

Full Length Research Paper

Psychosocial factors that affect girls' academic performance in secondary schools in Kenyenyia, Kisii county, Kenya

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Female education is recognized as a critical pathway in promoting social, political and economic development. In Kenya, in spite of the progress made in narrowing the gender gap in education, still some parts of the country record low performance in girls' education from secondary to tertiary colleges and universities and this not only deprives them of opportunities but also sustains the gender gap in leadership and professional fields. The aim of this study, was to investigate psychosocial factors that affect the girls' academic performance in secondary schools in Kenyenyia sub-county in Kenya. Kenyenyia was chosen for the study because in the KCSE result of 2009, 2010 and 2011 no girl from the area managed to score an 'A' or 'A-'. In this study the social learning theory of Albert Bandura was used. The objectives of the study were: finding out the teachers' attitude towards girls education and finding out the girls' academic self-concept. The study employed descriptive survey research design. The target population of the respondents was 1200 girls: 2400 boys and 24 class teachers. 12 secondary schools were randomly selected from which a sample of 120 girls, 84 boys and 12 class teachers were chosen. The study had a total population of 216 respondents. The data were collected using two sets of questionnaires; the class teachers and the students'. The instruments were piloted in two schools which were not included in the study. Cronbach coefficient alpha method was used to estimate the reliability of research instruments. Data were analyzed using Statistical Package for Social Sciences (SPSS). Descriptive statistics were used to analyze quantitative and qualitative data. The research found out that girls have a negative attitude towards school, most teachers have a positive attitude towards girls' education though others feel that girls need more support than boys, girls' illicit relationship with teachers negatively affect girls' performance and (51.7%) of the girls portrayed a negative academic self – concept. The research findings of the study can assist the government, the policy makers, the ministry of education and teachers in creating programmes that can motivate girls 'to work hard. The study can also inform the teachers on the need to change their attitude towards girls' educational needs and find ways of engaging them to do better. The secondary schools administration and the government should instigate relevant measures to help curb illicit relationships of teachers with the girls.

Key words: Academic performance, attitude, academic achievement, psychosocial factors, academic self-concept.

INTRODUCTION

Education is valued because it contributes to national development through provision of an appropriate human

resource that helps to spur productivity and eliminate poverty, disease and ignorance (Republic of Kenya,

2005). It is true that educating girls is the first step in eradicating poverty in the third world countries. (http://www.unicef.org/girls_education 2005), in educating women the community as a whole benefits. The United Nations report (2002) indicates that, educating women would raise the quality of life in many countries. It would increase the awareness in those countries. According to Nichols and Utesch (1998) from Bangladesh, girls who are educated in their early childhood are also more likely to educate their children, thus ending the spiral of uneducated girls and reversing it to create a cycle of educated girls. He says that "education is the gateway to equal access to information, opportunities, self-determination and political and social empowerment."

Quality education is key to providing the right human resources for social and economic production sectors facilitating wealth creation and improving living standards Abdullah (2011). A report from the department of international Development 1998 revealed that countries consider the provision of education important for their overall socio-economic development and consequently allocate an annual basic substantial amount of resources to it. Post primary education for a girl has important individual benefits in terms of her options and resources over her lifetime. These benefits extend beyond the girl in affecting her family and the society as a whole, the benefits to society include enhanced economic development, education for the next generation, healthier young girls and families and fewer maternal deaths (UNICEF, 2004). Kelly (1998) reveals that when parents are confronted with constraints of limited opportunities or resources for schooling, they generally favour the education of male children. This in the end may lead to low girls academic performance in National examinations, which will impact negatively on the society because lack of education for girls has a negative influence on child mortality, economic growth and fertility rate (Kitaev, 1999). Ayodo (2010) observes that the quest for the provision of quality education continues to be a matter of leading concern to both consumers and providers of the education service in Kenya and other developing countries. This is supported by the UNESCO (1994) report that reveals that concerns for quality education has dominated the education debate from the early eighties and has remained a central issue in the twenty first century. Socio-cultural attitudes, practices and school-related factors which include irrelevant school curriculum and materials, inadequately trained teachers, unfriendly approaches in training and lack of role models are among the factors that have been obstacles to girl's academic achievement (Mbilinyi, 2003). Education is classified as a

basic need, which is a basic necessity for a decent life alongside adequate nutrition, shelter, clothing and good health. One of the stated aims of education is to provide the learning environment in which all students can achieve their potential. Despite that goal, girls continue to perform poorly in national examinations. Therefore, there is need to examine the effect of psychosocial factors on the girls' academic performance in secondary education.

The 1998 UNESCO conference on higher education in the 21st century emphasized the need for women to have access to higher education. This is also in line with the third Millennium Development goal, which is to promote Gender Equality and Empower women (UNDP, 2003). The World Declaration on Education for all posited that the most urgent priority was to ensure access to and improve the quality of education for girls and women and to remove every obstacle that hampers their active participation. It was declared that all gender stereotypes in education should be eliminated. However, an analysis of KCSE results indicates that at both national and provincial levels the averages of examination scores for boys were higher than those of girls over several years between 1990 and 1996. The same research showed that boys attained higher average mean scores at national level than did girls throughout the seven-year period. The same trend contributes as reflected by the 2013 KCSE results in Table 1.

Data from the table indicate that the gap between boys and girls was larger especially in the grades A to C+. For instance, the percentage of girls who obtained grades A to B in 2013 was 32, 38, 37 and 38% respectively. A similar picture is reflected when the results for 2012 are considered.

Research has identified several factors that may explain the general poor performance of girls. These include negative attitude of the girls towards schooling, social cultural factors such as belief that girls cannot do well or should not be taken to school; household factors such as poverty and household chores; parents' views, low self-esteem; stereotypical attitudes and subtle sexual harassment of girls (Abagi and Sheila, 1995; Kasente, 1995; Kelly, 1998; Kitaev, 1999; Mbilinyi, 2003; Okojie et al., 1996; Wasanga, 1997). Among school related factors identified included irrelevant school curriculum and materials, inadequate facilities, inadequately trained teachers, unfriendly approaches in training and lack of role models.

