

# LINKING FEMALE STUDENTS' ENROLMENT TO PRINCIPALS' GENDER IN RURAL NIGERIAN SECONDARY SCHOOLS

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## Abstract

The study examined the relationship between principals' gender and female students' enrolment figures in rural African communities. The objective of the study was to determine whether female students' enrolment was higher in schools managed by male or female principals. Data on male students' enrolment and principals' gender in 1,296 rural public co-educational secondary schools between 1999 and 2003 were analysed. Results show that female students enrolments' enrolment index was higher in schools managed by female principals. The implication is that rural female students appear to prefer schools managed by female principals to those managed by male principals. It was therefore recommended that more female principals should be deployed to rural secondary schools to enhance female students enrolment.

## Introduction

Efforts by most developing African countries to increase female students' enrolment in their secondary schools have become issues of local and international interests. At local levels, enlightenment programmes are carried to rural dwellers on the importance of educating the female child. Laws are being made and social reforms embarked upon (Acleloye, 1999) to ensure that the female child has equal opportunity and access to education as her male counterpart.

At the international level, major covenants on female education have been signed by developing nations. Some of these agreements include the Jomtien Declaration and Framework for Action on Education for All, the New Delhi Declaration on E-9 countries, the Ouagadougou Declaration on the Education of Women and Girls, the Dakar Conference on Women and Development. In addition to these efforts stated above, other international organizations such as UNESCO, UNICEF and the World Bank are providing funds, human development training programs and other forms of assistance programs to developing nations to enhance the education of African rural female children.

Despite these efforts amounting to millions of dollars, available records (Egwaoje, 2002; Yerokun, 2002 and Jamila-Suara, 1999) appear to show that the rate of increase in female enrolment remains low in many developing African countries. In Nigeria for instance, between 1988 and 1997, female students' enrolment into secondary schools increased by 8.4 percent over a ten years period, while that of the males went up by over 9.6 percent (NAii, 2000). The enrolment figures for female students are even lower in the rural schools. Table 1 shows urban-rural difference in female enrolment data between 1993 and 1997.

**Table 1: Urban-Rural Female Students' Enrolment (%)**

Commu	Enrolment (%)				
	1993	1994	1995	1996	1997
Urban	52.8	5	51.9	52.7	5
Rural	47.2	4	47.9	47.9	4

It would appear from data presented in table 1, that there were minimal increases (1.2% in 1994 and 0.3% in 1997). Drops in rural female students' enrolments were observed in 1995 and 1996. These data and other related findings (Nwagwu, 1999; Damar, 1999 and Akanbi, 1999) are giving Stakeholders in African education at national and international levels major concern for a need to develop effective framework for improving female students' enrolment in rural African secondary schools.

In an attempt to proffer solutions to the problem of poor female enrolment in secondary schools, several factors have been identified as probable causative factors. First, there is the wrong notion that the place of the woman is in the home, which is purportedly still being perpetuated in a few "primitive" African communities. It appears it is believed in such communities that young female students would eventually mature and get married to serve only their husbands as "masters", consequently, the need to educate them, outside the culturally established domains of services to their husbands and families were looked upon as a waste of resources. Therefore, young school aged girls are not allowed to accompany their male siblings to schools. Another very significant problem reportedly militating against female enrolment in secondary school is early female marriage (Soile and Ogunmuyiwa, 2001). In some African communities, young adolescent girls are betrothed to older men, and these future husbands in many cases reject formal secondary education for these girls. Low female students enrolments could also be due to family poverty as reported by Avwata and Adiotomre (2002). When family resources available for the education of both male and female children are inadequate, priority is given to the education of the male children, while the female ones are left at home. These are some of the reported impediments to female students' enrolment, which the international community is examining with view to find solutions to in an attempt to enhance female students' enrolment in African schools.

While some measure of success may have been attained through research in these areas, major breakthroughs cannot be claimed because these studies have failed to take into consideration the main subject-which is the Female Child herself. The object of focus has never really been the female child in these studies. Such questions as factors that could attract the child to secondary school, her fears, aspirations and doubts appear not to have been well examined, empirically.

