



Women Empowerment in Technology and Vocational Education to Mitigate Global Imbalance and Economic Exclusion in Enugu State

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Abstract

The study aimed at investigating women empowerment in Technology and Vocational Education to mitigate global imbalance and economic exclusion in Enugu State. Three research questions guided the study. Three null hypotheses were formulated and tested at 0.05 level of significance. The study adopted descriptive survey research design. The population for the study comprised 110 respondents (40 university teachers, 50 students and 20 admission officers) all from University of Nigeria Nsukka and Enugu State University of Science and Technology. There was no sampling because the entire population was used. The instrument for data collection was a questionnaire. The instrument was validated by five experts. A reliability coefficient of 0.71 was obtained using Cronbach Alpha method. The data collected was analyzed using mean with standard deviation and t-test statistic. The result revealed lack of gender quota system policy in admission, appointment and promotion; implementation was recommended among others.

Keywords: Women Empowerment, Technology and Vocational Education, Global imbalance and Economic Exclusion

Introduction

The Nigeria Technology and Vocational Education sector is a critical facet of Sub-Saharan Africa’s (SSA) economy. The economy depends solely on the contribution of more women in Technology and Vocational Education to produce technocrats in various trades like agriculture, Mechanical and electrical technology etc. As of 2015, women make up around 40% of the SSA’s agricultural labor force (Borgen 2021). Although their contribution is critical due to discriminatory laws and social norms, a large gender gap within this sector continues to persist. However, many have come to realize the potential that lies behind empowering and educating female Agricultural teachers, Mechanical teachers and Electrical teachers etc in Technology and Vocational Education to train other counterparts. By decreasing the gender gap and expanding females’ access to Technology and Vocational Education, these women have the potential to increase agricultural output in developing countries by between 2.5 and 4% (Borgen 2021). Organizations like “women who farm Africa” and “African women power network” are prioritizing empowering women in Technology and Vocational

Education so as to train, retrain and reduce poverty among women. These women can take up vital positions within Technology and Vocational trades dominated by the opposite gender in order to reduced global imbalance of women involvement in technological oriented economy. Regardless of female active role in Technology and Vocational Education especially agricultural education, women own fewer assets, have less access to necessary agricultural yields and receive less education and training in these areas compared to men in Sub-Saharan Africa. These can be evidenced in the enrollment of female genders in Agricultural education department, faculty of vocational Technical Education, University of Nigeria Nsukka for the year 2020/2021 session. The total number of students admitted into PhD programme in Agricultural education department is eleven (11), where the female gender is three (3) and the opposite gender is eight (8) (School of postgraduate’s studies and Department of Agricultural education University of Nigeria Nsukka 2021). The main cause of this persistent gap is the established traditional gender roles (Oniye, 2018). Gender roles continue to



negatively impact women across Africa. Women often face more difficulties in owning land, establishing credit and gaining access to proper resources as policy makers are dominated by the opposite genders due to limited, little or no education and training of female genders in the area of this study. When given the proper tools, these women could have a substantial positive effect on both the Nigeria economy and SSA's agricultural output.

Closing the gender gap is imperative to making progress in SSA's economy and increasing Nigeria agricultural output and other technical areas. Ruth (2019) explains that in Sub-Saharan Africa, Technology and Vocational Education is two to four times more effective in reducing poverty than growth in other sectors. Ruth explains further that because women are more likely than men to invest resources into meeting their children's educational and nutritional needs, investing in women is crucial. As explained by Slyvia (2019), "when mothers are educated, they keep their education in their home and use it to educate their children. If you educate a woman, you educate her home and to some extent, the community if properly prioritized and applied. Empowering women in Technology and Vocational Education could break intergenerational cycles of poverty, reduce hunger, malnutrition rates and mitigate global imbalance and economic exclusion of women in this 21st century technological driven economy.

Women's empowerment can be defined as promoting women's sense of self-worth, their ability to determine their own choices, and their right to influence social change for themselves and others Slyvia (2019). The roles of women in schools are often defined in terms of their 'natural' affinities with children and their innate love for teaching and nurturing, as well as their ability to do it. Nonetheless, men still dominate women in every country in the world, Nigeria inclusive; resulting in widespread of men dominating women and girls in Technology and Vocational Education. Inequality in the Nigerian society inevitably has an impact on the provision and content of education, as well as on the ability of girls to enter, and remain in school. Many women see Technology and Vocational Education as men-oriented course of study due to hands-on activities involved and fear of operating machines etc. Reinartz (2019) argues that balancing work and family is a major hurdle for working women. Hence, a family responsibility influences the careers and

