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ABSTRACT

Purpose: The purpose of this study was to find out the influence of school environment on girls' academic achievement at Secondary School Education level in Kisumu East Sub- County.

Methodology: The research designs used were correlation and descriptive survey designs. The study population consisted of 1560 girls from form four, 39 head teachers and 39 class teachers. Simple random sampling technique was used to select 300 form four girls. Saturated sampling technique was used to select 30 head teachers and 30 class teachers. Data collection instruments included questionnaire, interview schedule and document analysis guide.

Findings: The study established that school environment affected girls' academic achievement.

Unique contribution to theory, practice and policy: The recommendations of the study were; Schools should advice parents on how to properly use their resources on supporting their daughters' academic performance other than making negative comments. The study may be significant to education policy makers, planners and implementers on how to provide secondary education that will enhance girls' academic achievement.

Keywords: *Factors, education, school environment, girls' academic achievement, Kisumu East Sub- County.*

1.0 INTRODUCTION

Quality Education is the key to providing the right human resources for social and economic production sectors facilitating wealth creation and improving living standards, Abdullah (2011). A report from the department of international Development 1998 revealed that countries consider the provision of education important for their overall socio-economic development and consequently allocate an annual basic substantial amount of resources to it.

Post primary education for a girl has important individual benefits in terms of her options and resources over her lifetime. These benefits extend beyond the girl in affecting her family and the society as a whole, the benefits to society include enhanced economic development, education for the next generation, healthier young girls and families and fewer maternal deaths (UNICEF 2004). The benefit of education for a girl and society can be explained by the effect that education has on empowering girls to acquire and use new personnel, social and economic behavior that in turn, affect societal change (Moulton, 1997).

The current study was based on a theory postulated by Pearson, where society views all activities that are carried out to be based on social roles and interactions of men and women. This is an assumption of gender roles as dictated by society. The society seems to have ultimate authority on the precise nature of what women and men actually do, and their real contribution to production and reproduction which turns out to be biased against women according to (Orodho 2004). This theory argues that because of biases, the performance of women and men is affected in nearly all spheres of life such as; business, education, and environmental conservation and development projects. Pearson's gender relations' framework was found appropriate for this study because it emphasizes the various social, cultural and economic norms and standards, which must be considered when girls or females take the opportunities to participate in social activities such as education. This theory was therefore relevant for the study because it captures the variables, which govern the study. A lot of research has been done about girls' academic achievement in secondary schools; little has been done in Kisumu East sub-County secondary schools with a view to improving the situation in Kisumu East sub- County. There was need to establish the various selected factors that influence girls' academic achievement such as school environment factors.

2.0 LITERATURE REVIEW

The school has an impact on the academic achievement of girls as shown by various researchers, Lockheed (1991) notes that girls are often discriminated against, especially in co-educational institutions by teachers who believe that they are incompetent. Eshiwani (1990) observes that girls in Kenya are socialized to be passive and this may be carried out at school. As a result their potential is suppressed and ignored and their ability seldom recognized or appreciated (UNICEF, 1996).

A gender biased learning environment, insensitive teaching – learning resources, sexual harassment, high level of repetition and failure, poverty, opportunity cost of schooling, overloaded curriculum, among others according to Abagi and Wamaita (1995) will continue to

favour the boy child. Kisumu District is unique given its varied ethnic groups, races and religion which present a multicultural environment.

The impact of poor teacher quality in secondary school is worse than that of teacher attrition due to transfer and death (Ingers and Kralik, 2004). An unmotivated teacher is inappropriate personnel to promote girl – child academic achievement since they may perpetuate gender stereotypes on role, occupation and behaviour in the process of curriculum instruction. In addition less experienced teachers are less likely to use textbooks, which motivate learning, than more experienced ones (Psacharopoulos and Woodhall, 1985). This study will seek to establish whether the school environment contributes to girls’ academic achievement in secondary school.

The school environment influences the pupils’ ability to learn (Wamahu, 1995). Learning occurs when there is order, good facilities and availability of teachers. Odaga and Heneveld (1995) observes that girls’ participation and performance in education is influenced by availability of place, proximity of school to home, appropriate physical facilities, for example, toilets, school climate and the presence of female teachers. The closer the school the less fear parents have for their daughter’s safety and reputation.