Thus, a new theme currently being explored in developing African countries has to do with the determinants of female students' interest in secondary education, with emphasis on factors that could enhance their enrolment in schools. In this study, we have chosen to look at how principals' gender could rouse female students' interest in education and cause them to enrol in secondary schools. It is being argued, that because of the humility of rural girls, which is probably encouraged by certain religious and cultural practices, female students will be more comfortable under female principals. The assertion therefore is that the presence of more female principals in secondary schools could enhance female students' enrolment.

The process on a broader spectrum involves identifying women in leadership positions, in diverse professional areas that are willing to serve as models for young rural girls. In the school system, many female principals are taking up the challenge, and they are accepting deployment to rural areas, where they can work closely with these village girls. The underlying assumption is that when these rural girls make contact, and closely interact with these women in leadership positions, they (the girls) are likely to be inspired and encouraged to enrol and remain in school for good education.

This gender mentorship approach to enhancing female students' enrolment appears simplistic, yet its operation, according to Ganser (1996), is quite complex. The questions often asked include the guarantee that this method is the required antidote to poor rural female students' enrolment in African secondary schools? Are the female enrolment figures for schools currently managed by female principals higher than those managed by their male counterparts in the same or identical communities? Issues similar to these ones contributed to our desire to carry out this research. It is our opinion that proffering answers to some of these salient issues could provide insight into the role of gender mentorship in enhancing rural female students' enrolment in African Secondary Schools. This paper therefore examined female enrolment figures for schools managed by female principals against those managed by male principals, to determine whether or not there is a difference in enrolment index. Enrolment index was measured by female students enrolment divided by the percentage of schools managed by the male/female principals. Details on enrolment index are provided in measures of variables for the study. It was conceptualised in this study that other conditions being equal, an observed difference in female students enrolment between schools managed by male and female principals could be due to gender of the principal managing the school.

### **Conceptual Framework**

This study is based on the role model concept. Mentorship or role modelling is not a new concept in management. Koki (2003) affirms that mentoring has served as a developer of young minds since the time of Odysseus, over 300 years ago, when he entrusted the education and care of his son to his friend, Mentor. Several interpretations have, since this period been given to the mentoring process in contemporary literature of educational management. Several researchers, including Dilworth and Imig (1995), Feiman-Nemser and Parker (1992) and Gray and Gray (1985) have done extensive studies on mentorship. Most of these studies emphasised various developmental phases of the mentoring relationship, the dynamics of the mentoring relationship itself, and the application of cognitive developmental theory to the mentoring process (Bey and Holmes, 1992).

Findings from studies on mentoring in educational development (Koki, 2003) revealed a complex and multidimensional process of guiding, counselling, teaching, influencing and supporting the learner, in this case, the female rural African child. Based on this concept and in consonance with Koki's (2003) reports, it is idealised that the

female principal should be seen to lead, guide and advise her students in and out of the school environment, in a manner that could encourage her students to always enrol and remain in school. Even at principal-teacher level, findings by Feiman-Nemser and Parker (1992) show that pairing novice teachers with more experienced teachers enhanced the performance of the younger teacher. Principals have therefore in many instances used the experienced teachers, who can effectively explain school policies, regulations and procedures; share methods, materials and other resources help solve problems in teaching and learning; provide personal and professional support; and guide the growth of the new teacher through reflection, collaboration, and shared inquiry at different levels of educational development. In line with this reasoning, Gay (1995) reported that the modelling process grows out of belief in the value and worth of people and an attitude towards education that focuses upon passing knowledge, from one generation to the other. One of the most difficult tasks (Freedman and Jaffe, 1993) is the ability of the mentor-principal to create that environment of value, worth, and trust in the child to enable her look on to the principal for leadership. Thus, Koki (2003) declares that the mentoring process extends far beyond supporting the enrolment of pupils into the school system through guidance and encouragement. It must be nurtured, maintained and sustained through commitment to education, hope for its future and respect for those who enter into it, the idea behind the mentorship model on female students enrolment is that having enough female principals deployed to rural areas could enhance female students' enrolment in rural African secondary schools.

### **Study Objectives**

The purpose of this study was to examine the relationship between the gender of principals and female students' enrolment in rural secondary schools. There are unconfirmed speculations among stakeholders in education that female students' enrolment in urban secondary schools are higher in schools managed by female principals, and it is being alleged that that "observed" comparatively higher enrolment could be as a result of gender mentorship, therefore more female principals should be deployed to schools. These assumptions have not been empirically investigated, but the understanding is that if more female principals are deployed to these schools, enrolment figures for female students were likely to increase. This study set about providing empirical data to this problem by examining female students' enrolments in rural community co-educational public secondary schools managed by male and female principals over a five-year period, between 1999 and 2003.

