Acquisition of Vocational and Technical Skills for Sustainable Development in Technical Colleges in Rivers State: Determinants of Gender Disparity

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Abstract- This study unveils the determinants of gender disparity in vocational and technical skills acquisition programs in Rivers State technical colleges. Two research questions and one null hypothesis were raised and formulated respectively to guide the study. Descriptive survey research method was used for the study. The population consisted of 645 students in Rivers State technical colleges and a sample size of 183 was selected through proportionate random sampling technique. A 20-item structured questionnaire was used for this study. Three experts validated instrument. Cronbach's alpha method was used to establish the reliability of the instrument in a pilot test; which yielded a reliability of 0.81. Mean and standard deviation were used in analysing data related to the research questions while t-test was used to test the hypothesis. The study revealed that societal and parental/guidance views were some of the determinants of gender disparity in acquisition of vocational and technical educational skills. The study among other things recommended that public relation units should be established in each technical college in order to sensitize members of the citizen on the importance of vocational and technical skills.

Index Terms- Gender disparity, Sustainable development, Technical colleges, Vocational skills,

I. INTRODUCTION

C ustainable development according to Holbrook (2015) is a Of form of development that addresses the needs of the present without compromising the needs of the future generation. Its implication is that, there is a need to adopt a rational approach to economic, social, environmental and cultural practices that will preserve available resources for future use. One of the goals of sustainable development which was adopted on the 25th of September, 2015 by countries around the world is gender equality. Gender according to Thundike (2015) is the fact of being male or female, especially when considered with reference to social and cultural difference. The issue of gender education has often been looked at from the perspective of equality in accessibility, that is to say, equal opportunity should be given to learners irrespective of sex. Obodo (2014) defined gender as a socially ascribed attribute which differentiate feminine from masculine. Gender disparity is the type of sex discrimination applied in the educational system which affects both male and female during and after an educational experience (Enueme, 2015).

Akpotohwo and Ehimen (2014) describes gender disparity as lopsidedness in access to various developmental opportunities as it affects both males and females. The dichotomous nature existing between males and females role in occupations and careers in life has led to inequality that has manifested in numerous ways in our daily activities. These differences are very much evidenced in our private and public lives, choice of occupation, career ambitions and aspirations which have great effect on societal development.

The Association for the Promotion of Education, Health, Environment and Technology Research (NJEHTR, 2011) stated that, in every society, there seems to be a social difference between male and female in terms of roles and responsibilities, though these roles vary from one society to another and from one culture to another. They asserts that for ages we have been socialized into believing that the different roles and status accorded to men and women in the society is determined by biological attribute which is natural, constant and therefore not changeable.

While gender disparity is evidenced in various sectors of human endeavour, it has become more obvious in the acquisition of vocational and technical skills in Technical Colleges. The introduction of technical colleges or vocational education was not only to improve skill acquisition but also to encourage occupational development (Puyate, 2014; Sigh, 2016). Ugwu (2016) observed that the future of any nation lies on skills, knowledge and abilities of her citizens which are expected to be acquired through technical education without gender prejudice. Okoro (2015) explained that the major aim of technical education is to prepare its recipient for employment in any recognized occupation. Its recipients according to Okoro include both male and female trainees and learners.

Osam (2013) states that technical education is that aspect of education, which leads to the acquisition of practical and applied skills as well as basic scientific knowledge. This implies that technical education is to prepare individuals without sex discrimination for gainful employment. In pursuance of the lofty objective of VTE, the Federal Government according to Akpotohwo and Ehimen (2014) directed the National Board for Technical Education (NBTE) to draw up circular for technical colleges and supervise the running of technical education. This

mandate led to the establishment of technical colleges all over the country where courses such as mechanical engineering, electrical engineering, fabrication engineering, automobile technology, building technology, furniture technology, drafting, painting and decoration and other practical skills related courses were taught. The major aim of technical colleges is to provide learners irrespective of sex and economic status with employable skills (Okala, 2014).

