

## **APPRAISAL OF THE FACTORS MILITATING AGAINST FEMALE PARTICIPATION IN TECHNICAL VOCATIONAL EDUCATION AND TRAINING (TVET) IN GOVERNMENT GIRLS SCIENCE AND TECHNICAL COLLEGES IN KANO STATE, NIGERIA.**

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### **ABSTRACT**

*Technical Vocational Education and Training is that aspect of education which prepares individuals (male or female) to apply relevant practical skills to make changes within their society and afford self dependent or self employment. The objective of the study was to investigate the factors that militate against female participation in Technical Vocational Education and Training in Kano state. One null hypothesis test using Mann-Whitney test on mean rank significant Urban and Rural students responses to determine the significant differences the Urban and Rural responses on the factors that militate against female participation in Technical Vocational Education and Training in Kano state. The survey research design was used for the study. The area of the study comprises of comprise 6 Senior female Science and Technical Colleges in Kano State. Purposive sampling was used to select two female science and technical colleges, one in Urban and the Other in Rural areas of Kano state. The target population of the study was 129 SSII female students. Simple Random sampling was used to select 60 SS II Female Technical and vocational students. The Questionnaire was used named; Factors militating against Female Students Participation in Technical Vocational Education and Training Questionnaire. The instrument has reliability of 0.79. The data was analysed using mean and frequency count. Some of the findings include; Female students consider technical and vocational subjects as difficult. Poor image and status of technical and vocational education discourage female students in studying technical and vocational course. Only few Female students want to further their study in technical and vocational education. Some of the recommendations include; Female students should be encouraged to choose and further their studies in technical and*

*vocational subjects. Technical and vocational teachers should always highlight the prospects of technical and vocational subjects toward empowerment of girls.*

**Keywords:** *Technical and Vocational Education, Female participation.*

## **INTRODUCTION**

Technical and vocational education is that aspect of education which prepare individual (male or female) to apply relevant practical skills to make changes within their society and afford self dependent or self employment. Gender participation in technical and vocational education cannot be over emphasized. It is important to stress that before the advent of western education in Nigeria, women traditionally derived considerable independence in the home through some simple native technological process such as weaving, dying, carving, pottery, spinning, knitting, oil processing and gardening among others (Hyellaiya, 2008). Moreover, in the recent change in female breakthrough in the advocacy in hands-on skills and domestic technology such as car driving, use of modern electrical appliances in our homes (electric cooker, blenders, electrical boilers, freezers), and computer applications. Females also attach high value to metal jewelry gold, diamond, stainless steel, silver wares among others, all these are products of Technical Vocational Education. One of the aims of Technical Vocational Education and Training in schools is to prepare students to understand and participate in technological society through experience with technological methods, resources and knowledge. Yet more than a decade, females are not getting the knowledge and skills needed to compete in the global economy (Jennifer, 2008)

Furthermore, Mafa and Mohammed (2013), state that African developmental process is in crisis which is manifested in Nigeria's education. It is associated with gender insensitivity in development plans and procedures, and that 90% of African countries including Nigeria, female enrolment are lower than those for males at all levels of education. They added that the low enrolment could be attributed to many factors which include; cultural bias, religious, domestic reason.

Egun and Tibi (2010) examined the effect of cultural expectations and roles, sex-stereotyped occupations, and lack of access to education and suggest education of parents, increment in the number of female teachers in schools, re-examination of cost of education for secondary school as a means of encouraging and retaining girls in schools. They also reported that females constituted 49% of Nigeria's population as illiterates, the disparity terms of gender literacy has stemmed from lack of access to education

Moreover, a study also conducted by Udeani (2012), the study assess eight factors involved with science career choices: Interest, Enrolment, Masculine image of science, Social barriers, Role Model, School factor, Teacher factor and Parental factor The instrument was administered to a sample of 375 females enrolled in a general studies programme in the 2010/2011 academic session at the University of Lagos, Nigeria. Result indicated that the group means were significant for enrolment, social barriers and role models. The group means for interest, masculine image of science, school, teacher and parental factors were found not to be significant. The paper concludes that because females and males appear to possess equal potential to develop the skills required for the pursuit of science it is both a waste of talent and a deprivation to individuals that the two sexes do not participate equally in science.