Schools in rural communities were chosen for the study because a higher proportion of the population live in rural areas, therefore, results of the study could be better generalised. Again, most female principals prefer larger inner city schools where they can be functional in other social or political activities, therefore, their impact will be more felt in the villages. The 1999 - 2003 period was chosen because of the Universal Basic Education (UBE) programme which began in 1999 and caused more high calibre education manpower, including school principals to be deployed to rural areas.

A second objective of this study is that female gender mentorship may be established, if indeed, female students' enrolment was found to be higher in schools managed by female principals, when compared with those managed by male principals, an attempt to ascertain whether or not there is gender impact on female students' enrolment in rural areas, two fundamental questions were asked;

1. What were the female students' enrolment figures for rural secondary schools managed by male (MP) and female principals (FP) between 1999 and 2003?
2. Is there a difference in female students enrolment index (FESEX) for rural schools managed by male principals between 1999 and 2003?

Despite existing speculations among urban dwellers about probable gender mentorship effect on female enrolment, these authors predicted that enrolment indices (FESEX) for female students in rural schools managed by male and female principals would not significantly differ. This assumption was predicated on the fact that there is limited number of secondary schools in most rural African communities. Many rural communities have one or two secondary schools established for both boys and girls in their localities, therefore, rural children may not often have a robust choice about which school they attend. A student who for any reason wants to attend a school outside her community must be ready to bear the additional costs of transportation, lunch and other incidental expenses, which they may not be able to readily afford, because of poor rural income.

In view of these likely constraints, it was our assumption that rural female students may not necessarily want to pay the extra costs by leaving the schools in their neighbourhood to another, which is further away, just because they prefer a school managed by a female principal. Thus, gender attraction between the student and the principal must be strong to warrant the student's movement against all odds to a school far away in another community. Such a bond could probably encourage increase in female students' enrolment in secondary schools managed by female principals. The authors went about examining this assumption by testing the null hypothesis of no significant difference in female students' enrolment index (FESEX) in 1296 rural public coeducational secondary schools managed by male and female principals between 1999 and 2003.

### **Method**

The study employed a survey design. Data on female students' enrolment and principals' gender in 1296 rural public secondary schools between 1999 and 2003 were obtained from the ministries of education of the different states. A validated instrument with reliability coefficient of .78 used for data collection was rigorously pilot-tested.

### **Procedure**

There are 36 states in Nigeria and the Federal Capital Territory. To ensure fair and adequate representation, the samples were drawn in line with the existing geopolitical zones. These are; North-West Zone, North Central Zone, North-East Zone, South-West Zone, South-South Zone and South-East Zone. By stratified random sampling technique, data on female enrolments in 1296 rural coeducational secondary schools from the six zones were collected. Only public secondary schools were used because of the low level of private secondary schools in the areas. Three states were randomly sampled from each of the six zones. From each of the three states, 8 local government areas (LGA) were randomly sampled, while from each of the L.G.As, nine co-educational schools were randomly sampled.

The names of sampled schools were compiled in the research instrument and forwarded to the Ministry of Education. Data on enrolment figures of females students and principals' gender for the schools from 1999 to 2003 were collected by the researchers and their assistants who have been trained on the procedure for collecting the data prior to the exercise. Key measures used in the study are explained below.

### Measures

#### Female Student Enrolment (FESEN)

This was separately measured. Female students' enrolment for schools managed by female principals as well as female students' enrolment for schools managed by male principals. In each of these cases, female students' enrolment was determined by the number of female students on an annual basis under the headship of either a male or a female principal for the period under investigation.

