Gender Equity In Employment And Appointment To Management Positions Of Science And Technology Staff In Federal And State Universities In South East Zone Of Nigeria: Implication For The Attainment Of The Millennium Development Goals

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Abstract

The study investigated gender equity in employment and appointment to key management posts of staff science and technology departments in federal and stale Universities in South East zone of Nigeria. The design adopted in this study is an Ex-Post-Facto design. Four research questions guided the study. The study was carried out in nine universities in five states in South East Zone of Nigeria. The population for the study was made up of nine deputy registrars (personnel) from the nine universities four federal and five slate universities) in South East Zone of Nigeria. The entire population of nine registrars served as the sample for the study. The instrument for data collection was a guided figure based recording sheet developed by the researchers. The instrument was lace validated by two experts (Measurement and Evaluation and two science educators in Nnamdi Azikiwe University, Awka. Owing to the nature of the instrument the reliability was not established. Data collected were analysed using frequency tables and percentages to answer the research questions. Results showed that there was no gender equity in employment and appointment (to key management posts) of science and technology affirmative in Federal and State Universities in South East one of Nigeria. Implications of this findings on affirmative action on gender equity in employment and appointment to posts as stated in the. Millennium Development Goals (MDGs) also were discussed. Recommendations were also made among which were: that universities management should develop policies that allow females to balance their work and family responsibilities more easily so as lo ensure gender equity in employment and appointment to management posts. Also the Federal government of Nigeria on its part should develop and enforce policies that ensures that the 30:70 gender equity affirmative action as stated in MDGs is achieved by 2015 as earlier proposed by the Federal government of Nigeria.

Keywords: Employment, Equity, Gender, Goals, Millennium, Science, Technology

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In today's increasingly scientific and technological society, sustainable development ad improved quality of life depend to a great extent on our ability to understand and utilize science and technology. Hence, the Federal government and various state governments of Nigeria have made and continues to make huge financial investments on science and technology education. The Federal government stated one of its national objectives of education in its National Policy on Education (FMH, 2004) to be the vision of equal opportunity for education of all children of school age both within and outside the formal school system. Again, in its National Policy on Science and technology (FMST), 1986) the Federal government of Nigeria emphasised its determination lo promote gender equity in science and technology education at all levels of the education system. It is however sad lo note that inspite of the huge financial investment and pronouncements by the federal government, gender disparity in access to education and employment opportunities still exist in some parts Nigeria. Several research reports UNDP, 1996, Okeke, 2001; and Ezirim, 2006) show that women and girls are denied equal rights to education, employment opportunities, job securities and other benefits available to their male counterparts. For instance, many multinational companies discriminate against female graduates during employment. In like manner, in urban economy, women arc generally disadvantage as they are the last to be considered for employment but the first to be laid off in the event of staff down sizing or retrenchment in any establishment.

Globally, there is a growing awareness that women arc underrepresented in almost all sectors of development including education and employment opportunities although women constitute more than half of the world's population (Federal Government of Nigeria, 2004). The degree of under representation differs from country to country. In Nigeria for instance, women and girls are under represented in all occupations dealing with science, technology and engineering (Okeke, 2001 and Ezirim, 2006). Only very few women rise to managerial position in both public and private sectors. This is unacceptable compared to the large number of qualified females available for such managerial positions. In Nigeria, gender disparity in education and employment in science and technology related jobs been a topical issue in developmental discourse in the past few decades.

The Federal government of Nigeria is a signatory to the African charter on Humana and People right called "the Bajul Charter" and also a signatory to the Universal Declaration of Human Right (UDHR, I948) which states that every citizen has the right to public service in his country, has the right to work, has a free choice to employment and has a right to just and favourable remuneration. Despite all these gender disparity in access to education, employment and appointment to top managerial positions still persist in Nigeria.

The United Nation Development Programme (UNDP, 1995) in a human development report staled that women were treated worse than men world-wide and that the gender discrimination were not restricted to education but also to employment, nutrition and health care. This study aim at finding out if gender equity exist in employment and appointment to top management positions of academic and non academic science and technology staff in Federal government owned and state government owned universities in South East Zone of Nigeria; and its implications for the attainment of the Millennium Development Goals (MDGS).

Science according to Okeke (2007) is a systematic process of obtaining verifiable/testable knowledge about nature and natural occurrence utilizing careful observations and experiments. She also defined technology as the practical application of science in solution of problems encountered in the environment. Science and technology are veritable tools for socio-economic development of modern society. Gender according to Okeke (2001) is the social and or cultural construct, characteristics: behaviours and roles which society ascribes lo females and males. The Oxford Advanced Learners' Dictionary (1995) defined equity as a situation in which every one is treated equally or treated with fairness. Gender equity in employment means giving equal employment opportunities to male and female while gender equity in appointment means giving equal opportunities to both male and female to rise to management position or be appointed lo lake up key management posts such as directors, managers, head of departments or co-ordinators.