Aseka (1986) in her research on Factors affecting girls performance in mixed secondary schools observed that in all textbooks ,wherever portrayed girls are identified with traditional values and ways of life .if portrays boys as stronger more incentive and active .thus developed biased attitude among the children leading to consequent withdrawal of girls and low academic achievements.

Aduda (2001) asserts that the attitude of teachers, pupils and the society is the essential issue that needs to be addressed especially in mathematics. The education system has itself to blame for not providing the appropriate required skills. One of the education roles is to liberate one from ignorance and enslavement. Further studies by Aduda and Muito (2003), confirm that there is a greater awareness among educators and policy makers that gender related interventions should focus more closely on school level factors in order to achieve gender equality in provision of education.

Reynolds (2001) argues that learning environments are a powerful arena for viewing negotiations on autonomy and dependence. Within the critical pedagogy, it is important to acknowledge socially constructed and reinforced differences with reference to race, gender and the inequalities of power. Further, inequalities of power can generate active engagement on the consequences of difference as an integral reference rather than a suppressed aspect of education process.

Okojie (2001) found that lack of facilities in the school like tap water, electricity or even workers in the school translates to girls being allocated less time unlike boys so that while boys play games, girls are occupied fetching water for use in the kitchen or cleaning the classrooms. Such activities do not help girls engage in play to refresh themselves for study. This is further supported by Waweru (2005) who observed that appearance of adequate physical facilities in school is an important source of inspiration and motivation for members of the school community especially girls. Education for all (EFA) global monitoring report (2005) indicated that availed resources support the process of teaching and learning. It further noted that direct ways in which the resources are used has a direct relationship in girl’s education.

3.0 RESEARCH METHODOLOGY

The research employed descriptive survey design technique. Data was collected using questionnaires for students and teachers. Interview schedules were used to collect data from head teachers. Quantitative data was analyzed using descriptive statistics i.e. frequencies, percentages, means and standard deviation. Scientific Package for Social Sciences was also used. Pearson's Chi-square statistics was used to establish the extent to which the school environment influences girls' academic achievement.

4.0 RESULTS

4.1 Demographic Characteristics of Respondents.

The respondents in this study included Head teachers, class teachers and form four female students of 2015. Demographic characteristics of the respondents that the study sought to establish were, age, sex, professional qualifications and teaching experience based on questionnaires. Background information of the students helps to promote girl child education. It helps to determine the procedures to be adopted, what vocabulary to use and even determine which examples are most likely to fit their age and experience level. This information is therefore key to planning and organization on how to provide secondary education that will enhance girls' academic achievement. The ages of the teachers are presented in Table 1.

Table 1: Ages of Teachers as reported by Head Teachers (n=30) and Class Teachers (n=30)

Age Bracket	<u>Head Teachers</u>		<u>Class Teachers</u>	
	f	%	f	%
21 – 30 yrs	-	-	07	24
31 – 40 yrs	03	10	10	33
41 – 50 yrs	23	77	13	43
51 – 60 yrs	04	13	-	-
Total	30	100	30	100

As shown in Table 1, 10% of head teachers fell within the age bracket of 31 – 40 years, while 24% of the Class Teachers fell within the age bracket of 21 – 30, the majority (77%) of head teachers were in the age range 41 – 50 years while some (13%) were above 51 years of age. Among the class teachers, 33% fell in the age bracket of 31-40 years while majorities (43%) were between 41-50 years of age. There was no teacher aged above 50 years. This could imply that at the beginning teachers in this study could have been inexperienced and need the induction programs to make them effective to handle the learning process in our secondary schools. As can be observed from Table 1, 90% of the head teachers fell above 40 years of age a sign that they were old and experienced enough to offer good advice to the girls. Equally, most class teachers (43%) fell in the 40 years and above age bracket and indication that they were capable of guiding the girls towards better academic achievements. The study also considered the gender of head teachers and class teachers as presented in Table 2.