education choices of women who mostly have disproportionate work in care of children and the home. Furthermore, the plight of women, in terms of education is compounded by this negative attitude of parents toward female education (Oniye, 2018). Another implication for poor education opportunity for women is involvement in low paying ventures. It has been noted by Oladunni (2020) that because of societal stereotype and stigmatization on certain professions and subjects as the exclusive preserve of men or women, most Nigerian women have been forced into less paid jobs like, nanny, cleaning services and other middle level professional occupations. In university of Nigeria Nsukka, the female lecturers in Agricultural education department under faculty of Vocational and Technical Education are 30% to the male counterparts who are occupying 70% domination currently, the same applicable to students at postgraduate level in Technology and Vocational Education (Department of Agric Education 2021).

Vocational and Technical Education is the acquisition of practical skills, attitudes, understanding and knowledge relating to occupants in various sectors of economic and social life" (Olakitan, 2012). The purpose of Vocational and Technical Education is to provide a foundation of skills that enable high school students to be gainfully employed after graduation either full-time or while continuing their education or training Agwubuike (2018). The term Technical Education first became popular in the 1970s; it was distinguished from vocational education by its emphasis on general employability and adaptability skills applicable to all occupations, while vocational education was primarily concerned with occupational skill training for specific occupations. That basic definition of Technical Education remains appropriate today. Vocational and Technical Education takes place at two levels namely: informal and formal levels. The Informal level is when skills are acquired through out of school indirect learning by practitioners for example, a child watching the father tills the soil while formal level is when the learner acquires the training and skills through the educational school system. Kpernyam, (2019) confirmed that Learning is incidental and natural.

A global imbalance refers to the situation where some countries have more assets than the other countries. In theory, when the current account is in balance, it has a zero value: inflows and outflows of capital will be cancelled by each other. Hence, if the current



account is persistently showing deficits for certain period it is said to show in equilibrium (Kpernyam, 2019). Since, by definition, all current accounts and net foreign assets of the countries in the world must become zero, and then other countries become indebted with the other nations. During recent years, global imbalances have become a concern in the rest of the world. In the context of this study, women empowerment in Vocational and Technical Education experiences global imbalance by poor participation of women and girls in the field globally.

Economic exclusion is a multidimensional process in which particular groups are prevented from participating fully and equally in the economic life of their city or metropolitan area Agwubuike (2018). Economic exclusion can manifest in the form of gender discrimination, disenfranchisements from education and political positions, promotion, appointments, etc. In the context of this study, the particular groups prevented from participating fully and equally in the economic life of their city or metropolitan area are the women while the economic life refers to the fruits produced by empowering women in Vocational and Technical Education. The fruits produced by empowering women in Vocational and Technical Education are the profit of education and training which paves way to contribute to the Nigeria gross domestic products (GDP) without gender discrimination. By this way, economic exclusion of women will be mitigated.

Therefore, the purpose of the study was to investigate women empowerment in Vocational and Technical Education to mitigate global imbalance and economic exclusion in Enugu State. Specifically, the study sought to:

1. investigate the problem of gender inequality in the admission of students in Vocational and Technical Education departments/faculties
2. find out the problem of gender imbalance in the appointment of lecturers in Vocational and Technical Education departments/faculties
3. ascertain the problem of gender disproportion in the promotion of lecturers in Vocational and Technical Education departments/faculties

Research Questions

The following research questions guided the study:

1. What are the problems of gender inequality in the admission of students in Vocational and Technical Education departments/faculties?
2. What are the problems of gender imbalance in the appointment of lecturers in Vocational and Technical Education departments/faculties?
3. What are the problems of gender disproportion in the promotion of lecturers in Vocational and Technical Education departments/faculties?

Hypotheses

The following hypotheses were tested at 0.05 level of significance.

1. There is no significant difference in the mean rating of gender inequality in the admission of students in Vocational and Technical Education departments/faculties
2. There is no significant difference in the mean rating of gender imbalance in the appointment of lecturers in Vocational and Technical Education departments/faculties
3. There is no significant difference in the mean rating of gender disproportion in the promotion of lecturers in Vocational and Technical Education departments/faculties

