



THE JOURNEY SO FAR IN SENIOR HIGH SCHOOL ENROLMENT OF GIRLS AND PERFORMANCE IN GHANA: THE CASE OF KASSENA-NANKANA EAST MUNICIPALITY

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Abstract

Empowering the girl child has long been the goal of many countries especially countries hard hit by gender disparity in education. Ghana, just like other countries in sub-Saharan Africa, has implemented policies to help address gender disparity in education. This study sought to assess factors that limit female enrolment and performance despite policies and programmes put in place to solve gender disparity in education. Using a quantitative research approach, questionnaires were administered to 1,070 students and 170 teachers. Secondary data on enrolment and performance were also acquired from the Kassena-Nankana East Municipal office of the Ghana Education Service. The study revealed that though enrolment in senior high schools increased for both boys and girls from 2010/2011 to 2019/2020 academic years, girls still lagged behind boys in enrolment and performed inversely in the West African Senior School Certificate Examination. Poor parental control, peer pressure, teenage pregnancy, poverty, early marriage and betrothal, and gender roles, still have significant effects on female enrolment. Access to money for upkeep affects the concentration of girls in school while policies and programmes put in place to help address gender disparity, are riddled with limitations. The way forward is to ensure that policies meet their goals as well as encouraging girls to take education serious through initiatives such as rewarding brilliant students and enhancing mentorship in schools.

Keywords: Girl child, Enrolment, Performance, Senior high school, Challenges.

Introduction

Globally, education equips humans with ideas, resources and solutions to solve the problem of poverty and inequality. It is for this reason that, by right, children have access to quality basic education, a foundation for a better life (United Nations Educational, Scientific and Cultural Organization (UNESCO), 2011). The adoption of Article 26 of the Universal Declaration of Human Rights in December 1949 by the United Nations General Assembly states that, as a fundamental human right, children must have access to

education. This, however, should be free at the elementary and primary levels and at higher levels, accessible based on merits (Nwangwu, 1976; Coleman, 2017).

Over the decades, the world has recorded significant improvement in achieving the goal of educating children. This improvement, however, is met with gender gaps as girls lag behind their male counterparts (UNESCO, 2018). In Africa, even though education is a fundamental human right,

often, girls are denied access to this right (Offorman, 2009; Bouchama et al., 2018). A report by British Broadcasting Corporation (BBC) indicated that, in some African patriarchal societies, boys are favoured because they will continue their family lineage (BBC, 2006 as cited in Offorman, 2009). This patriarchy holds the ideology that, by creation, God conferred supremacy and authority to males (Mlana et. al., 2005). Such an ideology places the man superior to the woman intellectually and domestically which also, affects access to education. This is true for the three Northern regions in Ghana because they belong to the patrilineal society.

It is no doubt that education is beneficial to every country. In Ghana, successive governments since independence have proven this by making efforts to help eliminate barriers to education and have strived to achieve the goal of providing quality education as well as making it free at the primary level. They designed policies and programmes such as the Education Strategic Plan (ESP) for 2003-2015, the Free Compulsory Universal Basic Education Programme, Expansion of Early Childhood Development Services and School Feeding Programme to achieve this. This was to be achieved together with instituted measures to eliminate gender disparity in primary schools (Madeez et al., 2007). The inclusion of the Free Senior High School Policy by the government of Ghana in 2017 is a further step aimed at making education accessible to as many qualified students as possible at no cost to parents (Abdul-Rahaman et al., 2018). Efforts made towards achieving Sustainable Development Goal 4 (quality education) cannot be overlooked as a further step to ensure that girls are educated (United Nations Development Programme (UNDP), 2020).

It was hoped that such policies and programmes by governments and the provision made in the Constitution of Ghana on rights to equal educational opportunities and facilities (Government of Ghana, 1992), would bridge the gender gap in schools. This, however, appears not to be true for senior high schools since gender parity has only been achieved for kindergarten,

primary and junior high schools but not for senior high schools (United Nations Communications Group and Civil Society Platform, 2017).

Female enrolment in the Northern sector of the country is lower in senior high schools than in the Southern sector largely due to low completion from junior high schools. This is evident from the report of Ghana Statistical Service (2015) which states that the Northern sector where the study area is located recorded the lowest rate for completion (80.5%) in 2013/2014.

This study, therefore, sought to investigate the factors which limit enrolment and performance of girls in senior high schools in the Kassena-Nankana East Municipality. This was achieved by considering the following specific objectives;

- Assessment of female enrolment in senior high schools in the Kassena-Nankana East Municipality.
- Examining the performance of females in senior high schools.
- Identifying factors that limit female education in senior high schools even though programmes have been implemented to encourage girl-child education.

This paper is structured into five sections, that is an introductory section that gives an overview, presents the research problem and objectives of the study, literature review section, methodology section, results and discussion section, and the conclusion and recommendation section.