#### Female Student Enrolment Index (FESEX)

The number of coeducational secondary Schools managed by male principals were found to be higher than those managed by female principals. Therefore, female students' enrolment index was determined by dividing female students' enrolment ratios by the percentages of schools managed by either the male or female principals. For example, in Delta State of Nigeria, there were 72 sampled schools, with female students' population of 64,800. Only 10,896 were found to be enrolled in schools managed by female principals. It was also found that of the 72 sampled schools, 57 or 79.1% were managed by male principals, and only 15 or 20.8% were managed by female principals. Therefore,

$$1. \quad \text{Female students' enrolment ratio for schools managed by female principals} \\ = \frac{10,896}{64,800} \\ = 0.17$$

3.

$$2. \quad \text{Female enrolment ratio for schools managed by male principals} \\ = \frac{53,904}{64,800} \\ = 0.83$$

4.

$$3. \quad \text{Female enrolment index for schools managed by female principals}$$

$$\frac{0.17}{20.6\%} \\ = \frac{0.17}{0.206} \\ = 0.81$$

4,

$$\text{Female enrolment index for schools managed by male principals}$$

$$\frac{0.83}{79.2\%} \\ = \frac{0.83}{0.792} \\ = 1.05$$

### Results

Female students' enrolment and computed index for rural secondary schools managed by male and female principals are presented in table 2.

**Table 2: Rural Female Students' Enrolment and Enrolment Index**

	Female	% Enrolme Schools by	% Total of managed Female	Enrolment Index

	Sc m M Pr	S M b F P	H %	p R	principa		In man male prin	In m fe pri
					%	R		
1	68	4	4	.	2	.	.81	1.5
2	69	6	4	.	3	.	.78	1.4
2	71	6	4	.	3	.	.77	.15
2	73	7	4	.	3	.	.76	1.4
2	70	6	4	.	3	3	.77	1.4

From data presented in (able 2. it is observed that in 1999, female enrolment figure for schools managed by male principals was 6802, and for the same year, the female enrolment figure for schools managed by female principals was 4862, bringing total female enrolment to 6803 + 4864 or 1 1,667. The percentage or ratio of female students' enrolled in schools managed by female principals was calculated to be =  $\frac{4864}{11,667} = 41.7\%$  or .47

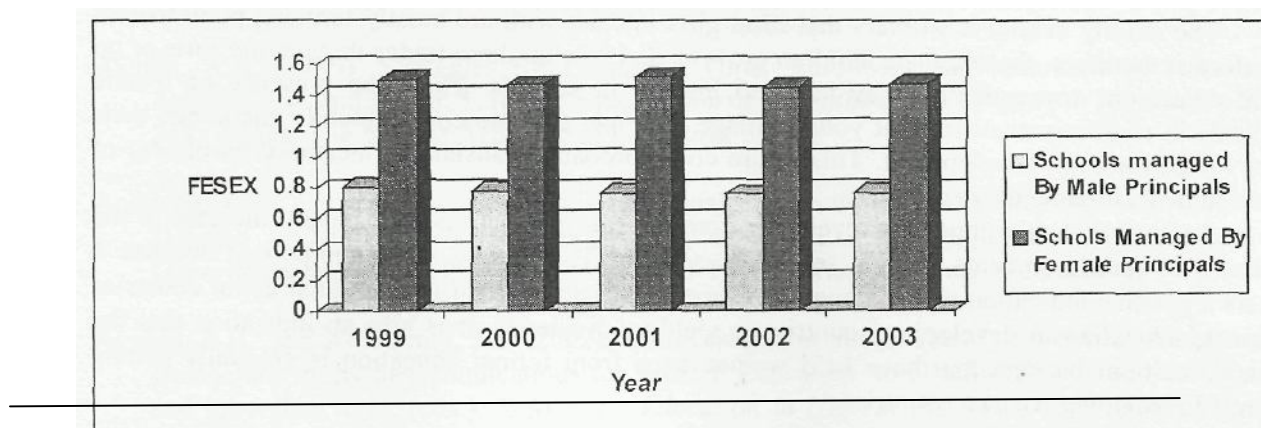
Similarly, the percentage of female students enrolled in schools managed by male principals in 1999 was =  $\frac{6803}{11,667} = 58.3\%$  or .58 (not shown in table 2).

Data collected also show that, in 1999. 27.8% of the sampled schools were managed by female principals, while 72.2% (not presented in table 2) were managed by male principals.

