

## **Effects of the Type of School Attended on Students Academic Performance in Kericho and Kipkelion Districts, Kenya**

**Dr. David N. P. Mburu**  
University of Nairobi  
Kenya

### **Abstract**

*This study aimed at finding out the effects of the type of school attended on male and female students, academic performance in Kenya. The study sought to explore the influence of the different male and female students' school and societal socialisation experiences on their academic performance. The study used descriptive research design and two questionnaires for data collection. Descriptive statistics was used in data analysis. The research was guided by the following objectives; To establish whether social classroom interactions affect male and female students academic performance; Establish whether the type of school attended affect male and female students' academic performance. The research also addresses the following research questions: what social classroom interactions affect male and female students' academic performance; what effect does the type of school attended have on male and female students' academic performance. The major findings of the study were that the type of school attended affected students' academic performance as majority of the girls who qualified to join tertiary institution were from single-sex schools.*

**Key words:** Coeducational schools, Single sex schools, performance, gender.

### **1.0 Introduction**

There is much commentary on the educational outcome related to the type of institutions girls have access to; that is single sex schools and coeducational schools (Meyer,2008: Riordan,2008). According to Booth and Nolan (2009) girls' environment plays an important role in explaining why she chooses not to compete. Girls from single-sex schools behave more competitively than do girls in coeducational schools. A study by (Malcove, 2007) found out that females frequently expressed having more confidence in the single-gender setting. This study also found out that girls found it easier to contribute to oral discussions and to ask questions without being ridiculed in a single gender setting. Equally Eisenkopf, Hessami, Fischbacher and Ursprung (2012) analysis the impact of female-only classes on mathematic achievement, exploiting random assignment of girls into single-sex and coeducational classes in Switzerland secondary schools. They found out that single sex classes improve the performance of female students in math. In a study by Kessels and Hannover (2008) they found out that girls from single-sex physics classes reported a better physics self-concept of ability than girls from coeducational classes. Single sex schooling was found to help adolescents to gain a better self-concept of ability in school subjects that are considered inappropriate for their own sex. A study by ACER (2008) found out that girls attending single sex schools produced higher tertiary entrance scores than those in coeducational schools.

Most studies have indicated that boys contribute more to classroom interaction (for example, by "calling out" answers) and dominate in "hands-on" activities, such as laboratory work and computer sessions (Francis, 2004). From this perspective, the presence of boys in the classroom is seen as having a negative effect on girls' academic engagement and achievement. Other commentators have pointed to the "distraction" inherent in mixed gender educational settings for adolescents. Saidin and Brahim (2011) in a study carried out in single-sex schools in Malaysia they found out that boys performance in English and foreign languages, and girls performance in Maths and science improved in a single gender settings. The study reports the experience of 30 secondary students enrolled in single gender schools. The study reveals that in gender separate classroom, students have higher motivation and higher confidence levels which offer them better educational opportunities.

The advantages of single-gender education for girls is that it helps in expanding their educational opportunities, it custom-tailors their learning and instruction, and provides them with greater autonomy, especially in heterosexual relationships (NASSPE, 2010).

Arguably, the single greatest benefit of girls-only education is the greater breadth of educational opportunities and the finding that many girls score higher on their final academic scores from an all girls' school as compared to a girl who attended traditional high school (Sugden, 2009). Sax (2010) in his book 'Girls on the Edge': The four factors driving the new crisis for girls argues that at every age, girls in girl-only classrooms are more likely to explore "non-traditional" subjects such as Computer Science, Physics (or the primary school precursors to the Physical Sciences), Woodworking, among others.

In girl-only learning environments, girls are exposed to more successful female role models. The top students in all academic subjects and the leaders in sport and extra-curricular activities are girls. In general, they feel better about their bodies and their body image as well as about their academic abilities. By promoting self-esteem, single-sex schools may better equip girls to fight for their human rights in gender-biased male-dominated societies (Sullivan, Joshi & Leonard, 2010)

According to Schmuck (2005) and Smyth (2010) critics of single-sex education argue that girls-only schools are unnatural social settings which isolate girls from boys. In well-managed co-educational environments boys and girls learn to respect and value each other's ideas. They learn to listen and communicate with each other. Isolating girls and boys in single-sex schools is considered a barrier to them developing the effective interpersonal skills they will need to function as grown-ups in their society

On the other hand Eliot (2009) argues that single sex schools automatically expand the leadership opportunities available to both boys and girls, and they increase the odds that each sex will enter non-traditional disciplines. Girls were also found to do better in certain subject areas such as Mathematics and Science when boys are not in the class. A study by Sullivan, Joshi and Leonard (2010) in British schools examining the impact of single-sex schooling found out that single sex schooling is linked to the attainment of gender stereotyped subject areas for both sexes, not just during the school years, but also later in life. Riordan(2008) in a research commissioned by the US department of Education found out that in single –sex high schools , students exhibited high levels of engagement in academic activities and homework completion than students in coeducational schools.

