INFLUENCE OF GENDER ON -SELF-CONCEPT AND ACADEMIC PERFORMANCE AMONG SECONDARY SCHOOL STUDENTS IN KANGEMA CONSTITUENCY, MURANG'A COUNTY, KENYA

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A Project Report Submitted to the Graduate School in Partial Fulfilment for the Requirements for the Award of the Degree of Master of Education in Guidance and Counseling

EGERTON UNIVERSITY

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DECLARATION AND RECOMMENDATION

Declaration	
I declare that this Project Report is my original work	and has not been previously presented
for the award of a degree in any other university.	
Signature	
Benson Mbare Kiiru	Date
EM16/1632/06	
Recommendation	
This Project Report has been submitted with m	y recommendation as the University
supervisor.	

Date

Signature...

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DEDICATION

To my dear parents, Duncan Kiiru and Jane Waceke,who never learnt psychology but were great counsellors.

ACKNOWLEDGMENT

I would like to thank my God for inspiring me to leave the comfort zone and aspire for greatness and Egerton University for giving me a chance to advance my education. Thanks to Professor Chepchieng who was a source of hope in moments of desperation and hopelessness. Gratitude to Dr. Owen Ngumi for his challenges and tremendous efforts to ensure quality and high standard in my project work. Warm appreciation to my dear wife Pascaline Mbare, for spending sleepless nights proof reading and editing my work and my sons Phil-Duncan, Victor-Brian and Daniel-Rogers for their love, support, patience, understanding and encouragement.

ABSTRACT

Globally, boys and girls use gender as an organising theme to classify and understand their perceptions about the world. While some male students perform relatively well as compared to females in KCSE, others in the same schools, taught by the same teachers and sharing same resources, are outperformed by females in examinations. Females are outperforming males at all levels of the school system, where girls' enrolment in secondary schools tends to go upwards, while that of boys reduces rapidly. This study sought to examine the influence of gender (male and female) on self-concept and academic performance among secondary school students in Kangema Constituency, Murang'a County. The study employed a causal comparative expost facto targeting all the 6,168 students and 24 teacher counselors in the 24 secondary schools in Kangema Constituency. Twelve secondary schools were selected to take part in the study. From each of the sampled schools, 20 students were selected using stratified random sampling. In mixed schools, 10 boys and 10 girls were selected to ensure gender balance, giving a sample size of 240 students, (120 boys and 120 girls). 12 teacher counselors were also selected to participate. A questionnaire for students and an interview schedule for teacher counselors were used as the main tools for data collection. A pilot study was conducted in two schools to test the reliability and validity of the data collection tools. A cronbach alpha of 0.6670 was obtained using Spearman's correlation coefficient and the instruments were considered as reliable. Quantitative data was analysed using descriptive statistics, (frequencies, means and percentages) and inferential statistics, (t-test and Pearson's correlation), at 0.05 level of significance. The Statistical Package for Social Sciences 12.5 was used to analyse data. The study established that there were statistically significant gender differences on students' self concept and academic performances and that female students had a more positive self concept than male students. With regard to academic performance, male students were performing well in academics compared to the female students. The study recommends that guidance and counseling services should be provided to the female students based on self-concept to improve academic performance; frequent counseling sessions, among male students based on self-concept to improve in verbal, honesty, trustworthiness and same sex relations; while administrators and teacher counselors should guide and counsel students on their self concept.

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LIST OF ACRONYMS AND ABBREVIATIONS

ADHD Attention Deficit Hyperactive Disorder

AIDS Acquired Immune Deficiency Syndrome

ANOVA Analysis of Variance

ASALS Arid and Semi Arid Lands

CEDAW Convention on the Elimination of all Discrimination against Women

CRC Convention on the Rights of the Child

DEO District Education Officer

EFA Education for All

GER Gross Enrolment Ratio

HIV Human Immunodeficiency Virus

KCPE Kenya Certificate of Primary Education

KCSE Kenya Certificate of Secondary Education

KIE Kenya Institute of Education

KLB Kenya Literature Bureau

KNUT Kenya National Union of teachers

MDG Millennium Development Goals

MoE Ministry of Education

NCA National Curriculum Assessments

NER Net Enrolment Ratio

PASCI Personal and academic self-concept

PISA Programme for International Students Assessment

PSE Personal and Social Education

SAUMEQ Southern and Eastern Africa Consortium for Monitoring Educational

Quality

SLE School Life Expectancy

SMT Science Mathematics and Technology
SPSS Statistical Package for Social Sciences

UNESCO United Nation Education Scientific and Cultural Organization

UPE Universal Primary Education

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Muganda, (2002); Muthaka and Mwangi, (2002), postulate that education is fundamental to development of human resource capacities for sustainable economic growth and development. They argue that by imparting new skills and knowledge to men and women, boys and girls respectively, education tends to expand human capabilities, increases labor productivity and enhance essential participation and partnership in nation building. Education is therefore a vital tool in achieving greater autonomy, empowerment of women and men, boys and girls, and addressing gender differences in the distribution of various available opportunities and resources. Achievement of gender equity in education may require collaborative participation of learners (boys and girls), parents, communities and development partners, the civil society, private sector and the government.

Globally, boys and girls at adolescence use gender as an organizing theme to classify and understand their perceptions about the world. Gender differences are influenced by society's beliefs about the traits of female and males, that impact greatly on processing of social information and self- concepts. Gallagher, (2001), explains that social and cultural factors such as, student's familiarity with the subject, changes of career aspirations, gendered perceptions of specific subjects, presentational styles of boys and girls and teacher expectations are the major reasons leading to gender differences in self-concept and academic performance. However, unlike biology the social and cultural factors are changeable by modifying the context of education. Accordingly, current researchers are acknowledging that gender differences have either little or no biological basis, and are focusing on gender differences as a result of the social-cultural and environmental influences. In the classroom environment, there are a variety of influences that create and affect gender differences and stereotypes, between boys and girls; such as, social expectations and informal influences when children are young. On the other hand, parents can do a variety of things to help reduce the impact that gender stereotypes can have on their children; and they should make an effort to expose boys as well as girls to all subjects.

There at least 15 different "self" terms used by different authors, such as self-concept, self-esteem, self-worth, self-acceptance. All these terms are used interchangeably and inconsistently, when they may relate to different ideas about how people view themselves. Self-concept refers to the knowledge about the self that is clearly defined, internally consistent and temporarily stable.

Strein, (1993), argues that the global view, sometimes conceptualized as general self-concept, is the older and the more common view among counselors and therapists. Eventually, the most important distinction that differentiates various conceptualizations, is whether self-concept is viewed as an overarching global characteristic of the person or as a set of self-evaluation specific to different domains of behavior. Self- concept requires consistency, stability and it tends to resist change. If self-concept changed readily, the individual would lack a consistent and dependable personality. That is, the more central a particular belief is to one's self-concept, the more resistant one is to changing that belief. This may allow the person/student, to reflect more on the past event, analyze present perceptions, and shape future experiences. Accordingly, females are more likely to adopt a self-evaluating perspective during the learning process than males, thus doing well in academic performance. Males on the other hand, could benefit from more general assistance in planning, organizing and structuring learning activities than their female counterparts.

It is imperative to note that individual's belief about themselves are strongly related to successful learning, and successful learners are more confident of their abilities and believe that investment in learning can make a difference. Students with high self-concept are therefore more likely to approach school related tasks with confidence, and success on those tasks reinforces this confidence. The opposite pattern is likely to occur for students with low self-concept. Students, who lack confidence in their ability to learn what they judge to be important, are exposed to failure, not only at school but also in their adult live. According to the Programme for International Students Assessment, (2002), it is important to note that in all countries all over the world, males tend to express a higher level of self-concept in sciences/technical subjects while females express a high level of self-concept in humanities and languages. This suggests that gender differences in students academic

performance need to be scrutinised, reviewed and analysed in close relationship with the habits, attitudes and self-concepts of secondary school students in various parts our country to enhance efforts in academic performance for better results. This study therefore sought to determine the influence of gender on self-concept and academic performance among secondary school students.

1.2 Statement of the Problem

While some male students perform relatively well as compared to females in KCSE, others in the same schools, learning with the same teachers and sharing same resources, are outperformed by females in examinations. This calls for research to determine the factors that account for the influence of gender on self-concept and academic performance among students. This study seeks to establish the influence of gender on self-concept and academic performance of students in Kangema Constituency, Murang'a County. The influence of gender and self-concept on students' academic performance has not been understood among schools in Kenya and in Kangema constituency.

1.3 Purpose of the Study

The purpose of the study was to establish the influence of gender on self-concept and academic performance among secondary school students in Kangema constituency, Murang'a County, Kenya.

1.4 Objectives of the Study

The following are the objectives of the study:

- (i) To find out the influence of gender on academic performance among secondary school students in Kangema constituency.
- (ii) To determine the influence of gender on self-concept among secondary school students in Kangema constituency.
- (iii) To establish the relationship between students' self-concept and academic performance in secondary schools in Kangema constituency.
- (iv) To determine whether there are differences between boys' schools, girls' schools and mixed secondary school students in self-concept in Kangema constituency.