The widening gap of gender disparity in student's enrollment into technical colleges is unhealthy owning to the huge benefits inherent in VTE. National Board for Technical Education indicated that 43,176 students enrolled in technical colleges in 2014; out of which 36,508 were males (85%) and 6,668 were females (18%). In 2015 a total of 40,405 enrolled in technical colleges; out of which 32,606 (81%) were males while 7,799 (19%) were females (Sigh, 2016). The inequality in students' enrollment in technical colleges could be as a result of some determinants factors.

Obi (2015) stated that societal view about VTE is major determinants factor in students' choice of occupation and career in technical colleges. The feeling that technical skills are only meant for males discourages females from pursuing such careers. There is also a feeling by the society that vocational skills development processes are difficult for females. Others according to Akpotohwo and Ehimen (2014) believe that vocational skill acquisition were incompatible with mother's role at home and that girls who take to such careers have slim chances of getting married; as these negative thoughts may influence the interest, self-confidence among the female folk and reduce their ability and motivation to take up a career in technical skills acquisition programmes.

Parental interference in the choice of career in VTE may be another determinant factor. While some female children may desire to acquire a technical skill through technical colleges, most parents restrain them from doing so; after all, they are their sponsors (Steve, 2014; Olanka, 2015). It is repugnant to most parents and guardian to allow their children and wards to school in technical colleges. By implication,, the study will seek to find out if societal opinion on VTE and parental interference are determinants for gender disparity in acquisition skills in Rivers State technical colleges.

Location of prospective students and parents/guardian could influence their choice of career in vocational skill acquisition in technical colleges. Children from the rural areas prefer to attend technical colleges while those in urban areas do not (Idike, 2014). However, Okadara, (2014) was of the view that both parents and children from urban and rural areas did not like career in vocational skill acquisition in technical colleges. The study will seek to find out if location could influence choice of career in vocational skill acquisition in Rivers State technical colleges.

I.I. Statement of Problem

A critical look at the various skilled programmes in technical colleges in Rivers State designed to train youth, reveals a clear evidence of gender difference in careers, in areas of automobile technology, welding and fabrication technology, electrical and electronics technology, mechanical technology, craft practices, carpentry and joinery, building construction technology and plumbing and pipe-fitting. These skill areas is dominated by men

and as such it is regarded as a male domain and any female that go into these areas are seen to have step out of line (Akpotohwo & Ehimen, 2014). One of the most urgent challenges facing the world is the growing number of people that are excluded from meaningful participation in the economic, social, political and cultural life of their communities and their nations in general; and such societies are neither efficient nor safe. Educational discrimination in favour of males dominated occupations and favour of female dominated occupations can prevent the society from achieving the quest for rapid social and economic development (Akpotohwo & Ehimen, 2014). This study will examine the determinants of gender difference in technical and vocational skill acquisition in Rivers State technical colleges.

I.II. Purpose of the Study

The major purpose of this study was to determine the factors responsible for gender disparity in acquisition of skill for sustainable development in Rivers State technical colleges. The study will specifically sought to determine:

- 1. If the influence of the society causes gender difference in skill acquisition in technical colleges.
- 2. If parental/guardian interference influence their children/wards against careers choice in skill acquisition in technical colleges.

I.III. Research Questions

The following research questions were raised to guide the study:

- 1. does the unconscious influence of the society determine gender disparity in VTE skills in technical colleges?
- 2. does parental/guardian's interference influences their children/wards career choices in skill acquisition in technical colleges?

I.IV. Hypothesis

One null hypothesis formulated to guide the study.

1. Students in both rural and urban areas will not differ significantly in their mean rating on parental/guardians view influencing their children/wards career choices in skill acquisition in technical colleges.

