

## **The Academic Progression Paradox: Socioeconomic Determinants of the Mismatch between Boys and the Girl-Child Education in Rural Ghana**

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### **Abstract**

*This study investigated the cause of the mismatch in academic progression between boys and girls in rural Ghana as they climb the academic ladder from Junior High School to Senior High School. At primary level, there is gender parity but it begins to dwindle in the case of girls as they go higher. The findings suggest that the principal cause is socio-economic. The more the external locus of control in terms of resources, the likelihood it is for children to leave school to work to contribute to family resources or in the case of girls to resort to premarital sex and unplanned pregnancies precipitating early school exit. In situations, however, where the locus of control of resources is internal, parents are more likely to take care of their children, avoiding the likelihood of risky behaviours. The findings further suggest a synergy between three inter-related factors: a) lower socio-economic status is predictive of dropping out of high school especially in the case of the girl; b) socio-economic constraints increase the probability of learning difficulties and c) the interaction between the lower socio-economic status and learning difficulty tends to exacerbate the probability of dropping out of school in a cultural mindset more favourable to the education of the boy than the girl.*

### **Introduction**

This paper has a historical antecedent. In 2011, this researcher as an education expert and the Chair of the Education Faculty in one of the Ghanaian Universities was invited to the Annual Education Review Forum organised by the Ghana Education Service in one of the ten administrative regions of Ghana. One of the core issues that kept resurfacing during the forum was the gender gap between the boy and the girl-child. Statistics between boys and girls in this region of Ghana at the basic schools were almost at parity. However, as they begin to make a transition from the Primary and Junior High school towards the Senior High School, the number of males tends to outstrip that of the females for more than three consecutive years and continues to be a trend as reported in the regional profile of school year data in this particular region of Ghana.

School enrollment by and large has gone up in all regions across Ghana. This is partly due to the global emphasis on education for all by the year 2015 as well as the school feeding programme instituted by the Ghana Education Service under the umbrella of the Ministry of Education. For example, the Basic Regional Profile for the 2009/2010 school year indicates that in terms of school enrolment, the Brong Ahafo region of Ghana (one of the two study areas of this paper) registered a total of three hundred and thirty-one thousand, five hundred and twenty four (331, 524) in the public primary schools, whilst the private primary schools enrolled a total of 182, 085. At the Junior High School level (J.H.S), the region enrolled a total of 107, 853 pupils in the public J.H.S, whilst the private J.H.S registered 52, 913 for the same school year 2009/2010. In terms of gender balance in the enrolment, 48.7% were females in the public primary schools, while at the Junior High School level, 46.4% were also females. In the private schools, 49.7% were females at the primary level and 49.2% at the J.H.S level. Thus one could observe from these indicators that in terms of parity, between the girl child education and that of boys, there is some balance in the Brong Ahafo Region (MOE, 2009/2010 Education Profile).

However as these boys and girls gradually progress from the Junior High School into the Senior High School, especially at the level of the first and second year in the Senior High School, there is a drop in the numbers in the case of the girl-child (2009/2010 Regional Education Forum Report). Boys entering second and third year in the Senior High Schools tends to be more than girls. It is in the light of this gender mismatch as students make progression into the Senior High School that this research was undertaken to investigate those factors that influence this early school exit. The possible causes of school exit in the case of the girl-child are multi-factorial: socio-cultural factors, economic factors, geographical factors, health factors, political/administrative factors, etc.

Over the past decade or so, the focus on girls' education has been shaped by a number of key commitments including the Beijing Platform for Action in 1995, the 2000 Dakar Framework for Action on Education for All and the Millennium Development Goals. Within Africa, the Second Decade of Education for Africa (2006-2015) reflects these commitments with a specific goal: to eliminate gender disparities and ensure gender equality, girls' and women's empowerment through -out the education system (African Union, n.d)

In 2008 the Association for the Development of Education in Africa Biennale reinforced this, prioritizing the transition of girls from basic to higher levels of education and increasing the percentage of female teachers at post-primary levels. Conferences of education ministers, such as that of ECOWAS (Economic Community of West Africa) in 2004, have prioritized commitments to girls' education. Whilst this international and regional attention has led to improvements in some aspects of girls' education, much remains to be done to meet the goals of gender equality that African Governments have committed to in education, from pre-primary to adult levels. For example, in the primary sector, the last decade has seen very rapid increases in enrolment for both boys and girls with the abolition of school fees in many countries and a strong emphasis on access from the MDG and EFA agendas. Over 46 million children have enrolled in primary education from 1999 to 2008 in sub-Saharan Africa, with the regional net primary enrolment rate for girls moving from 54% in 1999 to 74% in 2008. Despite this progress, there remain 29 million primary-aged children out of school in sub-Saharan Africa, 54% of whom are girls, and the region as a whole is not on track to achieve UPE by 2015( UNESCO 2011).

### **Objectives of the Study**

The objective of this study is to investigate the following:

- 1) Those socio-economic and psycho-social factors that induce the early adolescent girl-child to leave school early.
- 2) Whether or not pre-marital sex as a determining factor in early school exit is socio-economic related.
- 3) Whether the drop-out girl child had any prior knowledge of sex-education.
- 4) The roles that teachers, parents and other authority figures can play as role models.
- 5) The influence of peer pressure in adolescent pre-marital sex and early school dropout.
- 6) The benefit from exploring the causal relationships between prior school experiences of the adolescent, adolescent reproductive behavior, and subsequent school enrolment.

### **Problem Statement**

Education is a human right. Yet millions of children in Africa are still out of school and majority of them are girls. Sub-Saharan Africa accounts for 47 percent of out-of-school children worldwide, with 54 percent of those children being girls. In 2006, 35 million children were not enrolled in school. This is almost one third of the school-age population. In 2008, in primary schools specifically Sub-Saharan Africa had yet to achieve gender parity. Gender disparities were largest in rural areas and among poor households. In secondary school, only 30 percent of boys and 25 percent of girls were enrolled. Redressing this situation demands serious investment in getting more children, both boys and girls, to secondary school and achieving gender parity. Female students constitute less than two-fifths of the population in tertiary education in Sub-Saharan Africa, with only 38 percent of females having enrolled in tertiary education in 2005.

While much progress has been made over the past 10 years in rectifying gender imbalances in education and development in sub-Saharan Africa, socio-cultural, economic and political challenges nevertheless still constitute barriers to girls' education in the region (<http://www.fawe.org/about/work/education/>). Considerable attention has been paid over the last decade to the parity between the girl-child education with that of the boy in many countries of Sub-Sahara Africa, especially in Ghana.

