

Economic Factors Affecting Girls Academic Performance (Kcse) In Mixed Secondary Schools: A Case Of Nakuru Municipality

Owuor Dorothy Akinyi
Chemisto Esther Musani

Kenyatta University-Department Of Education Administration
And Curriculum Development- Kenya

Abstract

This study intended to investigate Economic factors affecting girls' performance in mixed secondary schools. The objectives of the study were to determine Economic factors, which affect girls' academic performance (KCSE) in mixed secondary, to suggest the possible strategies to counter the Economic factors which affect girls' academic performance. The study sampled mixed Secondary Schools which are twelve in number using simple random technique to select six schools. From the sampled schools, an equal numbers of students were selected from form four classes in each school totaling 160. Sixty (60) teachers were included in the study and six (6) head teachers. Data was collected using questionnaires for students and teachers. Interviews were for head teachers. The research employed a mixed method design technique. Data was analyzed using descriptive statistics i.e. frequencies, percentages, mean and Standard deviation. Scientific Package for Social Sciences (SPSS) was also used. The findings of the study were to provide to the education stakeholders to come up with strategies for countering the Economic factors affecting girl's academic performance in

KCSE in Nakuru Municipality. From the research findings, it was established that Economic factors affecting girls' performance were poverty levels, system of giving bursaries, and ignorance of available resources. The recommendations made were increased bursaries, inviting resource persons to talk to girls, providing basic needs and organizing parents meeting to discuss various issues affecting the girl student.

Keywords: School based factors, KSCE, and girls

Introduction

Background to the study

Over the past three decades, there has been ongoing debate about the advantages of mixed schools and single-sex education for children's socio-emotional and educational development. This debate started with the early British findings reported by Dale (1969;1971; 1974) which suggested that mixed schools were better placed to meet the social and educational needs of young people (Dale, 1974). Up until this time, there had been a strong tradition of single-sex schooling at the secondary level, with mixed schools being less common (Cocklin, 1982). However in response to Dale's findings and increasing social concerns about the importance of cross gender socialization, most Western countries moved away from single-sex secondary education towards a commitment to mixed schooling for both boys and girls. In response to changing patterns of school organization and strong criticisms of the evidential basis upon which Dale based many of his assertions (Lee & Bryk, 1986; Marsh, 1989; Schneider, Coutts, & Starr, 1988), there has been renewed interest in the extent to which single-sex and mixed schools affect children's academic development. A lot of studies are now available which compare the educational achievement of children attending single-sex and mixed secondary schools. The results of these studies have been inconsistent, with some providing support for the benefits of mixed schools (Marsh, 1989; Marsh, Smith, Marsh, & Owens, 1988), while others support single-sex education (Astin, 1977; Lee & Bryk, 1986;

Riordan, 1985), and yet others finding no achievement differences between children attending single-sex and coeducational schools (Miller & Dale, 1974; Rutter, Maughan, Mortimore, & Outson, 1979). This issue has been further complicated by claims that school type may have a differential effect on girls and boys achievement, with boys tending to perform better in a mixed school environment, while girls tend to fare better in a single-sex school environment (Finn, 1980)

Gender parity in formal education is not only a major concern for parents, educators and policy makers, but also a basic human right, a key indicator of achievement of education for all, and a source of economic growth (Bank, Delmont and Marshall, 2007). Among the serious obstacles to female education, premature departures or dropping out from schools by female students is notable in Sub-Saharan Africa. Early departures of girls from schooling certainly result in wastage. When we talk of wastage, it means the inefficient utilization of both human and economic resources by the education system (Njau and Wamahiu, 1998). The interruption of schooling by female students is also expensive in terms of the quality of life of those who drop out as well as to the society at large. It is challenging to provide education for all citizens and to observe the Universal Declaration of Human Rights that entitles everyone to the right to basic education. As per the 2012 EFA Global Monitoring Report, Sub-Saharan Africa has the lowest total secondary enrolment (UNESCO, 2012) save for exceptional cases like Rwanda, Lesotho where boys are more disadvantaged than girls (UNESCO, 2012). Every modern society considers high girl-child completion rate in education crucial. This is because education is one of the most effective instruments a nation has at its disposal for promoting sustainable social and economic development (MoEST, 1999). It leads to increased productivity of the educated as a means of human resource development for communal benefit (MoEST 2002). Girl-child education raises economic productivity, reduces poverty and fertility rates, lowers infant and maternal mortality, and improves health, nutrition and environmental management (World Bank 2002).

Analysis of KCSE examination results in Nakuru Municipality indicated that academic performance of girls in mixed day public secondary schools was low compared to counterparts in girls boarding public secondary schools. Table 1. As a result, the researcher sought to examine economic factors that affected girls' academic performance in mixed day public secondary schools in Nakuru Municipality. The KCSE results show that girls from single sex boarding schools in Nakuru district as a whole performed better in KCSE as compared to those in mixed day public secondary schools in the same area. If females manage to complete their education it is equal to investing in future progress and better standards of living with multiplier effects. To make efforts that improve wastage due to dropouts requires a clear understanding of the extent, causes, consequences, and policy responses made to the problem of female dropouts. This understanding will be used as benchmark for policy makers to start new actions. This study is likely to create such an understanding as far as the promotion of girls' education is concerned.