Research indicates that teachers' attitudes are connected to their actions and teacher actions are related to students' achievement (Marzano, 2007). Teachers' attitude associated with professionalism, curriculum and

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Table 1. 2013 KCSE grade summary.

Gender	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E
MALE	1855	6267	10776	15315	18216	21836	26492	32385	37703	39672	28542	3913
FEMALE	867	3492	6237	9341	12648	16515	22079	28378	34100	38505	27251	3129
ALL	2722	9759	17013	24656	30864	38351	48571	60763	71803	78177	55793	7042

Source, KNEC 2013.

students impacts teachers' behaviours related to these areas. The attitudes teachers hold are associated with what they teach, how they teach and how they perceive students. Consequently, this impacts their teaching behaviours. According to Munck (2007), "the outcome of attitude is the tendency to react favourably or unfavourably to situations, persons or events.

Therefore, teachers' attitudes are connected with instructional behaviours which influence students' achievement. Gourneau (2005) stated that, "effective attitudes and actions employed by teachers ultimately can make a positive difference on the lives of their students.

Other research studies support the link between what individuals think and how they behave (Oskamp and Schultz, 2005; Pjares, 2002; Wasiesko, 2002). Vartuli (2005) stated that instructional behaviours are influenced by what teachers think and believe. Attitudes related to instructional practice ultimately influence what or what does not occur in the teacher's classroom. Teachers' attitudes that include a commitment to students' learning and personal learning are connected to students' achievement (Strong, 2007; Wilkerson and Lang, 2007). Teachers' behaviours are expressions of teachers' beliefs and attitudes. In his meta-analysis, Marzon (2007) explained, "a teacher's beliefs about students' chances of success in school, influence the teacher's actions with students, which in turn influences student's achievement. If the teacher believes students can succeed, s/he tends to behave in ways that help them succeed". Teacher core attitudes that include the idea that all students can learn increase the probability of learning for all students. These attitudes create a positive environment for students' achievement (Wasiesko, 2007).

From the students' perspective, a positive attitude and attitudes of high expectations were reported as an important characteristic for effective teachers (Thompson et al., 2004). In their view, "it is important to catch students doing a thing right rather than catching them doing something wrong. Effective teachers develop ways to remind themselves to do this and the impact on students can last many years." In an earlier study in Korea by Koutsoulis (2003) students listed the effective teacher as one with a friendly, understanding attitude. Other teachers' attitudes listed by students as important include: fairness, forgiveness, respect, compassion and

student-centeredness (Koutsoulis et al., 2003). Teachers' attitudes are reflected in their daily practice through instructional strategies and practices and interactions with colleagues, parents and students.

Another study by Omar (2010) found that lack of sensitivity on the part of teachers to the needs of girls' in schools deprives them of a congenial learning environment. The overall classroom environment that reinforces gender stereotypes also lowers the importance of girls' education and self esteem compared to that of boys (Kurien, 2010). With regard to teachers' attitude toward girls, the findings indicated that teachers' attitude toward boys are more positive than it is toward girls. This finding strongly agrees with that of Shephardson and Pizzini (1992), that teachers have gender biased perception of girls' scientific ability. The review above indicates that teachers' attitude affects girls' academic performance. Lewin et al. (2011) found that the performance gap between boys and girls in primary schools in Kenya was 4.4% for questions that required mainly reasoning and 14.1% for questions that required observation or experiment. A visit to some schools during science lessons indicated that girls tended to be passive onlookers while boys took active roles. Therefore teachers' attitudes have the capacity to influence the academic growth of students (Marzano, 2007; Wasiesko, 2007) and is a cognitive process that is revealed through teacher's words, behaviours, actions, choices and motivation.

The low performance of girls reported nationally is reflected in the wider Nyanza Province and especially in Kenyan sub county as indicated in Table 2.

The percentage of girls who have attained grade A plain over the years was 6.3% compared to 93.7 for boys. When the result is narrowed down into districts and comparing performance in the districts, the larger Gucha District where Kenya is inclusive in Nyanza Province performed poorly since it was ranked 19 out of 21 districts in the province in the KCSE results of 2009. Table 3 shows girls' performance as compared to the boys in Gucha District; where Kenya is inclusive.

Research done in Kenyan sub county has focused on why very few girls are enrolled in school and the little that has been done on factors affecting performance has concentrated on physical facilities in the school which are not girl friendly and yet this also affects the boys as well

Table 2. Analysis of the K.C.S.E. Result of the Year 2003 – 2009.

Year	Candidates with grade 'A' in KCSE	Boys	Girls
2003	44	42	2
2004	36	35	1
2005	65	63	2
2006	104	96	8
2007	122	116	6
2008	93	84	9
2009	110	102	8
Total	574	538	36

(Nyanza Province Education Brief, 2010).

Table 3. Girls' Performance As Compared To the Boys in Gucha District.

	Female	Male
Percentage (%) total entry	38.9	61.1
Number of B plain and above	37	29.4
% of B plain and above	1.5	7.6
% of C+ and above	6.6	20.9
% of D+ and below	75.6	58.0

(Nyanza province education brief 2010).

(NEWI, 2010; D.E.O, 2010). Thus not much research has been done on the role the teachers may be playing in the poor performance of students particularly their attitudes and behaviours towards the students and also the girls' academic self-concept.

It is therefore important to find out the nature of teachers' attitudes and behaviours towards female students and also the girls' academic self-concept, whether the above cited factors may be influencing the performance of girls in Kenyenyia Sub County, Gusii County.