Nevertheless, few studies however have focused on examining, why these efforts, notwithstanding, girls especially in the rural areas as compared to the urban areas tend to leave school early without completion within the two administrative regions of the Ashanti and the Brong Ahafo in Ghana. For example, as mentioned earlier in the introduction, the Brong Ahafo region is one of those regions in the country where many adolescents especially girls drop out of school as they progress towards the Senior High School. This continues to be a trend in the annual regional education report. The same scenario is found in the rural areas of the Ashanti region, in such areas as the Atwima Nwabiagya, Amansie and the Ejura-Sekyedumase districts, just to mention a few. For example, in the Atwima Nwabiagya district, at the JHS level, enrolment increased significantly from 532 in 2005 to 13, 945 in 2009. However, unlike pre-schools and primary, boys enrolment is higher than girls- implying that as they climb the ladder to the top, girls drop out tends to be higher. It is on the basis of this gender mismatch in academic progression in the rural areas of Ghana that this study was undertaken to find out the root cause.

### **Research Questions**

Consequent on the above mentioned problem, this study was built around the following key questions:

- 1) What are the socio-economic factors that precipitate the mismatch between boys and girls as they progress through the academic ladder into Senior High School?
- 2) Is there a connection between the urban-rural differentials that affect this mismatch?
- 3) How does the level of parental education influence the academic progression of the girl-child?
- 4) How does the concept of education as human capital influence the external locus of control in the case of the girl-child?
- 5) Does family structure have any influence on the education of the girl-child?
- 6) Is there a link between pre-marital sex, teenage pregnancies and early school exit?
- 7) How does the home upbringing prepare the girl-child prior to school experiences and early adolescent physical, biological and psychological changes before puberty?
- 8) To what extent can peer group influence and affect the choices of the adolescent girl with respect to early school exit?
- 9) What influence does the mother have on the choices of the girl-child regarding early school exit?

### **Significance of the Study**

This study is significant because it helps to identify the causes of early school exit especially in the rural areas among the early adolescent girl-child in this era of 'education for all by 2015'. Besides, the findings of the study will give some indicators of the factors that explain the possible mismatch between boys and girls in the early years of the Senior High School in the Ashanti and the Brong Ahafo regions- thus the findings will be useful resource material which will go a long way to help educators, parents, teachers and all other stakeholders in the education of young people to understand better, the causes of early school exit as a social phenomenon and its effects on the girl-child. In addition, the findings of this research will contribute to enhancing the literature on this subject and also enhance empirical studies that have already been undertaken.

### **Literature Review**

#### ***Family and school attendance and attainment***

The importance of educational attainment to society cannot be underestimated. In this respect, researchers have conducted many studies focusing on this issue. For example, in 1962, Bertrand studied the link between social interaction, the family and the school systems and its effect on high school dropouts. The core determinants of high school drop out that he found were as follows: a) that low socioeconomic status directly correlates with high school dropouts; b) students whose parents have lower educational attainment are more likely not to complete high school; c) parents who place a low value on a high school education have the tendency to transfer this low value to their children, thereby increasing their chances of dropping out of high school; d) students who have lower GPA's and who have failed more classes possess a higher chance of dropping out of high school; e) students incompatible with school social system tend to receive more ridicule from students and punishment from teachers and consequently drop out of school (Bertrand, 1962). Thus the main finding centered on the effect that dysfunction between family and the school social structure cause. When they contradict each other students aim to fit-in with their family social structure rather than their school social system- thereby affecting their decision to stay in school.

That is Bertrand's findings prove useful in that it shows the impact that the socio-economic status (SES) and the accompanying challenges that students face on high school completion

(<http://www.iwu.edu/economics/PPE14/Ingrum.pdf>)

### ***Effect of locus of control***

In 2003, Coleman and DeLeire investigated the effect that locus of control has on a student's decision to complete high school. They found that students with external locus of control place a lower value on a high school education and therefore tend to drop out of high school more often than students with an internal locus of control (Margo Coleman and Thomas DeLeire, 2003). Both in developed and developing countries, children from families with more socio-economic resources are more likely to stay in school (Coleman et al 1966; Jencks et al 1972; Shavit & Blossfeld, 1993; Tansel, 2002; Glewwe & Jacoby, 2004; Mingat, 2007; Evangelista de Carvalho Filho, 2008). For wealthier families, the direct costs associated with education, such as fees, books, and uniforms, are less likely to be an obstacle. Opportunity costs of children not being able to help at home, at the family farm or by earning additional income through child labor are also likely to be less important to them (Basu, 1999). Moreover, wealthier families are less affected by credit constraints. Imperfect credit markets have been found to be a major obstacle for the education of children from poor families (Brown & Park, 2002; Edmonds, 2006; Ersado, 2005; Thorbecke & Charumilind, 2002).

### ***Parental level of education and labour market position***

Besides household income, also the educational level and labor market position of the parents is expected to play a role. There is ample evidence that children from better educated parents more often go to school and stay in school (Shavit & Blossfeld, 1993; UNESCO, 2005; Buchmann & Brakewood, 2000; Colclough et al., 2000; Tansel, 2002; Huisman & Smits, 2009; Smits, 2007; Ersado, 2005). Parents who have reached a certain educational level might want their children to achieve at least that level (Breen & Goldthorpe, 1997). For educational enrollment of girls, education of the mother might be especially important (Fuller et al., 1995; Emerson & Portela Souza, 2007). Mothers who have completed a certain level of education have experienced the value of education and know that it is within the reach of girls to complete that level. Although, as Gitter and Barham (2008) concluded, there need not be a linear relationship.