NAKURU MUNICIPALITY KCSE GENDER RESULTS ANALYSIS (2003-2006)																																
SCHOOL	2003					2004					2005					2006																
	M	A	O	S	E	G	R	B	R	I	R	M	A	O	S	E	G	R	B	R	I	R	M	A	O	S	E	G	R	B	R	I
MENENGAI	7.56	B-	8.315	B-	6.804	C+	7.226	C+	7.95	B-	6.5	C+	7.534	B-	8.29	B-	6.78	C+	7.485	B-	8.23	B-	6.74	C+								
NAKURU DAY	6.33	C	6.963	C+	5.697	C	6.457	C+	7.1	C+	5.81	C	6.055	C	6.66	C+	5.45	C-	6.537	C+	7.19	C+	5.88	C								
LANGALANGA	6.05	C	6.655	C+	6.655	C+	5.445	C-	5.856	C	6.44	C	5.965	C	6.56	C+	5.37	C-	5.913	C	6.5	C+	5.32	C-								
FLAMINGO	5.4	C-	5.94	C	4.86	C-	4.987	C-	5.49	C	4.49	C-	5.941	C	6.54	C+	5.35	C-	5.263	C-	5.79	C	4.74	C-								
ST XAVIER	5.58	C	6.138	C	5.022	C-	5.052	C-	5.56	C	4.55	C-	5.87	C	6.46	C+	5.28	C-	7.919	B-	8.71	B	7.13	C+								
LANET	4.41	D+	4.851	C-	3.969	D+	5.549	C	6.1	C	4.99	C-	5.07	C-	5.58	C	4.56	C-	4.75	C-	5.23	C-	4.28	D+								
MOI	4.17	D+	4.587	C-	3.753	D+	4.79	C-	5.27	C-	4.31	D+	4.902	C-	5.39	C-	4.41	D+	4.573	C-	5.03	C-	4.12	D+								
KENYATTA	5.37	C-	5.907	C	4.833	C-	5.41	C-	5.95	C	4.87	C-	5.15	C-	4.22	D+	4.772	C-	5.25	C-	4.295	C-	4.3	D+								
NAKURU WEST	3.75	D+	4.125	D+	3.375	D	4.159	D+	4.58	C-	3.74	D+	4.587	C-	5.05	C-	4.13	D+	4	D+	4.4	D+	3.6	D+								
UPPER HILL	4.53	C-	4.983	C-	4.077	D+	4.303	D+	4.73	C-	3.87	D+	4.448	D+	4.89	C-	4	D+	4.242	D+	4.67	C-	3.82	D+								
AFRAHA	3.57	D+	3.927	D+	3.213	D	3.28	D	3.61	D+	2.95	D	4.009	D+	4.41	D+	3.61	D+	5.053	C-	5.56	C	4.55	C+								
NAKURU HIGH	7.58	B-	8.338	B-	6.822	C+	7.638	B-	8.4	B-	6.87	C+	7.486	B-	8.24	B-	6.74	C+	8.108	B-	8.92	B	7.3	C+								
AVERAGE MASS	5.4	C-	5.89	C	4.82	C-	5.39	C-	5.9	C	4.9	C-	5.55	C	6.1	C	5	C-	5.718	C	6.3	C	5.15	C-								
MSS	5.5	C																														
BOYS MSS	6.1	C																														
GIRLS MSS	5	C-																														
MSS Mean standard Score																																

Source: Ministry of Education NAKURU DISTRICT 2007 DISTRICT EDUCATION DAY 2006 KCPE/KCSE ACTIVITIES TROPHIES AND AWARDS PRESENTATIONS.

Source: Nakuru Municipality Education office-KSCE Analysis

Table 1: Nakuru Municipality Gender Results Analysis (2003-2006)

Objectives of the study

- a) To determine Economic factors, which affect girls' academic performance (KCSE) in mixed secondary schools in Nakuru Municipality.
- b) To come up with possible strategies to counter economic factors which affect girls' academic performance.

Research Questions

The study was guided by the following research question;

How do Economic factors affect girls academic performance

What possible strategies can counter the Economic factors, which affect girls' academic performance?

Literature Review

Economic Factors

The Economic Constraints to Educational advancement for women is closely related to cultural and structural Constraints. Parents opt to take boys to school due to financial constraints. When girls are constantly sent home for school fee, they give boys the priority to attend school. Much has been done to investigate how family background affects students' performance. The dropout of girls from schooling has been found to have links with socio-economic factors by several studies in Africa South of the Sahara. According to Odaga and Heneveld (1995), and Njau and Wamahiu (1998) the most important of these factors include direct and opportunity costs of schooling, limited employment opportunities, socio-economic status, parental/family investment behaviour, the economic value of girls, rural/ urban residence, and the level of parental education.