According to UNESCO (2007) and Riordan (2008) policymakers in many education ministries are debating the value of coeducational classes' vis-vi-vis single-sex education. In single sex education, all learners are either girls or boys. The heart of most debate is whether girls will be safer and get a better education if they learn only with other girls or in mixed classes with boys. Educators have three main choices of educating girls. There can be single-sex education in separate boys' or girls' schools, co-education of girls and boys in the same classes in the same school, or mixed models. Separate boys' schools and girls' schools may also bring their students together for some joint education for sport or extra-curricular activities.

Proponents of single-sex schools argue that these schools allow girls to flourish in a way that coeducational schools may not. Some studies indicate that girls in schools with single-sex programs achieve higher learning, display more self-confidence and leadership skills, and enter male-dominated fields at a higher rate (Ferrara, 2005; Smyth, 2010). Studies have also shown that girls in single-sex classes are actually more likely to act outside of traditional gender roles. Boys might also feel freer to engage in pursuits they may not have considered at a coeducational school. When girls are around, they are the ones expected to take part in such 'non-macho pursuits.' But when the girls are not in the school, boys may perceive that it is acceptable to fill those 'feminine' roles. Single-sex schools would therefore allow some boys to transcend the gender roles that are typically assigned to them. Single-sex schools have a higher percentage of graduates who attended four year colleges and a lower percentage of graduates who attended two-year junior colleges than coeducational schools. The positive effects of single-sex schools remain substantial, even after taking into account various school-level variables such as teacher quality, the student-teacher ratio, the proportion of students receiving lunch support, and whether the schools are public or private(Park, Behrman & Choi, 2012).

Although the disparity between the enrolment of girls and boys in primary school has narrowed since 1960s the number of girls who enroll in higher education institutions continue to lag behind that of boys (Republic of Kenya, 2006). In Kericho and Kipkelion districts there has been continued gender disparity in performance in favour of boys. In 2006, out of the 299 students who attained grade B and above in KCSE examination from the top 15 secondary schools in the two districts, 193 (65%) were boys and only 106 (35%) were girls.

In many cases teachers tend to encourage boys more than girls, especially in the Science subjects in co-educational schools (Elimu Yetu Coalition, 2003). There is also a high dropout rate of girls in secondary schools in Kericho and Kipkelion districts who account for 44.6 percent against 31.9 percent of boys in the two districts (Republic of Kenya, 2003).

Despite the desirable nationally stated and pursued goal of gender equity in education, females continue to be disadvantaged particularly at the secondary and post secondary levels. Achievement of gender equality in academic performance is therefore a goal in its own right. The main area of concern in gender differences in academic performance includes the type of school attended, family factors, persisting negative socio-cultural practices and attitudes which inhibit balanced achievements, gender stereotyping and socio-cultural classroom interactions among many other issues which have not been adequately addressed. It is in the light of this background that an attempt is made to investigate effect of the type of school attended on students' academic performance Kericho and Kipkelion districts.

### **1.1 Purpose of the study**

The purpose of this study was to investigate the influence of the type of school attended on gender differences in KCSE performance in Kericho and Kipkelion districts. The study sought to explore the influence of the different male and female students' school experiences that affected their academic performance.

### **1.2 Objectives of the study**

The study aimed at achieving the following objectives to:

- i) Establish whether social classroom interactions affect male and female students' performance in Kenya Certificate of Secondary Education.
- ii) Establish whether the type of school attended affect male and female students' performance in Kenya Certificate of Secondary Education.

### **1.3 Methodology of Research**

This study used descriptive survey research design. According to Jackson (2009) descriptive research is used to obtain information concerning the current status of the phenomenon to describe 'what exists' with respect to variables or conditions in a situation. The main goal of this type of research is to describe the data and characteristics about what is being studied. The idea behind this type of research is to study frequencies, averages, and other statistical calculations.