Table 2 Showing Gender of Head Teachers and Class Teachers (n=30)

Gender	<u>Head Teachers</u>		<u>Class Teachers</u>	
	f	%`	f	%
Female	07	24	10	33.3
Male	23	76	20	66.7
Total	30	100	30	100

It can be observed from Table 2, that 76% of head teachers were males and only 24% of the head teachers were females. The male dominance can also be observed from the data on class teachers where males were 66.7% while females were only 33.3%.

During interviews, it was established that majority of the newly appointed teachers were males while only a few were females. It was also established that both male and female appointees had not be exposed to teaching after their initial training in colleges and that they were in dire need of induction to place them well into the profession.

Table 3 Teachers Academic and Professional Levels of Education (n=30)

Academic Level of Education	<u>Head Teachers</u>		<u>Class Teachers</u>	
	f	%	f	%
A level with Diploma	-	-	-	25
BA/BSc with PGDE	-	-	-	-
BED	16	53.3	17	64
MED	14	46.7	06	11
Total	30	100	30	100

As it can be observed from Table 3, no head teacher had A-level with Diploma in Education, while majority (53.3%) had Bachelor Degree in Education and some 46.7% had Masters of Education. The class teachers holding A – level with Diploma in Education were only 25% while majority (64%) had Bachelor Degree in Education and only 11% had Master’s Degree in Education. According to the results in Table 3, there were no head teachers or teachers with Bachelor of Arts or Science with Post graduate diploma in education. This may be interpreted to mean that all the teachers and head teachers involved in the study were those who preferred teaching as a profession and therefore had the interest of the learners at heart.

Table 4: Teachers Years of Work Experience as reported by Head Teachers (n=30) and Class Teachers (n=30)

Experience in the Teaching profession	<u>Head Teachers</u>		<u>Class Teachers</u>	
	f	%	f	%
1 – 5 yrs	-	-	02	07
6 – 10 yrs	02	07	15	50
11-20 yrs	28	93	13	43
Total	30	100	30	100

As can be observed from Table 4, no head teacher had less than 5 years experience as a head teacher. Only 7% had 6-10 years experience while majority (93%) had more than 10 years experience as head teachers and were qualified enough to support academic performance of girls. It can also be observed that some (7%) class teachers had less than 5 years leadership experience and were most likely to rely on the head teachers for direction during induction for newly appointed teachers. While majority (50%) had between 6 – 10 years leadership experience, they too would rely on their head teachers who were more experienced to show them way forward on how to improve the girls' academic performance. It was only some (43%) class teachers that had between 11 – 20 years of professional experiences that would require little assistance from their head teachers if any to promote girls' performance. From Table 4, it can be implied that the contributions of head teachers towards girls' performance was vital.

4.2 Effects of School Environment on Girls' Academic Performance as reported by Class Teachers (n=30)

The research question responded to was; to what extent do school environments affect girls' academic achievement in secondary education. The response to this research question were as shown in table 5

Table 5: Effects of School Environment on Girls' Academic Performance as reported by Class Teachers (n=30)

Perception	Mean Rating
Lack of textbook	2.93
Lack of facilities	4.00
Hostility of teachers	2.26
Hostility of students	2.16

Table 5 revealed that lack of facilities greatly affected the academic performance of girls with a mean rating of 4.0. Inadequate textbooks were also affecting the performance of girls with mean rating of 2.93. Hostility of teachers also affected the girls' performance with mean rating of 2.26

while the hostility of students did not greatly affect the girls' performance as it has a mean rating of 2.16.

The study established that there was lack of facilities in girls' schools which would otherwise enhance academic performance of girls in schools. Lack of text books was equally noted with a mean rating of 2.93. Lack of such important facilities are a pointer to poor organizations in schools as put forward by Bargetuny, (1991) that girls were prone to dropping out of school, underachievement in school and in some areas they did not enroll in school. This is due to poor school environment in terms of school organization, curriculum, cultural practices, and attitudes.