Rationale for the study

The participation of girls in education in Kenya, like in other countries in Sub-Saharan Africa, is influenced by a complex interplay between out-of school and in-school factors. It is imperative to note two issues. First, these factors are common in every community/district in Kenya although their intensity varies from region to region. Second, psychosocial based obstacles to girls' education have not been an area of much focus in research and debates in Kenya. It is the researcher's belief that even if the community obstacles to education are tackled, girls will not participate in education effectively because of the psychosocial factors of which this study intends to focus

on.

The government's policy on education has been geared to enhancing access, equity and quality at all levels of education (Kenya Vision, 2030). In spite of the fact that the enrollment has improved for both the boys and girls in the years [2009 to 2011], girls' performance in Nyanza region is lower as compared to boys and girls from other counties.

The underlying factors of the poor performance among girls in Nyanza indicate that the major barriers to girls education can be summed as poverty, early pregnancy, gender favouritism (by parents), early marriages, truancy, sexual harassment, lack of role models, absent parents (mostly fathers), unfriendly facilities, lack of female teacher counselors, lack of self esteem just to mention a few (NEWI, 2010; D.E.O, 2010). The factors that have been tackled to explain the poor performance in girls also affect the boys as well. This shows that not much has been done on how psychosocial factors affect girls' academic performance, especially the teacher's attitude and the girls' academic-concept in secondary education. That is what this study intends to find out in Kenyenyia Sub County, Gusii County.

Objectives of the study

1. To find out the teachers' attitude towards girls education in secondary schools in Kenyenyia sub-county.
2. To find out whether the girls' academic self-concept affects their academic performance in secondary schools in Kenyenyia sub-county.

The research questions were generated from these objectives.

Definition of terms

Attitude –refers to individual's prevailing tendency to respond favourably or unfavourably to an object (person, school or event) [Davidson, 1993]. Within this context of study attitude is deemed to be teacher's intended efforts or attempts to promote girls' attitude towards secondary education.

Education–refers to developmental process provided by a school or other institutions for acquisition of knowledge, skills and attitude.

Academic performance–grades representing the sample of a student's achievement with respect to attained academic skills or knowledge e.g. KCSE.

Student- refers to the girls in this study.

Academic achievement- refers to a successful accomplishment or performance in an examination, like a girl

having attained a grade that would allow her to join a public university in which the minimum university grade is a C+.

Academic self-concept - refers to individuals' knowledge and perceptions about themselves in academic achievements, and convictions that they can successfully perform a given academic tasks at designated levels.

THEORETICAL FRAMEWORK

Modeling theory is also referred to as Observational Learning or Social Learning View that guided the study. It was developed by Bandura (1977). Social learning theory (SLT) looks at learning that occurs within a social context. It emphasizes the importance of observing and modeling behaviors, attitudes, and emotional reactions of others. Thus it focuses on learning by observation and modeling. The theory originally evolved from behaviorism but now includes many of the ideas that cognitivists also hold; as a result it is sometimes called social cognitive learning. Social learning theory talks about how both environmental and cognitive factors interact to influence human learning and behavior. It focuses on the learning that occurs within a social context. It considers that people learn from one another, including such concepts as observational learning, imitation, and modeling (Abbott, 2007). Bandura (1977), who is considered one of the leading proponents of SLT, believed that performance could be influenced by the type of instruction delivered and by the interactions that occur between the students and the teachers. The interactions between the person and environment can have a reciprocal effect by which the environment influences behavior, and behaviors influence the environment (Pastorino and Doyle-Portillo, 2013).

A person's behavior can affect the way in which they experience the environment through selective attention. Human behavior also influences the environment, such as when an aggressive person creates a hostile environment. Thus, behavior determines which of the many potential environmental influences come into play and what forms they will take. In turn, the environment partly determines which forms of one's behavior are developed and activated (Bandura, 1977; 1989). "Reciprocal determinism suggests that individuals function as a result of a dynamic and reciprocal interaction among their behavior, environment, and personal characteristics. Personal characteristics include one's thoughts, emotions, expectations, beliefs, goals, and so forth. Behavior is conceptualized as a person's skills and actions. Lastly, environment is considered to be a person's social and physical surroundings. All three systems interact with each other; therefore, a change in one will influence the others as well. Reciprocal determinism indicates that

people do have a say in their future, because of reciprocal interactions" (Encyclopedia of School Psychology by Steven, 2005). A fundamental idea of reciprocal determinism is the belief that people have the ability to influence their destiny, while at the same time recognizing that people are not free agents of their own will. Humans are neither driven by inner forces nor automatically shaped and controlled by the environment.

Thus, humans function as contributors to their own motivation, behavior, and development within a network of reciprocally interacting influences. "Albert Bandura speculates that personality is the product of three interacting forces: *environment, behavior, and thoughts*. Bandura called the constant interaction among these three factors reciprocal determinism. We choose to place ourselves in certain environments, and these environments then influence our behavior and the way we think. However, the way we think - our attributions, goals, values, and perceptions - may guide which environments we choose to be in as well as the behavior we exhibit. Our behavior, in turn, may change the environment as well as the way we think. All three variables influence each other in a reciprocal manner" (Pastorino and Doyle-Portillo, 2013).

Verification of Bandura's modeling theory by various researchers has shown that modeling or exposure to good role models determines a good behaviour in an individual through observation and imitation for the individual learns vicariously and avoids punishment. Cunia (2007) stipulates that students learn simply by observing other people (models); modeling provides an alternative to shaping for teaching new behaviors. Instead of using shaping, which is operant conditioning, modeling can provide a faster, more efficient means for teaching new behavior. To promote effective modeling a teacher must make sure that the four essential conditions exist; attention, retention, motor reproduction, and motivation. Teachers and parents must model appropriate behaviors and take care that they do not model inappropriate ones; therefore teachers should expose students to a variety of other models. They should also help students to believe that they are capable of accomplishing school tasks and also help them to set realistic expectations for their academic accomplishments.