### ***Risk behaviours: Premarital sex and school drop out***

In a study conducted in four countries in Sub-Sahara Africa, namely, Ghana, Uganda, Burkina Faso and Malawi, findings indicated that young women in three of these countries, Ghana, Malawi and Uganda who have had premarital sex are significantly more likely than those who have not had premarital sex to leave school (Biddlecom et al, 2008). Among 18-19-olds who had been attending school at age 12 and had completed primary school, half or more reported that they had had sex (49-74%), except in Ghana where 31% of males and 44% of females had done so. In Ghana and Uganda, higher proportions of females than males in this age group had had premarital sex, whereas the reverse was true in Malawi. The proportion of respondents in this group who had had premarital sex while in school ranged from 16% in Ghana to 54% in Malawi among males, and from 18% in Ghana to 37% in Uganda among females; only in Malawi was the proportion among males significantly different from that among females (Melhardo (2009). A recent analysis of trends in marriage and the timing of sexual initiation in sub-Saharan Africa found that, while the age at first sex has either remained the same or has risen in conjunction with a rise in the age at marriage, there has been an increase in the proportion of first sex that occurs before marriage. Further details on the context—in particular, whether premarital sex is more likely than in the past to occur among adolescent students—have not yet been investigated (Lloyd & Mensch, 2006). Thus from the above, it is a fact that for most adolescents having sex outside of marriage is a reality and this is likely to induce early school exit.

### ***Ghanaian Adolescent sexual and reproductive experience***

Data on first sexual intercourse for both males and females are available in the 1993 and 1998 Ghana Demographic and Health Surveys (GDHS). Prior to that, nationally representative survey data on first sexual intercourse had been compiled for females only. Among 15–19-year-olds in the 1998 GDHS, 38% of females and 19% of males had ever had sexual intercourse. The figure for females in the 1993 GDHS was 59%, indicating a substantial decline among adolescent females in the proportion who have had sex within that age group. Among adolescent men, 33% had ever had sex in 1993 and 19% had ever had sex in 1998, indicating a substantial decline during the 1990s.

Nationally, among women aged 20–24, the median age at first intercourse has increased from 16.9 to 17.4 between 1993 and 1998; for males aged 20–24, the median age increased from 18.4 to 19.5. Thus, on average, females begin sexual intercourse about two years earlier than males. Several small scale or subnational studies also examine the timing of sexual initiation. Because these studies use a number of different measures and cover particular areas or groups, their findings cannot be directly compared with those of national surveys. In a study of 1,415 males and females aged 10–19 in Ketu South, Upper Denkyira and Offinso electoral constituencies, Sallar observed that the median age of first sexual intercourse for males and females aged 10–19 in these three areas in Ghana was 16.41. By age 15, 47% of the males and 38% of the females had ever had sex. Among adolescents aged 12–20 studied in Kumasi and Accra, it was observed that the median age at first sexual experience was 16 for both boys and girls in the sample. In a study of 1,782 unmarried young people aged 15–19 in the Greater

Accra and Eastern Regions, Agyei and others found that 67% of males and 78% of females had ever had sex, and the mean age at sexual debut among those who had ever had sexual intercourse was 15.5 for males and 16.2 for females. In a 1991 study of 400 single females aged 18–25 in Cape Coast, 86% of the respondents had ever had sexual intercourse, and 42% of these had had sex before age 16.44. Similar studies carried out in 2000 in Accra, Kumasi and Agomanya have reported median ages of 18, 17 and 16 among single female youth and 17 among males in Accra and Kumasi. In a survey of 1,038 students (471 females and 567 males) aged 13–18 in nine senior secondary schools, 50% of the adolescents considered chastity as an ideal to attain and thought that it was realistically attainable. Yet 42% of the male students and 15% of the female students surveyed had had sexual intercourse. The average age at first sexual experience was 15 (the youngest was 8, a case of defilement; the oldest was 23). Half of the sexually experienced students had their first sexual experience between ages 14 and 17, and 25% had their first sexual experience at age 13 or younger. Reasons given for engaging in sexual intercourse included pressure from peers, deception by partners, experimentation, and satisfaction of sexual desires. Both national and local area studies show that better educated youth begin sexual activity at a later age than those who are less educated. Although some inconsistencies are found with respect to gender and urban-rural differences; this is probably due to particularities of specific areas and groups (Awusabo-Asare K, et al (2004).

### ***Household Structure***

Besides socio-economic characteristics of the parents, the demographic structure of the household also might influence educational attainment. The number of siblings for instance has been found to be negatively correlated to educational enrollment both in the USA (Blake, 1989) and in some developing countries (e.g. Pong, 1997 for Malaysia; Knodel et al., 1990 for Thailand). This is probably due to the fact that people with more children can devote less time and resources to each individual child (Downey, 1995). However, this is not the case in all situations. For example, in rural Botswana, the number of 7-14 year old children in the household was found to be positively related to enrollment (Chernichovski, 1985). The reason for this may be that with more children, there are also more helping hands at home, which increases the chance that at least some children stay in school. The same effect might be found in extended families, where relatives, especially grandparents, may help out in the household or contribute to the household income, making it easier for children to stay in school.

### **Other socio-economic, cultural, political factors**

The term ‘school exit’ as used in this paper is meant to be synonymous with abdicating a school programme without completing one’s course of studies. There are so many factors for leaving school without completion. The major factors include, but certainly not limited to the following: socio-cultural, economic, geographical, health, and political/administrative factors.

### ***Socio-cultural factors***

In terms of socio-cultural factors, a major deterrent to girl child education is a near universal fundamental cultural bias in favour of the boy child. This is especially so in the study area in which this research was conducted. The Ashantis and the Bonos of Ghana traditionally follow the matrilineal system of inheritance- tracing their lineage from the woman figure. Traditionally, marriage for the girl-child has been more much paramount among these two tribal groups in Ghana than her formal education as compared to that of the boy. The widespread operation of patriarchal systems of social organization, of customary early marriage, of the incidence of early pregnancy (in and out of marriage), of heavier domestic and subsistence duties of females (especially in rural areas), a generally lower regard for the value of female life, all combine to adversely affect the participation of girls and women in formal education. To this list may be added problems of seclusion and security in some areas.

The influence of this factor can only be overcome by a profound change of attitude on the part of influential males. This may not happen without grass-root and community based approaches initiated by the very community and supported by significant others like government, the religious bodies and NGOs.

### ***Economic Factors***

Together with the fundamental socio-cultural bias in favor of males, the economic factor, especially in terms of abject poverty and hunger, is probably the most influential in adversely affecting female participation in education, especially in rural areas in Sub-Saharan Africa. In such harsh economic circumstances, both direct and hidden costs to a family of sending daughters to school are perceived by parents to be prohibitive in terms of the provision of books, uniforms as well as the loss of vital help at home and on the land. In most cases, the contribution of females is unpaid and they may have little or no experience of the handling of money, which further reduces their status and power, but increases their vulnerability. Because of the patriarchal predominance, investment in a girl's schooling is wasteful since it benefits the family into which a girl marries rather than her own. In the more privileged classes, investment in the education of females may be an advantage in 'marrying well'. In such classes, the more educated the girl is, the more the bridal prize (*tiri nsa*) (that the old man – the father, among the Akans of Ghana) attracts. Otherwise, the girl child is at times viewed albeit unconsciously a 'commodity' with certain economic value.

