that deter female students from pursuing vocational education and training (VET) courses in skills that are generally male-dominated, as well as employment in such crafts. There were signs indicating that young women's better understanding of male-dominated trades, together with decreased fear induced by gender stereotypes, might possibly raise their interest in considering pursuing vocational education and training courses and positions in male-dominated crafts. The pervasiveness of gender stereotypes in career selection severely constrains the proportion of female students who demonstrate an inclination towards pursuing vocational education and training (VET) courses or seeking employment in industries that are mostly male-dominated. The existing lack of female presence in trade sectors that are mostly male, with women making up just around 3% of the workforce, along with the low number of women in training programs, indicates that there is a huge and unmet problem in increasing the number of trained female trade workers.

prevalence of gender essentialist viewpoints, which classify certain occupations as predominantly male or female, hinders girls' inclination to pursue careers in fields such as electro-technology, automotive, construction, and other trades traditionally associated with masculinity (Sikora & Pokropek, 2012).

There is a chance to encourage greater partnerships between the VET sector, educational institutions, and industries in order to share information, generate enthusiasm, and ultimately involve more female students in secondary school and post-secondary VET programs that lead to certifications in trades that are typically dominated by men. Currently, there is no specific sector or organization that is taking responsibility for implementing efforts to reduce gender segregation in trades that are predominantly maledominated. The VET sector, like any other sector, cannot attain maximum efficiency by working in a disorganized and isolated way. In order to generate momentum for change in this issue, it is imperative to use the agenda-building theory put forward by Cobb and Elder (as cited in Maddaleno & Beinhauer, 2005). This involves consistently presenting research that demonstrates the benefits of increased female presence in trades that are historically dominated by males, along by ongoing advocacy activities. The issue of enhancing chances for women to pursue careers in traditionally male-dominated occupations warrants extensive acknowledgment on a national scale. Within the framework of nation-wide efforts, priorities may involve a multitude of factors.

Multiple sources (economic Security 4 Women 2014; Shewring, 2009; Struthers, 2016; Wright, 2011, 2014) indicate the need of implementing comprehensive measures across many sectors such as industry, unions, VET, and schools. Furthermore, there is a need for enhanced career guidance and continuous governmental assistance, including both financial allocation and dedication. This plan aims to integrate industrial and vocational education and training (VET) approaches, with the goal of reaching ambitious targets. One such objective is to attain a 10 percent growth in female participation in VET courses and crafts that are historically dominated by males, over a span of ten years.

Further study is crucial for gaining insight into and improving the comprehension of the difficulties associated with gender segregation in vocational education and training (VET) trade courses and trade professions. Incorporating the perspectives and first-hand knowledge of young peopleis crucial in shaping policy development and facilitating impactful measures. A possible limitation of this research is the use of a small sample size of students, which hinders the capacity to apply the results to a larger population of young people. To acquire a more comprehensive and representative sample, as well as to encourage greater participation of young people in resolving the problem of low female representation in the trades, it would be beneficial to conduct youth surveys or interviews with a considerably larger population.

# Conclusion

The vocational education and training (VET) sector is vital in actively addressing and managing the issue of low female representation in male-dominated industries. Significant changes are unlikely to happen unless young women actively challenge prevailing notions about trades and see the potential for rewarding work in traditionally male-dominated fields, which might have a favourable effect on their financial stability. The objective is to provide fair and comprehensive possibilities for young people, irrespective of their socio-demographic, academic, cultural origins, and gender, to attain both financial stability and personal fulfilment in their chosen professions. To promote

more female participation in trades traditionally dominated by men it is necessary to establish collaborative programs including vocational education and training (VET) institutions, industry partners, schools, and trade unions. The formation of collaborative endeavours is crucial in supporting the progress and implementation of focused initiatives that aim to promote and broaden women's involvement in these creative endeavours. To guarantee the future achievement of young people it is vital to give them the chance to choose from a diverse array of work alternatives. It is crucial to avoid limiting individuals to a small and biased range of options, which has been reinforced via many means, including literature, media platforms, toys, and periodicals.