For instance, when teachers' attitude to girls' education is positive and girls are motivated to work hard, they would emulate the good behaviour and in turn get interested in their studies to achieve high academic results to be like that character whom she identifies with like her mentor or role model (Bandura, 1977 pg 128-129). Self reinforcement plays an important role in determining human behaviour; therefore, if the girl is self motivated she will have positive feelings about going to school and in turn she will work hard to achieve the best. Self rewarding behaviour tends to be maintained more effectively than if it has been externally reinforced,

Table 4. Distribution of respondents based on gender.

Gender	Frequency	(%)
Male	7	58.3
Female	5	41.7
Total	12	100

including self reinforcement processes in learning theory.

In this regard the teacher ought to have a good rapport with the girls so that she can develop the inner drive to work hard and if the teacher reinforces good behaviour and rewards good performance in form of prizes then this could make the girls to work hard in order to get the rewards and in return there will be improved academic performance. This increases the explanatory power of reinforcement principles as applied to human functioning (Bandura, 1977 pg 129-144). Therefore the socialization process eventually influences girls' performance and their interest in educational activities, hence the need for this research.

MATERIALS AND METHODS

Study design

The study applied descriptive survey research design, where frequency distributions and percentages were used. This design sought to ascertain respondent's perspectives or experiences on a specified subject in a predetermined structured manner. Babbie (1977) notes that, descriptive studies of the survey nature can be used not only for the purpose of description but also for the determination of relationships of variables at the time of the study. Mugenda and Mugenda (1999) assert that this type of research design attempts to describe such things as possible behaviour between values and characteristics. It was therefore the appropriate design for use to determine the reasons and causes of poor academic performance of the girls in secondary education in the study locale.

Setting

The research was located in Kenya sub-county which is found in Kisii county, Nyanza region, Kenya.

The target population for this study was 1200 girls and 2400 boys from forms 2 and 3 in 12 public secondary schools, and 24 class teachers in the selected schools

Participants

Demographic characteristics of class teachers

Demographic analysis was done on the basis of the respondents' gender, professional qualification, type of school, teaching experience. The number of teachers who participated in the study was 12. Table 4 shows the categorization of the teachers according to their gender. The table was generated using frequency

Table 5. Highest qualification of class teachers.

Qualification	Frequency	(%)
Bachelors	9	75%
Masters	3	25%
Total	12	100

Table 6. Type of school of the class teachers.

Type of school	Frequency	(%)
Girls boarding	2	16.7
Mixed day & boarding	4	33.3
Mixed day	6	50
Total	12	100

Table 7. Experience of respondents in teaching

Experience	Frequency	(%)
1-5	6	50
6-10	3	25
11-15	3	25
	12	100

distributions and percentages.

From the results in Table 4, the male teachers were more in percentage and this is a concern because girls are likely to confide in a female teacher than a male teacher. Also the female teachers having experience may better handle the needs of the girls. According to Kasanye (1995), distribution of teachers by gender has an important impact on girls' attitude towards school and education. Presence of female teachers provides girls with role model who also guides and counsels them especially on issues related to puberty. Kasanye (1995) argues that girls shy off from approaching male teachers and when the male teachers advise them on sexual matters, this is sometimes seen as sexual provocation.

The teachers in the study had different qualifications and this is shown in Table 5.

From the results in Table 5, (9) 75% of the respondents had a bachelors degree; therefore most class teachers seem to be having a good level of education. This is a likely indication that they have interacted with colleagues from other regions and may have through shared experience acquired knowledge on how to deal with particular situations affecting girls in various localities.

The teachers in the study were teaching in different categories of schools as shown in Table 6.

From the results in Table 6, (2) 16.7% of the respondents were teaching in girls boarding while 50% were teaching in mixed day schools. This allowed for diverse experience among the class teachers. Some have dealt with girls alone and some with mixed gender; hence each is well acquainted with their peculiar scenarios.

The teachers in the study had different years of teaching experience in the various schools as shown in Table 7.

Table 8. Distribution of respondents by age.

Gender	Age bracket	frequency	Percentage (%)
Male	16-20	78	38.2
	21 and above	6	2.94
Female	16-20	119	58.3
	21 and above	1	0.49
Total		204	100

Table 9. Distribution of girls by type of school.

Type of school	Frequency	Percentage (%)
Girls boarding	40	33.33
Mixed day & boarding	30	25
Mixed day	50	41.67
Total	120	100

Table 10. Distribution of girls based on class.

Class	F	Age (%)
Form two	64	53.33
Form three	56	46.67
Total	120	100

The results in Table 7 indicate that most of the teachers have experience. This is indicative of a respondent group that has variety; hence better responses. Those with longer experience may have interacted more with students hence can give a better picture of the existing scenario.

Demographic characteristics of students

Demographic analysis was done on the basis of the respondents' age, class, and type of school. The number of respondents who participated in the study was 204. Table 8 indicates the student's age in the sampled group.

The results in Table 8 reveal the general trend of ages of secondary school students in the Kenyan context. Majority of the students complete their secondary education aged below 20 years. The students captured are therefore within the age bracket that fits for high school students.

The students were also categorized according to the type of school they attended as shown in Table 9.

From the results in Table 9, respondents were captured from different types of schools and this was important in this research because the feelings, opinions and attitudes of girls under different environments would reveal their attitudes. It was important to collect data from girls who interact with members of the opposite sex on a daily basis in class and outside class within and without the confines of the school, since this could give a clear picture of the experiences girls undergo through and how this affects their performance.

Table 11. Distribution of boys by type of school.

Type of school	F	%
Mixed day & boarding	56	66.67
Mixed day	28	33.33
Total	84	100

Table 12. Distribution of boys based on class.

Class	F	%
Form two	30	35.71
Form three	54	64.29
Total	84	100

The students were further categorized in relation to the class they were in as shown in Table 10.