(v) To establish the extent to which guidance and counselling has influenced gender on self-concept and academic performance among secondary school students in Kangema Constituency.

1.5 Research Hypotheses

- H0₁: There are no statistically significant gender differences in academic performance among secondary school students in Kangema constituency
- H0₂: There are no statistically significant gender differences in self concept among secondary school students in Kangema constituency.
- H0₃: There is no statistically significant relationship between self concept and academic performance among secondary school students in Kangema constituency
- H0₄: There are no statistically significant differences in academic performance in boys' schools, girls' schools and mixed secondary schools' students in Kangema constituency
- H0₅: Guidance and counseling has had no statistically significant influence on self concept and academic performance among secondary school students in Kangema constituency

1.6 Significance of the Study

The study may create awareness and provide enough information to be used in developing policy recommendations for revised plans of both boys and girls education in Kenya. The study may also encourage research on factors that are adversely affecting student's performance, participation and learning, development of capacity and training programs in the MoE, for revising education strategies, dissemination of information and best practices in education through publications, electronic media, videos and presentations, which would enhance high academic performance. Further, the study may enhance gender mainstreaming in secondary schools in Kenya and promote positive policy dialogue with the government through the MoE, professionals, counselors, teachers, parents and other education stakeholders. The study may pave way for further research and investigations in the field of guidance and counseling.

1.7 Scope of the Study

The study sought to find out the influence of gender on self-concept and academic performance among secondary school students in Kangema Constituency, Murang'a County. The study investigated on gender, academic performance, self-concept and school type only.

1.8 Limitations of the Study

The study covered public secondary schools in Kangema Constituency only. This means that the findings of the study may not be generalized to schools in the whole country.

1.9 Assumptions of the Study

The study was based on the following assumptions:

- (i) That the respondents were co-operative and gave truthful and honest answers.
- (ii) That other factors were likely to influence the implementation of these tasks such as performance in national examinations (KCSE), school culture, and school inspections conducted to improve the standards of education.

1.10 Definition of Terms

The following terms assumed the meaning perceived by the study as follows:

- **Academic performance**: It refers to the extent to which specific educational goals have been achieved, being measured by one's performance in selected subjects such as sciences, mathematics and literacy.
- **Counseling:** Refers to assisting the students to discover alternative ways of resolving conflicts and solving problems in given situations in different time with regard to their behavior.
- **Gender**: It refers to the social-cultural characteristics by which schools and society categorize males and females, boys and girls.
- **Gender role**: This is the use of a set of rules and regulations, in a school that uphold behavior expectations for boys and girls, males and females.
- **Self**: It is the totality of the feeling a person has about himself and as his way of knowing and evaluating himself.
- **Self concept** Knowledge about the self that is clearly defined, internally consistent and temporarily stable.
- **Self-efficacy**: This refers to the teacher's ability to assess the student's state and quality in producing the desired results in academic performance.
- **Self-Esteem**: Refers to the way individuals perceive and value themselves in relation to interactions with others in society.
- **Stereotype**: This refers to a fixed idea or image that teachers, students and the society have in regard to a particular type of person or person's thing or things which is often not true in reality.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter starts with a background to Gender differences and self- concept. This is followed by a critical analysis of the selected works that reveals what has already been researched on, globally, in some selected commonwealth countries and in Kenya, and the theoretical and the conceptual framework of the study.

2.2 Gender in Relation to Globalisation

The world gender order reveal how males are being reconfigured by transnational power relations. According to Barbara and Arlie, (2002), women are on the move as never before in history. However the effort to provide equitable education to all students has led to extensive research based on race, ethnic differences, gender, access, learning and achievement. Gender disparity in education and self-concept is an old phenomenon, where traditionally, girls have been disadvantaged in most parts of the globe, and they continue to be so even today. Debate on gender equality in education presently revolves around two universally accepted declarations or goals. One of them being the Universal Primary Education, (UPE) by 2015 (World Bank, 2005), later refocused as Education for All, (EFA), as articulated in Jomtien, Thailand in 1990, and reaffirmed at the Dakar, (Senegal) World Education Forum, in April, 2000. Secondly, in September, 2000, the United Nations General Assembly adopted the Millennium Declaration to achieve universal completion of primary, and schooling by 2005, and at all levels by 2015.

Gilligan, (1989), stated that, as the river of a girl's life flows into the sea of western culture, she is in danger of drowning or disappearing. That is, girls are silenced as they enter adolescence in the male- centered society. On the other hand, the feminist researchers, and women's advocacy groups began reporting that the Nation's teenage girls are academically short changed, drained of their self-esteem by a society that favors boys. According to Pipher, (2000), something dramatic happens to girls in early adolescence where the selves of girls go down in droves. The United States Congress passed the Gender Equity Act, categorizing girls as an under-served population.

At the Fourth World Conference on Women in Beijing, the American delegation presented the educational and psychological deficits of American girls as a pressing human rights issue. In the 1990's, the crisis tack turned to boys and stories about their crisis appeared in a number of world leading newspapers such as, The New York Times, The Washington Post, The Boston Globe, The Today and also The Daily Nation. Gilligan, (1989), argued that boys are more traumatized by the way they are socialized in the patriarchal social order which results to them hiding their humanity and submerging their very best qualities. This had resulted to it becoming undeniable that the stereotypical boys' behavior that was once normal now offends and upsets a lot of people. According to Pollack, (1998), the normal boys are in trouble, they are disconnected from the real world, unable to relate to people and to express themselves emotionally and they are seriously lagging behind the girls, a situation that keeps getting worse. That bereft of discipline, competitive structures and direct moral guidance on how to compete and succeed, many of the boys do behave badly as they also fare badly academically. The boys are disconnected, isolated, alienated and trapped by a stereotypical masculinity that prevents them from expressing their painful inner feelings, and speaks of the school shootings as the tip of the iceberg.

2.3 The Legal Framework on Gender

Both the constitution of Kenya and the Session Paper on Africa Socialism and its application to Planning in Kenya, (2007), outlaw discrimination on the basis of gender and put more emphasis on social justice and equal opportunities with regard to education. According to Equal Opportunities Commission, (1996), the development of equality of opportunities between boys and girls in schools, owes much to the legal requirements placed on educational establishments by the Sex Discrimination Act, (1984). This Act provides a clear legal framework of equal treatment for both boys and girls, and has produced major changes in the practices of schools; for instance, in relation to access to the main curriculum activities. Many secondary schools, now have equal opportunity policy statements, and are trying to reduce any aspects of their organization and culture which might treat girls or boys unfairly, or inappropriately, and might hinder the educational performance and personal development of either sex.

The Sex Discrimination Act establishes a student's right not to be the victim of sex discrimination and defines the various forms this may take. It requires that applicants for admission to various schools in an area to have access to any school in that area, selective or non selective, grant maintained or specialist, irrespective of one's sex. The standards of behavior, restrictions on students dress and appearance, school rules and disciplinary methods must be applied consistently to all students regardless of their sex. It also requires that all extra-curricular activities such as field trips, clubs, team sports and community work must be equally available to both boys and girls and must provide the same standards of opportunities for both sexes. Career guidance, interviews and literature must be provided on a non-discriminatory basis, and visit to employers and opportunities for work experience must be open to all students regardless of their sex. It also establishes that subjecting students to any form of detriment on the grounds of sex is unlawful. That is, schools should not try to balance the numbers of girls and boys in any particular class, form or stream if this is likely to be detrimental to one sex. The Children's Act, (2001), unequivocally stipulates every child's entitlement to education, thus, ensuring full inclusion of both girls and boys in basic education. It's through this policy that the government reaffirms its commitment and determination to address the legal and policy issues in order to facilitate attainment of equality in the education of both boys and girls in our secondary schools, to promote academic performance.

2.4 Gender and Self-concept

Jyotsna, (2006), pointed out that gender is a social construct, referring to the ways in which societies distinguish women and men, boys and girls, and assign them social roles. It is a conceptual category referring to masculine and feminine qualities, behavior patterns, roles and responsibilities. According to Amittai, (2008), gender is the social area in which men and women, girls and boys, are differently and unequally raised, treated, and valued. It is thought of as something that society construct on top of the biological facts. Esplen & Jolly (2006) define gender as an array of socially constructed roles and relationships, personality traits, attitudes, behaviors, values, relative power and influence that society ascribes to the two sexes on a differential basis. However, it is not those differences between individuals that are separating them; rather it is their refusal to recognise those differences and to

examine the distortions which result from misnaming them, and their effects upon human behavior, expectations, performance and participation.

Strein (1993) argues that, self-concept is one of the most popular ideas in psychology literature, and it is also an elusive and often poorly defined construct. It is a set of personal beliefs about who they are as individuals. Strein further states that, terms such as 'selfconcept', 'self- esteem', 'self- worth', 'self- acceptance', are often used interchangeably, when they relate to different ideas, about how people view themselves. It is viewed as inherently phenomenological, referring to the persons own view of him or herself. In other words, self- concept is the sum total of a being's knowledge and understanding of his or herself. The main components of the self-concept include physical, psychological and social attributes which can be influenced by the individual's attitudes, habits, beliefs and ideas. Machargo, (1991), defines self- concept as the set of perceptions or reference points that the subject has about himself or herself, the set of characteristics, attributes, qualities, and deficiencies, capacities and limits, values and relationships that the subject knows to be descriptive of himself or herself, and which he or she perceives as data concerning his or her identity. It is therefore summed up as the set of knowledge and attitudes we have about ourselves; the perceptions that the individual assigns to him/her, and characteristics or attributes that we use to describe ourselves. It is understood to be fundamentally a descriptive assessment and has a cognitive nuance.