### ***Geographical Factor***

This relates directly to difficulties of physical access, which adversely affect girls more than boys. Patterns of transportation and migration affect educational provision of girl child. Girl child, being the weaker sex, often fall victim of rough terrain and long distances to and from school. In the end, the 'endangered girl' child may not be in position to make it through in school. The final result is either dropping out of school or poor academic performance that cannot guarantee a bright tomorrow.

### ***Health Factor***

In general, the effect of poverty and malnutrition on the health of school age children falls harder on girls than boys. Boys may get preferential feeding, while girls (who have a heavier domestic work load) are more likely to be undernourished. Even if they get to school, this adversely affects their performance and therefore retention rate.

### ***Political/administrative Factor***

Although policies exist in most cases for such developments as universal primary education, equal educational opportunities in terms of gender and the eradication of gender bias from texts and other materials, the political will to carry these through seems to be weak in the face of severe economic constraint in most of African Governments. The role of NGOs in gender mainstreaming has markedly been better. However, there is much more that needs to be done (<http://kenpro.hubpages.com/hub/Factors-Affecting-Girl-Child-Education-in-Sub-Saharan-Africa>).

### **Theoretical background**

According to Becker's (1964) Human Capital Theory, wages differ because jobs differ and workers differ. Each worker brings a unique set of skills and abilities to the labor force (human capital) which determine their compensation. Education, training, and medical treatment have been shown to contribute to the accumulation of human capital. Thus this theory assumes that, investments in human capital increase the chances for economic success. Therefore labor force across the world needs to recognize the necessity for increased human capital in order to compete in the labor market. Clearly, the Human Capital Theory emphasizes the importance of investment in human capital, such as a high school education, for success as completing high school and therefore aims to determine the human capital investments that determine this "economic success." Since high school occurs during our youth, the majority of the human capital investments that would lead us to this achievement must be transferred from our parents to us. Therefore, our family socioeconomic class greatly impacts our human capital accumulation. Families from a lower socioeconomic class not only obtain less resources but also less human capital to pass onto their children, thereby causing these children to automatically be disadvantaged. Therefore, this paper hypothesizes that lower familial investment in children's human capital would increase the chances of these students dropping out of high school (<http://www.iwu.edu/economics/PPE14/Ingrum.pdf>).

According to human capital theory, participation in education is an investment in human capital made because of the expected returns later in life (Becker, 1964; Mincer, 1958). In the case of young children in developing countries, parents are expected to have a large say in this decision. They are expected to weigh off the future benefits of schooling against the immediate costs. Those benefits can be for the children themselves, but also for the parents, because in the absence of a pension system, children may provide the old-age security. The costs of schooling include direct costs of books, school fees, uniforms and travel costs as well as opportunity costs of children not being able to help at home, in the household or in the family business, or to earn money in the labor market (Basu, 1999; World Bank, 2002; Admassie, 2003). The direct and opportunity costs of going to school and the value attached to education by parents and children are influenced by many factors, both at the level of the household and the context in which the household is situated. Parents' schooling level and work situation might influence the degree to which schooling is valued in the household. The number and gender of the children in the household might influence the distribution of scarce resources available for education among them. The quantity and quality of the local educational facilities determine whether it is possible and makes sense to go to school.

### **Hypotheses**

Essentially, following from the literature and the theory, this paper aims to research (3) three hypotheses:

- 1) Lower SES increases the probability of dropping out of high school in the case of the girl-child;
- 2) Learning disabilities increase the probability of dropping out of high school;
- 3) The interaction between lower SES and learning disabilities further increases the probability of dropping out of high school.

### **Research Methodology**

#### **3.1 Population**

In this research, the population constituted the following categories of people: a) adolescent girls in selected rural and urban areas in the Ashanti and Brong Ahafo regions who for some reasons were not able to complete either the Junior High School or the Senior High; b) Teachers and Heads of both Junior High School and Senior High Schools in the two administrative regions in the study area; c) parents who have wards and children who were not able to complete schools.

#### **3.2 Sample and Design**

This study used the purposive sampling design from 440 samples: 120 girls between the ages of 13-18 years who dropped out of school were selected from the Ashanti region and the remaining 120 between the same age ranges who left school prior to completing their respective programmes were also selected from the Brong Ahafo regions. There was another purposive sampling of 100 teachers from the two regions (30 of them were heads and the remaining 70 were classroom teachers and 100 parents of girls who dropped out of school in the two regions. Out of the 240 girls who dropped out of school, 60 percent were randomly selected from both rural areas in the two administrative regions, while the remaining 40 percent were selected from the Kumasi city and the Sunyani municipality. Thus all respondents were from the Kumasi city and its rural areas in the Ashanti Region as well as from the Sunyani municipality and its rural areas of Ghana. Kumasi was chosen for this study, even though the researcher is teaching at a University that is about one and a half hours drive from Kumasi, because Kumasi is geographically a nodal city: people from North and South, East and West of Ghana converge on Kumasi. This allowed for easy sampling drawing. When permissions were obtained, the 440 respondents were given a survey pack which contained a consent form and a questionnaire. The researcher personally delivered and collected the self-administered questionnaires from the respondents; thus gaining good cooperation and number of completed questionnaires returned.