From the results in Table 10, (64) 53.33% of the respondents were form twos. In most schools, the form twos and threes are more influential when it comes to social issues in school. The form ones are usually absorbed in transition from primary school life to secondary school life and struggling to fit in the new environment while the form four are more concerned with passing their final exams and making it to tertiary education. The research therefore captured form twos and threes to get better response.

The boys were categorized also in terms of the type of school they were in as shown in Table 11.

From the results in Table 11, (56), 66.67% were in mixed day. Capturing respondents from the different types of schools was important in this research because the feelings, opinions and attitudes of boys under different environments would reveal their attitudes. It was important to collect data from boys who interact with members of the opposite sex on a daily basis in class and outside class within and without the confines of the school. Several studies carried out show that the attitude of boys towards school changed at the onset of adolescence.

The boys were further categorized in terms of the class they were in during the study as shown in Table 12.

Instrumentation Validity and reliability of the research instrument

According to Orodho (2003), validity is the degree to which results obtained from analysis of data actually represent the phenomenon under study. The instruments of this study were therefore validated through application of content validity, which was determined by experts' judgement. Gay (1992) identified that content validity is a matter of judgement by the researcher and professionals and has no specific formula for determination. Instrument validity in this study therefore was established by experts' advice through discussions with the research supervisors. All the changes were then incorporated in the revision of the research instrument.

To ensure reliability of the developed instruments, the questionnaires were pre-tested by being administered to 10 respondents from two schools which were not included in the study. The selection of the 10 respondents was done using purposive random sampling procedure. The pre-test was later subjected to

Table 13. Teachers' attitude towards girls education in secondary schools.

Girls' attitude towards learning		Percentage (%)			
		SA	A	UN	SD
1	Girls are less capable academically than boys	8.3			83.3
2	Girls need more support than boys to do well in school	50	50		
3	Girls are more interested in their physical outlook than in their academic work	8.3	66.7	8.3	16.7
4	Girls can only do well in arts subjects		25		75
5	Teachers molest girls and this negatively affect girls' performance	16.7	25	16.7	41.7
6	Girls' illicit relationship with teachers negatively affect girls' performance	50	41.7	8.3	
7	Girls can never get A's like boys				100
8	Its not possible for girls in this school to do well in KCSE.		8.3		91.7
9	I rarely bother asking girls questions in class as I know they will not know the answer.				100
10	I usually concentrate on helping boys in class rather than waste my time on girls		8.3		91.7

KEY:SA-Strongly Agree, A-Agree, UN-Undecided, SD-StronglyDisagree

the test-retest analysis technique and gained a Cronbach Alpha Reliability Coefficient of 0.82 (Cronbach, 1951). The high coefficient indicated that a very small score variation occurred from testing session 1 to testing session 2. The coefficient also indicated that the same result would be obtained with a repeated measure of accuracy of the same concept; hence the instruments were reliable. They were also scored and the comparison between the two answers obtained was made. The Pearson's product moment coefficient for the test-retest was employed to compute the correlation coefficient in order to establish the extent to which the contents of the questionnaires are consistent in eliciting the same responses every time the instrument is administered. The coefficient obtained was 0.8; indicating that the scores obtained by each respondent on the first and second tests were quite close. The instruments were of high reliability (Orodho, 1998). The instruments were duly modified to meet performance standards before being used for data collection.

Data collection procedures

A self-administered questionnaire was used for data collection. The researcher constructed a questionnaire and adapted another questionnaire on self-concept from Gachukia, (1994), and another one from Omar (2010), which had an attitude scale on attitudes of girls to secondary education but with some modifications on the scale to suit the study. There were 2 sets of questionnaires: class teachers' and students'. The questionnaires are in the annex.

Variables and statistical analysis

Independent variables were attitude and academic self- concept, and Dependent variables on the other hand was academic performance. Tables were used to present the frequencies and percentages and Statistical analysis was done using SPSS version 17.0 computer software.

Ethical considerations

The researcher sought a letter of approval from graduate school and a research permit from the National Council of Science and Technology in order to get assistance and co-operation from the schools administration and education offices. The researcher

assured the respondents of utmost confidentiality of their responses and that the findings were in no way going to be used against them.

RESULTS AND DISCUSSION

The teachers' attitude towards girls education in secondary schools

Objective one sought to establish the teachers' attitude towards girls' education in secondary schools in Kenya sub-county. After data collection, the data were entered into the computer for analysis. The data largely came from individual respondents and were analyzed quantitatively and qualitatively. The Statistical Package for Social Sciences (SPSS) version 17.0 computer programme was used to analyze the data. The analysis was guided by the objectives of the study. Qualitative data were put and categorized according to the themes and where it was applicable they were presented in form of frequency tables. Quantitative data were analyzed using descriptive statistics such as percentages .

Teachers' attitudes towards the girls are presented in Table 13.

The findings from the table indicate that most teachers have a positive attitude towards girls' secondary education, though quite a number (100%) feel that girls need more support than boys; girls concentrate more with their physical appearance (75%). This adversely affects their performance and that girls' illicit relationship with teachers negatively affect girls' performance (91.7%). These findings agree with Omar (2010), who found out that teacher perceptions and their attitude towards students are equally important variables in students' adjustment. He further said that lack of sensitivity on the part of teachers to the needs of girls in schools deprives them of a congenial learning environment (Omar, 2010).

Table 14. Girls' academic self-concept and their academic performance in secondary schools.