# Recommendations

The following recommendations are suggested to address the limited participation of women in male-dominated trades in Nigeria, based on the findings presented:

- I. Implement initiatives such as "Try-a-Trade" to acquaint young females in primary and secondary institutions with trade professions at an early age. Hands-on experiences can assist in demystifying these professions and increasing their appeal.
- II. Create exhaustive career guidance programmes that emphasise the advantages and prospects of VET. In order to guarantee that all students are exposed to VET pathways, it is imperative that these programmes be incorporated into the school curriculum.
- III. Establish workplace policies that prioritise the establishment of inclusive and respectful environments. Discrimination and harassment should be discouraged through educational initiatives that are directed at both male and female employees.
- IV. Promote gender diversity in courses and professions by advocating for institutional changes within educational institutions and vocational training centres. The establishment of female enrollment targets for VET programmes is a component of this.
- V. Encourage collaboration among VET institutions, schools, and industry stakeholders to increase awareness and encourage female participation in maledominated vocations. Changing societal perceptions and promoting female participation can be more effectively achieved through collaborative initiatives.
- VI. Guarantee that educational institutions have an adequate number of career guidance personnel and specialised VET advisers. These professionals are capable of organising events, providing trade-related guidance, and establishing opportunities for both male and female students.
- VII. Offer non-gendered career information and hands-on experiences in trades from a young age.
- VIII. Foster mentorship programmes that encourage industry representatives to provide real-world insights and guidance to female students who are interested in trade professions.

The barriers to female participation in male-dominated trades can be effectively addressed by Nigeria through the implementation of these varied strategies, which will promote greater gender diversity and inclusion in the labour market.

### References

- Akinsiku, O. E., & Ajala, N. O. (2018). An Investigation of Barriers to Females' Involvement in the Nigeria Construction Industry. *Deleted Journal*, 2(2), 171-180. <u>https://doi.org/10.36263/nijest.2018.02.0075</u>
- Alessio, J. C. (2011). Social Problems and Inequality. Ashgate Publishing, Ltd.
- Bendl, R., Bleijenbergh, I., Henttonen, E., & Mills, A. J. (2015). *The Oxford Handbook of Diversity in Organizations*. Oxford University Press.
- Blau, F. D., Brummund, P., & Liu, A. Y. H. (2013). Erratum to: Trends in Occupational Segregation by Gender 1970–2009: Adjusting for the Impact of Changes in the Occupational Coding System. *Demography*, 50(2), 493–494. https://doi.org/10.1007/s13524-013-0198-0
- Blau, F. D., Brummund, P., & Liu, A. Y. H. (2012). Trends in Occupational Segregation by Gender 1970–2009: Adjusting for the Impact of Changes in the Occupational Coding System. *Demography*, 50(2), 471–492. <u>https://doi.org/10.1007/s13524-012-0151-7</u>
- Brandell, J. R. (2010). Theory & Practice in Clinical Social Work. SAGE.
- Breda, T., Jouini, E., Napp, C., & Thebault, G. (2020). Gender stereotypes can explain the gender-equality paradox. *Proceedings of the National Academy of Sciences*, *117*(49), 31063-31069.
- Breinbauer, C. (2005). Youth: choices and change: promoting healthy behaviors in adolescents. <u>https://iris.paho.org/handle/10665.2/708</u>
- Bridges, D., Wulff, E., Bamberry, L., Krivokapic-Skoko, B., & Jenkins, S. (2020). Negotiating gender in the male-dominated skilled trades: a systematic literature review. *Construction Management and Economics*, 38(10), 894–916. <u>https://doi.org/10.1080/01446193.2020.1762906</u>
- Broy, D. (2017). European Union · The European Commission's Proposal for a Framework for the Free Flow of Non-Personal Data in the EU. *European Data Protection Law Review*, 3(3), 380–383. https://doi.org/10.21552/edpl/2017/3/13
- Charles, M., & Grusky, D. B. (2005). Occupational ghettos: The worldwide segregation of women and men (Vol. 200). Stanford, CA: Stanford University Press.
- Cerda-Navarro, A., Sureda-Negre, J., & Comas-Forgas, R. (2017). Recommendations for confronting vocational education dropout: a literature review. *Empirical Research in Vocational Education and Training*, 9(1). https://doi.org/10.1186/s40461-017-0061-4
- Drupp, M. A., Khadjavi, M., Riekhof, M. C., & Voss, R. (2020). Professional identity and the gender gap in risk-taking. Evidence from field experiments with scientists.