Literature Review

Ghana Statistical Service's report on girl child education indicates that, the completion trends for girls tend to decline in junior high school. This affects enrolment in senior high schools and widens the enrolment gap (GSS, 2015). According to the Sixth Ghana Living Standards Survey (GSSL6), enrolment for the girl child is low for secondary and higher-level education with fewer females (11.7%) attaining secondary education or higher level of education as compared to their

male (18.0%) counterparts (GSS, 2014). In the 2008 report, the Ghana Statistical Service revealed that in the Upper East Region, where the study area (Kassena-Nanakana East Municipality) is situated, the attendance rate for females between ages 16-18 is 56.4% as compared to 64.9% for male attendance (GSS, 2008). This is attributable, perhaps, to poor performance leading to dropouts.

Also, on the issue of literacy which comes mostly as a result of school enrolment, UNESCO (2017) indicated that the literacy rate for females between ages 15 to 24 years increased by 90% globally as compared to 73% for older women in the year 2016. However, in sub-Saharan Africa, the youth literacy rate for females is 75.4% as compared to 79.2 % recorded for their male counterparts (UNESCO Institute for Statistics, 2017). These statistics from UNESCO suggests that enrolments are higher for males in sub-Saharan Africa as compared to their female counterparts.

More so, UNESCO's report on gender inequity reveals that, the world is still far from achieving its goal of providing universal education at primary and secondary levels with sub-Saharan Africa lagging at all levels (UNESCO, 2019). They attribute this to the fact that more girls are likely to stay out of school as compared to their male counterparts in sub-Saharan Africa. They projected that two million boys are more likely never to attend school as compared to four million girls (UNESCO Institute for Statistics, 2019). With these worrying statistics on gender disparity in education, what could possibly account for the differences?

Britwum et al. (2017) in a study on teenage pregnancy and school dropouts pointed out that financial constraints and peer influence are the two major causes of teenage pregnancy which consequently leads to school dropout. When this happens, enrolment figures at the next level are affected. These financial constraints could possibly be blamed on poor parental control. This is similar to the findings of a study conducted by Suleman et al. (2015) which identified poor financial status of parents, teenage pregnancy and poor parental

control among others as leading factors that affect female education.

In addition, Ziyaba (2015) disclosed that socio-cultural factors affect female education and girl child participation in school. Akinyi and Musani (2015) however, hinted that teenage pregnancy and students' relationships affects girls' performance in senior high schools.

Olasehinde and Olatoye (2014) from a study conducted in Nigeria revealed that there were no differences in performance for both male and female students in science-related courses which portrayed gender equity in performance in senior high schools. Meanwhile, Ullah and Ullah (2019) noticed that girls in senior high schools outperform boys in both developed and developing countries. However, this may not be true for all societies since there are variations due to socio-cultural factors. Hence, providing enabling environments for girls to access education can help girls achieve greater heights. More so, a study by Issah (2019) in West Mamprusi Municipality in the Northeast Region of Ghana, affirms that gender disparity in enrolment exists in senior high schools. This is because from 2015 to 2019, fewer girls have been enrolled in senior high schools as compared to their male counterparts.

This informed the need to assess enrolment and performance in the Kassena-Nankana East Municipality and the influence of socio-cultural factors on female education.

Methodology

This research employed a quantitative research approach using the survey research design. The variables under study are the enrolment of students and students' performance. The main research instrument used to collect primary data was the questionnaire. Secondary data were taken on student's enrolment and performance from the Ghana Education Service.

The study focused on senior high schools located in the Kassena-Nankana East Municipality. There are six (6) senior high schools in the Kassena – Nankana East Municipality namely: Our Lady of

Lourdes (OLL) Senior High, a girls school; Navrongo Senior High (Navasco), mixed school; Notre Dame Senior High, a boys school; St Benedict Technical, a mixed technical institute; Awe Senior High /Technical, mixed; and St Johns Integrated, a senior high school that integrate the dumb students. The study purposely left out the technical institute and Notre Dame Senior High to seek admission homogeneity. Notre Dame Senior High has an additional admission criterion. It conducts entrance exam after the computer selection to sieve its students and St Benedict by its

nature has its own protocols to suit certain programmes. The remaining four schools rely on the Computerized Selection of Students and Placement System (CSSPS) to admit its students. Students of the remaining schools were randomly selected to participate in the study. Some teachers were purposefully selected and questionnaires administered.