Direct schooling costs have been found to be the major reason parents offer for not educating girls or for removing them from the school. The charges range from, tuition, fees for registration and admission, examinations, boarding, school building fund, parent and school association fees, book rental, money for uniforms, the provision of furniture and remedial fee. Reasons for the increasingly prohibitive cost have been

discussed from several perspectives. Graham-Browne (1991) and Nejema (1993) argue that poverty and the fiscal crises which force families to cover shortfalls have a devastating impact on households and the education system as far as girls' education is concerned. Kinyanjui, 1993, Namuddu, 1994 and Palme, 1993 link the severity of direct costs with the shift of educational costs to parents in the name of cost sharing. In Kenya these reports raise critical questions about whether government bursaries reach intended beneficiaries and in so doing expand access for those who are excluded, or whether the government reinforces the exclusion of the poor by awarding bursaries to financially able groups whose children are already in secondary school. Since children from the bottom wealth quintiles have fewer chances to enroll in secondary school than children from the top wealth quintiles, it is important that government bursaries reach the poor. A study by Njeru and Orodho (2003) on the bursary scheme in Kenya found that although there were students who benefited from bursaries, this had no significant impact on enrolment by the poor. Since children from the bottom wealth quintiles have fewer chances to enroll in secondary school than children from the top wealth quintiles, it is important that government bursaries reach the poor

Most studies are of the opinion that the direct costs or financial constraints hold back more girls than boys from schooling. The opportunity costs of girls' schooling are associated with resources/services lost due to sending the child to school. In many Sub-Saharan rural homes, it is hard to do without child labour with girls demanded more than boys (Odaga & Haneveld, 1995). The need for domestic labour has grown also with the rapid growth of urban areas. They further note that poor rural parents responded by sending their daughters into the domestic labour market in exchange for regular cash. The continuing importance of bride price, polygamy, adultery fines, and value accorded to marriage and motherhood depress the demand for female education in Sub-Saharan African societies. The prospects of low economic return for girls reinforce dropout rates in Africa. A research study carried out by Wanjiru (2007) in Mombasa on factors contributing to school drop out in public secondary schools revealed that 52.4% respondents valued

boys' education better than that of girls. Families which cannot easily afford to send both sons and daughters to school reckon that financial returns on the expenditure for girl's education are a good deal smaller than those of boys.

Historically, formal education has been linked to employment, particularly in the civil service sector in this region. There are cases where females are excluded from the labour market due to economic policies, in such circumstances boys are sent to school and girls are kept at home. In some scenarios, legal or regulatory barriers to women's participation in the labour force or policies have restricted women's access to information and resources. This perpetuate the tradition that girls stay home from school to do more domestic chores Herzl, 1991. It has also come out that many girls perceive marriage as an escape from family poverty, and mistakenly believe that pregnancy will help them to "hook" husbands (Odaga & Haneveld, 1995).

Girls from rich or average homes who live in urban areas, and whose parents are better educated are more likely to enroll and remain in school longer than those from poorer homes and rural areas. In areas where overall enrolments are low, the gender gaps in participation are wider (Cammish & Brock, 1994; Davison & Kanyika, 1992). The parental perceptions or investment behaviour concerning the irrelevance of girls' education influences both the enrolment and persistence of female pupils in schools. Odaga and Heneveld (1995) indicate that the educational investment behaviour or decisions of most African families is based on gender-differentiation, birth-order and number of siblings. Boys are seen as better investment than girls and that they are also better at school. This further stressed by Davison (1993) who indicated that parental decisions to educate boys are also influenced by patrilineal inheritance systems where boys are prime beneficiaries. He says there is a strong belief among families that, once married, girls become a part of another family and the parental investment is lost. Ombongi (2008) in his study carried out in Isiolo Kenya one of the ASAL districts, found that early marriages influenced participation in education as girls in standard 4 or between 12 and 14 years were

withdrawn from school to be married off to wealthy men in the community in exchange for dowry.

Research methodology

This section describes the research methodology that was used in the study. It explains the research design, target population, sampling procedure, sample size, research instruments, validation procedures, data collection and analysis procedures.

Research design

The study adopted a mixed method design an approach to inquiry that combines or associates both qualitative and quantitative forms (Creswell, 2007).It is more than simply collecting and analyzing both kinds of data; it also involves the use of both approaches in tandem so that the overall strength of a study is greater than either qualitative or quantitative research (Creswell & Plano Clark, 2007).

Target Population

The target population for this study was 12 public mixed secondary schools within Nakuru Municipality. From the sampled schools, an equal numbers of students were selected from form four classes in each school totaling 160. Sixty (60) teachers were included in the study and six (6) head teachers.

Location

The study was carried out in Nakuru Municipality, of Nakuru District because the problem of girls poor academic performance in KCSE in mixed secondary schools has been phenomenal as evidenced by the poor performance mentioned. Therefore there is a need to carry out study to determine the economic factors responsible and for this to establish the possible strategies that the secondary schools use to address this challenge.