II. METHOD

This study adopted description survey design. Descriptive survey was considered suitable for this study because it enabled the researchers to elicit information from its respondents. The population for the study comprised all 645 students of technical colleges in Rivers State. Through a proportionate stratified random sampling a total of 183 students (urban: 172, rural: 11) in 14 local government areas of Rivers State was the sample size. This sampling Technique ensures that the relative proportion of each item in the population is exactly its relative proportion in the sample (Nunmally, 2011).

Data was collected through the use of structured questionnaire that was developed by the researchers and validated by three experts in the department of Technical Education, Ignatius Ajuru University of Education, Port Harcourt. It was titled Determinants of Gender Disparity on Acquisition of Vocational and Technical Education skills in Rivers State

Technical Colleges: (DGDAVTERSTC). A questionnaire of 20 response items was formulated based on 4 point Likert-type scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) with the corresponding ordinal value of 4, 3, 2 and 1 respectively.

Forty (40) copies of the questionnaire were trial-tested on 40 students not included in the sample for the study to determine the reliability of the instrument. Cronbach Alpha statistic was used to determine the internal consistency of the items. The instrument was found to have the reliability co-efficient of 0.81. The data was analyzed using mean and standard deviation for answering the research questions; while t-test statistics was used to test the hypothesis at 0.05 level of significance. T-test according to Nunmally (2011) is useful in both small and large samples. To guide the decision making, 2.5 was used as the benchmark for mean scores with respect to the research questions. Any value

from 2.5 and above was accepted as positive indication of determinants of gender disparity in VTE skills acquisition in technical colleges, while any mean below the benchmark was not adopted as a positive indication of determinants of gender disparity in VTE skills acquisition in technical colleges.

III. RESULTS

Results of the study with respect to research question 1 and 2 were presented in Tables 1 and 2 respectively while the result of the null hypothesis was presented in Table 3 below.

Research Question 1: Does the unconscious influence of the society determine gender disparity in VTE skills acquisition in technical colleges.

Table 1: Mean and Standard Deviation of students' responses on the unconscious influence of the society in determining gender disparity in VTE skills in Technical Colleges

S/N	ITEMS	X	SD	DECISION
1.	Careers in technical-vocational skills is only suitable for males	4.16	1.41	SA
2.	The perceived difficulty in technical-vocational skills causes gender disparity	3.58	1.48	SA
3.	The discrimination against female sex causes gender disparity	3.94	1.34	SA
4.	Our culture does not allow women to have technical skills	2.39	1.31	D
5.	The dirty nature of technical-vocational occupations causes gender disparity	3.91	1.31	SA
6.	The use of large and sophisticated machines in technical-vocational occupations causes gender disparity	3.44	1.40	A
7.	Few female sex in technical-vocational skills occupation causes gender disparity	3.04	1.50	A
8.	Lack of role model to emulate causes gender disparity	3.46	1.45	A
9.	Male sex domination in technical-vocational occupation causes gender disparity	3.27	1.49	A
10.	Lack of persons of sex to share future career prospect will make me to dislike technical-vocational skills	3.16	1.44	A

Table 1 revealed that only item 4 with mean of 2.39 was not agreed as one of the societal factors that determine gender disparity in technical-vocational skills acquisition items, while items 1, 2, 3, 5, 6, 7, 8, 9, 10 are all caused by societal influence.

Research Question 2: To what extent do parental/guardian's interference influence their children/wards career choices in skill acquisition in technical colleges.

Table 2: Mean and Standard Deviation of Students' Response on Prental/guardians Interference Influencing their Children/wards Career Choice in Skill Acquisition in Technical Colleges.