The sample size of each school was proportionally taken; adapting the formula [1] and formula [2] from Daniel (1999).

$$n_o = \frac{z^2 \pi (1 - \pi)}{e^2} \text{----- [1]}$$

where, n_o = initial sample size, π = proportion, e = sampling error

z is the critical value of the normal distribution at $\alpha/2$

A finite correction factor was applied to obtain the final sample size (Daniel, 1999)

$$n_s = \frac{n_o \times N}{n_o + (N - 1)} \text{----- [2]}$$

where N is the total enrolment of Senior Higher Students

n_s is the corrected sample size

Using 2019/2020 academic year enrolment figures of students from the Kassena– Nankana East Municipal Directorate of the Ghana Education Service with a 95 percent confidence level ($z=1.96$) and a sampling error of ± 0.05 ($e=0.05$), the various sample sizes for the schools were estimated as shown in Table 1 below:

Table 1: Computed Schools Sample Size

Schools	Enrolment	π	n_o	n	Sample
Navrongo Senior High	1928	0.3443472	346.9306	326.743	330
Awe Senior High	1786	0.3189855	333.8101	315.0813	320
St Johns Integrated Senior High	953	0.170209	217.0318	208.9689	210
Our Lady of Lourdes Girls Senior High	932	0.1664583	213.2087	205.4229	210
	5599		1110.98	1056.22	1070

The schools were stratified into Form 1, Form 2 and Form 3 to give fair distribution of questionnaires to the various year groups of students. The sample size of each form was proportionately computed using formula [3]

$$n = \frac{n_s \times N_f}{N_s} \text{----- [3]}$$

where n_s = school sample size, N_f = Form population, and N_s = School population

Table 2: Sample Size of each Form in a School

	Navrongo SHS		Awe SHS		St Johns Integrated		Our Lady of Lourdes	
	Enrolment	Sample	Enrolment	Sample	Enrolment	Sample Size	Enrolment	Sample
Form 1	660	113	551	99	352	88	364	95
Form 2	650	111	737	132	206	52	297	78
Form 3	618	106	498	89	279	70	141	37
		330		320		210		210

The result of the study was analysed and depicted using tables and graphs with the aid of the Statistical Package for Social Sciences (SPSS) version 20 and Excel.

Results and Discussion

Participation and Recovery Rate of Responses

In all, a total of one thousand, seventy (1,070) students were selected to participate in the study from the four schools coming from various year groups. Questionnaires were given to them to share their opinion on factors that lead to low enrolment of girls and also on factors that affect performances. One thousand and sixty-eight (1,068) of the questionnaires were retrieved giving a recovery rate of 99.8%.

Also, 170 teachers in the Municipality were conveniently selected to assess their views on the state of female education in the Municipality.

Female Enrollment in Senior High Schools

Considering the Kassena – Nankana East enrolment figures for 2010 /2011(2010) academic year to 2019/2020 (2019) academic year as shown in Figure 1 below, there was an upward increase in total enrolment (year1, year2, year3) from 2010 (2010/2011 academic year) for all the years till 2013 (2013/2014 academic year) where the first years (year 1) experienced slight decreases in

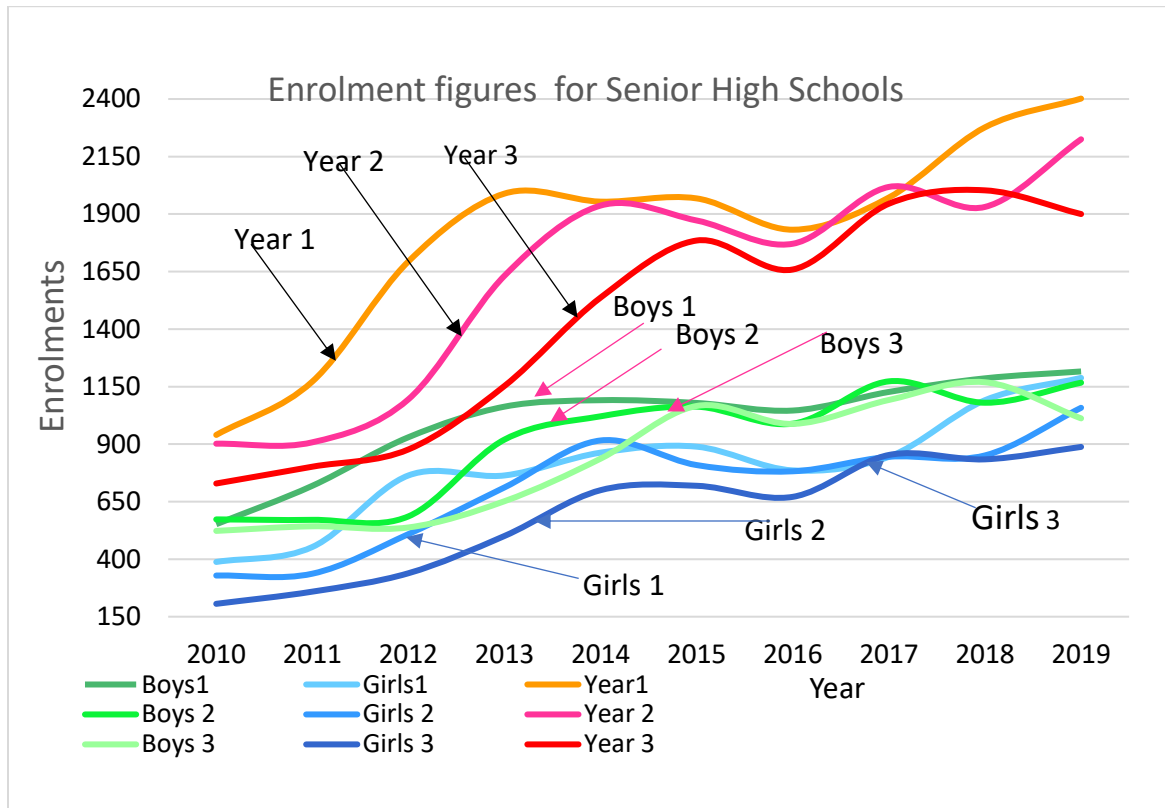
figures which picked up again in 2017 (2017/2018 academic year).