According to Mullings, (2000), culture is composed of the symbols and values that create the ideological frame of reference through which people attempt to deal with the circumstances in which they find themselves. In Korea and Vietnam, the Confucian Moral Code accords male superiority, authority, and power over women in family and social relations and has influenced the patriarchal systems. Women are granted little decision-making power and are not accorded an individual identity apart from their family role which emphasizes their service to male members. Women's growing educational and economic opportunities and the rise of women's rights groups, challenge gender inequality and this actual gender dynamics are not in strict compliance with the prescribed moral code. The immigrant women tend to stay committed to the ethnic patriarchal structure as

it provide resources for maintaining their parental authority, and resisting the economic insecurities, racism and cultural impositions of the new society.

The gender hierarchy and low self-concept, is evident in parenting practices where daughters are typically required to be home and performing household chores when not in school, while sons are given greater freedom. In the work place the average worker is very likely to work at a job assigned on the basis of gender and everywhere gender organises workplaces. Even youngsters can readily identify what is a man's job and what is a woman's job. Women's jobs and men's jobs are structured with different characteristics and different rewards. In every society it is found that women earn less than men even when they work in similar occupations and have the same level of education.

2.5 The Social Construction of Gender and Self-Concept in Academic Performance

Myers (2002) argued that successful social relations require all participants to present, monitor and interpret gender displays. A person, who fails to establish a gendered appearance that corresponds to the person's gender, faces challenges to his or her identity and status (self-concept). At the same time if one's gender self-identity is not displayed obviously, immediately, and consistently, one is somewhat of a failure in social terms with respect to gender, causing people to be uncertain or wrong about one's gender which is a violation of rules, that leads to embarrassment and discomfort, meaning that something has gone wrong with the interaction. On the hand, academic self-concept has significant influence on learning at school and personality development. According to Pintrich, (2000), school learning has centered its attention in the cognitive trend with emphasis on the necessary inter-relation between the cognitive and the motivational. In mixed secondary schools, boys tended to predominate in governing prefects' bodies and in senior levels of school management structures. However there should be coherent approaches to equal opportunities by representation of boys and girls on school management and governing prefects' bodies to reflect views and experiences present in wider society.

In Kenya, according to Gender Policy in Education, (2007), poor academic performance and gender differences are largely blamed on prevailing poverty, poor national economic performance, HIV/AIDS and environmental degradation. Other issues include negative

attitudes towards schooling due to low self- concept, amidst dwindling opportunities, thus de-motivating parents against sending their children to school, reduced gross enrolment ratios, high dropout rates, low completion and transition rates as well as regional and gender disparities, in addition to the questions regarding both quality and relevance of Kenyan education due to high rates of unemployment of university graduates. In addressing the foregoing problems, Kenya has developed policies such as, Poverty Reduction Papers, National Education Master Plan (1997–2010). And most recently, the country has embarked on developing provincial EFA plans Beyond the policies, there have been efforts related to service provision, including bursaries, text books, school feeding program, provision of desks and learning aids, and teacher training campaigns for girls' education, among others.

Gender differences arise from the process of assigning to men and women, boys and girls, specific social roles, privileges, rights, responsibilities and duties on the basis of the sexes of the persons concerned. For this reason many African societies, focus on gender analysis as essentially translating into focus on women and girls, in spite of cases in which boys are themselves disadvantaged in specific aspects of education and opportunities for specific skills acquisition. However, in Kenya, gender differences are observed in performance, self - concept, access, retention, transition and academic achievement at all levels of education with a serious impact being experienced in ASAL regions, many rural areas, urban informed settlements and other low potential areas. In the Kenya Certificate of Primary Education (KCPE), boys often outperform girls in all papers except English and Kiswahili composition, while in the Kenya Certificate of Secondary Education (KCSE), boys tend to perform better in key subjects such as English, Mathematics, Biology, Physics and Chemistry. According to Gender policy in education, (KIE, 2007) the following strategies are pursued to address gender difference in Kenya's education sector: provision of school boarding facilities in ASAL areas, affirmative action in admission into Public Universities, Bursary allocations, provision of resources for science laboratories especially in girl's schools, community sensitization and motivation, continuous curriculum review, assessment and improvement of pedagogy to address gender responsiveness and

formulation of policy guidelines such as, re- admission of school age girls who get pregnant while in school.

One principle of commonwealth countries is that every child, girls or boys has the right to quality education. The commonwealth has focused attention on removing the barriers faced by girls in accessing education. However, more recently, Ministers of Education from across the Commonwealth have raised the issue of boy's low academic performance, and poor attendance at school, a growing phenomenon in all regions, and in particular in the central regions of my beloved country, Kenya. It is generally accepted that a child's achievement at school will be determined by factors both inside and outside the school environment. While a number of countries in the Commonwealth have made tremendous progress in girl's education in the last one to three decades, a new phenomenon has emerged in certain countries where gender differences in education are turning in favor of girls and therefore against boys in terms of participation, performance and self- concept. In participation, School Life Expectancy, (SLE) is higher for boys in sub-Saharan Africa, East Asia and the pacific and south and west Asia, it is higher for girls in Latin America and the Caribbean, North America and Western Europe, according to Jyotsna, (2006).

According to Gender policy in education (2007) while Science Mathematics and Technology (SMT) are considered a prerequisite for industrialization and economic development, females on average remain at a disadvantage in many countries including Kenya. However, a study published in the proceedings of the National Academy of Sciences in Washington (2000) clearly postulated that, girls can do just as well at Mathematics as boys – even at the genius level – if they are given the same opportunities and encouragement. The researchers have also reported that gender inequality, not lack of innate ability or intrinsic aptitude is the primary reason as to why fewer females than males are identified as excelling in Science, Mathematics and Technology (SMT) performance in most countries. In Kenya, there is poor participation and performance in SMT subjects by both males and females, but females' participation and performance is worse than that of males' at all educational levels. A study of the historical development of education reveals that girls were encouraged to study humanities that is, History, Christian Religious

Education and Geography, and subjects that would prepare them for their care roles in the family, thus affecting their self – concept.

2.6 Role of Guidance and Counseling on Self Concept and Academic Performance

Provision of guidance and counseling services to the individual during adolescent years has for long been considered one of the most prominent determinants of success in later development. One of the objectives of guidance and counseling is offering educational guidance to students. According to the Republic of Kenya (2003), educational guidance is concerned with all those activities that are related to the student's adjustment to his educational environment. It has to do with 1) developing a favorable setting for the individual's education; 2) recognition of individual differences and their relation to educational achievement; and 3) curriculum choices (Republic of Kenya, 2003). Guidance and counseling also helps to assist students identify good studying habits. If a student is not able to identify a good study habit, his/her self-concept can be affected. Students find themselves in a situation where they must reconcile the influence imparted by the school, peers, and their personal values in good study habits. Students therefore need guidance and counseling to assist them with their educational problems, and show them the link between the subjects they learn in school, this way they are assisted to perform well in class and can boost their self-concept.

Marsh and Yeung (2007) have demonstrated that academic performance has substantial effects on subsequent academic self-concept and that academic self-concept also had substantial effects on subsequent academic performance. This reciprocal relation between academic self-concept and performance has also been supported by Hay (1997). Furthermore, Marsh and Yeung (2007) also showed that self-concept has significant effects on high school students' selection of coursework. Students' self-concept is therefore both an important educational outcome and an important factor that may facilitate other desirable educational outcomes.

2.7 Gender in Transition and Enrolment

Enrolment at secondary education level has grown by 18.3 per cent, that is, from 882,390 students in 2003 to 1,043,467 in 2006. However the GER in secondary schools has

remained low at least than 30 per cent throughout the 1990s and in the early part of 2000. The NER was less than 20 per cent between 1999 and 2004. In 2004, the national GER was 31.7 per cent for boys and 27.3 per cent for girls. That is the GER gender differences was 0.4 per cent in favor of girls in Central Province, while Nairobi Province recorded a gender difference of 11.2 per cent in favor of boys. On the other hand between 1999 and 2004, the NER gender differences at secondary school level was less than 1% and oscillated in favor of girls in 2003, then in favor of boys according to Gender Policy in Education, (2007). Gender differences in enrolment in teacher education are highest in secondary school teacher education a programmes. That is, between 1999 and 2003, the average enrolment of females was 49.6 per cent in primary teacher training colleges, 44.3 per cent in secondary teacher training colleges and 53.1 per cent in special education teacher training programmes.