Girls' academic self-concept.		Percentage (%)				
		CF	MF	UD	MT	CT
1.	I know I can perform as well as other students	16.7	8.3	18.3	34.2	22.5
2.	I have trouble expressing myself in class	25.8	20	16.7	21.7	14.2
3.	I am an important person to my classmates	4.2	2.5	9.2	30	54.2
4.	No matter what I do, I know I can never get an A or B	11.7	6.7	8.3	21.7	51.7
5.	I feel uncomfortable carrying out class activities in a group	48.3	24.2	6.7	13.3	7.5
6.	I feel uneasy to ask for clarification in class when I have not understood.	30.8	20	9.2	22.5	17.5

Key: CF (completely false) MF (mostly false), UN (undecided), MT (mostly true) and CT (completely true).

Table 15. Boys' self-concept and their academic performance in secondary schools

Boys' self-concept and academic performance		Percentage (%)				
		CF	MF	UD	MT	CT
1.	I know I can perform as well as other students	3.6	9.5	35.7	50	1.2
2.	I have trouble expressing myself in class	6.0	2.4	2.4	27.4	27.4
3.	I am an important person to my classmates	3.6	58.3	21.4	1.2	4.8
4.	No matter what I do, I know I can never get an A or B	59.5	13.1	10.7	8.3	6.0
5.	I feel uncomfortable carrying out class activities in a group	7.1	1.2	2.4	14.3	73.8
6.	I feel uneasy to ask for clarification in class when I have not understood.	72.6	6.0	3.6	8.3	7.1

Key: CF (completely false) MF (mostly false), UN (undecided), MT (mostly true) and CT (completely true).

The overall classroom environment that reinforces gender stereotypes also lowers the importance of girls' education and self esteem compared to that of boys (Kurien, 2010). With regard to teachers' attitude toward girls, the findings indicated that teachers' attitude toward boys are more positive than it is toward girls (Omar, 2010). This agrees with this finding, since 100% of the teachers indicate that girls need more support than boys to do well in school. This finding also strongly agrees with that of Shephardson and Pizzini (1992), that teachers have gender biased perception of girls' scientific ability (African Journal of Educational Studies in Mathematics and Sciences Vol. 4, 2006).

Academic self concept and girls' academic performance

Objective two sought to establish whether the girls' academic self-concept affect their academic performance in secondary schools in kenya sub-county. Table 14 shows the responses the girls had towards their academic self concept on how it affects their academic performance in secondary schools in Kenya.

From the results in Table 14, 51.7% of the girls said that it is completely true that no matter what they do, they know they can never get an A or B. 48.3% said that its

completely false that they feel uncomfortable carrying out class activities in a group, Table 15 shows the responses the boys had towards their academic self concept on how it affects their academic performance in secondary schools in Kenya.

From the results in Table 3, 59.5% of the boys said that it is completely false that no matter what they do, they know they can never get an A or B, 73.8% said that it is completely true that they feel uncomfortable carrying out class activities in a group. From the analysis of Tables 14 and 15, it shows that 51.7% of the girls portrayed a negative academic self - concept since they said that it is completely true that no matter what they do, they know they can never get an A or B; whereas 59.5% of the boys portrayed a positive academic self-concept since they said that it is completely false that no matter what they do, they know they can never get an A or B. A study carried out by Ormrod, says that self-concept has at least three sub components; academic, social and physical. Students are usually aware that they have both strengths and weaknesses, that they do some things well and other things poorly.

Students may have different views about themselves in these three areas. Firstly, they have universal beliefs regarding their academic capability and performance. Secondly, they have general thoughts about their potential to narrate with other people, especially with their peers.

Thirdly, they have universal beliefs about their ability to connect in corporeal activities such as sports and outdoor games (Ormrod, 2000).

Therefore, the findings of this research indicate that girls have a negative academic self-concept unlike the boys who portray a positive academic self-concept and according to Purkey as cited by Berg (1990), underscores the need for parents and educators to understand and appreciate the importance of self-concept in education in the following statement: "An overwhelming body of contemporary research points instantly to the relationship between self-concept and academic achievement and suggests strongly that self-concept can no longer be ignored by parents and teachers". Hence, this depicts that a lot needs to be done to help girls to develop a positive academic concept in order to help them to improve their academic performance.

CONCLUSIONS AND RECOMMENDATIONS

The findings indicated that most teachers have a positive attitude towards girls' secondary education though majority felt that girls need more support than boys and that girls concentrate more with their physical appearance. And this adversely affects their performance and also girls' illicit relationship with teachers negatively affects girls' performance. Therefore, there is need for the teachers to encourage the girls to focus more on their studies than their appearances and also discourage illicit relationships of teachers with girls.

The study also showed that 51.7% of the girls portrayed a negative academic self-concept since they said that it is completely true that no matter what they do, they know they can never get an A or B; whereas 59.5% of the boys portrayed a positive academic self-concept since they said that it is completely false that no matter what they do, they know they can never get an A or B. Therefore a lot needs to be done to help girls to develop a positive academic concept in order to help them to improve their academic performance.

RECOMMENDATIONS

Following the findings of this research, the following recommendations were made in order to improve girls' academic performance in secondary schools in Kenyena sub-county:

1. The male teachers and boys should be trained to be sensitive to the needs of girls and maintain professional relationships with all students.
2. The government should ensure that the perpetrators found to have illicit relationship with girls should be curbed through appropriate punitive measures to discourage the

behaviour.

3. The ministry of education, the government and other relevant stakeholders should work hand in hand to organise seminars and workshops to sensitize teachers on matters concerning the girls in order to help the girls improve on their academic self-concept.

4. The school administration should organize through the department of guidance and counseling to bring experts from various fields of higher learning more especially female to encourage the girls to work hard and take their academic work seriously.

5. Girls should be counseled in order to raise their self-esteem which in turn will help them to develop a positive academic self-concept.

Suggestions for further research

Based on the findings of this research, the following suggestions are recommended for further research:

1. Factors influencing the boys' attitude towards secondary education in Kenyena sub-county since the boys in the county do not compete favourably with boys from other counties
2. Factors influencing girls' attitude towards secondary education in other areas in Kisii county; the fact that from the literature review not much has been done on the same in those counties and girls' performance in those areas is equally not good.