#### **1.3.1 Theoretical framework**

This study adopted social learning theory and self efficacy theory propounded by Albert Bandura in 1977 and 1997. This theory focuses on the behaviour patterns that people develop in response to environmental contingencies. Some behaviour may be rewarded while others may produce unfavourable results through the process of differential reinforcement where people eventually select the more successful behaviour patterns (Atkinson, 1997). In Albert Banduras' Social learning theory further stresses the importance of learning by observation. Many behaviour patterns are learned by watching the behaviour of others and observing what consequences it produces for them. It emphasizes the role of models in transmitting both specific behaviours and emotional responses and it focuses on such questions as what types of models are most effective and what factors determine whether the modeled behaviour that is learned will actually be performed (Bandura, 1977).

At the core of Social Cognitive Theory is the self-efficacy beliefs, in that people's judgements of their capabilities to organise and execute courses of action is required in order to attain designated types of performances. Self-efficacy beliefs provide the foundation for human motivation, well-being, and personal accomplishment. This is because unless people believe that their actions can produce the outcomes they desire, they have little incentive to act or to persevere in the face of difficulties.

Bandura's (1997) key contentions as regards the role of self-efficacy beliefs in human functioning is that people's level of motivation, affective states, and actions are based more on what they believe than on what is objectively true. For this reason, how people behave can often be better predicted by the beliefs they hold about their capabilities than by what they are actually capable of accomplishing, equally self-efficacy perceptions help determine what individuals do with the knowledge and skills they have.

This helps to explain why people's behaviours are sometimes disjoined from their actual capabilities and why their behaviour may differ widely even when they have similar knowledge and skills. He further says that many talented people suffer frequent (and sometimes debilitating) bouts of self-doubt about capabilities they clearly possess, just as many individuals are confident about what they can accomplish despite possessing a modest repertoire of skills. Belief and reality are seldom perfectly matched, and individuals are typically guided by their beliefs when they engage the world. As a consequence, people's accomplishments are generally better predicted by their self-efficacy beliefs than by their previous attainments, knowledge, or skills. But according to Pajares (2002), there is no amount of confidence or self-appreciation that can produce success when requisite skills and knowledge are absent and that is why Social Learning Theory is still applicable in learning. Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do.

Social Learning Theory emphasizes that one's learning and performance of behaviours are influenced by one's social contexts, including the family, community and broader society (Crosbie-Burnett & Lews, 1993). Social learning suggests that a combination of environmental (social) and psychological factors influence behaviour. It indicates the effectiveness of human social models in influencing another to change behaviours, beliefs or attitudes, as well as social and cognitive functioning. Teachers and parents must model appropriate behaviours and take care that they don't model inappropriate behaviour. Teachers should also expose students to a variety of other models in order to increase their confidence (Cunia, 2007). That is why teaching boys and girls together could be damaging for education of the girls. This is because it makes them vulnerable to verdicts of others about their own incompetence in certain stereotyped subjects and directly affects their confidence (Smithers, 2004).

### **1.3.2 Sample selection**

The target population of the research consisted of all the teachers and students in form four in public and private schools in Kericho and Kipkelion District in 2010 Kenya Certificate of Secondary Education. The research used 231 teachers and 358 students. The study used descriptive research design and two questionnaires for data collection. The reliability of the data collection instruments was 0.81 for the students' questionnaire and 0.76 for the teachers' questionnaire. Descriptive statistics was used in data analysis.

### **1.3.2 Instruments and procedure**

The researcher employed self-administered questionnaires. These were used to obtain information from teachers and students. The researcher therefore constructed the questionnaires for the different respondents.

The teachers' questionnaire sought information on teacher's attitude towards single and coeducational schools and their influence on gender differences on students' academic performance. The students' questionnaire was to solicit information about the students' experiences in school and also sought information about the teaching and learning process in single and mixed schools. This section was used to get male and female students' attitudes towards their studies in single and coeducational schools.

The researcher also examined student's performance records in secondary schools under this study. A document analysis guide was used to get students performance data. This enabled the researcher to trace the trend of gender performance in schools.

