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WOMEN SHARE IN SCIENCE AND TECHNOLOGY EDUCATION AND THEIR JOB PERFORMANCE IN NIGERIA

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ABSTRACT

This investigation focused on women's share in Science and Technology education and their job performance in Nigeria. The investigation was conducted with two questions that were raised as a guide. A sample of 4886 was drawn through the questionnaire method. Analysis of the data was conducted through the use of frequency count. Findings obtained indicated that there was disparity between male and female gender in access to Science and Technology education in Nigeria, and also that there were no differences between women and men scientists and technologists in job performance. The conclusion was therefore reached that women do not have equal share with men in Science and Technology education even though the male and female scientists and technologists perform jobs equally in Nigeria. Recommendation was therefore made accordingly.

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Introduction

In normal situations males and females are supposed to share from offer of education in proportionate equality. For instance there is a certain argument that males and females in Nigerian have equal access to education. This group of individuals is of the view that the female gender in Nigeria are exposed to education equally as their male counter-parts.

But there is another group of Nigerians whose idea is that the female gender appears to be suffering denials of adequate educational enrolment opportunities. The group holds the view that the female gender in Nigeria is limited in opportunities when it comes to enrolment in sensitive places of learning which include Science and Technology.

Objective of the study

With the sensitive nature of job performance as the main purpose of education, the different views expressed above by two schools of thought indicate some seeming gender problems in the management of education in Nigeria. That therefore led to the objective of this research structured to investigate whether male and females share equal opportunities in admission into Science and Technology education in Nigeria. Also designed for investigation was the need to know whether male and female scientists and technologists have differences in job performance levels. in Nigeria.

It is a living fact that all modern societies anchor their solutions to material needs for comfort and pleasure on education. This implies that development lies in the well-being of individuals through the eradication of materials decay and satisfactory provisions of personal desires and requirements. Hence, to achieve the goal of national development educational activities must be wholistic in its planning and implementation realization largely in science and technology field. The role of women is therefore highly important to be focused on. Nigeria like some other countries of the world has a population of females almost equal to the males. Thus the level of women's productive contributions to national development can not be overemphasized, yet according to Spence (2000:14)

Women constitute 70% of the world's 1, 3 billon absolute poor. They have the most limited access to livelihood resources or to new technology-the key to employment in the 21st century

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This view further strengthened the objective of this research. It was thought that now was the time to articulate the roles of women and their educational preparedness toward their adequate contribution to national development in Nigeria especially that the target period of national development has been set for the year 2020. Hence having decided to embark on the study, the researcher raised the following questions to act as a guide in the investigation.

Are there equal admission opportunities between male and female gender in Science and Technology education in Nigeria?

Are there differences between male and female scientists and technologists in job performance ability in Nigeria?

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Science and Technology is a branch in the education system that moves societies into productive development, Nigerian skilled men and women in the labor force needs science and technology education, especially as it is a requirement for efficient job performance in all facets of life. Hence Ulilig (1999) states that the development and the transformation of any national economy should be the function of education through high-level productivity of skilled individuals in Science and Technology.

The fear that women are not strong in nature and therefore may probably not be able to work on science and technology platform is viewed differently by individuals. Thus Poffenberg and Norton (1956) discovered that teachers who make impact on their learner's behaviors and good results are those who show strong

The concern whether males and females have opportunity differentials in enrolment in Science and Technology education is a serious issue that could have positive or negative effect on the economic development of society. The Commonwealth (1999) argues that women make up the labour force majority in the industrial sector. And interest in a given subject, provide the learning materials, and maintain adequate control over the learners.

The argument that development is a function of individuals' acquired quantitative and qualitative Science and Technology educational skills appears to be commonplace belief. in all over the world. This is probably because it is through science and technology that innovation and changes are assured in all societies. Thus Taylor (1988) asserts that African societies require science and technology for national development. Hence the teaching of men and women in science and technology subjects at all levels of education demands adequate provisions of teaching and learning resources Ezeliora (1992). Thus Yager (1989), emphasizes that the approach to science in primary and secondary school curricula should shift emphasis mainly to application processes and creativity. that the activities in the sector include export processes, banking, etc. Hence it is feared that it may be disheartening if the assessment of admission between males and females in the field of science and technology in Nigerian universities is found to have some gape. However the Federal Republic of Nigeria (2000) in this regard indicates as follows;

Table1: enrolment in high institutions

Year	Enrolment	
	Males	Females
1993/94	593	98
1995/96	9101	3095
1996/97	691	464
1997/98	7383	2587

Source; Federal Office of Statistics 2000 Abstract

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To amplify the picture painted by the Federal Government of Nigeria above, Aguele and Uhumuavbi (2003) assert that the enrolment ratio of males to females in the universities fluctuated between 6:1 and 3:1 in the period between 1993/1994 and 1997/1998.