Conflict of Interests

The authors have not declared any conflict of interests.

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REFERENCES

- Abagi O, Wamahu S (1995). Household based factors and school participation of girls: Lessons from the existing surveys. Nairobi, Academy of Science Publishers.

- Abdullah S (2011). Standard Newspaper. 12th Feb. 2011.p.16.
- Ayodo H (2010). Impact of Family Socio-Economic Status on Girl Students' Academic Achievement in Secondary School in Kenya: A Case Study of Kisumu East District (unpublished M.E.D Thesis). Kabarak University.
- Babbie ER(1977). Survey research methods: Washington Publishing Co. California.
- Bandura A (1989). Self-regulation of motivation and action through internal standards and goal systems. In: L. Pervin (Ed.), Goal concepts in personality and social psychology (pp. 19–85). Hillsdale, NJ: Erlbaum.
- Bandura A (1977). Social Learning Theory. Englewood Cliffs, NJ: Prentice-Hall.
- Berg AS (1990). The Relationship between Self-Concept, Family Factors and Academic Achievement. (Unpublished M.Ed Thesis), University of Witwatersrand, Johannesburg.
- Cronbach LJ (1951). Coefficient alpha in the internal structure of tests. *Psychometrika*, 16:297-334. Retrieved from http://psych.colorado.edu/~carey/Courses/PSYC5112/Readings/alpha_Cronbach.pdf
- Davidson J (1993). School Attainment and Gender Attitudes of Kenyan and Malawian parent towards educating girls international journal of Development 13 9140. District Education Officers Report 2010, Nyanza Province Education Brief.
- Gachukia E (1994). Gender, education, and training: A case for affirmative action (Working papers series). https://openlibrary.org/search?author_key=OL380939A&first_publish_year=1994
- Gourneau B (2005). Five attitudes of effective teachers: Implications for teacher training. *Essays Educ.* 13:1-8.
- Kasente DH (1995). Processes influencing gender differences in access to post secondary institutions. Nairobi, Academy of Science Publishers.
- Kelly R (1998). Economic and Demographic Behaviour of Household in Kenya. Nairobi: Macmillan Publishers.
- Kitaev J (1999). Private Education in Sub-Saharan Africa, Reexamination of Concepts and Theories in Relation to the Development and Finance, Paris: UNESCO.
- Koech J (2005). factors affecting girls' performance in mathematics in KCSE in public secondary schools in Buret District, (unpublished M.E.D Thesis). Kenyatta University, Rift Valley Province, Kenya.
- Koutsoulis M (2003). The characteristics of the effective teacher in Cyprus public high school: The students' perspective. Arlington, VA: American Association of School Administrators. (ERIC Eric Document Reproduction Service No. 478 761.
- Lewin KM, Wasanga PM, Wanderi E, Somerset A (2011). Participation and performance in education in Sub-Saharan Africa with special reference to Kenya: Improving policy and practice. CREATE, University of Sussex.
- Marzano RJ (2007). Designing a comprehensive approach to classroom assessment. In: D. Reeves (Ed.), Ahead of the curve: The power of assessment to transform teaching and learning. Bloomington, IN: Solution Tree pp.103–126.
- Mbilinyi DS (2003). Equity in learning: The gender dimension. Daresalaam Tanzania.
- Mugenda OM, Mugenda AG (1999). Research methods qualitative and qualitative approaches, African Centre for Technology Studies Nairobi.
- Nichols JD, Utesch WE (1998). An alternative learning program: Effects on student motivation and self-esteem. *J. Educ. Res.* 91(5):272-279.
- Nyanza Education Women's Initiative (NEWI) preliminary findings June 2010 Nyanza province education brief 2010 (PEB).
- Okojie CE, Chiegwe O, Okpokunu E (1996). Gender gap in access to education in Nigeria. Nairobi, Academy of Science Publishers.
- Omar AE (2010). Factors influencing girl's attitude towards secondary education in Wajir district. Kenya. (Unpublished, Med). Thesis University Of Nairobi.
- Ormrod JE (2000). Educational Psychology: Developing Learners. Prentice-Hall, Inc, New Jersey, USA. pp.80-83.
- Orodho JA (2003) Essentials of Education and Social Sciences. Research Methods .Nairobi Masola Rights.
- Oskamp S, Schultz PW (2005). Attitudes and Opinions. Mahwah, NJ: Lawrence Erlbaum Associates.
- Pajares F (2002). Overview of social cognitive theory and self-efficacy. Retrieved December 2012 from <http://www.uky.edu/~eushe2/Pajares/eff.html>
- Pastorino EE, Doyle-Portillo SM (2013). What Is Psychology?: Essentials. Belmont, CA: Wadsworth, Cengage Learning.
- Republic of Kenya (2005). Sessional Paper Number One of 2005: Policy Framework for Educational Training and Research, Nairobi: Governmen Printer Website (http://www.unicef.org/girls_education_2005)
- Shephardson DP, Pizzini EL (1992). Gender bias in female elementary teachers' perceptions of the scientific ability of students. *Sci. Educ.* 76:147–153.
- Steven WL (2005). Encyclopedia of School Psychology. SAGE Publications, Inc. 688p. DOI:<http://dx.doi.org/10.4135/9781412952491>
- Thompson S, Greer J, Greer B (2004). Highly Qualified for Successful Teaching: Characteristics Every Teacher Should Possess. *Essays Educ.* 10. Retrieved from <http://www.usca.edu/essays/vol102004/thompson.pdf>
- UNESCO(1994). Access of Girl and Women Education in rural Areas; Comparative study. New York: World Bank.
- United Nations Development Programmes (UNDP) (2003). Human Development Report 2003. New York: Oxford University Press.
- UNICEF (2004). State of the World Children, Paris. UNESCO.
- United Nations report (2002). Women Education. New York: World Bank.
- Wasanga CM (1997). The attitude towards science among primary and secondary school students in Kenya. Nairobi, Academy of Science Publishers.
- Wasiczko MM (2007). The perceptual approach to teacher dispositions: The effective teacher as an effective person. In: M. E. Diez & J. Raths (Eds.), Dispositions in teacher education. Charlotte, NC: Information Age. pp.53-89.