Another study conducted by Nwakego (2014), the study examined the problems of the girl child education in Jos North Local Government Area in socio-economic aspects. One of the factors which have militated against women's equality in education is the traditional belief that "a women's place is in the kitchen" and that "a woman should be seen and not heard". The study investigated girls' enrollment in schools and at the work place and address the need for gender disparities and inequalities to be reduced to the barest minimum. Girl-child education in Jos North and Nigeria at large will continue to trail the boy-child education if the necessary policy actions are not put in place. The inability to address the issue will further widen the gender gap in education.

Similarly, the Gross Gender Gap in Kano State is about 21.1% in primary education, 13.6% in junior secondary and 13.1% in senior secondary education which indicate progressive reduction of gender disparities in enrolment (Kano Ministry of Education, 2006). Gender equity plays a major role not only in the educational setting, but also in the students' future career choices. If the goal of education is to expose students to possible educational career paths, the notion of gender equality for all educational and field must be included, limiting students gender-specific roles in their careers can lead to insecurity and confusion among students and an economically depressed society (Jennifer, 2008).

However, in 2012, 'Girl child education initiative' was put in place by the Kano state government in an effort to tackle the challenges of girl child education which include; free transportation, free school pupil feeding and provision of two free sets of uniform. These have engendered the increase in school enrolment figures of females' pupils (Suleiman, 2012). Despite the general enrolment increase, still there is significantly low participation of female in technical and vocational education as stated by Ali (2013) that there are low levels of females' enrolment in the area of Technical Vocational Education and Training in Kano state. Hence, females and males appear to possess equal potential to develop the skills required for the pursuit of Technical Vocational Education and Training. It is against this background that the study intends to find out the factors that militate against females' participation in technical and vocational education in Kano state.

### **OBJECTIVE OF THE STUDY**

- 1) The objective of the study was to investigate the factors that militate against female participation in Technical Vocational Education and Training education in Government Girls Science and Technical Colleges, Kano state.

### **Research Question**

- 1) What are the factors that militate against female participation in Technical Vocational Education and Training in Government Girls Science and Technical Colleges in Kano State?

## **METHODOLOGY**

The attitude survey research design was used for the study. The attitude survey design concern with the attitude of children to schooling and to the learning of specific subjects. Information obtained from a survey of such attitudes might help in curriculum changes (Sambo, 2005). The area of the study comprise 6 senior female science and technical colleges. Purposive sampling was used to select two female science and technical colleges, one in Urban (X1) and the Other in Rural (X2) areas of Kano state. Purposive sampling is a sampling technique in which researcher relies on his or her own judgment when choosing members of population to participate in the study (Sambo, 2005). The target population of the study was 129 SS II Technical and Vocational classes. Simple random sampling was use to select 60 SS II females students. The instrument used for data collection was a structure questionnaire developed by the researcher from the review of related literature. The instrument was named: Factors militating against Female Students Participation in Technical Vocational Education and Training Questionnaire. The instrument contains 14 items. Four (4) point response format ranging from strongly agree to strongly disagree was used to determine the opinion of the respondents. The responses were scored as: Strongly Agree (SA) =4, Agree (A) =3, Disagree (D) = 2, Strongly Disagree (SD) = 1. The instrument has reliability of 0.79. Copies of the questionnaire were distributed to respondents with the help of a research assistant. The data was analysed using mean and frequency count.

## **Results**

The result of the data collected was analysed and presented based on the research questions.

## **Research question**

- 1) What are the factors that militate against female participation in Technical Vocational Education and Training in Government Girls Science and Technical Colleges in Kano State?