Methodology

The study employed a descriptive survey research design. The study was carried out in Technology and Vocational Education Department/faculty, University of Nigeria, Nsukka, and Enugu State and Enugu state University of Science & Technology (ESUT) because they have the department/ faculty of Technology and Vocational Education which is of interest to the researcher, again the choice of selecting University of Nigeria, Nsukka, and Enugu State University of Science & Technology (ESUT) is because universities remains first in ranking compare to other tertiary institutions in Nigeria like colleges of education(Technical) that offers Technology and Vocational Education at middle level. Empowering women at middle level of Technology and Vocational Education is never better than the highest level at which the universities does. The faculty of Vocational and Technical Education (VTE) University of Nigeria Nsukka is made up of six departments namely; Agric education, Business education, Computer and Robotic education, Home



economics and Hospitality management education, Industrial and Technical education, Entrepreneurship education while Enugu State University of science and Technology (ESUT) has Technology and Vocational Education (TVE) as a department with options in Building technology education, Electrical/Electronic Technology Education, and Mechanical Technology education. Factually Technology and Vocational Education (TVE) department and Agric Education department are under faculty of education. The population for the study comprised forty university teachers, fifty students and twenty admission officers from departments/faculties of Vocational and Technical Education, all from University of Nigeria Nsukka and Enugu State University of Science and Technology. Altogether, there were one hundred and ten respondents. There was no sampling because the entire population was used. The instrument used for data collection was a questionnaire titled: Women Empowerment in Vocational and Technology Education (WEVTE), the items statements was structured in a four-point rating scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) with weighting values of 4,3,2, and 1

point respectively. The instrument contains three sections with eight clusters each. The instruments were validated by five experts; two from Technology and Vocational Education Department and three from faculty of Vocational and Technical Education. A reliability coefficient of 0.71 was obtained using Cronbach Alpha method. Copies of questionnaire were distributed, completed and returned, hence representing 100 percent return rate. Mean and standard deviation were used to answer the research questions while t-test statistics was used to test the null hypotheses at 0.05 level of significance; Thus, for research questions, any item with a mean score of 2.50 and above was regarded as agreed while items with mean score below 2.50 was regarded as disagree. For the null hypothesis, when the t-calculated value was equal to or greater than the t-critical value, the null hypotheses was rejected, otherwise it was not rejected.

Results

The results are presented in tables according to research questions and hypotheses.

Table 1: mean ratings with standard deviation of the respondents on gender inequality in the admission of students in Vocational and Technical Education departments/faculties

S/N	Gender inequality in the admission of Students	20 Admission Officers			50 VTE Students		
		X	XD	Dec	X	XD	Dec
1	The number of female students is less than the male students	2.58	0.71	Agree	2.80	0.50	Agree
2	Less number of females applied for admission	3.00	0.82	Agree	2.88	0.46	Agree
3	Not all the female who applied for admission was admitted	2.97	0.54	Agree	3.01	0.70	Agree
4	Greater number of female students admitted dropped	2.66	0.91	Agree	2.60	0.41	Agree
5	The admission department is dominated by the male gender	2.78	0.93	Agree	2.85	0.96	Agree
6	Some female who applied for admission do not possess the requisite qualifications	3.05	0.82	Agree	3.02	0.89	Agree
7	Some female who applied for admission possessed the requisite qualifications but was denied admission	2.55	0.86	Agree	2.79	0.51	Agree
8	The is no gender equality policy for admission of students	2.93	0.94	Agree	2.83	0.95	Agree
	Cluster mean	2.86	0.82	Agree	2.85	0.67	Agree

The data presented in Table 1 showed that all the eight items had mean score above the cut off mean of 2.50 indicating that all item statement in table 1 is the problems of gender inequality in the admission of

students in Vocational and Technical Education departments/faculties. The values of their standard deviation are also homogenous.



Table 2: mean ratings with standard deviation of the respondents on gender imbalance in the appointment of lecturers in Vocational and Technical Education departments/faculties

S/ N	Gender imbalance in the appointment of lecturers	40 VTE Teachers			50 VTE Students		
		X	XD	Dec	X	XD	Dec
1	The number of female lecturers is less than the male genders	2.58	0.71	Agree	2.80	0.50	Agree
2	Less number of females applied for the job	3.00	0.82	Agree	2.88	0.46	Agree
3	Not all the female who applied for job was appointed	2.97	0.54	Agree	3.01	0.70	Agree
4	The recruitment team is dominated by the male gender	2.66	0.91	Agree	2.60	0.41	Agree
5	Some female who applied for the job do not possess the requisite qualifications	2.78	0.93	Agree	2.85	0.96	Agree
6	Some female who applied for the job possessed the requisite qualifications but was not appointed	3.05	0.82	Agree	3.02	0.89	Agree
7	The is no gender equality policy in the employment of female lecturers	2.55	0.86	Agree	2.79	0.51	Agree
8	Over the years, the leadership of the university is dominated by the male gender	2.93	0.94	Agree	2.83	0.95	Agree
	Cluster mean	2.86	0.82	Agree	2.85	0.67	Agree

The data presented in Table 2 showed that all the eight items had mean score above the cut off mean of 2.50 indicating that all item statement in table 2 is the problems of gender imbalance in the appointment of

lecturers in Vocational and Technical Education departments/faculties. The values of their standard deviation are also homogenous.