Sample and Sampling Procedure

A sample is a small proportion of a target population. Sampling means selecting a given number of subjects from a defined population as a representative of that population. Any statement made about the sample should also be true to the populations Prewitt (1980). According to Napa (1997) a research should select a sample large enough to improve the likelihood of obtaining results that are similar to what would be obtained using the entire population. A 50% sample is recommended for populations that run in hundreds for population that runs in thousands, 5% to 20% may be drawn. This was the convenient sample for the study.

The study sample was six (6) schools, six (6) head teachers, sixty (60) subject teachers, sixty (60) girls. The school included in the study were selected through simple random sampling techniques, which gave the six (6), head teachers who participated in the study. This technique was used to select these schools because these institutions are of similar characteristics i.e. mixed schools. Purposive sampling technique was used to select the ten (10) subject teachers in every school. The ten (10) subject teachers were those examined in KCSE: Maths, English, Kiswahili, Biology, Chemistry, Physics, History, Geography, Business Studies and Agriculture. The ten (10) girls from every school that were included in the study were selected by using simple random sampling technique because the performance of such students similar i.e. poor performance with a mean grade of C- in almost all the school in the sample.

The total number of respondents included in the study were as shown in table 2 below.

Table 2. Total number of respondents

RESPONDENTS	NUMBERS
Schools	6
Head teachers	6
Subject teachers	60
Form four students	
Female Students (girls)	60

Research Instruments

Two types of instruments were used for the study; questionnaires and interview guide.

a) Students Questionnaires

Sixty (60) students were issued with questionnaires to answer. The students were from four schools so it was appropriate for them to answer the questionnaires.

b) Teachers Questionnaires

Questionnaires were administered to four subject teachers. They are conversant with what goes on in class and outside classrooms.

Head teachers' Interview schedule

The interview guides were used to respond to verbal responses from the head teachers of the six selected schools regarding poor performance of girls. The researcher went for this because the head teachers also teach the students. They are the ones who collect fees so they know the financial problems as they interact with parents personally. They are also directly involved with disciplinary cases involving the students.

Validity of the Instruments

Validity of the instrument to be used for data collection was determined through content validity procedure by seeking expert judgment and discussion with the supervisors and other professionals.

Reliability of the instrument

Reliability of the instrument concerns the degree to which a particular measuring procedure instrument gives similar results over a number of repeated trials.

A test – retest or coefficient of stability method was used to estimate the degree to which the same results could be obtained with a repeated measure of accuracy of the same concept in order to determine the reliability of the instrument. It was assumed that responses to the two tests would be very similar because the latter reflects the same thing (content) for

respondents.

Score obtained by each respondent on the first and second test was quite close. If they were not then the instruments would have been of low reliability.

In order to test reliability of the instrument in the study, following steps were stipulated

a) The developed questionnaire was given to a few identical subjects for the study in four mixed schools in Naivasha Municipality.

b) The answered questionnaire was scored manually.

c) The same questionnaires were administered to the same group of subjects after a period of two weeks.

d) The questionnaire responses were score manually

e) A comparison between answers obtained in b and d above were made.

A Pearson's product moment formula for the test – retest was employed to compute the correlation coefficient in order to establish the extent to which the contents of the questionnaire are consistent in eliciting the same responses every time the instrument is administered.

Data Collection Techniques

The researcher obtained a research permit from the Ministry of Education headquarters at Jogoo House (Nairobi) to seek for permission to visit schools as they fall under it. From the Ministry, the researcher got permission from the District Education Officer, Nakuru District to visit Schools. The researcher then visited six secondary schools in Nakuru Municipality informing them about this study and organizing with school heads to meet the teachers and students. Lastly, there was the actual visit to schools to administer questionnaires to teachers and students in sampled schools and interview session with the head teacher.

Data Analysis

The data collected was subjected to mixed method analysis approach.

The sample size was 132 which can allow the generalization of the study. The researcher used wave analysis to determine response bias that is, the researcher examined returns on select items week by week to determine if average responses change (Creswell 2007). Those who returned surveys in the final weeks of the period were considered nearly all non-respondents. Descriptive statistics like mean, mode, frequencies, percentages and charts were used.

Data presentation and analysis

The principal guiding factor was that data analysis presented in this chapter was the study objectives highlighted as follows.

To determine if there is a relationship between girls' poor performance and Economic factors.

To determine the possible strategies that can counter the Economic factors, which affect girls' academic performance.

The collected data was analyzed using descriptive statistics. Frequency distribution tables and percentages were used to help in cross tabulation of data. According to Orodho (2004), tables and more so dummy tables describe statistical results more clearly and economically than words.

Demographic Data of Study participants

There were five head teachers out of the six intended who participated in the study. Table 3 presents the age, gender, academic and professional qualifications of the head teachers who participated in the study.