**Table 1**  
**Mean response of SS II Female students Technical and Vocational Classes. Government Girl Science and Technical College, Kano State.**

S/N	ITEMS	Rural School(X1)	Urban School(X2)	Mean Rating(X)	Remarks
1	Females students consider technical and vocational subjects as difficult	3.7	2.3	3.0	Agree
2	I attend technical and vocational classes regularly	1.9	3.0	2.5	Agree
3	I always feel that technical and vocational courses are meant for male students	3.2	2.4	2.8	Agree
4	Our principal do encourage us to concentrate on technical and vocational subjects	2.0	2.5	2.3	Disagree
5	I was not encourage to choose technical and vocational subjects	2.8	3.6	3.2	Agree
6	Technical and vocational teachers always highlight the prospects of technical and vocational subjects toward empowerment of girls	2.6	3.6	3.1	Agree
7	Technical and vocational teachers always encouraged female students in studying technical and vocational subjects	2.7	3.7	3.2	Agree
8	Poor image and status of technical and vocational education discourage female students in studying technical and vocational course	2.8	2.7	2.8	Agree
9	I want to further my study in technical and vocational education	2.2	2.4	2.3	Disagree
10	Parents/guardians always encourages us in studying technical and vocational course	2.1	2.2	2.2	Disagree
11	Our school had guidance and counselling unit for students	2.0	2.8	2.4	Disagree
12	We were given Free reading/writing material were given by the school management in our technical and vocational classes	1.0	2.5	1.7	Disagree
13	Prizes were given to the best female students in technical and vocational subjects	2.2	2.2	2.2	Disagree
14	I receive courage from my peer group	2.1	2.2	2.2	Disagree

Keys; X= Mean response of SS II female Technical and Vocational students, X1= Mean response of Rural school SSII female Technical and Vocation Education, X2= Mean response of Urban school SSII female Technical and Vocation Education.

### Research Hypothesis

HO: 1. There is no significant difference between the Rural and Urban

female students' responses on the factors that militate against female participation in TVET in Kano State.

Table 2: Mann-Whitney test on mean rank significant Urban and Rural students responses

**Test Statistics<sup>a</sup>**

	Scores
Mann-Whitney U	206.000
Wilcoxon W	671.000
Z	-3.622
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Groups

Result from Table 2 found a statistically significant mean rank difference between the urban and rural students' response on the factors that militate against female participation in TVET in Kano State. It indicates that the P-value (.000) is less than the  $\alpha$  (.05). Therefore, the null hypothesis is rejected in favour of the alternate hypothesis. Meaning, there is significant mean rank difference in the Urban and Rural students' responses on the factors that militate against female participation in TVET in Kano State

**Descriptive Statistics**

	N	Mean	Std. Deviation	Minimum	Maximum
Scores	60	34.32	5.503	25	48
Groups	60	1.50	.504	1	2

**FINDINGS AND DISCUSSION**

From the result of the Table 1, item 1, 2, and 3 on the female students considers technical and vocational subjects as difficult, attending classes regularly, and feeling about offering Technical courses. This finding is similar to that of Silverman and Pritchard (2008), they state that there is loss of interest among female in technology classes. Item 4, the female students were not highly encouraged by their principals. This may due to the facts that the schools were not purely Technical Colleges. Item 5, 6, 7 and 8 the female students agreed with the statement. This finding is also similar to Egun and Tibi (2010) that sex-stereotyped occupation is a

factor that hinders female participation in technical and vocational education. Item 9, 10, 11, 12, 13 and 14 female students disagree with the statement this indicate lack of encouragement from the part of school administrators, parents/guardians. These findings are also similar to Jennifer (2008), stated that the barriers of female involvement in technology education as; lack of knowledge of career options, lack of female role models and mentors in technology education, lack of funding and other administration support, and parental expectation. Also the findings of Itohan and Garba (2015), they state that some problems that hinders female participation in Technical and vocational education as; peer group influence, poor image and status of technical and vocational education, lack of incentives to encourage the female students, parental perception, and lack of appropriate vocational guidance and career counselling.

## **CONCLUSION**

In conclusion, given equal access by building pure Senior Female Technical Colleges and encouragement by the school administrators, parents/guardian, peer group and proper guidance and counselling in a normal school setting, the female students will become confident enough to take part in building up experience in putting technical and vocational education into practice and consequently further their education in technical and vocational education there by minimise the gap between them and their male students counterpart.

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