Considering the separate data plot for boys (green lines) and for girls (blue lines), it is obvious that girls lag behind boys when it comes to enrolment figures since all the blue lines (girls1, girls2 and girls 3) are all below the green lines (boys 1, boys 2, boys 3). When you consider the decline for first years for instance, the line for girls (line 1) is more pronounced with zigzag lines after 2012 (2012/2013 academic year) than that for boys (line 1) which has a smooth and steady decrease.

The issues of gender disparity in enrolment in senior high schools as revealed by this study is similar to that of Issa (2019). His study in West Mamprusi Municipality in the Northeast Region arrived at the same conclusion that fewer girls have been enrolled in senior high schools as compared to their male counterparts. The two studies seem to affirm UNESCO’s claim that girls lagged behind their male counterparts in terms of enrolment in sub-Saharan Africa (UNESCO, 2019).

A follow up question on the disparity in enrolment figures was to assess if girls have equal platforms to compete with boys? All the 170 teachers, and 63.9% of the students (both males and females) agreed to the fact that girls have an equal platform to compete with boys (Table 3).

Figure 1: 2010/2011 to 2019/2020 Enrolment Figures of the Kassena – Nankana East Municipality



Source: Ghana Education Service, Kassena – Nankana East Municipality, 2020.

Table 3: Do Girls have an Equal Platform to Compete with Boys in Academia?

	Yes	NO	Totals
Males	243 (56.5%)	187 (43.5%)	430 (100%)
Females	439 (68.8%)	199 (31.2%)	638 (100%)
Totals	682 (63.9%)	386 (36.1%)	1068 (100%)

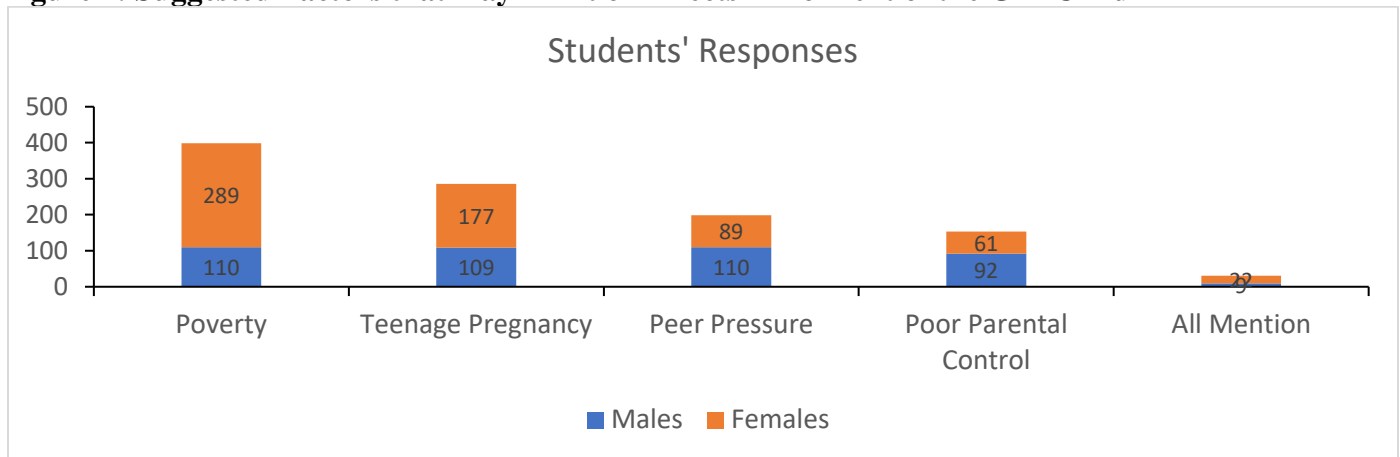
Source: Field survey, 2020.

Factors that Limit Female Enrolment

Somani (2017) pointed out that educating the girl child is key in developing human resources; beneficial not only to individuals but nations at large. This statement calls for a conscientious effort on girl child education.