Investigation methodology

To carry out this investigation successfully a sample of 2498 women and 2388 men totalling 4886 was selected. The random sampling technique was adopted in the selection of the sample. The country was zoned into five parts, i.e. the Northeast of Nigeria, the Northwest, the Northcentral, the Southeast and the Southwest. Equal number of four states were randomly selected from each zone, and 250 sample was also randomly drawn from each state. The sample subjects comprised of Ministry of Education staff, schools administrators, unemployed school graduates/graduate employees, Ministry of Labour and Productivity, employers of labour, Federal Office of Statistics, and undergraduates.

Instrument of the study and data analysis

The questionnaire was developed to draw data from the sample subjects.The administration and retrieval of the instrument which lasted 10 weeks was carried out by the researcher and research assistants. The mortality rate was however low relatively especially on the part of the women where only 2 sample was lost. .

The data that were gathered were subjected to necessary sorting and treatment. The statistical tool of frequency count was applied in the analysis as shown on the following tables:

Question 1: Are there equal admission opportunities between male and female gender in Science and Technology education in Nigeria?

Table II: Gender Admission opportunities in Science and Technology Education

Respondents	Admission Level		
	Males	Females	Total Respondents
Ministry of education	402	296	698
Ministry of Labour and Productivity	412	286	698
`Federal Office of Statistics	418	280	698
Employers of labour	457	241	698
High institutions administrators	406	292	698
Under-graduates	516	182	698

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Unemployed school graduates/graduate employees	506	192	698
Total	3207	1679	4886

Question II: Are there differences between male and female scientists and technologists in job performance ability in Nigeria?

Table III: Job performance rating between male and female scientists and technologists

Duties/points of assessment	Job performance levels assessment		
	Male	Female	Total assessment
Process management planning and administration	237	251	488
Materials management and administration	242	246	488
Work design	245	245	490
System evaluation and assessment	234	254	488
Reporting and feedback	239	249	488
Costing / budgeting	239	251	490
Initiative decision	350	138	488
Community needs identification	230	258	486
Innovation and change	237	253	490
Human relation	230	258	488
Total	2483	2403	s4886

Discussion of findings

The analysis of data on the tables above revealed that males and females do not have equal admission opportunities in Science and Technology education in Nigeria. Table I specifically showed this through the respondents' scores which revealed that the admission of males was higher than the females by 3207 to 1679.This finding was confirmed by the Federal Government of Nigeria (2000) and Aguele and Uhumuavbi (2003) who found that males were given more admission opportunities than females in the universities where courses related to science and technology are studied more predominantly.

However Table II showed that the male scientists and technologists only slightly performed higher than their female counter-parts and also in only within one duty/point of assessment. There is no wonder Mahendra and Wolfgang (2002) advocated that countries should eliminate gender disparity in all levels of education by 2015 why Omatseye.(2003) states that intellectual

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abilities or moral judgment should form the basis of individual training and not other considerations bothering on gender. Hence curiously the women sampled in this investigation exhibited sound morality in the sense that even though they were more than men in the sample they rated job performance accurately to allow their male counterparts obtain higher score than themselves.

Conclusion

Based on the findings in this investigation the researcher came to the conclusion that women do not share in Science and Technology education equally with their men counter-parts in Nigeria. The fear that women may not have the capacity to perform duties adequately as their men counter-parts in science and technology sector is therefore baseless. This view was based on the fact on table II above where it was shown that men only perform slightly higher in the general rating than women, and also only in one duty platform out of the ten that were evaluated.

Recommendation

Based on the findings and the conclusion of this research the author deemed it necessary to recommend that men and women should be provided equal admission opportunities in Science and Technology education in Nigeria. That all gender disparity considerations should be avoided during admission, and allocation of the graduates to duties.

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