The computed female enrolment index (FESEX) for schools managed by female principals, presented in table 2, therefore is =  $\frac{4864}{27.8} = 1.5$

Similarly, the computed FESEX for schools managed by male principals, presented in table 2 is =  $\frac{6803}{72.2} = .81$

The female enrolment ratio (%) and enrolment indices for the period 2000 to 2003 were similarly computed and presented in table 2. Findings from data presented in table 2 appear to show that schools managed by female principals had higher female enrolment index. For clarity and easy interpretation, the data were displayed in graphical form and presented in Figure I.



**Figure 1:** Female Enrolment Index for Rural Secondary Schools (1999 - 2003)

It is of interest to note from figure 1 that the enrolment indices for schools managed by female principals were consistently higher than for those schools managed by male principals for the period under study. This result appears to show a possible link between principals' gender and female students' enrolment in rural African communities.

These data should however be interpreted with caution for several reasons. First, a few research findings (Egwaoje, 2002), have reported general increases in female enrolment, at different levels, in both rural and urban communities, since the inception of the UBE programme in 1999.

Thus, the observed increases in this study could also have a possible link with UBE enlightenment programme, which many (Amkweze, 1999) claim to be more important in rural African communities. Secondly, there are reports of steady decline in male students' enrolment in secondary schools in some African states. Thus, the observed increase in the study could have been due to the drop in male students' enrolment. Attempts were made to overcome these limitations, hence, only coeducational institutions were used for the study, and the study was also extended over a five-year period. Therefore, these limitations should be taken into consideration in the interpretation of the results of this study.

### **Discussion**

Female education is now being looked upon as a worthy venture in many developing African countries. And the desire to increase female enrolment in schools has encouraged investment in research and other related studies on female enrolment. Findings from present research show that female enrolment index was higher in schools managed by female principals when compared with schools in similar environments managed by male principals. The results appear to show that female students were more likely to enrol in secondary schools managed by female principals.

The result of this study could also be interpreted in line with Koki's (2003) report that mentorship plays very significant roles in educational development of students. Findings from this study has important implications in the education systems of most developing countries, where female enrolment figures are very low. The issue is important because in many African rural communities, the dearth of well-educated women in leadership positions that young schoolgirls can look up to for direction appears to impede the education of women in general in Africa. This observation is particularly worse for rural women.

The readily available workers that rural girls interact with are mostly farmers, petty traders and artisans, therefore, these female children grow up and take up these trades that require little or no formal education, consequently, they have no interest in schools. Thus, the presence of female principals in rural communities that young village girls can emulate could actually encourage their desire for educational development. This desire could probably translate to increased enrolment of female students in secondary schools.

Another probable important revelation from the study is the reported general increase in the enrolment of female students in rural secondary schools. The finding is very important because it appears a positive indication that the huge investments by national and international donor countries on female education in developing countries is yielding dividends. It is also an indication that the chains of cultural barriers that have held women back from formal education is gradually getting broken in developing African countries.

### **Conclusion**

It is generally believed that malaria is the greatest killer today in Africa. While these authors share that view, we also believe that this is made possible because of inadequate formal education of most African women. This is why the education of the female child is paramount and all avenues are being explored to enhance female students' enrolment in schools.

This study examined the relationship between secondary school principals' gender and female students' enrolment in rural African communities between 1999 and 2003. Findings from data analysed show that there appear to be a progressive increase in female students' enrolment from 1999 to 2003. Results also appear to show that female students' enrolment index for schools managed by female principals was higher than those managed by male principals. This could be interpreted to

mean a possible gender link between secondary school principals and female students' enrolment. Based on this result, it was concluded that there could be a probable relationship between principals' gender and female students' enrolment, and that the presence of more female principals in rural secondary schools could lead to increased female students' enrolment in rural schools.

## Recommendations

The following recommendations were made, that more female principals should be deployed to rural communities to encourage female students' enrolment in secondary schools.

This study like many similar studies has several limitations that should be kept in mind. The study only examined a small portion (principals' gender) of a large system of variables related to female students' enrolment. Samples were drawn principally from the Nigerian school system and the instrument used for the study is relatively new, although it was vigorously pilot-tested. Further research into female enrolment among different socio-economic groups within the continent may open more doors to improved understanding of the complex nature of this problem area. It is only through more comprehensive study using data representing the many varied aspects of the problem that researchers, practitioners, policy-makers, and the community in general will come to a better understanding of what needs to be done, to enhance female students' enrolment in rural African secondary schools.

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