According to Gender Policy in Education, (2007), the number of secondary schools has increased from 4,071 in year 2003 to 4,506 KCSE Examination centers in year 2006. At the same time, performance at K.C.S.E, has improved steadily. For instance, in year 2006, 1,265 (0.48%) candidates obtained Grade A while in year 2005, only 611 (0.24%) candidates obtained the same grade in the entire country. It is also imperative to note that boys tend to perform generally better than girls in key subjects such as English, Mathematics, Biology, Physics and Chemistry. In languages, girls are generally regarded as more adept than boys, but between years 2000 and 2005, this perception was debunked by the performance in KCSE English, when boys' performance in the subject was superior to that of girls.

In year 2006, Eastern Province registered 21,309 boys and 22,718 girls for the Kenya Certificate of secondary education. This clearly indicates that girls are more than boys in search for secondary education, according to Teachers Image, (vol. 14, 2007). In spite of the gender difference in Eastern province, performance in Kenya Certificate of Secondary Education examination has been on an upward trend, where in, 2005, the mean score rose by a positive index of +0.128 from a mean of 5.1583 to 5.2863 in years 2006. In 2009, central Province for the first time registered more girls than boys for the form four Kenya

Certificate of Secondary Examination. According to the region's Education Office, 31,404 girls sat for the KCSE, compared to 29,695 boys, as indicated in the Teachers Image vol.16 (MoE 2009). Thus, the society in central province has been focusing more on protecting the girl child than the boy child. That is to mean, there are very few boarding schools for boys compared to girls schools in the region. The result is that boys become easy prey to alcoholism, drug use and substance abuse, domestic conflict and bad company.

2.8 Gender Participation, Performance and Self-concept in Selected Subjects in Secondary Schools

In the past, concern about gender differences has almost universally addressed the underachievement of females. However, as females have first closed the gap and then surpassed males in many aspects of education, there are now many instances in which there is concern about the under achievement of males. However, girls are more successful than boys at every level in national examinations. There is an insignificant gender difference in the school curriculum, since students take the same courses. The main exception is in physical education, where boys tend to have a narrower curriculum than girls in key stages. In mixed schools both boys and girls have formal terms, equal access to the same cocurricular activities, though the pattern of their involvement is often gender-related, for instance ,boys are frequently underrepresented in music activities; in co-curricular physical education or sports activities at secondary level, boys out number girls. However, more girls are now taking the traditional boys' subjects although boys are still reluctant to take the traditional girls' subjects such as home science and typing. It is clear that subject choices reflecting students' individual preferences and perceived needs are sometimes heavily influenced by gender: boys favoring Physics, Economics, Mathematics, Chemistry and Geography, with girls favoring Languages, Literature, Biology, Art and Design.

There is considerable evidence of gender differences in the quality of learning in that, although an individual's attitude to learning is clearly not predetermined by gender, there are tendencies for girls and boys to respond in certain general ways in given circumstances. In this light, girls tend to under-estimate their abilities in mathematics and to be discouraged adverse circumstances, and they are most successful when the teaching gives

them a chance to talk ideals through and place mathematical concepts in a relevant context. In English, boys tend to have more negative attitudes towards reading and writing than girls. They often have narrower experiences of fiction, write more predictably, and have difficulties with the affective aspects of English. Their learning improves when the teaching convinces them of the value of what they are doing and gives them a clearer understanding of the variety of language use. The use of information technology can benefit the quality of their work. In some research evidence, according to Equal Opportunities Commission, (1996), girls tend to lack confidence in using the concepts of physical science in their technology work, even when their competence is equivalent to that of the boys.

Gender differences in subject interest which explains the student's self—concept, show clearly that females tend to express greater interests in reading than males, while the reverse is the case in Mathematics. It is therefore imperative to state that gender differences in performance in reading and mathematical literacy are thus closely mirrored in student interest (self—concept), in the respective subject areas. Girls had higher self—concepts than boys in the areas of verbal, academic, relationships with same sex peers and parents and honesty self—concept while boys were more positive in their math's, physical abilities, appearance, relationships with the opposite sex, emotional stability and general self—concept. At the same time, boys are usually more concerned than girls with having a positive image of themselves in class, on which account they tend to seek positive competency judgments, that is in failure situations, their image of themselves might be damaged and may attribute this failures to causes like luck or the teacher and not so much to internal factors like effort or ability. This may lead the students to approach the learning process in a superficial way, and make little—use of significant learning strategies.

In class participation, boys in a Mathematics class tend to dominate discussions and methods of solutions. They much more frequently raise their hands to answer questions or solve problems, with little worry or concern that their answer may be wrong, and they speak their answers with great confidence. While at the same time, many girls are unlikely to raise their hands at all, and when called on, often respond with the correct answer, but phrase it as a question. In language and arts subjects, girls perform better than boys and

this is attributed to boys paying more attention to factual material and wants the right answer. On the other hand, girls are more apt to see the bigger picture, able to apply what they have read to other situations. Owens (2003), found that girls prefer cooperation, openended and organized activities, while boys prefer competition and individualism.

2.9 Factors that Increase or Decrease the risk of Academic Performance across Gender in Kenya Secondary Schools

According to Gender Policy in Education (2007) boys and girls succeed in school while others struggle or drop out due to various socio-economic challenges. In Kenya's secondary schools, they have learned valuable lessons about risk factors- those traits and life experiences that can jeopardize a student's healthy development and protective factors – the characteristics and life experiences that can increase a student's likelihood of positive outcomes. Some of the individual risk factors for academic failure include: low socio-economic status, pessimism about the future, lack of feeling connected to school, drug use and substance abuse, peer pressure and reading perverse literature.

On the other hand the family, school, and community factors that contribute to risks for academic failure are: poor family communication or family conflict especially for boys; low expectations regarding academic achievement; having friends who are disruptive in class or drop- out of school; negative school climate, such as poor attitudes or unconstructive interactions among students, teachers and administrators; classroom disruptions or feeling unsafe at school; lack of educational resources such as Libraries and Laboratories; influence from the print and electronic media; emergence of illegal movements such as "Mungiki" and vigilante groups; and wide-spread of HIV/ AIDS epidemic. At the same time the following factors contribute to academic achievement: ability to pay attention in class participating in extra- curricular activities; parental monitoring and involvement; involvement with positive peer group activities and good relationship with peers; presence and involvement of caring and supportive adults; and community of service learning opportunities.

However it is worth to note that boys face many academic challenges including learning disabilities, underachievement and dropping out of school than girls, which may impact

negatively on their academic performance and self-concept. Eventually, according to Educational statistical booklet (2005) boys—who feel emotionally supported by teachers and other staff, may have a stronger connection to school and may be less likely to drop out. At the same time, when their parents are directly involved in their lives, boys tend to have high expectations for and positive relationships with their parents. That is, a good father-son relationship characterized by frequent contact and open communication can lead to a boy doing better in school and developing a positive self-concept.

In Kangema constituency, the boys' crisis has escalated to a level that they badly need clear and unequivocal rules; they need boundaries and also need a clear structure to enhance their academic performance in schools. As indicated in enrolment and K.C.S.E performance (2008), there are clear indications that the adolescents in Kangema are increasingly becoming victims of the society's vices, such as alcoholism, drug use and substance abuse, both in the rural-urban settings, day and boarding schools. Accordingly, many school-going adolescents have become victims of school drop outs, they are being recruited into illegal and clandestine movements and organizations such as (Mungiki, Thaai, Kam-Jeshi, Jeshi La Mzee, disbanded Mount Elgon Defense Force) and several other criminal gangs which are detrimental to their gender, self- concept and end up Jeopardizing their academic performance and their future endeavors. On the other hand, the young adolescents in our secondary schools have become consumers of drugs and substance abuse, victims of illicit sex and sex abuse, indiscipline, activities such as, school strikes, expulsions and imprisonments, indicating that there is a problem and a need to be addressed, based on gender differences, self-concept and academic performance. However, to get that problem solved, and the need satisfied, both boys and girls need directive education about gender differences, self -concept and academic performance, to create awareness and explicit instructions from the Government, MoE, Therapists, Professionals, Counselors, Teachers and Parents, to provide proper education systems and effective Guidance and Counseling Programmes.

2.10 Theoretical Framework

The study was based on Branden (2001) Self Concept Theory. The theory postulates that an individual's behavior or attitude is determined by the way he or she views self or is

viewed by others. This is displayed in his every emotional response as a result of self evaluation. Teenagers are very conscious of their self image which is affected by the way they view themselves and are viewed by others. This self-image is reflected in their behavior and attitude. Branden (2001) argues that the nature of students' self image has profound effects on his/her thinking process, emotions, desires, values and goals. According to Branden, the preservation of the will to understand in every aspect of one's life is the basic condition necessary for the academic achievement and self concept.

In previous research studies, Rogers (1947) argues that the self is a central ingredient in human personality and personal adjustment. Rogers describes the self as a social product developing out of interpersonal relationships and striving for consistency. Rogers maintains that there is a basic human need for positive regard both from others and from self and believes that in every person there is a tendency towards self actualization and development as long as this is permitted and encouraged by an inviting environment. Self concept has the following components; social, which depends on sense of belonging or acceptance; physical, which is the self image; emotional, which may be reflected in an individual's behavior, displayed in form of guilt, desire or fear; and academic self concept. As applied to this study the theory holds that self-concept which is affected by academic self concept, self image, guilt, goal setting, attitude, fear or desire and belonging or accepted will affect the academic performance of secondary school students. The study attempted to examine the influence of gender on self concept and academic performance among secondary school students. It is hoped that solutions on how to assist the student raise his/her self-concept can be suggested based on this theory. According to Branden, raising the status of self-concept can change the attitude of and mental wellbeing of the students to enhance academic performance. This means that by changing students' perception towards education regardless of their gender, all the students can be supported and hence settle down in schools for better academic outcome.