#### **3.2 Procedure and Measures**

The questionnaires were divided into different sections. These sections sought to measure the following study variables: a) *personal data of respondents and adolescents*. Girls, teachers and parents were asked to report information on their age, ethnicity, education, birth order, marital status, monthly income, occupation and number of children.; b) *Socio-economic status of parents*; c) *Social Factors: Parental and adolescents perception of social norms (gender beliefs, rewards of penalty by wider society, social disorganization, that is substance use and violence.*



Here the focus was on finding out parental and adolescents attributes of what constitutes social norms in terms of their scale of preference. There was a total of eight items in the measure using Likert's 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree); d) *Family factors and parental practices*: Under this, the questionnaire focused on the following: the family structure, the educational level of parents, the family dynamics and attachments, family attributes and values, communication of family with daughter, family disruption (single parent or two family). c) *On Parental practices*, two measures were used: parenting involvement scale, and a subscale from High School and Family relationships: Questionnaire for Teachers, Parents, and Students (Epstein, Connors, & Salinas, 1993) and Parental Monitoring Scale (Paulson, Marchant, & Rothilsberg, 1998) were combined to generate a total score for parental educational practices. The Parental Involvement Scale measures parents' involvement in adolescents' school activities through communicating, volunteering, helping learning at home, and making decisions. This instrument contains 26 items, rated on a 4 point Likert scale. The Parenting Monitoring Scale measures parental knowledge of their children's whereabouts and activities in and out of school. There are five items in this 5 point Likert scale, spanning from 1 (strongly disagree) to 5 (strongly agree). d) level of built-in measure of i) economic, ii) emotional and iii) social security to adolescents between parents from extended family system and parents from two-parents households on one hand and between two-parents household and single-parents. There are five items in this 5 point Likert scale, spanning from 1 (strongly disagree) to 5 (strongly agree). d) *Older peers and close friends*: the measures were on the following: peers involvement, drug abuse, peers involvement, deviant behaviour, sex and peers permissive attitude. There are five items in this 5 point Likert scale, spanning from 1 (strongly disagree) to 5 (strongly agree).

## Results

### Demographic profile

There were a total of four hundred and forty respondents (440) in this survey. Out of this, two hundred and twenty (240) constituting (54.5%) of the overall respondents were girls, aged between 13-18 years who dropped out of school before completing either the Junior High School (JHS) or the Senior High School. Out of this 240, 140 that is (58.34%) were aged between 16 and 17 years, 50 (20.83%) were 18 years and the other 50 (20.83%) were 19 years. Two hundred and ten (210) (87.5%) were from the rural areas, and 30 (12.5%) were from the urban areas. One hundred (100) teachers from the two administrative regions that were studied were interviewed. Out of this thirty (30) consisting (30%) were heads of schools who had been teaching between 20- 25 years and possessed either the Masters Degree or the Bachelors. The remaining seventy (70) teachers (70%), forty (40) that is (57%) possessed the Bachelors Degree in Education, 15 (21.5%) had Ordinary Bachelors Degree with the Postgraduate Diploma in Education and 15 (21.5%) were unprofessional. One hundred (100) parents of girls who dropped out of school were also interviewed.

Respondents	Age/ Years	Percentage (%)
Girls dropped out of school	13-18 Years	54.5%
	16-17 years	58.34%
	18 years	20.83%
	19 years	20.83%
Dropped out girls from rural areas		87.5%
Dropped out girls from urban areas		12.5%
Heads of schools teaching	20-25 years	30%
Teachers		70%
B.Ed		57%
Bachelors with the PGDE		21.5 %
Unprofessional		21.5%

Table 1: source field work (2013)

### Socio-economic determinants of parents of school dropouts

#### Income level of parents

One hundred (100) parents of school dropouts from the two administrative regions were interviewed for this study.

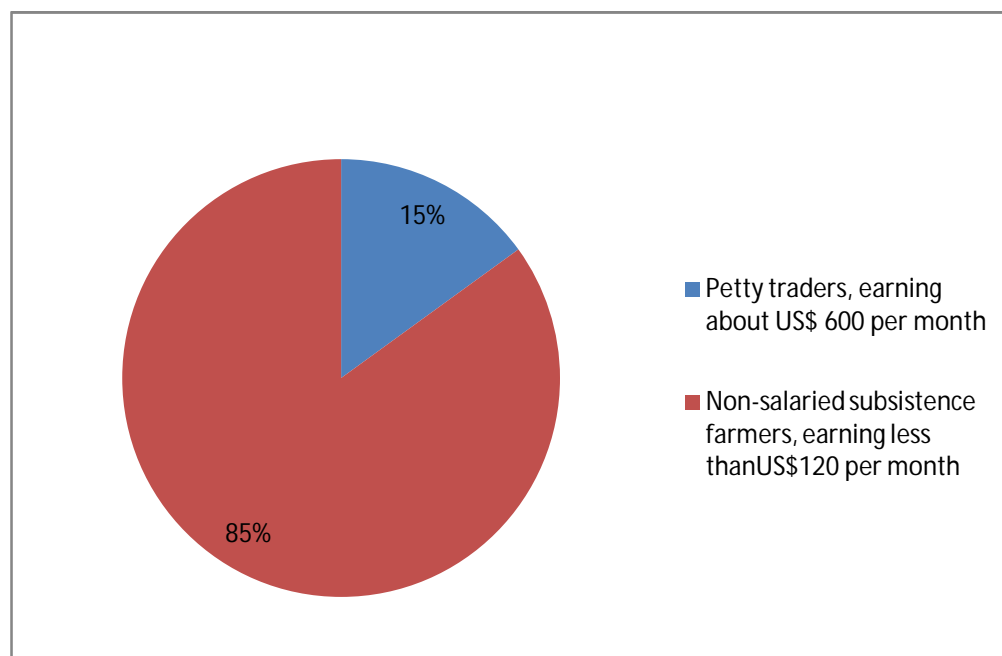


Fifty of them constituting (50%) were selected from the Brong Ahafo regions and the other half from the Ashanti region. In each of the two regions, thirty five (35), that is 70% of the parents were selected from six rural areas and the remaining 30% (30) were interviewed from the Kumasi Metropolis and the Sunyani Municipality. Eighty-five (85%) out of the one hundred parents in both regions were mostly non-salaried subsistence farmers who earned less than 5 Ghana cedis a day (that is about US\$4, totalling to about 120 US\$ per month), while the remaining fifteen (15%) were petty traders, earning an average of about 30 Ghana cedis a day (that is 20 US\$ a day, that is about US\$ 600 a month).

### Major occupations of parents

The major occupation of most of the parents selected for the interview were mostly subsistence crop farmers in the rural areas who produced just enough for themselves and their families in such crops as cassava, plantain, yams and other vegetables. These constituted the eighty-five percent (85%). The other fifteen percent (15%) were petty traders who sell all kinds of commodities in the village markets, from food crops to hardware, sandals etc. These earned about 10% more than those in the subsistence village crop farming.