According to Class teachers factors associated with the instructional process such as textbooks, teacher quality, teaching methods, school organizations, teachers' correction of pupils' books, school library activity, class room organization and frequency of homework determined the level of participation. This assertion is supported by Eshiwani (1993) who noted that the presence of quality school facilities and services are some of the symbols of high educational quality. It is the role of the principal to put in place rules and regulations that will ensure that girls remain in school at all times unless they are participating in educational activities outside the school. The principal is also expected to understand the curriculum establishment because she or he plays a key role to increase retention by organizing, planning and coordinating school activities with the girl at the center (Ochieng', 1997).

According to head teachers, most girls could do better than they were scoring if the facilities could be adequate for learning. Inadequacy of facilities forces girls to either share or improvise and this venture is never liked by girls who finally give up and relax for nature to take its course. These findings are also supported by Odaga (1992) who noted that the availability of physical and instructional facilities had significant influence on girls' performance. The facilities include classrooms, workshops, dormitories, computers, school vehicles, text books, laboratories and lighting among others. In his study of quality of schools in Kisumu Municipality, Odaga further noted that physical facilities attract and motivate students to work hard and complete their education. He further observed that those schools with better facilities do better in examinations. Wanjiku and Wanjiru (1994) also noted that the quality and adequacy of these resources have direct impact on the girls' education.

Head teachers noted during interviews that textbooks in Kenya do depict girls and women with sexist bias that does not only lead girls into traditional roles, but also contribute to their negative attitude to learning and withdrawal from school. In reference to mathematics texts, it is noted that they depicted a picture of active male engaging in active work and business in a wider range of fields, earning cash, buying land houses, farm, vehicles, food, and clothing, borrowing and taking loan to develop his financial capacity, savings and investing substantial profits. Women in contrast are mainly absent from these activities, but when they do appear in textbook, they are engaged in domestic or poultry activities (Obura 1991).

According to the class teachers during interviews, the personality and attitude of the subject teacher far exceeds the methods and materials in teaching, they further noted that some teachers in either mixed schools or girls schools regarded girls as academically inferior. They describe girls as stupid and lazy, articulating lower expectations. This finding is also supported by

Kasente (1996), in a study of Uganda post-secondary institutions, who asserted that the way teachers criticized the student responses and other gender-based teacher-pupil relationships could lead to negative and limited perceptions of female academic ability and potential.

The findings can further be supported by various documented records that the majority of students admitted to pre-service training programmes did not choose education at all, but took teaching as the only available option (Republic of Kenya, 1999). Consequently, they joined teaching as a last resort (Indoshi, 2003) and were somewhat not stable and effective enough to promote girl-child participation. The head teachers equally noted that an unmotivated teacher is inappropriate personnel to promote girl-child participation since they might perpetuate gender stereotypes on role, occupation and behavior in the process of curriculum instruction. In addition to that, it is important to note that less experienced teachers are less likely to use textbooks, which motivate learning among students, than more experienced ones (Psacharopoulos & Woodhall, 1985).

Table 6: Results of Pearson's Chi-square Test on the Effects of School Environment on Girls' Academic Achievement

	Value	df	Asymp. Sig.(2 sided)
Pearson's chi square	69.89	12	.000
Likelihood ratio	59.625	12	.000
N of valid cases	306		

Table 6 shows that the probability of the chi-square test statistics (chi square =69.9) is $p = 0.000$; this is less than the alpha level of significance of 0.05. This shows a significant association between the type of school and the performance.

5.0 CONCLUSIONS

The conclusions arising from the findings of this study are summarized as follows:

- 1) The school environment although proves to be favorable for girls, it is however biased on the text and curriculum which portrays male as masculine and female as weaker sex.
- 2) Teachers attitude is positive as they perceive girls to be capable of performing well in Exams.
- 3) The girls do get enough support from their teachers without complaint.
- 4) Girls are affected by personal problems for example favoritism of bright students by teachers, missing lessons, being sent home for school fees, being very strict. The girls further complain of arrogance and a lot of competition from their fellow students.

6.0 RECOMMENDATIONS

Schools should advice parents on how to properly use their resources on supporting their daughters' academic performance other than making negative comments.

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