2.11 Conceptual Framework

According to the case study, there are significant gender differences between boys and girls which may have implications for school programmes and policies that are related to psycho – social development before and during adolescence, and may impact greatly on the

academic performance and self- concept of secondary school students. It is in this view that the gender theory based on the categories of social expectations, roles, behaviors and values, has on the element of our epistemology or how different persons perceive the entire world of their existence. The expectations strive to empower both men and women, boys and girls to affirm their self – concept and achieve high academic performance.

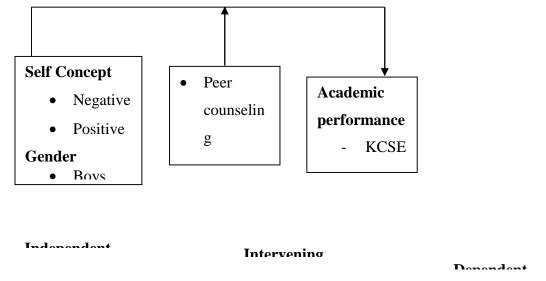


Figure 1: Influence of Gender on Self-Concept and Academic Performance

The study examined the influence of gender on self concept and academic performance among secondary school students. The independent variables of the study were gender and self concept. The intervening variables are peer counseling, motivation and role modeling. It is expected that these variables will influence students' academic performance which is the dependent variable of the study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter contains the research design that was used, the study area, population, sampling procedures and research instruments. This is followed by validation of the instruments, data collection techniques, the issue of ethnical consideration and methods of data analysis.

3.2 Research Design

The study employed the *ex post facto*. According to Kothari (2007), descriptive survey design is concerned with describing, recording, analysing and reporting conditions that exist or existed. Kerlinger (1986) argues that survey method is widely used to obtain data useful in evaluating present practices and in providing basis for decisions. This design was considered appropriate because it enabled the researcher to collect and analyse data from a wide range of respondents from headteachers, teachers and students of secondary schools. The design enabled the researcher to examine the influence of gender, self-concept and academic performance among secondary school students in Kangema Constituency.

3.3 Location of the Study

The study was conducted in Kangema Constituency of Murang'a County, Kenya. The study area was chosen because it is easily accessible and the researcher is conversant with it. According to statistics from the DEO's office Kangema District, boys have recorded better KCSE results from year 2009 to 2011 as compared to girls. However girls have recorded higher enrolment as compared to boys. (See appendix D)

3.4 Population of the Study

The study targeted all secondary school students and teacher counselors from Kangema constituency of Murang'a County, Kenya. The 24 secondary schools in this area have a population of 6,168 students and 24 teacher counselors. Table 1 shows the target population of the study.

Table 1: Distribution of Schools and Students in Kangema Constituency

Type of school	No. of schools	Teacher	No. of Boys	No. of Girls
		counselors		
Boys' only	3	3	1,164	0
Girls' only	3	3	0	1,213
Mixed schools	18	18	1,925	1,866
Total	24	24	3,089	3,079

Source: D.E.O's office Kangema (2013)

As shown in Table 1, there are 3,089 boys and 3,079 girls in the 24 secondary schools in Kangema constituency of Murang'a County, all of whom were targeted in the study. The 24 schools in the district are distributed as follows: 3 Boys' only, 3 Girls' only and 18 mixed schools.

3.5 Sampling Procedures and Sample Size

The sample size was determined by a formula postulated by Nassium (2000).

That is;

$$n = \frac{NC}{C^2 + (N - 1)^2}$$

Where;

n = the population

c =the coefficient of variation

e = the standard error

According to Nassium (2000), the coefficient of variation is at most 30% or 0.3, while the standard Error is 0.05.

In this study the population is 6168;

Therefore,

$$n = \frac{6168 \times (0.3 \times 0.3)}{0.3^{2} + (1694 - 1) (0.02)^{2}}$$

$$n = \frac{6168 \times 0.09}{0.09 + 6167 \times 0.0004}$$

$$n = \frac{555.12}{2.5568} = 217.11$$

n= 217 which is the minimum sample size that should be selected from a population of 6168 students.

First, the researcher selected a representative number of schools for the study. The three boys' only schools and 3 girls' only schools were selected for the study. Simple random sampling was used to select 6 out of the 18 mixed schools. This gave a sample of 12 schools (3 girls only, 3 boys only and 6 mixed schools), which comprised 50% of the targeted 24 schools. From each of the 12 sampled schools, 20 students were selected using stratified random sampling. The 20 students were selected from Forms One to Four, with each class contributing 5 students. In mixed gender schools, 10 boys and 10 girls were selected to ensure gender balance in the ratio of 1:1. Purposive sampling was used to select 12 teacher counselors. Therefore, the total sampled 240 students and 12 teacher counselor, giving a total of 252 respondents.

Table 2: Distribution of Respondents in Different School Categories

Category of	No. of schools	No. of Boys	No. of Girls	No. of Teacher		
respondents				Counselors		
Boys' only	3	60	0	4		
Girls only	3	0	60	4		
Mixed Schools	6	60 60		4		
Total	12	120	120	12		

3.6 Instrumentation

The main tool for data collection was a questionnaire divided into five sub-sections. section A collected data on gender and academic performance; section B collected data on gender and self-concept; section C collected data on students' self-concept and academic performance; Section D collected data on single and mixed schools, while section E collected data on the role of guidance and counselling in addressing gender on self-concept and academic performance. An interview schedule designed for teachers' counsellors was also used to collect data. In addition, Personal and academic self-concept (PASCI) developed by Fleming and Whalen (1990) were used to measure the students' self-concept. The PASCI measures the components of self-concept related to social and academic concerns. Eighteen (18) item self report questionnaires were adopted focusing on self-concept, gender and academic performance.

3.7 Pilot Study

Prior to visiting the schools for data collection, the researcher conducted a pilot study to pre-test the questionnaires using two schools in the district, which were not be included in the final study. The pilot study enabled the researcher to improve the reliability and validity of the instruments, and to familiarise with its administration.

3.7.1 Validity

Validity is defined as the accuracy and meaningfulness of inferences, which are based on the research results, (Mugenda and Mugenda, 1999). In other words, validity is the degree to which results obtained from the analysis of the data actually represents the phenomena under study. Validity according to Borg and Gall, (2003), is the degree to which a test measures what it purports to measure. That is, validity of an instrument is improved through expert judgment. As such, the researcher sought the assistance of research experts, experienced graduates, lecturers and experienced supervisors in order to help improve validity of the instrument.

3.7.2 Reliability

Mugenda and Mugenda (1999) define reliability as a measure of the degree to which a research instrument yields consistent results or data after repeated trial. To enhance reliability, research instruments were piloted in two schools in the County which were not included in the final sample. Within each school, 10 students participated in filling the questionnaires. Split-Half technique for reliability was employed, whereby the pilot questionnaires from the sample schools were divided into two halves and then a correlation coefficient was employed since it provides a measure of relationships between two continuous random variables. A cronbach alpha of 0.6670 was obtained and therefore the instruments were considered as reliable. The researcher then assessed the clarity of the questionnaire items so that those items found inadequate or vague were modified to improve the quality of the research instruments thus increasing its reliability. For the PASCI, reliability testing by Fleming and Whalen (1990) revealed median internal consistency reliability coefficients for the American, Hong Kong, Nepalese, Nigerian and Mozambican samples of 0.82, 0.63, 0.46, 0.63 and 0.61 respectively. That these coefficients were lower than those found in the American sample for whom PASCI was originally designed and for whom English is the first language is not unexpected. (Akande, 2010) however noted that the figures were probably acceptable for research purposes where group rather than individual differences was being investigated. Moreover, confirmatory factor analysis of PASCI responses from the four non-Western samples was encouraging regarding the existence of an underlying hierarchical model. The researcher then assessed the clarity of the questionnaire items so that those items found inadequate or vague were modified to improve the quality of the research instruments thus increasing its reliability.

3.8 Data Collection Procedure

A research permit was obtained from the National Council for Science and Technology. Thereafter the office of the District Education Officer (DEO) for Kangema Constituency was contacted before the start of the study. The selected schools were visited and the questionnaire administered to the respondents. The respondents were assured that strict confidentiality would be maintained in dealing with the responses. The filled-in questionnaires were collected after one week. The researcher personally administered the

questionnaires to the teachers and students and conducted interviews with the teacher counselors. The researcher also booked appointments with the Principals of the participating schools on appropriate day to visit and collect data from their schools. Data collection process took a period of one month.

3.9 Data Analysis

This study generated both qualitative and quantitative data; hence both qualitative and quantitative techniques were used to analyze the data obtained. Qualitative analysis considered the inferences that were made from the opinions of the respondents. This analysis was thematically presented in narrative form and where possible tabular form. Quantitative data was analyzed using descriptive and inferential statistics. Mugenda and Mugenda (1999) assert that the purpose of descriptive statistics is to enable the researcher to meaningfully describe a distribution of scores or measurement using a few indices or statistics.