S/N	ITEMS	X	SD	DECISION
1.	My parents advice me that careers in technical-vocational skills have adverse effect on marriage opportunity	3.55	1.58	SA
2.	My father said technical-vocational skilled workers close late from work	3.27	1.30	A
3.	Technical-vocational skills occupations are incompatible with mother's care at home	3.31	1.39	A
4.	Those that take to technical-vocational skills occupations do not marry on time	3.48	1.46	A

5.	My uncle said that technical-vocational skills practitioner look masculine in nature	3.62	1.41	SA	
6.	My mother said technical-vocational skills require much strength for its implementation	3.21	1.48	A	
7.	Technical-vocational skills are foreign skills	3.39	1.48	A	
8.	My aunty said that female that take to technical skills do not do well	3.32	1.56	A	
9.	My parents advise that technical-vocational skills manipulations is not compatible with women during	3.45	1.48	A	
	pregnancy				
10.	My parents advise that technical skilled personnel look tough and aggressive, that I should not enrol into it	3.31	1.51	A	

The result in Table 2 shows that parental/guardian's interference influences their children/wards choice of career in skill acquisition in technical colleges.

Hypothesis 1: Students in both rural and urban areas will not differ significantly in their mean rating on parental/guardians interference influencing their children/wards career choices in skill acquisition in technical colleges.

Table 3: T-test comparison of mean rating of students in rural and urban areas on parental/guardians interferences influencing their children/wards career choice in skill acquisition in technical colleges.

Students	N	X	SD	Df	T-cal	T-crit	Decision
Urban	172	4.41	0.81				
				181	1.099	1.645	Ho Accepted
Rural	11	4.10	1.00				•

As shown on Table 3, the calculated value of T-ratio (1.099) was less than the critical value of T-ratio (1.645); the null hypothesis was accepted. Implying that students in rural and urban areas expressed the same view on parental/guardians interference influencing their children/wards career choices in skills acquisition in technical colleges.

IV. DISCUSSION OF FINDINGS

The findings on the unconscious influence of the society as presented in Table 1 showed that 9 out of 10 items are factors that are responsible for the causes of gender disparity in technical-vocational skills acquisition programmes. The findings in item 7 and 9 agree with the assertion of Akpotohwo and Ehimen (2014) that gender disparity in technical skills is much, that a cursory look at different technical skills areas in Nigeria will reveal that it is dominated by male and the females into it are seen to have step out of line.

The findings associated with parents/guardians influences against technical-vocational skills acquisition in Table 2 revealed that the respondents agreed that career in technical-vocational skills have negative effect on female marriage opportunity and it is incompatible with mother's role or care at home. Items 5, 6, and 9 agree with the view of Akpotohwo and Ehimen (2014) that the disparity emanated from traditional image of working with technical profession as being related with heavy object, dirty and masculine in nature, that it requires much strength, that any women who wishes to succeed in this field has to be tough, aggressive and masculine.

The findings in Table 3 above indicates that students in rural and urban areas expressed the same view on parental/guardians

interference influencing their children/wards career choices in skills acquisition in technical colleges.

V. CONCLUSION

In any society where people both male and female are excluded from meaningful participation towards developmental effort, such society is bound to move at snail pace towards the achievement of developmental stride. The technological development of any nation is comparatively rapid if the male and female sex avail themselves the opportunity to acquire technical-vocational skills, without any form of stereotype that interfere with the interest of each individual. Therefore, everyone should be encouraged to explore his or her career ambition based on interest and ability so as to contribute immensely towards national development.

VI. RECOMMENDATION

Based on the findings of this study, the following recommendations are made:

- 1. Efforts should be made to carryout sensitization campaign in print and electronic media to parents and members of the public on issues of gender disparity in technical-vocational skilled programmes and its attendant effects on the society's in general and in the nation in particular.
- 2. Vocational guidance in schools should be strengthened to guide and encourage female students' participation in technical skills acquisition programmes.
- 3. Efforts should be made by the government, parents, teachers, and all stake holders in education industry to encourage

the female enrollment into technical skilled programmes to serve as role models to younger females to emulate.

- 4. The government should provide scholarship, bursaries to female students who enroll in technical skilled areas to make it attractive.
- 5. The government should make efforts to collect data to enhance planning in gender related issues in technical-vocational skilled programmes.

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