Table 3: Head teacher's frequency

AGE BRACKET	FREQUENCY	PERCENTAGE %
31-40 YRS	3.0	60.0
41-50 YRS	1.0	20.0
50 YRS AND ABOVE	1.0	20.0
TOTAL	5.0	100.0
ACADEMIC QUALIFICATIONS		
Dip	1.0	20.0
BA/BSc With PGDE	1.0	20.0
B.ED	3.0	60.0
TOTAL	5.0	100.0
EXPERIENCE		

6-10 YRS	1.0	20.0
11-15 YRS	1.0	20.0
16 YRS and above	3.0	60.0
TOTAL	5.0	100.0
SCHOOL		
DAY SCHOOL	4.0	80.0
FULL BOARDING	1.0	20.0
TOTAL	5.0	100.0
STREAMS		
SINGLE STREAMED	1.0	20.0
DOUBLE	1.0	20.0
TRIPLE	3.0	60.0
TOTAL	5.0	100.0

Source: Head teacher's questionnaire

Their age and academic qualifications are as given in the table. The table shows most of the head teachers, 60% of them are B.ED holders the best requirement for secondary education. The years of experience are quite high-16years and above. This makes them better in handling the girls in school having dealt with them for long. Majority of them, 60% are in triple streamed classes a sign that majority deal with big numbers which is likely to lead to neglect of other students, especially girls who may need special attention.

The study also involved subject teachers. 55 teachers out of the initial sixty from the six schools were involved in the study. Their demographic data involved age, academic qualifications and experience. This is given in table 4.

Table 4: Teachers Frequency

AGE BRACKET	FREQUENCY	PERCENTAGE %
20-30 YRS	4.0	7.3
31-40 YRS	36.0	65.5
41-50 YRS	15.0	27.2
TOTAL	55.0	100.0
QUALIFICATIONS		
DIP	13.0	23.6
BA/BSC with PGD	15.0	27.0
B.ED	22.0	40.0
M.ED	4.0	7.3
MA/MSC	1.0	1.8
TOTAL	55.0	100.0
EXPERIENCE		
BELOW 1 YRS	2.0	3.6
1-5 YRS	2.0	3.6

6-10 YRS	6.0	10.9
11-15 YRS	27.0	49.2
16 YRS and above	18.0	32.7
TOTAL	55.0	100.0
STREAM		
TRIPLE	40.0	72.7
DOUBLE	11.0	20.0
SINGLE	4.0	7.3
TOTAL	55.0	100.0

Source: Teachers Questionnaire

Most of the teachers fell in the age bracket of 31-40 years i.e. 65.5 %. 23.6 % of them were diploma holders, 27.2 % have BA /BSc with PGD while 40 % were B.Ed. holders. The remaining 1.8 % had Masters Degree. With majority having B.Ed., this was a good sign as that is what is needed for a secondary education. Majority of the teachers – 49.1 % have an experience of between 11-15yrs and another 3.6 below 1 years' experience only 32.7 % have an experience of 16 years and above. Most of the teachers therefore have enough experience a good sign that they can help deal with student's problems. 72.7 % of the teachers are in Triple streamed schools, 20 % in double stream while 7.3 in single streams. This is an indicator that the teachers have their hands full. The study also involved 60 girls all from four classes.

The First objective of this study was to identify the relationship between girls' poor performance and the socio-economic factors.

The head teachers were asked the following questions.

1. Do most of your students have fee problems?
2. In which category do most of your parents fall?
3. Does your school get bursary awards?
4. Is there a relationship between the girl's areas of residence and their academic performance?

The head teachers responded as follows on fee problems.

Table 5: Fees problems 100%

MOST AFFECTED BY FEES PROBLEMS		
GENDER	FREQUENCY	PERCENTAGE%
GIRLS	3	60
BOYS	2	40
TOTAL	5	100

CATEGORY WHERE MOST PARENTS FALL		
LOW INCOME EARNERS	4	80
MIDDLE INCOME EARNERS	1	20
TOTAL	5	100

Source: Head teachers' questionnaire

Out of the head teachers questionnaire 100% of them do agree that most of their students have fee problems. 60 % do agree that the most affected are girls while 40 % say boys are most affected. This confirms what most studies have come up with that is that that the direct costs or financial constraints hold back more girls than boys from schooling. The opportunity costs of girls' schooling are associated with resources/services lost due to sending the child to school. In many Sub-Saharan rural homes, it is hard to do without child labour with girls demanded more than boys (Odaga & Haneveld, 1995) affected. It therefore affects mostly girls. 80 % of head teachers agree that most parents are low income earners while only 20 % don't agree. This could be due to the fact that most of these schools are based in the slums and are all day schools except for Nakuru High school which is a mixed National school. 100 % of heads concur that they get bursaries. As already discussed in the Literature review, girls from rich or average homes who live in urban areas, and whose parents are better educated are more likely to enroll and remain in school longer than those from poorer homes and rural areas. In areas where overall enrolments are low, the gender gaps in participation are wider (Cammish & Brock, 1994; Davison & Kanyika, 1992 Beneficiaries are both girls and boys – 100% but it comes out that the rich are still the beneficiaries. (Njeru and Orodho, 2003).