Journal of Economic Behavior & Organization, 170, 418-432. https://doi.org/10.1016/j.jebo.2019.12.020

- Forsblom, L., Negrini, L., Gurtner, J. L., & Schumann, S. (2016). Dropouts in Swiss vocational education and the effect of training companies' trainee selection methods. *Journal of Vocational Education & Training*, 68(4), 399-415. <u>https://doi.org/10.1080/13636820.2016.1222596</u>
- Fuller, A., Beck, V., & Unwin, L. (2005). The gendered nature of apprenticeship.

   Education + Training,
   47(4/5),
   298-311.

   https://doi.org/10.1108/00400910510601887
   47(4/5),
   298-311.
- Gadassi, R., & Gati, I. (2009). The Effect of Gender Stereotypes on Explicit and Implicit Career Preferences. *The Counseling Psychologist*, 37(6), 902-922. https://doi.org/10.1177/0011000009334093
- Jeanes, E., Knights, D., & Martin, P. Y. (2011). Handbook of Gender, Work and Organization. John Wiley & Sons.
- Jieyu, L. (2016). Gender, Sexuality and Power in Chinese Companies. Springer.
- Knights, D., & Omanović, V. (2016). (Mis) managing diversity: exploring the dangers of diversity management orthodoxy. *Equality, Diversity and Inclusion: An International Journal*, 35(1), 5-16. <u>https://doi.org/10.1108/edi-03-2014-</u>0020
- Metu, A. G., & Nwogwugwu, U. C. C. (2022). Challenging Factors Affecting Access to Finance by Female Micro Entrepreneurs in Anambra State, Nigeria. *Journal of African Business*, 1-13. <u>https://doi.org/10.1080/15228916.2022.2064677</u>
- National Board for Technical Education, (2012). Digest of Statistics on Polytechnics in Nigeria, 2011/2012.Kaduna: NBTE.
- Obinna, O. C., & Muntaka, F. (2022). *Nigeria: Strengthening Women's Participation in Trade*. Southern Voice. <u>http://southernvoice.org/nigeria-strengthening-womens-participation-in-trade/</u>
- Ramaci, T., Pellerone, M., Ledda, C., Presti, G., Squatrito, V., & Rapisarda, V. (2017). Gender stereotypes in occupational choice: a cross-sectional study on a group of Italian adolescents. *Psychology research and behavior management*, 109-117.
- Rogers, M. E., & Creed, P. A. (2010). A longitudinal examination of adolescent career planning and exploration using a social cognitive career theory framework. *Journal of Adolescence*, 34(1), 163-172. https://doi.org/10.1016/j.adolescence.2009.12.010
- Sikora, J., & Pokropek, A. (2012). Gender segregation of adolescent science career plans in 50 countries. *Science Education*, 96(2), 234-264. https://doi.org/10.1002/sce.20479
- Spearman, J., & Watt, H. M. (2013). Women's aspirations towards STEM careers: A motivational analysis. In *Conceptualising women's working lives* (pp. 175-191). Brill.

- Struthers, K. (2016). Paving the Way for Girls into Male-Dominated Trades: Reducing Gender Segregation in the Trades. https://doi.org/10.25904/1912/1515
- The Role of Career Mentorship in Overcoming Challenges Facing Female ConstructionProfessionals: A Nigerian Perspective/ International Journal of Women inTechnicalEducationandEducationandEmployment.https://www.ajol.info/index.php/ijowited/article/view/235887
- Wang, Y. (2022). Investigating employment in the nigerian offshore oil and gas industry: is gender a prerequisite? https://pearl.plymouth.ac.uk/handle/10026.1/18630
- Wright, T., & Conley, H. (2018). Advancing gender equality in the construction sector through public procurement: Making effective use of responsive regulation. *Economic and Industrial Democracy*, 41(4), 975-996. https://doi.org/10.1177/0143831x17745979