**Socio-economic determinants of parents of dropped out girls**



**Figure 1: source field work (2013)**

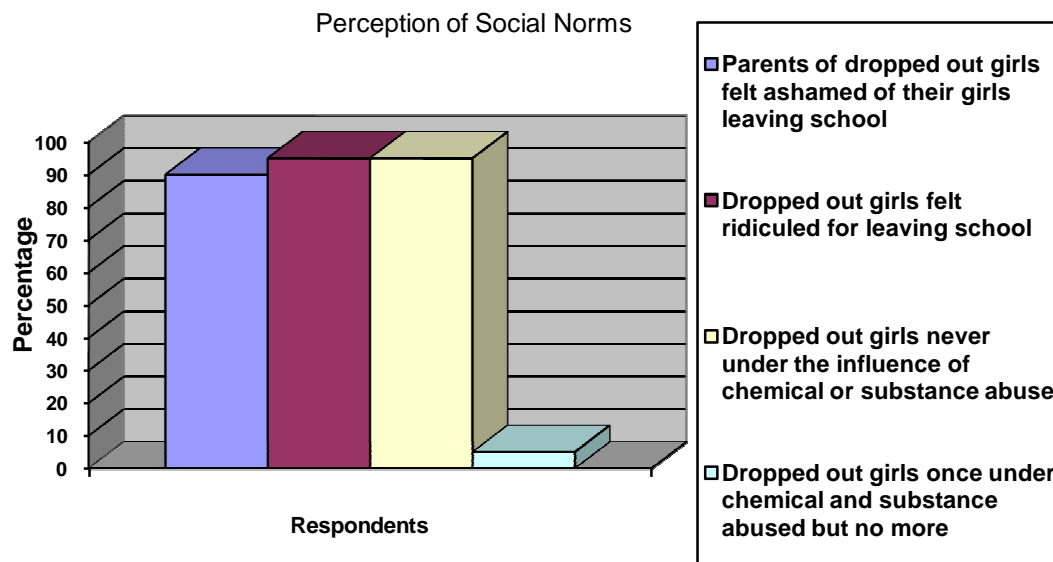
### *Social factors: Parental and adolescents perception of social norms*

Under this section, the survey examined three core areas, namely, a) gender beliefs, b) perception of rewards of penalty by wider society and c) parental view of social disorganization with specific reference to chemical and substance use and violence. With respect to the first core area under this segment, 65 (constituting 65%) out of the one hundred parents interviewed for this study were of the view that the girl-child is of more value, compared to the boy-child. The reason behind this view was that the girl as compared with the boy is likely to get married to someone and hence can alleviate the family from poverty. This in the view of some of these parents was the reason to have the boy-child educated since the latter might not be as fortunate as the latter. In their perception, the boy who has neither formal education nor apprenticeship is less likely to be supported in the future than it is for the girl. This type of reasoning places onus on them to have their boy-child educated rather than the girl, especially if they have to make opportunity costs in their meagre income. Those other fifteen parents within the range of US\$ 600 a month had different view. For these the formal education of their girl-child was as important as it is for the boy. However, if they had to make a choice due to constrained income, the option will go to the boy child. Almost all parents interviewed, that is 90% out of the one hundred were in no doubt at all that rewards of penalty by wider society in the case of their girls leaving school prematurely especially as a result of premarital sex and unplanned pregnancies were enough to make them feel ashamed.

This in their considered opinion is linked to the Ghanaian cultural mindset, especially the Akan cultural taboo associated especially with girls who got pregnant before going through the *bragoro* (an initiation rite for all girls before they become sexually active. Failure to go through this rite before pregnancy was and is still a taboo among the Ashanti's and Bonos, where this study was conducted). Thus majority of parents sampled for this study is inhibited by this cultural taboo. The perception of the girls who were school dropouts was not different from that of their parents. Two hundred and twenty eight (228) out of the 240 of them constituting 95% felt the ridicule alone was enough to make them feel ashamed because of the stigma attached to school dropout.

Regarding the issue of social disorganization with specific reference to substance and chemical abuse, 228 (95%) of the girls respondents said that they had never been under the influence of substance or chemical abuse since they left school. Twelve (5%) admitted having been for sometime under substance and chemical abuse due to peer pressure, but were no longer using these. This was corroborated by 95 (95%) of the parents who took part of this survey.

**Perception of social norms**



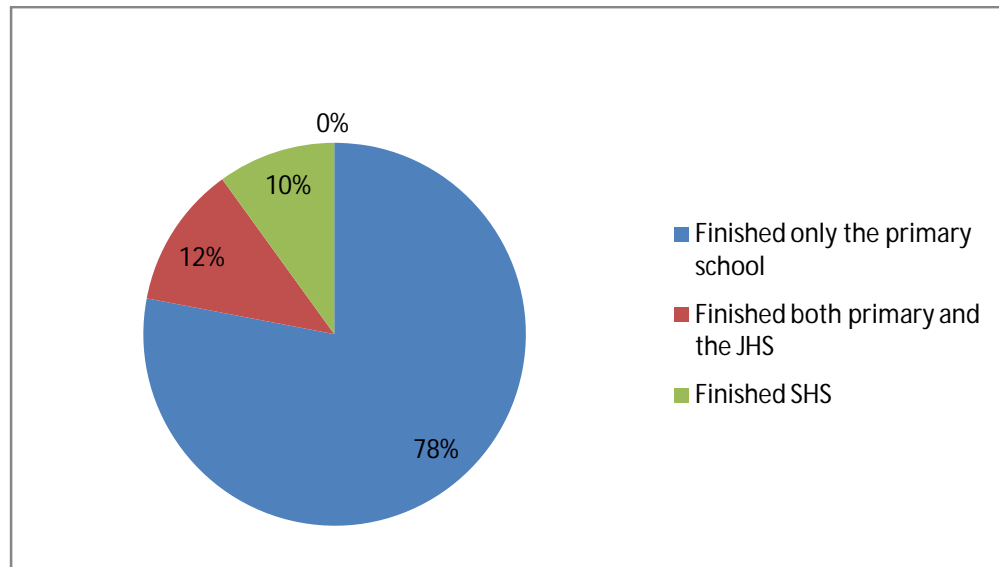
**Figure 2: source field work (2013)**

**Family Factors and the educational level of parents**

This part of the study sought to measure the synergy between two variables and their possible impact on school drop of the girl child in Ghanaian rural set up. The two variables examined were: a) family factors and b) the educational level of parents. Family factors as used in this research means the family structure in terms of the number of children in a given family. Thus the more the number of children, the more the likelihood of economic constraints faced by parents. Such condition de facto can precipitate the girl-child being forced by economic circumstances to engage in such risk behaviours as pre-marital sex which can lead to unplanned pregnancies and hence early exit from school. Whereas, in situations where the number of children is few, such risk behaviours are less likely to be predictive. The other variable also sought to measure the educational background of parents as to whether not parents themselves finished basic school, Senior High school, etc.