### **1.3.4 Data analysis**

Data was coded and analysed according to the research questions. This analysis was done by the aid of Statistical Package of Social Science (SPSS) software. The Quantitative data collected was tabulated and analysed using percentages and frequencies and compared with students' performance data. Data on students' social classroom interactions was also tabulated and compared with the students' performance. Chi Square and Correlations statistics was also used in analysing data on the influence of the type of school attended on students' academic performance. This was then compared with students' results in Kenya Certificate of Secondary Education (KCSE).

## 1.4 Research Results

### 1.4.1 Effects of the type of school attended on students' academic performance

The study sought to find out the effects of the type of school attended on male and female students' academic performance. In order to answer this research question, several questions were asked. Figure 1 shows the general performance of the students by gender and the type of school attended.

**Figure 1: Students' who scored Grade 'C+' to 'A' and the type of school attended**

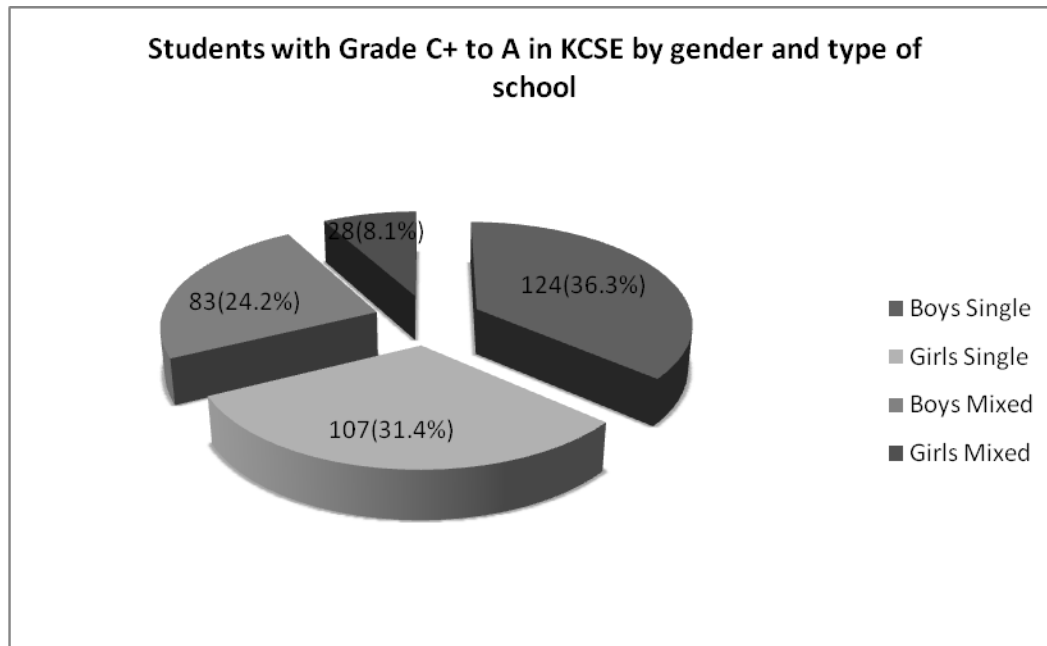


Figure 1 show that 31.4 percent of the girl respondents who attained grade C+ and above were from single sex schools. Girls from mixed schools were only 8.1 percent. Boys from mixed sex schools who attained grade C+ and above were 24.2 percent and those from single sex schools were 36.3 percent. This results show that most of the girls in mixed schools did not attain a C+ which is the minimum qualification to join public universities. On the other hand most of the girls from single sex schools had performed better than those from mixed schools. A higher percentage of girls with minimum university qualifications come from single sex schools. Hence, the low transition rate of girls to higher educational institutions as compared to that of boys. The results then show that girls from single sex schools performed better than those from mixed schools. This outcome corroborates with previous research in Switzerland by Eisenkopf et al (2012) whose findings suggested that girls do better in certain subject areas such as Mathematics and Science when boys are not in class. In another study in South Africa by Cater (2005) it was found out that girls achieve better results in single sex environment than in coeducational classes. Table 1 shows the grades attained by the students in relation to gender and the type of school attended.