Table 3: mean ratings with standard deviation of the respondents on gender disproportion in the promotion of lecturers in Vocational and Technical Education departments/faculties

S/N	Gender disproportion in the promotion of lecturers	40 VTE Teachers			50 VTE Students		
		X	XD	Dec	X	XD	Dec
1	The number of female lecturers is less than the male genders	2.58	0.71	Agree	2.80	0.50	Agree
2	Less number of females applied for the job	3.00	0.82	Agree	2.88	0.46	Agree
3	Not all the female who applied for job was promoted	2.97	0.54	Agree	3.01	0.70	Agree
4	The appointment and promotion committee are dominated by the male gender	2.66	0.91	Agree	2.60	0.41	Agree
5	Some females do not possess the requisite qualifications to be promoted	2.78	0.93	Agree	2.85	0.96	Agree
6	Some female who possessed the requisite qualifications was not promoted	3.05	0.82	Agree	3.02	0.89	Agree
7	Some female who possessed the requisite qualifications was under promoted	2.55	0.86	Agree	2.79	0.51	Agree
8	There is no gender equality policy in the distribution of promotion	2.93	0.94	Agree	2.83	0.95	Agree
	Cluster mean	2.86	0.82	Agree	2.85	0.67	Agree

The data presented in Table 3 showed that all the eight items had mean score above the cut off mean of 2.50 indicating that all item statement in table 3 is the problems of gender disproportion in the promotion of lecturers in Vocational and Technical Education departments/faculties. The values of their standard deviation are also homogenous.

Discussion

The result of the study revealed respondents' agreement that all the eight (8) observatory opinions are problems of gender inequality in the admission of students in Vocational and Technical Education departments/faculties. Certainly, inequality in the admission of female students in Vocational and



Technical Education departments/faculties is a refined process that partially neglects assurance, gender quota system and equity in the distribution of students admitted in the department/faculty. This is in line with Agwubuike (2018) that economic exclusion can manifest in the form of gender discrimination, disenfranchisements from education and political positions, promotion, appointments, etc. Agwubuike view is in agreement that all the identified corresponding items are justifiable reasons negatively affecting equality in the admission of students in Vocational and Technical Education departments/faculties.

Similarly, the result of the study revealed respondents' agreement to all the eight (8) observatory opinions are problems of Gender imbalance in the appointment of lecturers in Vocational and Technical Education departments/faculties. Actually, Gender imbalance in the appointment of female lecturers in Vocational and Technical Education departments/faculties is a refined process that disregards assurance of gender quota system and equity in the distribution of teaching appointment. Women's empowerment can be defined as promoting women's sense of self-worth, their ability to determine their own choices, and their right to influence social change for themselves and others Slyvia (2019). Until Gender balance in the appointment of female lecturers in Vocational and Technical Education departments/faculties is well implemented, Slyvia (2019) definition of women's empowerment will not see the light of the day in full. Slyvia view is in agreement that all the identified corresponding items are the problems of Gender imbalance in the appointment of lecturers in Vocational and Technical Education departments/faculties.

Also, the result of the study revealed respondents' agreement to all the eight (8) observatory opinions are problems of gender disproportion in the promotion of lecturers in Vocational and Technical Education departments/faculties. Actually, gender disproportion in the promotion of lecturers in Vocational and Technical Education departments/faculties is the partial neglect of gender measure to which promotion of university teachers in Vocational and Technical Education departments/faculties miscorrelates. The plight of women, in terms of education is compounded by this negative attitude of parents toward female education (Oniye, 2018). Oniye view is in agreement that all the

identified corresponding items are justifiable reasons affecting gender proportion in the promotion of lecturers in Vocational and Technical Education departments/faculties.

Conclusion

The domination of male in technology and vocational education is traced from lack of gender quota system policy in the admission of students, appointments of lecturers and promotion of lecturers in Department/Faculty of Technology and Vocational Education in Enugu state.

Recommendations

1. Orientation and campaign through academic workshops, seminars and conferences are very essential to remove the wrong conception that technical jobs are meant for men as such no need for female to study technical and vocational education courses.
2. Gender quota system policy in the admission of students, appointments of lecturers, and promotion of lecturers in department/faculty of Technology and Vocational Education in Enugu state should be implemented.
3. Scholarships award to women interested in studying technology and vocational education in Enugu State should be implemented.

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