Descriptive statistics involved the use of frequencies, percentages, means and standard deviations. Bell (1993) maintains that when making the results known to a variety of readers, percentages have a considerable advantage over more complex statistics. Similarly, Borg and Gall (1989) hold that the percentage is the most widely used and understood standard proportion. Frequency tables, pie charts and bar graphs were used to enhance data presentation. The process of data analysis required the use of a computer spreadsheet, and for this reason the Statistical Package for Social Sciences (SPSS) was used. As Martin and Acuna (2002) observe, SPSS is able to handle large amount of data, and given its wide spectrum of statistical procedures purposefully designed for social sciences, it is also quite efficient. ANOVA test was used to compare means between three or more groups while t-test was used to assess whether the means of the two groups were statistically different from each other. All statistical analyses were conducted at the 0.05 level of significance.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents results of the study based on the data collected from the field. The purpose of the study was to establish the influence of gender on self-concept and academic performance among secondary school students in Kangema constituency, Murang'a County, Kenya. Results of the analysis are presented based on the following research objectives.

- To find out the influence of gender on academic performance among secondary school students.
- ii. To determine the influence of gender on self-concept among secondary school students.
- iii. To establish the relationship between students' self-concept and academic performance in secondary schools.
- iv. To determine whether there are differences between boys' schools, girls' schools and mixed secondary school students in self-concept.
- v. To establish the extent to which guidance and counselling has influenced gender on self-concept and academic performance among secondary school students in Kangema Constituency.

The demographic characteristic of respondents is given first, followed by the analysis of each of the five research objectives.

4.2 Demographic Characteristics of Respondents

The study respondents comprised of 12 teacher counselors and 240 students from secondary schools in Kangema constituency, Murang'a County. Out of the 12 teacher counselors, 7 (58.3%) were females while 5 (41.7%) were males. Among the 240 students, 125 (52.1%) were males whereas 115 (47.9%) were females.

Table 3 illustrates distribution of students by form.

Table 3: Distribution of Students by Form in Kangema Constituency

Class level	Frequency	Percent		
Form 1	59	24.6		
Form 2	60	25.0		
Form 3	59	24.6		
Form 4	62	25.8		
Total	240	100.0		

Table 3 shows that questionnaires for data collection were evenly distributed amongst the four classes. This ensured that all the students in all the forms had an equal chance to be included in the study. In form one; data was collected from 59 (24.6%) students, form two 60 (25%) students, form three 59 (24.6%) students and form four 62 (25.8%) students. This was a clear indication that all the students were in their adolescence stage. In relation to this, the researcher expected to have the information on self concept since at this stage adolescents experience body development changes which influence their self esteem, trustworthy and self concept. Previous studies illustrated that self-esteem levels are high in childhood, drops during adolescence, rises gradually throughout adulthood, and declines sharply in elderly (Robins, Trzesniewski, Tracy & Gosling, 2002). Marsh (1989) demonstrated that self-concept decreases from early preadolescence to middle adolescence, then increased through early adulthood. After determination of how the students were distributed by class in Kangema Constituency, the researcher further sought to determine the type of schools from where the study was conducted. Figure 2 presents this information

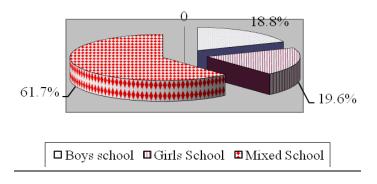


Figure 2: Distribution of Schools by type in Kangema Constituency

As shown in Figure 3, 61.7% of the students were enrolled in mixed schools, 19.6% were in girls only schools while 18.8% were in boys only schools. This shows that all schools by type were represented and hence the study would give a clear picture on influence of gender on students' self concept and academic performance. The researcher considered this information important in order to determine whether gender influences on student's self-concept was dependent on the school type.

Table 4 shows age of the teacher counselors. The study considered this information relevant in order to determine the age group within which teacher counselors were in, since the age of the teacher counselor was considered to have an influence on students' interaction with them.

Table 4: Teacher Counselors' Age in Years

Age	f	%
Below 30	5	41.7
31-35	3	25.0
36-40	1	8.3
41 and above	3	25.0
Total	12	100.0

Table 4 shows that 5 (41.7%) teachers counselors were aged below 30 years, 3 (25.0%) were aged 31-35 years while 4 (33.3%) were over 36 years. This implies that majority of teacher counselors were young and they would create a good rapport with students.

Table 5 shows teacher's responses on length of service as teacher counselor. This information was important since the duration a teacher had served as a teacher counselor would be key in determining whether they had gathered considerable experience in the field to be able to provide relevant information for this study.

Table 5: Duration Served as a Teacher Counselor

Duration Frequency Percentage

Total	12	100.0
16-20 years	1	8.3
11-15 years	1	8.3
6-10 years	2	16.7
1-5 years	7	58.3
Below 1 year	1	8.3

Table 5 shows that majority (58.3%) of the teachers had served as counselors for a duration of 1 to 5 years. This shows that most of the teacher counselors had served at least over one year in counseling and therefore were expected to be in a position of giving information related to students' self concept and academic performances.

4.3 Influence of Gender in Academic Performance among Secondary School Students

The first objective of the study therefore was to find out the influence of gender on academic performance among secondary school students. To address this objective, students were first presented with 10 aspects measuring their perceptions on influence of gender in academic performance. They were required to indicate their agreement levels on a five-point likert scale. The scale ranged from 1-5, with a score of 1 denoting strongly disagree, score of 2 representing disagree, score of 3 uncertain, score of 4 agree and score of 5 representing strongly agree. The midpoint of the scale was a score of 3 meaning respondent was undecided. Any score above 3 therefore, denoted that respondents agreed with the statements while scores below 3 denoted that respondents disagreed with the statements. Table 6 illustrates means and standard deviations obtained.

Table 6: Students Views on Influence of Gender in Academic Performance

Statement	S	A		A		U		D	S	SD	Mean	Std
	F	%	F	%	F	%	F	%	F	%	-	Dev.
Drugs are a big threat to the boy child's education	145	60.4	55	22.9	5	2.1	12	5.0	23	9.6	4.2	1.28
Boys can handle more serious and difficult	85	35.4	55	22.9	21	8.8	20	8.3	59	24.6	3.4	1.61

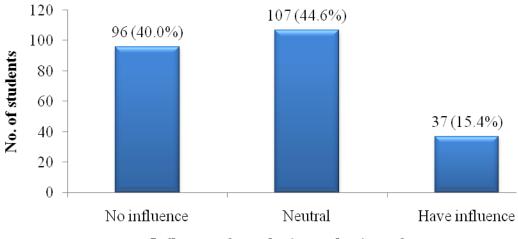
responsibilities than girls

Girls are more favored by parents and teachers in school than boys.	67	27.9	37	15.4	36	15.0	42	17.5	58	24.2	3.0	1.56
Boys tend to ask more trivial questions to gain teachers attention than girls.	36	15.0	60	25.0	50	20.8	35	14.6	59	24.6	2.9	1.41
Boys have more advantages in Maths and Sciences than girls.	38	15.8	43	17.9	36	15.0	42	17.5	81	33.8	2.7	1.49
Boys are more serious in school than girls.	36	15.0	32	13.3	64	26.7	36	15.0	72	30.0	2.7	1.41
Boys are more interested in Education than girls.	37	15.4	29	12.1	40	16.7	0	0.0	104	43.3	2.4	1.51
Most parents prefer educating boys than girls	23	9.6	28	11.7	57	23.8	35	14.6	97	40.4	2.4	1.36
Almost all careers tend to favor boys than girls.	21	8.8	36	15.0	30	12.5	47	19.6	106	44.2	2.3	1.38
Girls are more talented on academic than boys.	12	5.0	26	10.8	53	22.1	62	25.8	87	36.3	2.2	1.91

Key: SA: Strongly Agree A: Agree U: Uncertain D: Disagree SD: Strongly Disagree

As shown in Table 6, mean scores obtained on the scale ranged from 4.2 to 2.2. Students obtained mean scores above 3 only on the following two statements; Drugs are a big threat to the boy child's education (4.2) and boys can handle more serious and difficult responsibilities than girls (3.4). However, majority of the respondents obtained scores below 3 in most statements, meaning they disagreed with them. The lowest ranked statements were; girls are more talented in academics than boys (2.2), almost all careers tend to favor boys than girls (2.3) and most parents preferred educating boys than girls (2.4) and boys are more interested in education than girls (2.4). Results implied that students' gender influenced their responses on aspects measuring self concept.