Academic staff as used in this study refer to the regular teaching staff in the science and technology departments in Universities used for this study. Non academic staff (non teaching staff) as used in this study refers to qualified science or technology based staff who are based in science and technology departments of the universities used for the study but are not lecturers. Non academic staff include radiographers, science laboratory technologists, medical laboratory technologist, nurses, pharmacists serving in the dispensary section in hospital, and technicians in technology workshops. Non leaching staff who are not trained scientists or technologists but are working in science and technology' departments are not included. These means that massagers, cleaners, typists, drivers and all others in similar category working in science or science-based departments are not included as non academic staff in this study.

Statement of the Problem

Women and girls are underrepresented in almost all sectors of development including education, employment and appointment lo management positions despite the fact that they constitute more than half of the world's population (Federal Government 'of Nigeria, 2004). Many multinational companies, example discriminate against female graduates during employment. Furthermore, only very few women representing 5.5% occupy managerial positions in both public and private sectors. One of the Millennium Development Goals is to promote gender equality and empower, women. The Federal Government of Nigeria-is a signatory to the declarations of the millennium development goals and also a signatory to the 30:70 (Female: male) gender equity affirmative action agreed upon by the international community and some developing countries of which Nigeria is one.

In addition to these declarations, the Federal government of Nigeria is also poised at ensuring gender equity in science and technology education at all levels of education. To achieve this, the government has invested heavily on science and technology education through financial aids and provision of science and technology equipments to higher institutions as well as offering scholarships to science and technology students in tertiary institutions. One wonders whether the various university management are also promoting gender equity in employment and appointment of science and technology staff in government owned tertiary institutions in Nigeria. This study therefore investigated under equity in employment and appointment to key management positions of science and technology staff in Federal government owned and slate government owned universities in South East Zone of Nigeria. Specifically the study investigated:

- gender equity in employment of science and technology staff in Federal government owned universities in South East Zone of Nigeria.
- gender equity in employment of science and technology staff in state government owned universities in South East Zone of Nigeria.
- gender equity in appointment to key management posts of science and technology staff in Federal government owned universities in South East Zone of Nigeria.
- gender equity in appointment to key management posts of science and technology staff in state government owned universities in South East Zone of Nigeria.

- 2. What is the gender equity in employment of science and technology staff in state government owned universities in South East Zone of Nigeria?
- 3. What is the gender equity in appointment to key management positions/posts of science and technology staff in federal government owned universities in South East Zone of Nigeria?
- 4. What is the gender equity in appointment to key management positions/posts of science and technology staff in state owned universities in South East Zone of Nigeria?

Methodology

The research design used in this study is an Ex-Post-Facto design, because, the information sought is already in existence and the researcher docs not need to manipulate it. The study was carried out in nine universities (four federal government owned and five stale government owned universities) in five states in South East Zone of Nigeria. The population for the study was made up of nine deputy registrars (personnel) from the nine universities in South East Zone of Nigeria. Since the population was small, the entire population of nine registrars served as the sample, hence there was no sampling of subjects for the study. Four research questions guided the study, the instrument for data collection was guided figure based recording-sheet developed by the researchers. The instrument was face validated by two experts in measurement and evaluation and two science educators in Nnamdi Azikiwe University, Awka. Owing to the type of research design and the nature of the instrument, the reliability of the instrument was not established. The instrument was used to gather information on gender equity in employment and appointment (to management posts or leadership positions) of academic and non academic science and technology (S&T) staff in the nine universities used in the study. Data were collected on gender equity in employment and appointment to management posts like heads of departments, deans of schools/faculties, directors of programmes, unit co-ordinators and chairmen of committees in science and technology departments in the 2008/2009 academic session. Data collected were analysed using frequency tables and percentages for answering the research questions.

Results

Table 1: Frequencies and percentage distribution in employment of science and technology staff in Federal and

	FEDERAL UNIVERSITIES					STATE UNIVERSITIES				
	No. Male		No. Female		Total	No. male		No. female		Total
Status	Frequency	%	F	%		Frequency	%	F	%	
Academic	986	70.94	404	29.06	1390	662	71.96	258	28.04	920
staff										
Non-	244	42.96	324	57.04	568	192	40.42	283	59.58	475
Academic										
Staff										
Total	1230	62.82	718	37.18	1958	854	61.22	541	38.78	475

State Universities in South East Zone of Nigeria.