**Table 1: Grades attained in relation to the type of school attended in 2010 KCSE examinations by gender**

Grade	Gender	Type of school attended				Total
		Boys Boarding	Girls Boarding	Mixed Boarding	Mixed Day	
A_A-	Male	8	-	1	-	9
	Female	-	6	-	-	6
	Total	8	6	1	-	15
B+_B	Male	19	-	2	12	33
	Female	-	18	2	1	21
	Total	19	18	4	13	54
B-_C+	Male	17	-	4	20	41
	Female	-	26	7	3	36
	Total	17	26	11	23	77
C_D+	Male	23	-	14	37	74
	Female	-	27	12	28	67
	Total	23	27	26	65	141
D_D-	Male	10	-	-	7	17
	Female	-	2	2	32	36
	Total	10	2	2	39	53
E	Male	-	-	-	1	1
	Female	-	-	-	1	1
	Total	-	-	-	2	2

The results of Table 1 show that 24 of the sampled girl candidates who attained grades B and above were from single sex boarding schools. The results of this table also show that 33 girls out of 37 who attained grade ‘E’ to ‘D’ were from mixed secondary schools. The results of Table 1 were tested for significance of relationship using Chi-square test at a significance level of 0.05 and 15 degrees of freedom by the use of SPSS software. The Chi-square calculated was 68.5 and the critical chi-square at 0.05 level of significance and 15 degrees of freedom was 25.0. The calculated Chi-square was greater than the critical Chi-square at a significance level of 0.05. This shows that there was a significant relationship between the results, gender and the type of school attended. Students in single sex schools performed better than students in mixed schools. Boys in mixed schools also performed better than girls in all the grades. Hence, the type of school one attended was important in determining one’s performance in KCSE examinations.

**Table 2: Students’ performance in 2010 KCSE Mathematics examination in relations to the type of school attended**

Grade	Gender	Type of school attended and Maths performance by gender				Total
		Boys Boarding	Girls Boarding	Mixed Boarding	Mixed Day	
A_A-	Male	16	-	3	7	26
	Female	-	7	1	1	9
	Total	16	7	4	8	35
B+_B	Male	13	-	1	11	25
	Female	-	11	1	-	12
	Total	13	11	2	11	37
B-_C+	Male	6	-	4	9	19
	Female	-	8	5	1	14
	Total	6	8	9	10	33
C_D+	Male	16	-	4	19	39
	Female	-	25	8	8	41
	Total	16	25	12	27	80
D_D-	Male	25	-	6	26	57
	Female	-	27	4	32	63
	Total	25	27	10	58	120
E	Male	1	-	3	5	9
	Female	-	1	4	23	28
	Total	1	1	7	28	37

The results in Table 2 show that girls in mixed schools performed poorly in Mathematics. Only one girl in mixed schools from the sampled schools managed an 'A' grade in Mathematics while there were 7 boys with grade 'A' in Mathematics. The results of Table 2 were tested for significance of relationship using Chi-square test at a significance level of 0.05. The Chi-square calculated was 57.3 and the critical Chi-square was 37.6 at a significance level of 0.05 and 15 degrees of freedom. The calculated Chi-square was greater than the critical Chi-square at a significance level of 0.05. This shows that there was a relationship between Mathematics result, gender and the type of school attended. In single sex boarding schools girls performed better in Mathematics, scoring higher grades than girls in mixed schools. Hence, the type of school students attended had an effect on students' performance in Mathematics.

**Table 3: Teachers' opinion on whether girls in mixed schools have equal chances as boys to develop their potential**

Response	Frequency	Percent
Strongly agree	39	22.3
Agree	78	44.6
Not sure	15	8.6
Disagree	37	21.1
Strongly disagree	6	3.4
<b>Total</b>	<b>175</b>	<b>100.0</b>

The results of Table 3 show that, 23.3 percent and 44.6 percent of the teacher respondents either strongly agreed or agreed respectively that in mixed schools girls were rarely given a chance to develop their potential. In this case boys would outperform girls since they had better chances of developing their potential. According to Mendick (2005), schools serve as sites for the construction of masculinity and femininity. Thus, subjects like Mathematics and Physics, may become constructed as masculine making female students not to choose the subject and hence, limiting their potential. Studies carried out in the Britain by Sullivan, Joshi and Leonard (2010) also shows that there are many distractions for girls in mixed schools. Students were also asked to rate the participation of boys in mixed schools and the outcomes are shown in Table 4

**Table 4: Students' rating of voluntary participation of boys in mixed schools**

Response	Frequency	Percent
Very good	54	15.8
Good	88	25.7
Average	149	43.6
Poor	39	11.4
Very poor	10	2.9
No response	2	0.6
<b>Total</b>	<b>342</b>	<b>100.0</b>