Nevertheless, majority of the students agreed that drug abuse had a negative impact towards boy child's education. Figure 3 presents overall scores obtained by the respondents on influence of gender in academic performance



Influence of gender in academic performance

Figure 3: Influence of Gender in Academic Performance

As indicated in Figure 3, 96 (40.0%) students were of the views that gender had no influence in academic performance, 107 (44.6%) were undecided while 37 (15.4%) felt that it had influence in academic performance. To test gender differences in academic performance, the mean scores for male and female students on scale measuring their academic performances were compared. Table 7 illustrates results obtained

Table 7: Gender and Academic Performance Among Students

Gender of Students	N	Mean	Std. Deviation		
Male	102	6.2025	2.14342		
Female	87	5.6063	1.86875		
Total	189	5.9280	2.03826		

Table 7 shows mean scores obtained by 189 (102 male and 87 female students) students who indicated their mean scores in the end of term examination. Based on the results in the table, it emerged that male students obtained higher mean scores compared to the female students, meaning male students were performing well in academics compared to their female counterparts.

The first hypothesis adopted in the study was:-

H0₁: There are no statistically significant gender differences in academic performance among secondary school students in Kangema constituency.

To test this hypothesis, the researcher conducted a t-test statistic. The researcher selected this test to determine whether male and female students differed significantly in their academic performance. Table 8 presents t-test statistics for gender differences in academic performance

Table 8: t-test Statistics for Gender Differences in Academic Performance

	t	df	Sig.	Mean	Std. Error
			(2-tailed)	Difference	Difference
Equal variances	2.021	187	.045*	.5962	.29505
assumed					
Equal variances not	2.043	186.903	.042	.5962	.29186
assumed					

^{*}Significant at *p*<0.05 level

As shown in Table 8, t-test results revealed that there were significant differences between gender and student's academic performance at p<0.05 level. As reflected in Table 8, male

students obtained a mean score of 6.2025 while female students obtained a mean score of 5.6063. The results show that male students obtained higher scores than female students, meaning male students were performing well in academics as compared to the female students. The first hypothesis was therefore, rejected and a conclusion made that there were significant gender differences in academic performance. The results were in agreement with the study done by Maritim (1984) and Kamau, (1986) whose studies indicated that boys have higher aspiration than girls. Muthoni, (1998) in her study also indicated that in Kenya the education for girls lagged behind those of boys due to traditional gender- role stereotypes.

4.4 Influence of Gender on Self-concept among Secondary School Students

According to Azizi and Jaafar (2005), self concept is important in determining someone's personality. There are three important components in forming self concept that is self-awareness, self-acceptance which means the reciprocal feelings between oneself and others, and personal judgment due to the acceptance of others. It is often seen that male and female students hold different perceptions about themselves especially when it comes to their ability to do various tasks/duties assigned to them. The second objective of the study was therefore to determine the influence of gender on self-concept among secondary school students. To respond to this objective, study respondents were presented with 18 items measuring students' self concept. Sixteen items were measured using practically never (1) and very often (2) whereas the remaining two items were measured using not at all confident (1) and very confident (2). The midpoint of the scale used for all items was 1.5. Therefore, mean scores above 1.5 denoted that most of respondents indicated very often or very confident while mean scores below 1.5 denoted that respondents indicated practically never or not at all confident. Table 9 illustrates results obtained and to confirm these findings, t-test was used to test the second hypothesis of the study.

Table 9: Students' Self Concept Inventory

Statements	PN		VO		Mean	Std.
	F	%	F	%	-	Dev.
How often do you feel that you have a strong sense of Self-respect?	26	10.8	214	89.2	1.89	.311
Most of the time, do you genuinely like yourself?	30	12.5	210	87.5	1.88	.331
Do you think of yourself as a generally competent person who can do most things well?	29	12.1	211	87.9	1.88	.327
Do you ever feel especially proud of, or pleased with, your looks and appearance?	46	19.2	194	80.8	1.81	.394
Have you ever thought that you had a greater ability to read and absorb articles and textbooks than most people?	52	21.7	188	78.3	1.78	.413
Do you often think of yourself as an outstanding student?	54	22.5	186	77.5	1.77	.421
Do you ever feel less capable academically than others at your grade level?	182	75.8	58	24.2	1.76	.429
Do you ever doubt that you are a worthy person?	183	76.3	57	23.8	1.76	.426
Do you ever think that you have more ability in mathematics than most of your classmates?	67	27.9	173	72.1	1.72	.450
Do you think of yourself as a worthwhile person?	67	27.9	173	72.1	1.72	.450
How much do you worry about criticisms that might be made of you by others?	160	66.7	80	33.3	1.67	.472
How often do you have difficulty expressing your ideas in writing for class assignments?	149	62.1	91	37.9	1.62	.486
How often do you feel concerned about what other people think of you?	136	56.7	104	43.3	1.57	.497
Do you often feel nervous or self-conscious when called upon to speak in front of others?	116	48.3	124	51.7	1.48	.501
How much do you worry about whether other people will regard you as a success or a failure in your job or in school?	112	46.7	128	53.5	1.47	.500
Are you often concerned that your school performance is not up to par?	84	35.0	156	65.0	1.35	.478
	NC	%	VC F	%	Mean	Std. Dev.
When you have to write an essay to convincingly express your ideas, how confident do you feel that you have done a good job?	F 48	20.0	192	80.0	1.80	.401
Compared with others, how confident do you feel in your Mathematical abilities? Mathematical abilities? Mathematical Proportion of the North Act of the North	91	37.9	149	62.1	1.62	.486

Key: PN- Practically Never; VO- Very Often; NC- Not at all confident; VC- Very confident

As shown in Table 9, mean scores obtained by students ranged from 1.89 to 1.35. Majority (89.2%) of the students obtained a mean score of 1.89 hence indicating that they often felt that they have a strong sense of self respect. In addition, over 80.0% the students also reported that very often; they liked themselves (1.88), they felt that they are competent and most of the time they can do most of things well (1.88) and also they are pleased with their looks and appearance (1.81). However, a significant proportion of students were practically never concerned about; school performance (1.35) and how other people regard them as failure or success in school (1.47). This shows that most of the students had a positive self concept. Results in the table further revealed that majority of the students were very confident when writing an essay to convincingly express their ideas about job performance (1.80) and also most of them were confident with performance in mathematics (62.1%).

This shows that most of the students had high self esteem and hence they felt that they are capable of expressing their views and ideas. This positive self concept might be due to good relationship between students and colleagues around them or even other people. According to Azizi *et al.* (2005), students who have positive self concept usually received good attention and care from their own friends, teachers, parents, families or students around them. They always have the chance to gain more success than failure since they feel appreciated and receive good support from others.

Figure 4 presents overall scores on self concept inventory

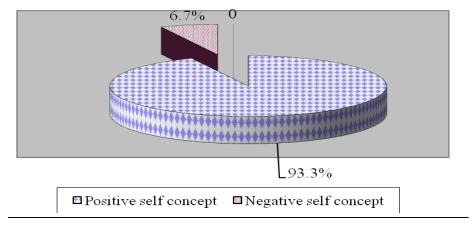


Figure 4: Level of self concept regarding students' academic performance

Figure 4 illustrates that majority (93.3%) of the students had positive self concept. This shows that most of the students had positive thoughts about their well-being and were generally satisfied with oneself. This is supported by Branden (2001) Self Concept Theory which postulates that an individual's behavior or attitude is determined by the way he or she views self or is viewed by others. This is displayed in every emotional response as a result of self evaluation.

To verify the above findings, further analysis were done to establish whether gender had influence on students' self concept, the mean scores of male and female students on self concept were computed and their results compared. Table 10 shows mean scores obtained by students across their self concept.

Table 10: Gender and Self Concept

Sex of the student	N	Mean	Std. Deviation		
Male	125	1.90			
Female	115	1.97	.160		
Total	240	1.93	.250		

As Table 10 shows, male students obtained a score of 1.90 on the scale measuring personal self concept while female students obtained a score of 1.97 on the same. This shows that female students had higher positive self concept compared to the male students.

The second hypothesis in the study stated that:-

H02: There are no statistically significant gender differences on self concept among secondary school students in Kangema constituency. To ascertain this hypothesis, the researcher conducted a t-test to determine whether male and female students differed significantly on their concept. Table 11 shows results of the analysis.

Table 11: t-test Statistics for Gender Difference on Students' Self Concept

	t	df	Sig.	Mean	Std. Error
			(2-tailed)	Difference	Difference
Equal variances	-2.437	238	.016*	08	.032
assumed					
Equal variances not assumed	-2.496	190.253	.013	08	.031
assumed					

^{*}Significant at *p*<0.05 level

The t-test statistics in table 11 illustrates that there were significant gender differences on students' self concept, at p<0.05 level. This confirmed results in Table 11 that, female students had higher positive self concept compared to their male counterparts. The second hypothesis was therefore rejected and the study concluded that there were statistically significant gender differences on student's self concept. Previous studies have shown that gender disparities arise from the process of assigning boys and girls, specific social roles, privileges, rights, responsibilities and duties on the basis of the sexes of the persons concerned. In secondary schools, gender differences are observed in performance, self-concept, access, retention, transition and academic achievement. This findings were supported by Marsh (2002) theory on physical self concept which shows that there were differences in both boys and girls self concept. The theory revealed that boys have higher self-concept than girls in the areas of Mathematics, general self, physical appearance and physical abilities, whereas girls have higher self-concept in the domains of verbal, honesty, trustworthiness, same-sex relations and general school.