The result in table 1 shows that out of the 1958 science and technology (academic and non academic) staff in federal universities in South East Zone of Nigeria, 1230 (62.82%) are 62.82% male while 728 (37.18%) are female. Similarly out of the 1395 science and technology (academic and non academic) staff in stale universities in South East Zone of Nigeria, 854 (61.22%) are male while 541 (38.78%) are female. Table 1 also shows that 70.94% of the academic staff in the federal universities used in the study are male while 29.06% are female. Similarly 71.96% of the academic staff in the slate universities used in this study are male while 57.04% are female for the federal universities; and 40.42% of the nor academic staff are male while 59.58% arc female for the state universities used in this study.

Table 2: Gender Distribution of science and technology staff to management posts in Federal and StateUniversities in South East Zone of Nigeria.

	FEDERAL UNIVERSITIES			STATE UNIVERSITIES				
DESCRIPTION	No. Male	No. Female	Total	No. male	No. female	Total		
Head of Dept.	243	72	315	213	43	256		
	(77.14%)	(22.86%)		(83.20%)	(16.80%)			
Deans of faculties/school	54	18	72	48	8	56		
	(75%)	(25%)		(85.71%)	(14.29%)			
Directors of Programmes	22	6	28	19	4	23		
	(78.57%)	(21.43%)		(82.61%)	(17.39%)			
Unit co-ordinators	52	14	66	69	16			
	(78.79%)	(21.21%)		(81.18%)	(18.82%)	65		
Chairman of committees	55	18	73	86	12	98		
	(75.34%)	(24.66%)		(87.76%)	(12.24%)			

The result in table 2 shows that more than 70% of science and technology staff in Federal universities who hold posts as heads of departments, deans of faculties/schools, unit co-ordinators, directors programmes and chairmen of committees were male while less than 30% of science and technology staff were female. In state universities, over 80% of male S&T staff hold posts as heads of departments, deans of faculties/schools, directors of programmes, unit co-ordinators and chairmen (committees while less than 20% of female S & T staff hold the same posts.

Discussion

The findings of this study showed that the number of male science and technology staff is more than the number of female science and technology staff in the federal government owned and state government owned universities respectively. The findings of this study further show that over 7 percent of academic staff in the science and technology departments in the Federal and stale universities used for this study were male while less than 30 percent were females. Thus, there is no gender equity in the employment of science and technology staff in federal and stale Universities in South East Zone Nigeria. These findings are in agreement with the United Nation Development Programme (UNDP) Report (1995) which showed that there is gender discrimination (to the disadvantage of females) in education, employment opportunities, remunerations and promotions. The findings of this study is also in agreement with the findings of Obiagwu (2008) who found that there is gender disparity in employment status in Federal and State Tertiary institutions in Anambra State.

However, the findings of this study showed that the number of female MOM academic staff in both federal and slate universities used in this study is more than the number of male non academic staff. This is because the non academic staffs in the Science and Technology Departments in the Universities used for this study were mainly nurses, medical laboratory technologists, pharmacists, science laboratory, technologists, radiographers and workshop technicians. Some of these occupations nursing, medical laboratory technologists arc traditionally regarded as femine jobs. In the recruitment of staff into such occupations more women are recruited because of the notion that women as mothers are more caring and they will bring their caring attitude into such occupations. Traditionally certain occupations, are regarded as femine, and gender role stereotyping channel more women to such occupation than men in the employment of non teaching staff in science and technology departments in federal and state universities used in this study, the number of females employed exceeded the number of males. Thus, there was no gender equity in employment of science and technology staff in federal and state universities in South East Zone of Nigeria.

The findings of this study also revealed that in appointment into key management positions, over percent of S & T staff that were appointed into key functions as heads of departments, deans of faculties/schools, directors of programmes, unit co-ordinators and chairmen of committee in federal universities used for the study were male while less than 26 percent were female. Similarly in the state universities used in this study more than 80 percent of the S & T staff that occupied key management positions were male while less than 20 percent were female.

The unwillingness to part with on traditional practices/customs help to increase the marginalization of women in employment and appointment to key management positions. Okeke (2009) stated that many employers of labour discriminate against women on the grounds that domestic responsibilities and motherhood (maternity leave, child care) interfere with jobs assigned to women and predispose them to absenteeism and failure lo meet with dead lines in the discharge of duties assigned lo cm. She argued that marriage is considered a vital factor in distracting women from science based occupations and that, in some countries women opt for careers which keep them in a lower position than their husbands. Furthermore, that most employers of labour prefer to employ males in key positions hence the gender inequality in employment and appointment to key management positions has persisted in Nigeria:

Implications for Affirmative Action for the Attainment, of the Millennium Development Goals