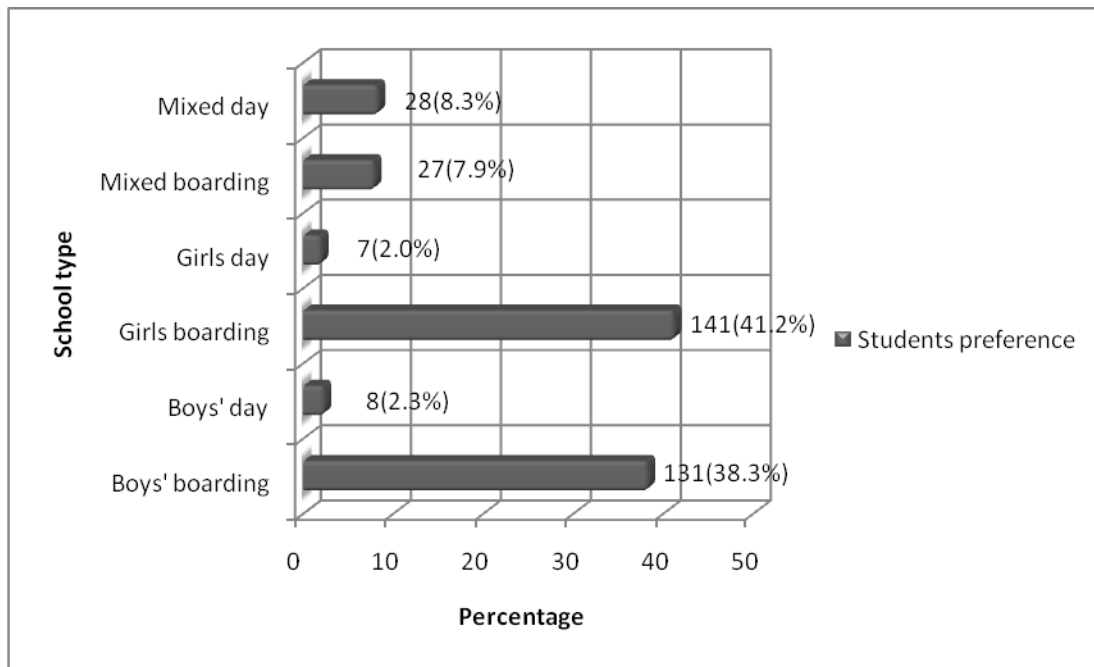
The results of Table 4 show that although 43.6 percent of the students rated boys' participation in mixed classes as average. The results also show that 25.7 percent and 15.8 percent of the respondents rated boys' voluntary participation as good and very good respectively. A research in Britain by Sullivan, Joshi and Leonard (2010) had found out that the presence of boys in the classroom had a negative effect on girls' academic performance. Boys freely contributed and dominated in classroom activities unlike girls. Boys did not wait to be asked questions but actively volunteered to answer them. Students rating of girls participations are shown in Table 5.

**Table 5: Students' rating of voluntary participation of girls in mixed schools**

Response	Frequency	Percent
Very good	46	13.5
Good	55	16.2
Average	145	42.4
Poor	77	22.5
Very poor	19	5.6
<b>Total</b>	<b>342</b>	<b>100.0</b>

The result of Table 5 show that 42.4 percent of the student respondents rated girls as average in classroom participation. The table also show that 22.5 percent of the students respondent rated girls’ voluntary participations in mixed schools as poor compared to 14.7 of boys. The difference in percentage is minimal but it might indicate that there were limitations for girls in mixed schools in terms of academic participation. From the literature reviewed girls were intimidated by boys in mixed schools and they could not fully exploit their potential. Girls were found to have been brought up in a patriarchal society which believed that boys were more intelligent than them. They also believed that girls could not ask questions in class in the presence of boys whom they thought that they were cleverer than them (Patchen, 2006). Figure 2 shows the type of schools students would have preferred.

**Figure 2: Type of school preferred by students**



The results of Figure 2 show that 38.3 percent and 41.2 percent of male and female students’ respondents respectively preferred single sex boarding schools. Only 16.2 percent of the student respondents would have preferred to be in a mixed school. Hence, it could be inferred that majority of the students in mixed secondary schools could be assumed that they felt they preferred single sex schools. The results show that students also felt that they could do better in single sex boarding schools than in mixed day or mixed boarding schools. Malacove (2007) had also found out that both boys and girls in single sex schools in the UK had a performance advantage to students in mixed schools. The environment especially in single sex boarding schools was found to be more conducive for both boys and girls, as there were fewer distractions from the opposite sex and less gender stereotypes. In Figure 3 teachers have given the type of school they preferred.