Out of the one hundred parents interviewed (75) 75% had more than five dependent children and all them did not earned more than thanUS\$200 a month. Out of the remaining 25 (25%), 15 of them had between 3 and 4 dependent children and the remaining ten (10) parents had 2 dependent children earning about US\$600 a month. In terms of educational background, (78) 78% finished only the primary and did proceed to the Junior High, (12) 12 % finished both the primary and the Junior High School, while 10 (10%) finished Senior High. None of the parents interviewed went beyond secondary level of education.

**Family Factors and the Educational Level of Parents**



**Figure 3: source field work (2013)**

***Family dynamics and attachments (single parenting, two-family, divorced/separated and widowed)***

In terms of family dynamics and attachments, this part of the study sought to examine whether the family from which the dropped out girls come from are single parenting, two-family households, divorced/separated or widowed. The research also measured the following variables in this part of the survey: a) the level of parental involvement in their adolescents school activities, b) helping children in their learning at home, and c) as to whether or not parents helped children in making decisions.

Out of the 240 school dropped out girls, who took part in this study, one hundred and ten (110) constituting 45.8% were from single-parenting, ninety (90) that is (37.5%) came from two-family households and remaining 40 (16.7%), were either divorced/separated or widowed. Ninety (90%) out of the one hundred parents reported they hardly got the time to be involved their children’s school activities such as attending Parents Teacher Association (PTA) meeting to monitor the academic progress of their children mainly because they did not have the time, or felt incompetent or did not really see this as a priority. Ten (10%) indicated that they did get involved often. As regards helping their children at home with their home work, the same number of parents (90%) out the aggregate of 100 failed to help their children for the same reasons given for their non-involvement in school work. In terms of decision-making, 85 (85%) out of the hundred parents interviewed agreed that they very often help their children in making decisions, while the remaining 15% did not do this often enough. Ninety-eight (98%) out of the hundred teachers who took part of the study indicated that parents of dropped out girls from their schools hardly got interested in the school activity of their children.

**Family dynamics and attachments**

<b>Respondents</b>	<b>Percentage (%)</b>
Single parenting	45.8%
Two-family households	37.5%
Divorced/separated/widowed	16.7%
Had no time to be involved in their children school work	90%
Got involved in their children school work	10%
Helping children’s decision –making	85%
Not helping children’s decision-making	15%

**Table 2: source field work (2013)**

***Older peers and close friends***

This segment of the survey examined three variables: a) peer’s involvement in decision-making; b) drug abuse; c) sex and permissive attitude.

Eighty five (85%) of teachers were of the view even though drug abuse was not a major problem which precipitated dropped out girls leaving school, the same number of teachers nevertheless felt that sex and permissive attitude were for most of the time the result of peer pressure. This was especially the case where parents for socio-economic reasons could not adequately shoulder their financial obligations to their girls. In situations where the girl-child is catered for and has parental supports for her academic work both at home and in school, it is very rare for such a girl to exit school prior to finishing her programme. One hundred and eighty (180) comprising 75% of the sampled dropped out girls indicated that drug abuse was not the number one problem for leaving school. Two hundred and sixteen (216) of the girls that is about 90% hinted that peer's involvement in decision-making as well as sex and permissive attitude were the main cause for leaving school.

### Older peers and close friends

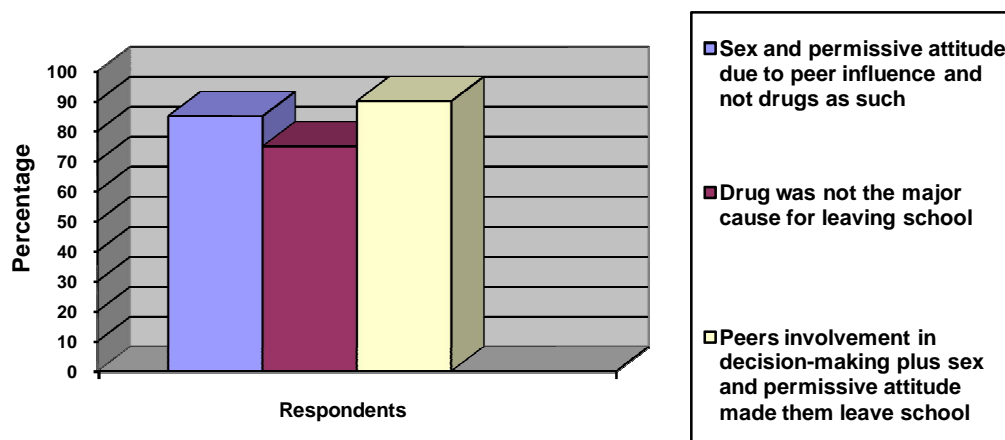


Figure 4: source field work (2013)

### Discussion

The findings of this study suggest couple of issues which appear to be the core determinants of high school dropout, precipitating the mismatch between boys and the girl-child education in rural Ghana as they climb the academic ladder. They are as follows: a) there is a general cultural bias in rural Ghana against the girl-child education; b) there appears to be a synergy between low socio-economic status on one hand and high school dropout of the girl-child; c) dropout girls whose parents have low educational background are more likely to leave school earlier without completing their studies than it is with students whose parents have had some level of higher education attainment; d) parents who place low premium on education are more likely to pass on this tendency to their children than parents who put high value on education- thereby increasing the chances of the children of the former dropping out of school; e) low ability students who do not do well in school are more likely to come from parents who fail to monitor the learning progression of their children in school as well as to help them with their school work at home- therefore there is the higher risks of these children not doing well in school and consequently losing interest and finally dropping out of school; f) children whose background appears to be incompatible with school work and school climate, especially when these children are also needed by parents to economically contribute to family income due to low socio-economic status are more at risks at dropping out of school.

The findings from the study appear to give some answers to the main research questions that guided this study. Besides they also match our core hypotheses in the sense that they give some plausibility to these hypothesis, namely, that lower social economic status increases the probability of dropping out of school in the case of the girl child; learning disabilities increase the probability of dropping out of school and that there is interaction between lower socio-economic status and learning disabilities and this further increases the probability of dropping out of school. The findings corroborate the study by Coleman and DeLeire (2003) and many others that students' decision as to whether or not they will complete high school is contingent on locus of control. In situations where students have external locus of control in that for example, financially they are dependent, such students tend to place lower value on high school as compared to those who have internal locus of control.