The Millennium Development Goals (MDGs) according to (FGN, 2006) are a series of eight-timebound development goals that seek to address issues of poverty, education, gender equity, health, he environment and global partnership for development, agree by the international community lo be achieved by the year 2015. The federal government of Nigeria is a signatory to the declarations of Millennium Development Goals is under obligation to implement the declarations made. Affirmative union is a minimum 30 percent female and 70 percent male representation in employment and appointment to key management posts agreed upon as a temporary measure to reduce gender discrimination and promote gender equity in employment and appointments to key posts. The findings of this study show that though Nigeria is a signatory to the Affirmative Action document, the provisions for that document has not been met in the employment and appointment to key management posts of academic and non academic staff in science and technology departments in the Federal and State Universities in South East Zone of Nigeria. The implication is that the 30:70 affirmative action is not yet been implemented in some universities in Nigeria. That being the case gender equity which is one of the Millennium Development Goals is yet lo be achieved in Federal and State Universities in South East Zone of Nigeria.

Conclusion

There is no doubt that gender equity is yet to be attained in the employment and appointment c scientists and technologists to key posts in some Nigerian universities. More efforts should be made to achieve the affirmative action decisions which Nigeria is obliged to fulfill bearing in mind that Nigeria in a signatory to the MDGs and the Affirmative action gender equity document. The small proportion of women currently employed in science and science-based occupations such as medicine, engineering. Geological sciences, agriculture is poor compared to the large number of qualified women in these fields. The problem of absence of gender equity in .employment and appointment to key positions oil science and technology staff in some Nigeria universities as found from this-study is largely socio-cultural coupled with the deep rooted prejudices and bias of the society as a whole against women in science and technology and not necessarily as a result of inefficiency or incompetence in the part of women. A change in societal values and expectations of the role of women would go a long way lo increasing the prospects of having gender equity in employment and appointment to management; positions in science and science related occupations ion our universities.

Recommendations

To promote gender equity in Employment and Appointment to key positions in Federal government owned and slate government owned universities in South East Zone of Nigeria the following recommendation were made:

- The Federal government of Nigeria should develop policy that facilitate a work-family balance for all employees in the universities taking into accounts the needs of both male and female.
- Management of universities (Vice Chancellors, members of senate and council) should bring gender
 perspectives into the universities policies and programmes through a careful and proper analysis of
 staff strength of the universities so as to increase the employment opportunities open to female
 scientists and technologists in the various science and technology departments.
- More women should be offered opportunity to participate in decisions-making by offering them appointment to key management posts, so as to promote gender equity in appointment to posts of responsibilities.
- The Federal government of Nigeria should develop policies that will ensure that the 30:70 (female/male) gender equity affirmative action is met by 2015 as contained in the MDGs document that Nigeria is a signatory.

- Ezirim, M.U. (2006) Scaling Up Girls' Participation in Science Education: Towards a Score Card on Quality Education for Girls. In H.A.C Okeke and M. Okara (eds) Breaking *Barriers lo Girl Education in Science*, *Technology and Mathematics* Ibadan, Nigeria: STAN (series 1).
- Federal Government of Nigeria (2006). *Millennium Development Goals Information Kit*. Abuja Nigeria: Hammer Head Publishers.
- Federal Government of Nigeria (2004). Millennium Development Goals' Report.
- Federal Ministry of Education (2004) National Policy on Education Lagos: NERDC.
- Federal Ministry of Science and Technology (1986) National Policy on Science and Technology. Ibadan: Nihort Press.
- Hornby, A.S (1975) Oxford Advanced Learners Dictionary of Cur rent English Third edition, Ibadan: Oxford University Press.
- Obiagwu, C.O (2008). Gender Equity Employment Status in Federal owned and State- owned Tertiary Institutions in South East Zone of Nigeria: Implications of Affirmative Action for the Attainment of Millennium Development Goals in B. G. Nworgu (ed) Educational Reforms and the Attainment of the Millennium Development Goals. Nsukka, Nigeria: University Trust Publishers. 109-113.
- Okeke, H.A.C (2009) Attracting Women into Science-based occupations: Problems and prospects in C.V. Nnaka and X. O. Njoku. (eds). *Ramifications in Gender and S'I'M education*. Ibadan Nigeria: STAN 89-108.
- Okeke, H.A.C (2007) *Making Science Education Accessible to All.* An Inaugural of the University of Nigeria, Nsukka. Nigeria: University of Nigeria Press.
- Okeke, H.A.C (2001). Towards Gender Equity in Nigeria in the 21" Century (Key note address) in C.V. Nnaka and M.C Anaekwe (eds) *Towards Gender Equality in Nigeria in the 21s' Century*. Enugu, Podik: 1
- United Nations Development Programme UNDP, (1995). *The Human Development Report 1995* New York and London: Oxford University Press.
- United Nations Development Programme (UNDP, 1996). *Development Report Measures, Global Gender Gap.* Cary: Oxford University Press.