Appendix 3: Class Teacher’s Questionnaire: For the investigation of psychosocial factors that affect girls’ academic performance in secondary education in Kenya Sub-county.

Please answer all the questions in the questionnaire as honestly as you can. Kindly tick() or write the correct responses in the spaces provided.

Part A: Background Information

1. Please indicate your gender
(a) Male [] (b) Female []
2. Which is your age bracket?
(a) 25 years and below[] (b) 26-34[] (c) 36-40[] (d) 45 and above []
3. Indicate your teaching experience in years
(a) 0-5[] (b) 6-10[] (c) 11-15 [] (d) 16 and above []
4. What is your professional qualification?
(a) Masters [] (b) 1st Degree [] (c) Diploma [](d) others (specify) []
5. In which category is your school?
(a) Girls boarding [] (b) Boys boarding [](c) Mixed boarding []
(d) Mixed day [] (e) Mixed day and boarding []

Section B

6. (a) In general how would you describe girls attitudes towards secondary school education? Positive[]
negative []
- b) In what ways do you think the girls attitudes stated above affect their academic performance?.....
- 10 .What do you think the following could do to motivate the girls to develop a positive attitude towards secondary education in your school?
(a) Parents.....
(b) Teachers.....
(c) School.....
(d) Government.....
(e) Religious groups.....
11. In your own opinion what are psychosocial based factors that influence girls attitude towards secondary education
12. What strategies have you employed to develop girls’ interest in high academic achievement?
.....
13. How are you tackling some of the negative factors that influence girls’ academic performance?.....
14. The following statements are views concerning girls’ performance in school. Indicate with a tick against each statement your most appropriate views.

KEY: Strongly Agree(SA) Agree (A) Undecided(U) Disagree(D) Strongly Disagree(SD).

	Girls’ attitude towards learning	Percentage (%)			
		SA	A	UN	SD
1	Girls are less capable academically than boys				
2	Girls need more support than boys to do well in school				
3	Girls are more interested in their physical outlook than in their academic work				
4	Girls can only do well in arts subjects				
5	Teachers molest girls and this negatively affect girls’ performance				
6	Girls’ illicit relationship with teachers negatively affect girls’ performance				
7	Girls can never get A’s like boys				
8	Its not possible for girls in this school to do well in KCSE.				
9	I rarely bother asking girls questions in class as I know they will not know the answer.				
10	I usually concentrate on helping boys in class rather than waste my time on girls				

THANK YOU

APPENDIX A4: STUDENTS' QUESTIONNAIRE

Please answer all the questions in the questionnaire as honestly as you can. Kindly tick () or write the correct responses in the spaces provided.

INSTRUCTIONS:

- (a) This questionnaire consists of 3 sections. Kindly respond to all items in each section.
 (b) Put a tick [] in the bracket to the right side of the option that best suits you.
 (c) Don't indicate your name on the questionnaire.

Part A: Background Information

This section requires the very basic information about you

1. Please indicate your gender

(a) Male [] (b) Female []

2. How old are you? (a) 16-20 yrs [] (b) 21 and above yrs.[]

3. Type of the school: (i) Girls boarding [] (ii) Mixed day and boarding [] (iii) Mixed day school []

4. In which class are you studying? (i) Form 2 [] (ii) Form 3

Part B:

(b) The statements below describe attitudes that different girls and boys have towards school. There are no right or wrong answers but only opinions. Express your feelings about each statement by ticking one of the 4 choices which best describes your feelings.

KEY : Strongly Agree (SA) Agree (A) Disagree(D) Strongly Disagree (SD).

	Girls' /boys' attitude towards learning	Percentage (%)			
		SD	D	A	SA
1	I feel like an outsider or left out of things in school				
2	I think I am wasting my time attending school				
3	Other students seem to like me				
4	I feel lonely when in school				
5	I do not like to be absent from school any day				
6	It does not matter if I am absent from school, I can copy the notes.				
7	I don't have much interest in going to school.				
8	I hate going late to school any day				

PART C:

We are all good and strong in some areas and weak or poor in others. The statements below are to help you describe yourself as you see yourself academically. Please read the statements carefully and then select one of the 5 responses listed below each item by ticking the one that best describes you. The abbreviations used stand for the following

KEY: CF (Completely false)MF (Mostly false) UD (Undecided)MT (Mostly true) CT (Completely true).

	Girls' / Boys' self-concept and academic performance	Percentage (%)				
		CF	MF	UD	MT	CT
1.	I know I can perform as well as other students					
2.	I have trouble expressing myself in class					
3.	I am an important person to my classmates					
4.	No matter what I do, I know I can never get an A or B					
5.	I feel uncomfortable carrying out class activities in a group					
6.	I feel uneasy to ask for clarification in class when I have not understood.					

Part D:

Please tick the appropriate response on how you interact with your teachers in the following statements:-

KEY: Strongly Agree (SA) Agree (A) Disagree (D) Strongly Disagree(SD)

Do your teachers show interest in every girl's learning? Please tick appropriately in the following statements:-

Girls' / Boys' interactive relationship with teachers	Percentage (%)		
	RARELY	SOMETIMES	ALL THE TIME
1. The teachers give girls an opportunity to express opinions			
2. The teachers help girls with their work			
3. The teachers continues to teach until the girls understand			
4. The teachers do a lot to help girls			
5. The teachers help girls with their learning			
6. The teachers ignore girls in class			
7. Girls are asked questions in class			

THANK YOU.