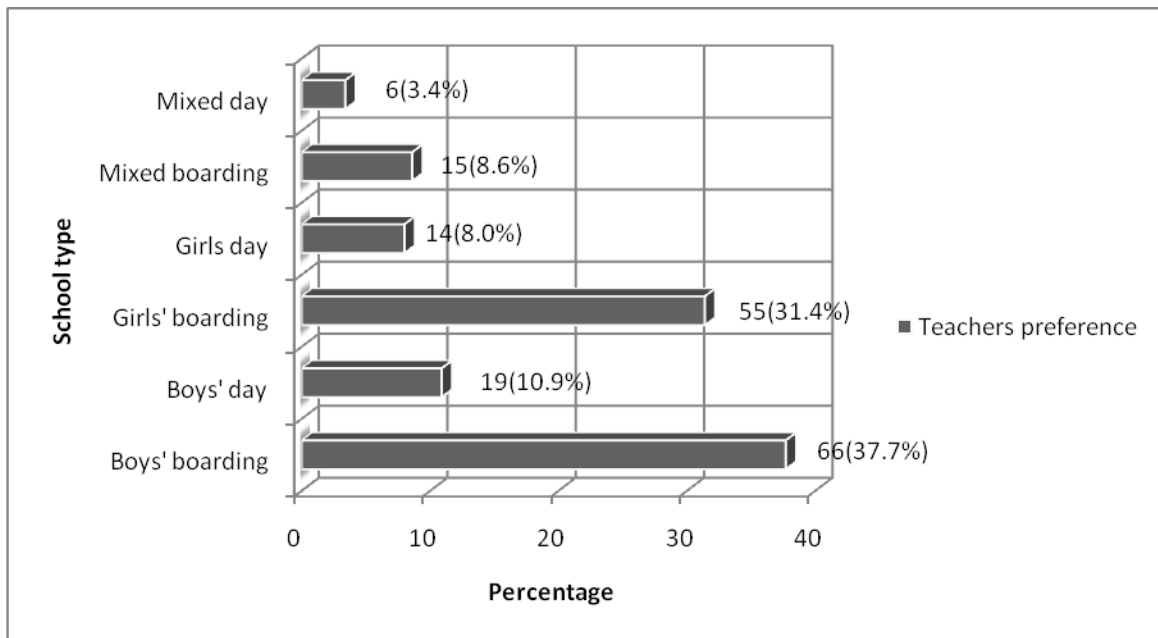
**Figure 3: Type of school preferred by teachers**

Figure 3 shows that 37.7 percent and 31.4 percent of teacher respondents preferred to teach in single sex boys boarding and single sex girls' boarding schools respectively. The figure also shows that only 12.0 percent of the teacher respondents preferred to teach in mixed schools. This inferred that teacher's classroom delivery in mixed schools could be hampered by teachers' perception. It could also be inferred from Figure 3 that majority of the teachers' in mixed schools wanted to move to single sex schools. If teachers had a negative attitude towards mixed schools, this could affect the outcome of these schools in the national examinations as it hampered teachers' classroom delivery. Teachers were mostly consulted by the students and if they had a negative attitude towards these schools then their output would be affected. The outcome of this study then shows that both students and teachers did not prefer mixed schools. Teachers in Table 6 have given their responses on whether girls were more passive than boys in mixed schools.

**Table 6: Teachers' responses on whether in mixed schools girls are more passive than boys**

Response	Frequency	Percent
Strongly agree	32	18.3
Agree	75	42.9
Not sure	17	9.7
Disagree	44	25.1
Strongly disagree	4	2.3
No response	3	1.7
<b>Total</b>	<b>175</b>	<b>100.0</b>

According to the results of Table 6, 18.6 percent and 43.6 percent of the teacher respondents either strongly agreed or agreed respectively that in mixed schools girls were more passive than boys. This view could make teachers to concentrate more on boys academic achievements than for girls. This may contribute to a difference in performance between boys and girls. This outcome was in collaboration with previous research carried out in American schools that found out that boys were more assertive in the classrooms than girls (Sax, 2010). The researcher further found out that female graduates of single sex schools had more confidence than female graduates from mixed schools. Table 7 show teachers' responses on whether girls have a chance to develop to their potential in mixed schools.