Students and teachers in this study were queried on factors suggested in literature that limit or affects girl child enrolment. There were responses to whether these factors contribute or limit enrolment in their perspectives. The students’ responses on suggested factors are depicted in Figure 2.

Figure 2: Suggested Factors that may Limit or Affects Enrolment of the Girl Child



Source: Field survey, 2020.

Majority of the female students (289) asserted that poverty is really a limiting factor on enrolment. Poverty here could possibly be viewed as parent inability to pay the required admission fees. In addition to the inability to pay fees, parents cannot afford to buy items that girls will need such as mattresses, consumables, and books among others. With the introduction of the Free Senior High School education policy by the government, one will say, expenses on fees have been catered for. However, students are still burdened with access to money for upkeep.

Teenage pregnancy and peer pressure were also deemed by the students as causes of low enrolments of girls in senior high schools in the Municipality. Girls who get pregnant during or after junior high school, do not make it to senior high school and the case in the Municipality, is no different as most

girls drop out of junior high schools because they are pregnant. Others also get pregnant as they await their Basic Education Certificate Examination results which prevents them from proceeding to senior high school.

The blame on parental control as a factor that may limit girl child enrolment was pronounced in the boys than the girls. However, about 32 of the students asserted that a combination of all these factors mentioned in Figure 2 limits enrolment (Figure 2).

On the side of the teachers, poverty, teenage pregnancy, and performance in the basic school examination (BECE) were identified as factors which limit female education. Their responses are displayed in Table 4 below.

Table 4: Teachers' responses on Factors that Limit Enrolment

Factors	Frequency	Percentage (%)
Poor performance in basic school examination	35	20.6
Teenage pregnancy	18	10.6
Poverty	12	7.1
All mentioned	81	47.6
None of the above	24	14.1
Total	170	100

Source: Field survey, 2020.

Responses from majority of the teachers (47.6%) asserted that the interplay of all the factors in Table 4 affect enrolment. Few of the teachers (14.1%) were in disagreement.

The researchers also used the teachers to validate the disclosure by Bouchama et. al (2018) that gender roles, early marriage and betrothal in West African Countries affects enrolment negatively. The responses of the teachers on this query are presented in Table 5 below.

Table 5: Teachers Responses on Cultural Practices which Affect Enrolment

Cultural practices	Frequency	Percentage (%)
Early marriage/betrothal	59	35
Gender roles	56	33
All mentioned	39	23
No idea	16	9
Total	170	100

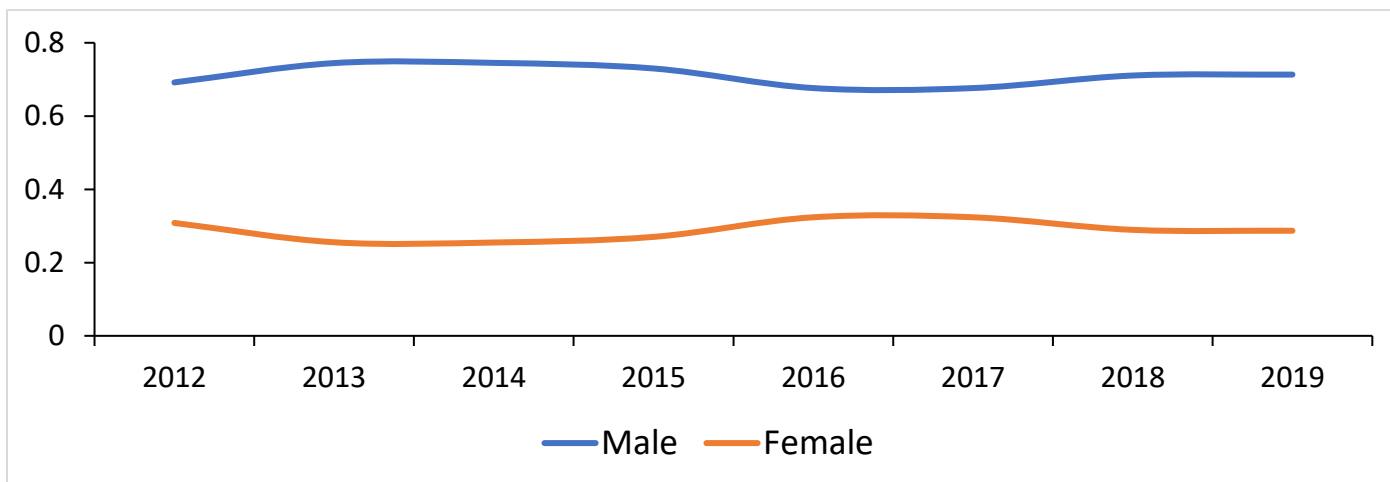
Source: *Field survey, 2020.*

Whereas early marriage and betrothal were asserted by the teachers as cultural practices that affect enrolment negatively with 35% of teachers’ responses agreeing to this, gender roles were also said to be cultural practices agreed by the teachers as factors which affect female enrolment (Table 5). The findings from the 170 teachers affirms the assertion made by Bouchama et. al (2018) that gender roles, early marriage and betrothal are also factors that affect enrolment.