On Economic factors, the teachers were to answer the following questions

1. How often do students miss school due to school fees?
2. Do students drop out of school due to school fees or other basic needs?
3. Do you think the parent's level of occupation has to do with this?
4. How often do girls fall pregnant in your school?

The teachers responded to the question on missing school by 60 %

saying that they miss school quite often and 40 % saying they don't miss school often. It is therefore clear that they can't cover the syllabus properly as expected then pass examinations.

Table 6: Teachers on socio economic factors

MISSING SCHOOL DUE TO SCHOOL FEES		
RESPONSE	FREQUENCY	PERCENTAGE %
QUITE OFTEN	33.0	60.0
NOT OFTEN	22.0	40.0
TOTAL	55.0	100.0
WHO ARE MOST AFFECTED		
GIRLS	40.0	72.7
BOTH	15.0	27.3
TOTAL	55.0	100.0

Source: Teachers questionnaire

It comes out clearly that girls are most affected as 72.7 % of the teachers responded by saying girls tend to miss school as opposed to 27.3% who say both come late. It could be due to performance of household chores or maybe they can't run as fast as boys now that the schools are day schools. This confirms what a research study carried out by Wanjiru (2007) in Mombasa on factors contributing to school drop out in public secondary schools revealed that 52.4% respondents valued boys' education better than that of girls. Families which cannot easily afford to send both sons and daughters to school reckon that financial returns on the expenditure for girls' education are a good deal smaller than those of boys are already in secondary school.

Table 7: Teachers on school fees

DO STUDENTS DROP OUT OF SCHOOL DUE TO SCHOOL FEES & OTHER NEEDS?		
RESPONSE	FREQUENCY	PERCENTAGE %
YES	35.0	61.8
NO	21.0	38.2
TOTAL	55.0	100.0
GENDER		
BOYS	15.0	27.3
GIRLS	40.0	72.7
TOTAL	55.0	100.0
DO PARENT LEVEL OF OCCUPATION CONTRIBUTE TO THIS		
YES	53.0	96.4
NO	2.0	3.6
TOTAL	55.0	100.0

Source: Teachers frequency

61.8 % of teachers agree that students drop out of school due to school fees and girls are most affected as shown on the table. This could be due to low-income nature of the parents together with preference to give boys education first. 96.4 % of them do agree that the parents' level of occupation contributes to this while 3.6 % deny this fact. Where women suffer from differential access and wage discrimination in labour market, there is likely to be detrimental to the expected household return in girls' education .It also comes out that if girls marry out of their own family into their husbands' family the parents may not be able to benefit from their returns to their daughters schooling.

Table 8:Students response on socio-economic factors

WHO PAYS YOUR SCHOOL FEES		
RESPONSE	FREQUENCY	PERCENTAGE%
PARENTS	48.0	80.0
GUARDIAN	8.0	13.3
WELLWISHERS	4.0	6.7
TOTAL	60.0	100.0
IS YOUR SCHOOL FEES PAID ON TIME		
YES	25.0	41.7
NO	35.0	58.3
TOTAL	60.0	100.0

Source: Students questionnaire

Out of student's questionnaire, 80 % of the students admit that it's their parents who pay for their school fees, guardians pay for 13.3 % while 6.7 % are paid by well-wishers. The fee however is never paid on time as 58.3 % of them agree and 41.7 say it's paid on time. This is likely to be an indication of the type of family backgrounds that most students come from.

The second objective focused on the possible strategies that can counter the economic factors affecting girl's academic performance

The following came up as the major economic factors affecting girls' performance in secondary schools in Nakuru district

Lack of school fees. The girls are not paid for school fees on time due to poverty and cultural factors which give boys a priority

Lack of sanitary towels. Most of the girls cannot afford sanitary

towels thus get very uncomfortable sometimes during the month.

Dropping out of school. Girls drop out of school due to school fees, lack of basic needs and early marriage

What the schools have done to counter the problem

They look for sponsors to help the financially unstable students. Several sponsors have come up through guidance and counseling department and the school administration and have been of much help to girls.

Providing basic needs for them such as sanitary towels. Here again the guidance and counseling department keeps things like sanitary towels for needy girls in their offices. They also invite organizations to school who provide girls with such.

Organizing parents meetings to discuss various issues affecting the students. At times the parents don't have the real picture of what the girls undergo as some girls are scared to tell the parents the truth. In school they are told what is happening and how they can cope at home.

Most schools have tried to channel bursaries to the real needy children although corruption in some areas has made this difficult.

Summary of the study findings

The findings indicate that this really affects them as follows;

i) *Fee Problems:* The most affected by this are the girls as opposed to boys. They have to constantly go back home for fees therefore losing academic hours hence not performing well.

ii) *Late Coming:* Most girls come to school late as opposed to boys. They most likely are involved in household chores at home.

iii) *Girls drop out of school* due to school fees problems and other needs.

iv) *Parents level of occupation is low* and contributes greatly to this.

v) Areas of residence where most of the girls come from are places not conducive for learning as the parents are mostly low-income earners.