**Table 7: Teachers' responses on whether girls have a chance to develop their potential in mixed schools**

<b>Respondents</b>	<b>Frequency</b>	<b>Percent</b>
Strongly agree	39	22.3
Agree	78	44.6
Not sure	15	8.6
Disagree	37	21.1
Strongly Disagree	6	3.4
<b>Total</b>	<b>175</b>	<b>100.0</b>

According to Table 7, 23.3 percent and 44.6 percent of the teacher respondents either strongly agreed or agreed respectively that in mixed schools, girls are not given a chance to develop their potential academically. This meant that in mixed schools the environment was not favourable for girls. Teachers are mainly entrusted with the curriculum delivery and interpretations, and students had very high regard for their teachers as seen in Figure 4.15. Teachers on the other hand, had been found to have poor attitude towards girls' academic performance as compared to that of boys as seen in Table 4.36 in this study. Boys dominated in mixed classes and girls remained passive. Studies conducted elsewhere have shown that girls in single sex classes were actually more likely to act outside of traditional gender roles exploiting their potential (Ferrara, 2005). The research further found out that in mixed schools there was a hidden pressure towards gender stereotyping in the classroom. This did not favour the performance of girls. In this study it was also found out that in girls' only schools, girls scored higher in mathematics than in mixed schools. Table 7 shows whether mixed schools put more pressure on boys to outperform the girls.

**Table 8: Teachers' responses on whether mixed schools put more pressure on boys to outperform the girls**

<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Strongly agree	37	21.1
Agree	67	39.4
Not sure	18	10.3
Disagree	39	22.3
Strongly Disagree	12	6.9
<b>Total</b>	<b>175</b>	<b>100.0</b>

According to the results of Table 8, 21.1 percent and 39.4 percent of teacher respondents either strongly agreed or agreed respectively that coeducational schools' had put more pressure on boys to outperform the girls. Mixed schools are seen as more favourable academically to boys than girls. Girls were easily distracted by the boys and this affected their academic concentration. For decades, the presumption was that coeducational schools provided a more equitable environment for learning. In recent years a number of researchers have built an increasing persuasive case that coeducational schools in many cases are not educating girls as well as boys to compete at par. The research by Sax (2010) found out that students in mixed schools were unable to explore into non-traditional academic areas. In mixed schools girls limited their potential as they could not undertake subjects like Mathematics and Science as they felt these subjects were reserved for boys. These attitudes were further reinforced by their teachers who felt that boys were better in Science and Mathematics subjects than were girls. In this scenario, boys had to excel in order to prove that they were better than girls.

### 1.5 Conclusion

In conclusion it can be said that the study brought out to the fore various social determinants of gender differences in academic performance. The study shows the type of school attended was a determinant on gender difference in academic performance. Girls in single sex schools had better grades than girls in mixed schools. They were also found to be more confident and they displayed more leadership skills compared to girls in mixed schools. Equally, boys in single sex schools felt free to be themselves and to explore new fields than when they were in the same class with girls. In single sex schools, boys did not follow the stereotyped gender roles that they had been socialised to by the society.

Teachers had also developed a negative attitude towards mixed schools and most of them were in favour of single sex schools. Only a few teachers preferred to teach in mixed boarding and mixed day schools.

It is also evident that most students preferred to join single sex schools. This brought about gender differences in performance as teachers and students joined mixed schools with a negative attitude towards them. The type of school attended was therefore found to be a determinant of gender difference in Kenya Certificate of Secondary Education (KCSE) examination.

Students in mixed schools felt that they would have performed better in single sex schools than in mixed schools. The study shows that majority of the students respondents felt that teachers' reinforced gender stereotypes of male superiority in mixed classes. There were also a number of distractions from the opposite gender and most of the respondents stated that girls were more distracted than boys in mixed classes. Students also felt free to contribute to the lesson without being conscious of the opposite gender. Most of the times boys dominated the classroom process in mixed schools and they received more encouragement to work through a problem than girls. Girls also did not volunteer to contribute to classroom discussions as they shied away from exchanging words with boys in the classroom. Mixed schools were therefore found not to be suitable for the education of girls. Although the schools were more suitable for boys compared to girls, boys were also found to perform better in single sex schools than in mixed schools and they were also in a position to of exploring into nontraditional gender stereotyped roles.

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