Performances of Girls in Senior high schools

Considering the performance of students in senior high schools, there seem to be an inverse relationship between gender performance. In a year that the boys perform better, the girls tend to decline in performance and vice versa. An example is presented in Figure 3.

Figure 3: Relative number of Students of Navrongo SHS who Passed WASSCE



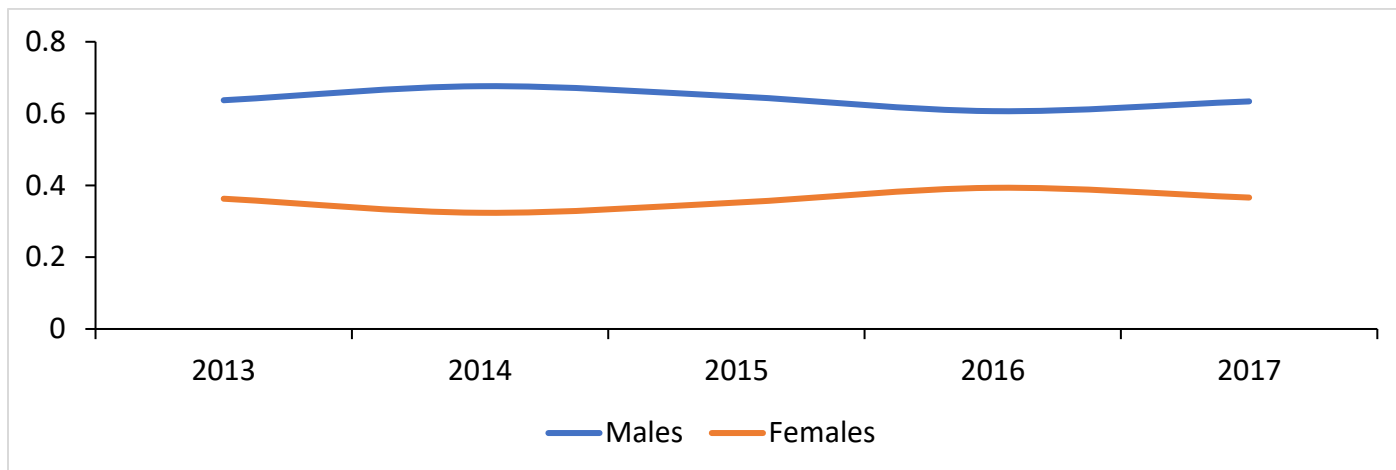
Source: *GES, Kassena-Nankana East Municipal Assembly, 2011/2012 to 2018/2019.*

Examining the relative performance graph of a mixed sex school like Navrongo Senior High, which has a large population and one of the known schools in the region, (Figure 3) the concave nature of the boys’ performance curve and that of the girls’ performance curve is inverse in nature. The vast gap between the curves reveals the

enrolment gap between gender in the school. The curves refute the notation that boys are performing better than girls.

Also, the relative performance curve of Awe Senior High, which is also a mixed sex school in the Kassena – Nankana East Municipality is presented in Figure 4.