Discussion

From the findings of the study it was established that most girls in mixed schools did not perform as well as they were supposed to at KCSE level. This is clear from Nakuru Municipality KCSE gender results analysis (2003-2006). Investment in human capital through equitable distribution of education opportunity may be used as a fuel to redistribute income and raise incomes of the poor (Psacharopoulos 1985). If both boys and girls from such backgrounds successfully exploit educational opportunities and attain quality grades at KCSE, their lives will improve. The researcher's observation revealed very glaring factors leading to this poor performance of girls. The study findings revealed that when it comes to late coming girls take the lead. This is because girls have to do quite some work at home before or after school. The respondents say most of the parents are low-income earners. Most students who go to mixed days schools are from low income earning households. Maleche (1972) argues that the cultural inhibitions include male prejudice as most parents concentrate more on the sons as opposed to the girls. If the girl is constantly sent away for school fees they drop out of school completely or decline academically. There is the issue of bursary and again here there is no preference to girls or boys as both are given equally. They even get an equal amount of Kshs. 5,000. The teachers, parents and other education stakeholders should strive hard for the perception that girls cannot do well in mixed schools be viewed differently. Girls are not weaker academically compared to boys. For education to be beneficial to both genders, the performance at KCSE must be competitive between both boys and girls.

Recommendations for the study

From the findings and discussions, the following recommendations were made.

The government should increase bursaries allocated to secondary schools in order to cushion students from economically disadvantage families. They should be given more opportunities when it comes to bursary

allocation

Resource persons should be invited to mixed schools to talk to the girls and encourage them. Old girls who have excelled can also encourage them to work hard. This is because some give up early due to the poverty at home.

Parents should be encouraged to discuss the issue of school fees with the school administration and local leaders so that bright needy girls are not left out due to lack of money.

During the bursary awards the gender factor should be put into consideration. This is because parents will try hard for their sons to be in school as opposed to their female counterparts.

References:

Achola, P. (1987). *Social Science Research Methods Hand Book for Africa*. Nairobi: Government Printers.

Anderson, J. E. (1986). *Education Research; an Introduction 4th Edition*. New York: Longman.

Asian Development Bank. (2001, September 14). *Participatory in Poverty Assesment in Cambodia, Manilla* . Retrieved from Asian Development Bank: <http://www.adb.org/documents/books/participatory-poverty/prelims.pdf>

Astin, A. W. (1977). *Four Critical Years. Effects of College on Beliefs, Attitudes, and Knowledge*

Bone, A. (1983). *Girls and Girls only schools*. Manchester: Equal Opportunities Commission.

Cammsih,N.K. and Brock,C. (1994). *State, Status and Status Quo: Factors Affecting the Education of Girls in Cameroon*. International Journal of Educational Development. 14/3.

Creswell, J. W. (2007). *Qualitative enquiry and research design: Choosing among five approaches*.

Creswell, J. W., & Clark, V. L. P. (2007). *Designing and conducting mixed methods research*.

Dale, R. (1969). *A research study in Pupil Teacher Relationships. Vol 1 of*

mixed or single-sex schooling London.

Dale, R. (1971). *Some Social Aspects. Vol 2 of Mixed or Single Sex Schooling?*

Dale, R. (1974). *Attainment, Attitudes and Overview. Vol 3 of mixed or single sex Schooling?*

Dalen. (1996). *Methods in Socio Research*; . New York: Longman Inc.

Davison, J. (1993). *School Attainment and Gender: Attitudes of Kenyan and Malawian*

Parents toward Educating Girls. International Journal of Educational Development.13/4.

Davison, J. and Kanyuka, M .(1992). *Girls Participation in Basic Education in Southern Malawi.* Comparative Education Review , 36/4.

Eshiwani, G. S. (1985). *A Study of Women's access to higher education in Kenya with Special reference to Mathematics and Science Education.* Nairobi: World Bank.

Finn, J. D. (1980). *Sex differences in educational outcomes: A cross-national study.* *Sex Roles*, 6(1), 9-26.

Gay, L. R. (1981). *Educational Research- Competencies for Analysis and Application.* Ohio: Bell, Howell.

Graham-Brawne,S. (1991).*Education in the Developing World: Conflict and Crises.* London:Longman.

Kathuri, N. J., & Pals, A. D. (1993). *Introduction to Educational Research.* Nakuru: Egerton University.

Kinyanjui, K. (1982). *Education and Inequality in Kenya Seminar Paper No 2037. Research Experience as Issues .*

Kinyanjui, K. (1993). *Enhancing Women's Participation in the Science Based Curriculum:*

The Case of Kenya. In Conway, J.K. and S.C. Bourque (eds). *The Politics of Women's Education Perspectives from Asia, Africa and Latin America.* Ann Arbor: The University of Michigan Press.