That is there is a correlation between locus of control and the human capital investment decision. The more economically-independent one is, the more the likelihood of the decision to invest in human capital. As per the data of this study, those parents who earned less than US\$200 a monthly were three times less likely than those who received about US\$ 600 to be interested in the education of their girl-child. Most research studies whether in the developed or the developing nations do indicate that for well-off families, the costs associated with education are not likely to be obstacles because the choice of having to work to contribute to family additional income instead of dropping out of school will not be an issue at all (Coleman et al 1966; Jencks et al 1972; Shavit & Blossfeld, 1993; Tansel, 2002; Glewwe & Jacoby, 2004; Mingat, 2007; Evangelista de Carvalho Filho, 2008).

The educational level of parents is an index of their labour market positions. The two variables as per the findings of this survey are not unconnected. For example, out of the one hundred (100) parents sampled for this study, 75 (75%) had more than five (5) dependent children- and these did not earn more than US\$200 a month. Greater number of dropped out girls in this study came from such parents. Out of the remaining 25 (25%), 10 parents who had two (2) children and received US\$600 had received some Senior High School education. Thus, the higher the level of education of parents, the better the income they in receive. These parents saw the value and the need for education of their children whether the boy child or the girl child. This finding in this study again appears to reinforce other empirical studies that support the evidence that children from better educated parents are likely to go to school and stay in school rather than exiting before their programmes of study (Shavit & Blossfeld, 1993; UNESCO, 2005; Buchmann & Brakewood, 2000; Colclough et al., 2000; Tansel, 2002; Huisman & Smits, 2009; Smits, 2007; Ersado, 2005). Again this underscores the point made by Fuller et al (1995), Emerson and Portela Souza (2007) that for the enrolment of the girl-child, the education of the mother is very crucial. Gitter and Barham (2008) in their study also make similar conclusion that most mothers who have attained a certain level of education and have experienced the value of education are more likely to know that it is within the reach of girls to complete that level.

Family dynamics and attachments are critical factors as to whether or not adolescents generally but especially the girl-child will stay in school or leave. The potential reduction of parental involvement in single-parent homes may negatively affect adolescents' developmental outcomes (Spera, 2005). Nevertheless, the negative impact of single parenting is inconsequential when quality care is provided by the caregivers. Evidence from the study by Zarinah, Rozumah, Krauss and Rumaya (2006) indicates that unfavourable living contexts such as single-parent family, lack of bedroom and having family members with chronic diseases is less detrimental if parent possess responsive parenting behaviour. Thus to a large extent, (though not always the case) single parenting is less likely to enhance learning achievement as compared to two-parent households. This claim is corroborated by the findings of this study. Out of the total of 240 school dropped out girls, one hundred and ten (110) that is 45.8% were from single-parenting, 90 (37.5%) from two family households and the rest were from either divorced or separated or widowed. Ninety (90) percent of parents did not have the time and the competence to monitor the learning progress of their children, 10% did monitor at times. Ninety eight (98%) of teachers interviewed attested that children from parental backgrounds that provided the needed social support to their children's academic achievement are less likely that their peers from less supporting backgrounds to drop out of school. In addition, strong parental support as well as attachments is more predictive factor for children taking decisions that are not influenced by peers.

Over-all findings of most research in Sub-Sahara Africa suggest that females are more vulnerable than males to leaving school once they have matured sexually and had premarital sex. So in Sub-Sahara Africa, adolescents who have had premarital sex show higher dropout rate (Biddlecom A et al., 2008). In this study by Biddlecom et al (2008), the findings were that young women in Ghana, Malawi and Uganda who have had premarital sex are significantly likely to drop out of school more than those who have not had premarital sex. The odd ratio was estimated to be 1.9-3.2. In Burkina Faso premarital sex was not found to be linked to school dropout among women. In Uganda however, school dropout was found to be correlated rather with boys who have had premarital sex. This finding is corroborated in our survey. One hundred and eighty (180) comprising (75%) of the school dropout girls interviewed felt that drug abuse was not so much an issue.

However, as regards sex and permissive attitudes, two hundred and sixteen (216) constituting 90% of the sample was of the view that this was more the result peers influencing attitudes.

## Conclusion

There is a wide international recognition that there is no investment in human capital more effective for achieving development than educating girls. Paradoxically, notwithstanding this recognition, reaching gender equity in school enrolment between boys and girls as they climb the academic ladder in most rural areas of Sub-Saharan Africa is still a major challenge. The purpose of this study besides contributing to the plethora of literature on the girl-child education is also meant to assist countries of Sub-Saharan Africa to continue to develop a much more effective and enhanced girls education strategies by providing a comprehensive review of what we know and do not know about the subject. One of the core findings of this study is that getting girls into schools, keeping them interested and ensuring that they complete their programmes requires addressing the neglect of many factors outside of the education system, such as socio-economic determinants. These determine whether or not a girl can attend school. The education of the girl-child is inextricably linked with other aspects of human development. To make it a priority implies paying attention to the socio-economic status of women, their empowerment, early childhood care, eradication of poverty especially among rural women in Sub-Saharan Africa.

The findings of this study suggest that the fundamental cause of the gender mismatch in the academic progression in rural Ghana is primarily socio-economic. Parental resources tend to constrain children's educational performance. The more the external locus of control especially in terms of resources, the likelihood it is for children to leave school to work in order to contribute to family resources. In addition, educational resources such as books, uniforms, etc may compel the girl-child from a financially deprived family to engage in risks behaviours such as premarital sex and consequent unplanned pregnancy. On the other hand, in situations where the locus of control in terms of resources is internal, parents are more likely to take care of their children and hence the less the risky behaviours.

As an aspect of socio-economic factor, the family size, the social support as well as attachments are critical. Poverty and low socio-economic status have the tendency to compel parents to work for greater part of the time to bring in the needed resources. This deprives children of the needed parental support and attachments in their learning especially in single parenting homes. All this implies that there is a synergy between the following:

- a) Lower socio-economic status is highly predictive of the dropping out of high school especially in the case of the girl-child;
- b) Socio-economic constraints increase the probability of learning difficulties;
- c) The interaction between the lower socio-economic status and learning difficulty tend to exacerbate the probability of dropping out of school especially in a cultural mindset in which the education of the boy-child is perceived to be more important than the girl.

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