Figure 4: Relative number of Students of Awe SHS who Passed WASSCE

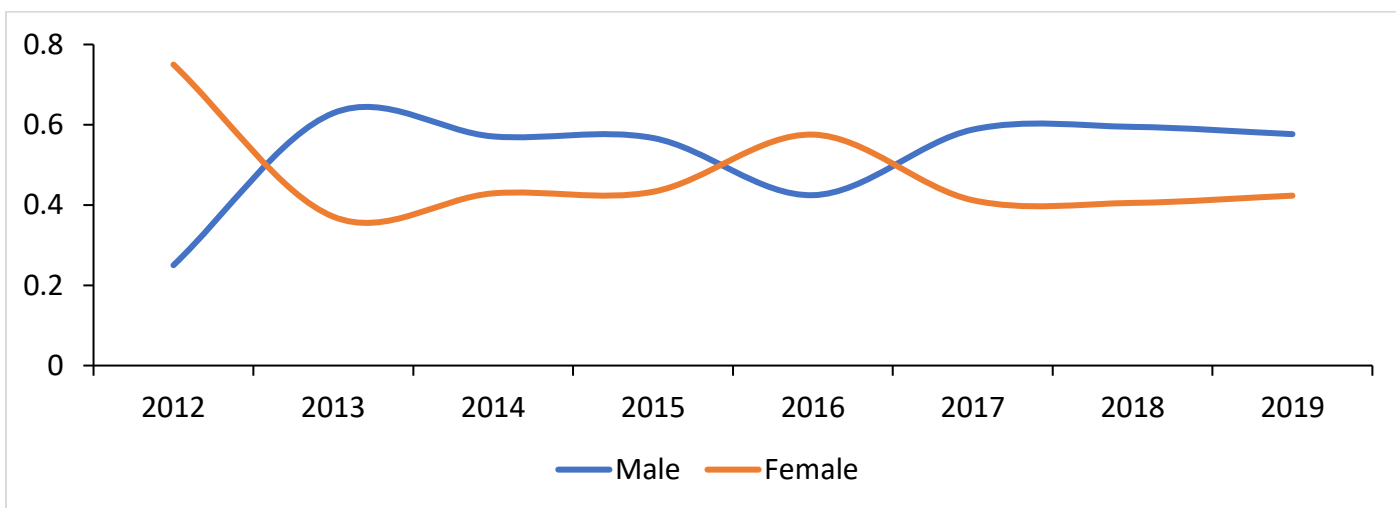


Source: GES, Kassena-Nankana East Municipal Assembly, 2012/2013 to 2016/2017.

The relative performance of Awe Senior High Technical looks similar to that of the Navrongo Senior High School when their overall performance was plotted.

That of the third school (St Johns Integrated Senior High) another mixed sex school in the Municipality with a smaller population as compared to Navrongo Senior High and Awe Senior High also has an inverse nature of students’ performance which proves that the performance of boys and girls in the West African Senior School Certificate Examination is inversely related in their overall performance.

Figure 5: Relative number of Students of St Johns Integrated SHS who Passed WASSCE



Source: GES, Kassena-Nankana East Municipal Assembly, 2011/2012 to 2018/2019.

Limitations to Female Education in Senior high schools

Girls in the study were presented with some challenges that might affect their participation and ability to concentrate in school. Their responses are presented in Table 6. Out of the 638 girls, 47% agreed that limited access to money is a challenge that affects them in senior high schools, 26% asserted that peer pressure was also a challenge, 21% indicated low self-esteem while 5% attributed it to all the factors mentioned with 1% of the responses stating that they had no idea that there are factors which affect girls in school.

Limited access to money was further broken down for the girls to share their opinion on factors related

to limited access to money. Responses are in Table 6. 37% identified their inability to pay school fees, 25% said lack of money for upkeep with 35% saying a combination of both were the economic factors that affected girls negatively in school. The lowest percentage (3) of respondents, however, had no idea that there were economic factors that affect girls in school. This finding agrees with the finding from a study conducted by Yenilmez (2016) in Turkey which indicated that disparity exists amongst males and females as women rise through the academic ladder largely due to limiting factors and barriers.

Table 6. Challenges that Affect Female Participation and Concentration in School

Challenges faced in school		Limited access to money	
Challenges	%	Factors	%
Limited access to money	47	Inability to pay school fees	37
Peer pressure	26	Lack of money for upkeep	25
Low self-esteem	21	Inability to pay school fees and Lack of money for upkeep	35
All the factors mentioned	5	No idea	3
No idea	1		
Total	100	Total	100

Source: *Field survey, 2020.*

The study probed further to sought from the respondents (teachers and students) as to whether the limited factors have an influence on the performance of the girl child. Majority of the respondents, 71.8 % of the teachers and 87.3% of the students, strongly agreed that the limited factors play a major role in determining whether the girl child performs excellently or poorly (Table 7).

On measures put in place by government and other agencies to help girls cope better in senior high schools, 59.4 % of the teachers and 75.9% of the students were of the view that the measures are not addressing the issues (Table 7).

An open query to the students allowed them to identify policies or programmes that have been put in place to encourage girls' enrolment. They mentioned, free education, bursary/scholarship and scholarship for brilliant girls as programmes put in place by the government to help increase enrolment.

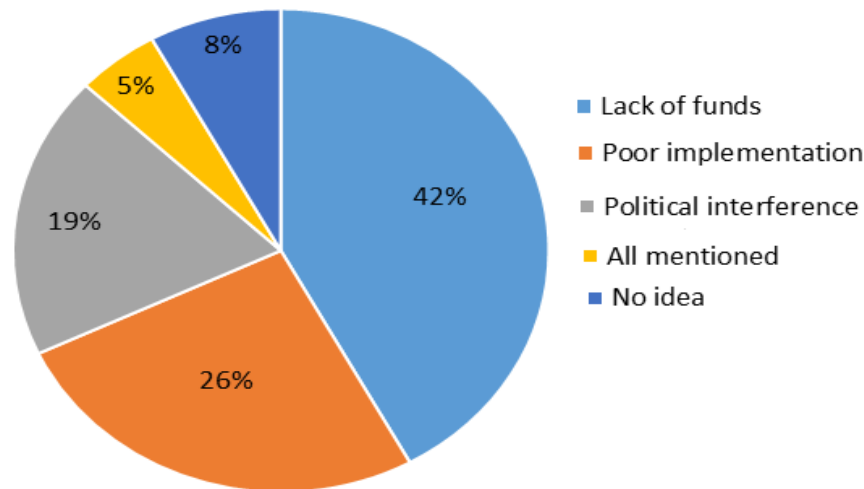
Table 7. Effects of Limiting Factors and Programmes Initiated to Address Issues on Performance of Girls