Klasen, S. (2002). *Low schooling for girls, slower growth for all? Cross-country evidence on the effect of gender inequality in education on economic*

- development. *The World Bank Economic Review*, 16(3), 345-373.
- Lehrer, S. (2000). For Girls Only; Making a Case for Single Sex Schooling. *Contemporary*
- Lee, V. E., & Bryk, A. S. (1986). Effects of single-sex secondary schools on student achievement and attitudes. *Journal of educational Psychology*, 78(5), 381.
- Marsh, H. W. (1988). *The transition from single-sex to coeducational high schools: teacher perceptions, academic achievement, and self-concept* [ResearchReport]. Sydney.
- Marsh, H. W. (1989). Effects of single-sex and coeducational schools: A response to Lee and Bryk.
- Marsh, H. W., Smith, I. D., Marsh, M., & Owens, L. (1988). The transition from single-sex to coeducational high schools: Effects on multiple dimensions of self-concept and on academic achievement. *American Educational Research Journal*, 25(2), 237-269.
- Mugenda, O., & Mugenda. (1999). *Research Methods, Qualitative and Qualitative Approaches*. Nairobi: Nairobi Acts Press.
- Naju, W. and Sheila, W. (1998). *The Costs of dropout: Addressing the Issues*. In Ann Cotton and Richard Synge, eds. (1998). Cutting
- Namudu, K. (1993). Gender perspectives in the transformation of Africa: Challenges to the African university as a model to society.
- Nejema, D. (1993). *An Overview of Women's Education In Africa*. In Conway, J.K. and S.C. Bourque (eds.). *The Politics of Women's Education Perspectives From Asia, Africa and Latin America*. Ann Arbor: The University of Michigan Press.
- Namuddu, K. (1994). *Gender Perspectives in the Transformation of Africa*. Paper Presented at 25 Anniversary Celebration of AAU.
- Njeru E. & Orodho, (2003): *Education Finance in Kenya: The Secondary School Bursary Scheme, IPAR Discussion paper series No.035, March 2003*: Nairobi.
- Nkapa, N. (1997). *Educational Research for Modern Scholar*. Enugu: Forth Dimension Publishing .

- Obura, A. (1988). *The image of girls and women in primary school text books in Kenya*.
- Obura, A. (1991). *Changing Images- Portrayal of Girls and Women in Kenyan Textbooks*. Nairobi:ACTS 59
- Odaga, A. and Heneveld, W. (1995). *Girls and Schools in Sub-Sahara Africa*. Washington:World bank.
- Ormerud, M. B. (1975). Subject preference and choice in coeducational and single sex secondary schools. *British Journal of Educational Psychology Vol 45*, 257-267.
- Orodho, A. J. (2003). *Essential of Educational and Social Science*. Masola Publishers.
- Orodho, A. J. (2004). *Elements of Education and Social Science Research Methods* . Masola Publishers.
- Orodho, A. J. (2004). *Techniques Of Writing Research Proposals and Reports in Education And Social Sciences*. Masola Publishers.
- Palme,M. (1993). *The Meaning of School Repetition and Dropout in Mozambican Primary School*. Education Division Document. Stockhom: SIDA.
- Penney, D. (2007). Physical education. In B. J. Bank, S. Delmont, & C. Marshall (Eds.), *Gender and Education* (pp. 321-326). Praeger Publishers.
- Psacharopoulos , G. (2004). *Returns to Investment In Education; A further update: World Bank Policy Research Working Paper* . Washington D.C: World Bank.
- Psacharopoulos. (1985). *The Ecocmics of Higher Education in Developing Countries; Comparative Education*,.
- SACMEQ. (2005). *A study of the condition of Schooling quality of Education*. Nairobi.
- Schneider, F., Coutts, L., & Starr, M. L. (1988). In favour of coeducational attitudes of students from coeducational and single-sex high schools. *Canadian Journal of Education Vol 13*, 479-496.
- Smithers, A., & Robinson, P. (2006). *The Paradox of Single Sex and Coeducational Schooling*. Buckingham: Carmicheal Piers.

- Spender, D., & Sarch, E. (1980). *Learning to Lose; Sexism and Education*,. London: The women's press.
- Stabiner, K. (2002). *All Girls : Single- Sex Education and Why it Matters*. New York: Riverhead Books.
- UNESCO. (2003). *Gender and Education for all The leap of equality* . Paris: UNESCO.
- UNESCO. (2004). *Gender- based issues and trends in ICT Applications in Education in Asia and the Pacific*. Bangkok.
- UNESCO. (2012). *EFA Global Monitoring Report: Youth and skills: Putting education to Work*. Paris: UNESCO.
- Wakhungu, J. (2004, December 16). science rooms, Chilly for girls. *The Standard Newspaper*.
- Wanjiru, N. (2007). *Factors Contributing to School Drop out in Mombasa District Kenya. Unpublished M. Ed Thesis. Nairobi: University of Nairobi*.