Effects of limiting factors			Programmes to address issues		
	Teachers %	Students %		Teachers %	Students %
Does not influence the performance of girls	20.6	8.0	Policies are addressing issues	30.6	22.2
Play a major role in determining whether the girl performs excellently or poorly	71.8	87.3	Policies are not addressing issues	59.4	75.9
No idea	7.1	4.6		10	1.9
Total	100	100	Total	100	100

Source: Field survey, 2020.

Findings suggest that 42% of the respondents(students) think lack of funds poses challenges while 26% are of the view that these policies are poorly implemented (Figure 7). About 19% identified political interference as a challenge in achieving the goals for which these policies were enacted whereas 5% said all factors mentioned posed challenges. The remaining 8% however, had no idea why these policies fail to address the problem.

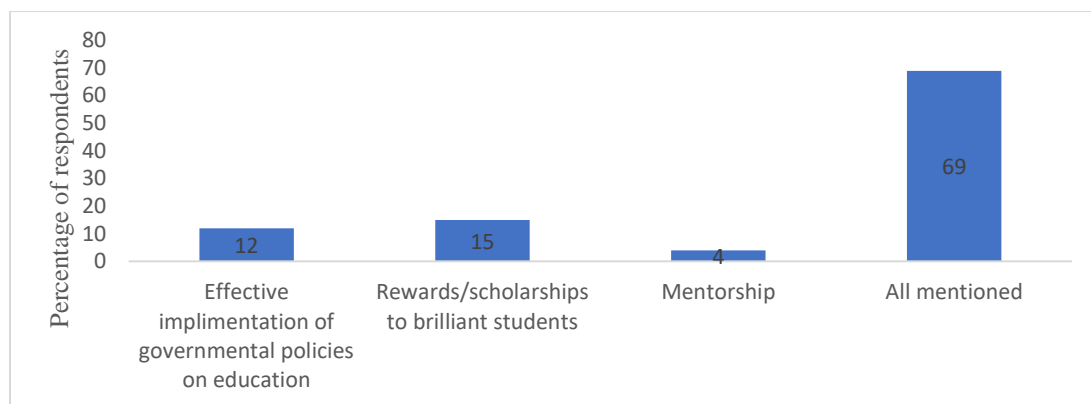
Figure 6: Reasons for Failure of Programmes



Source: Field survey, 2020.

It is therefore important to initiate and implement measures to help solve the problem. Majority of the teachers agreed that this can be achieved by ensuring that the following measures; effectively implementing policies, rewarding brilliant students and mentoring are implemented collectively (Figure 8). These suggested solutions aimed at improving female education are similar to Suleman et al. (2015) suggestions which include free education, scholarships for girls and an increase in school infrastructure. Ghana might have implemented free education but other suggested factors mentioned, need to be enhanced. Female mentors such as female teachers can mentor girls to appreciate education and strive to achieve greatness. It is therefore important to reduce the lack of access to female teachers as identified by Atta (2015) in his review to help achieve this goal.

Figure 7. Measures to Help Improve Performance



Source: *Field survey, 2020.*

Conclusion and Recommendations

Senior high school education is just as important as other levels of education in shaping the minds of the future generation. Enrolment figures for girls are low as compared to boys in all the mixed schools considered.

The overall performance of these girls in the West African Senior Secondary Certificate Examination is inversely related to the boys. That is, the year the boys perform well, the girls' performances fall and vice versa.

Factors such as poverty, poor parental control, peer pressure, teenage pregnancy, gender roles, early marriage and betrothal limits the ability of girls to either access full senior high school education or perform well.

Policies put in place by governments to address gender disparities in schools are not achieving goals for which they have been introduced to achieve due to limiting factors.

To address limitations to girl child education, the government with support from the Ghana Education Service and gender-based organizations, need to continuously introduce initiatives that will help reduce the impact of limiting factors on enrolment. Existing policies need to be enhanced to ensure that they work effectively in achieving the goals for which they have been introduced to achieve.

Also, education on girl child education needs to be intensified to ensure that parents educate the girl child. This can be done by addressing socio-cultural factors such as early marriage and betrothal and gender roles since these have a toll on educating the girl child.

Mentoring, reward and scholarship packages should also be introduced and enhanced to encourage girls to bring out their best in schools. These should include support for the upkeep of girls which goes beyond school fees and meals.

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