4.5 Relationship between Students' Self-concept and Academic Performance in Secondary Schools

The third objective of the study was to establish the relationship between students' self-concept and academic performance in secondary schools. To respond to this objective, students were presented with 10 aspects measuring their self-concept on academic performance. They were required to state their agreement levels on a five-point likert scale ranging from strongly agree (5) to strongly disagree (1). Presented in Table 12 are the means and standard deviations obtained.

Table 12: Students' Self Concept in Academic Performance

Statement	S	SA		A		U		D	S	SD .	Mean	Std.
	F	%	F	%	F	%	F	%	F	%		Dev.
I am satisfied with myself	182	75.8	142	17.5	7	2.9	6	2.5	3	1.3	4.64	0.77
I am comfortable with languages	86	35.8	102	42.5	28	11.7	14	5.8	10	4.2	4.00	1.04
I am comfortable with my Math's teacher	106	44.2	78	32.5	13	5.4	17	7.1	26	10.8	3.92	1.33
I am good in co- curricular activities	80	33.3	75	31.3	27	11.3	38	15.8	20	8.3	3.65	1.31
I am happy with Maths double lessons	72	30.0	72	30.0	25	10.4	31	12.9	40	16.7	3.44	1.45
I am not satisfied with my current grade in school	67	27.9	71	29.6	23	9.6	36	15.0	43	17.9	3.35	1.47
I am good in science subjects	46	19.2	77	32.1	53	22.1	43	17.0	21	8.8.	3.35	1.22
I like visiting the school library at all times	49	20.4	49	20.4	65	27.1	40	16.7	37	15.4	3.14	1.34
I do not enjoy using official languages in school	21	8.8	32	13.3	19	7.9	50	20.8	118	49.2	2.12	1.37
I am discouraged in my studies by my parents	11	4.6	13	5.4	12	5.0	34	14.2	170	70.8	1.59	1.10

Key: SA: Strongly Agree A: Agree U: Uncertain D: Disagree SD: Strongly Disagree

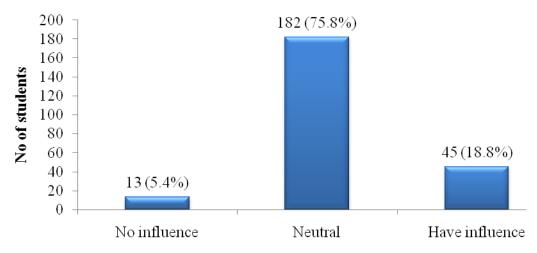
Mean scores obtained by students on aspects measuring self concept in academic performance ranged from 4.64 to 1.59. Majority of the students obtained mean scores above 3 in most of the aspects meaning that they agreed with them. The highest ranked aspects were; I am satisfied with myself (4.64), I am comfortable with languages (4.00), I am comfortable with the Math's teacher (3.92) and I am good in co-curricular activities (3.65). On the other hand, the lowest ranked aspects were; I am discouraged in my studies by my parents (1.59) and I do not enjoy using official languages in school (2.12).

Table 13: Students' Self Concept in Relation to Academic Performance

Statement	S	SA		A		U		D	S	SD	Mean	Std.
	F	%	F	%	F	%	F	%	F	%	-	Dev.
I believe I have the	212	88.3	22	9.2	0	0.0	1	0.4	5	2.1	4.8	0.66
ability to get good grades												
in school												
In the kind of things we	127	52.9	67	27.9	19	7.9	18	7.5	9	3.8	4.2	1.10
do in schools I feel that I												
am good as the other												
students in my class												
I see myself as among the	128	53.3	71	29.6	22	9.2	6	2.5	13	5.4	4.2	1.078
best learners in class												
I am happy with the	108	45	90	37.5	14	5.8	12	5.0	16	6.7	4.1	1.14
school work I do												
I am satisfied with my	73	30.4	105	43.8	26	10.8	19	7.9	17	7.1	3.8	1.16
school work												
I am proud of my report	47	19.6	65	27.1	48	20.0	49	20.4	31	12.9	3.2	1.32
form												
I think I take a longer	21	8.8	31	12.9	34	14.2	64	26.7	90	37.5	2.3	1.32
time than my classmates												
to understand the lesson												
I feel worthless in class	13	5.4	9	3.8	12	5.0	35	14.6	171	71.3	1.6	1.10
I dislike it when my	7	2.9	10	4.2	18	7.5	48	20.0	157	65.4	1.6	1.00
teachers ask me questions												
in class												
Even if I work harder, I	3	1.3	4	1.7	4	1.7	39	16.3	190	79.2	1.3	0.70
would not be able to												
achieve better marks.												

Key: SA: Strongly Agree A: Agree U: Uncertain D: Disagree SD: Strongly Disagree

As shown in Table 13, the mean scores obtained by students ranged from 4.8 to 1.3. Students obtained mean scores above 3 on the following statement; I believe I have the ability to get good grades in school (4.8), In the kind of things we do in schools I feel that I am good as the other students in my class (4.2), I see myself as among the best learners in class (4.2) and I am happy with the school work I do (4.1). However, students obtained low scores on the following statements; Even if I work harder, I would not be able to achieve better marks (1.3), I dislike it when my teachers ask me questions in class (1.6) and I feel worthless in class. This shows that students have high self concept towards their academic performance.



Influence of self concept in academic performance

Figure 5: Influence of Students Self Concept in Academic Performance

Figure 5 shows that 13 (5.4%) students indicated that self concept had no influence in academic performance, 182 (75.8%) students were neutral while 45 (18.8%) felt that self concept had influence in academic performance.

To determine the relationship between students' self concept and academic performance, the researcher conducted Pearson's' product moment correlation analysis based on the following hypothesis:-

H03: There are no statistically significant relationship between self concept and academic performance among secondary school students in Kangema constituency. Results of this analysis are as shown in Table 14.

Table 14: Students' Self Concept versus Academic Performance

	Pearson product moment	Students' mean scores in
	correlation	end of term exam
Students' self concept	Pearson Correlation	.181
	Sig. (2-tailed)	.013*
Total	N	189

^{*} Correlation is significant at the 0.05 level (2-tailed).

Results in Table 14 show a correlation coefficient r of 0.181 for students self concept and academic performance. This correlation illustrates that there was weak correlation between students' self concept and academic performance, at p<0.05 level of significance. Thus, the third null hypothesis was rejected and its alternate state accepted that there was a significant relationship between students' self concept and academic performance.

In agreement to the findings, Cokley (2000) established that there was a significant relationship between positive interpersonal relationships as a means of increasing academic self-concept and overall academic outcomes of students. Lyon (1993) also noted that high academic achievement levels were correlated with high academic self-concept even more significantly than with students' motivation toward school. Similarly, Marsh and Yeung (2007) found out that academic performance has substantial effects on subsequent academic self-concept and that academic self-concept also had substantial effects on subsequent academic performance. This reciprocal relation between academic self-concept and performance has also been supported by Hay (1997). Furthermore, Marsh and Yeung (2007) also showed that self-concept has significant effects on high school students' selection of coursework. Students' self-concept is therefore both an important educational outcome and an important factor that may facilitate other desirable educational outcomes.

4.6 Differences between Boys' Schools, Girls' Schools and Mixed Secondary School Students in Self-Concept

The fourth objective of the study was to determine whether there are differences between boys' schools, girls' schools and mixed secondary school students in self-concept. To address this objective, respondents (students) were given statements measuring students' self concept towards their school type. They were required to agree or disagree with each statement. Presented in Table 15 are their responses.

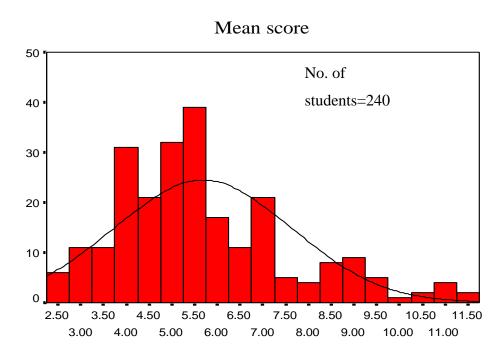
Table 15: Students' Self Concept towards their School -

Statement	Y	es	No		
	F	%	F	%	
Are you proud of being born a boy or girl?	237	98.8	3	1.3	
Are there more education challenges in mixed schools than in single schools?	163	67.9	77	32.1	
Do you appreciate being in your current schools?	143	59.6	97	40.4	
Do mixed schools perform better than single schools?	106	44.2	134	55.8	
Mixed schools offer better and conducive environment for studying than single schools.	89	37.1	151	62.9	
Are single schools better than mixed schools?	88	36.7	152	63.3	
Are students in single schools more disciplined than those in mixed schools?	88	36.7	152	63.3	
Does your comparison with those in mixed schools ever make you feel inferior?	57	23.8	183	76.3	
Do you curse or regret for being in a single school?	52	21.7	188	78.3	
Would you mind being in a mixed school?	50	20.8	190	79.2	

Table 15 shows that 98.8% of the students reported that they are proud of their gender and they appreciate being in the current school (59.6%). With regard to students' perceptions towards mixed schools, results in the table illustrates that 67.9% of the students indicated that there are more challenges in mixed schools than in single schools. Over 50.0% of them felt that mixed schools were not offering better and conducive environment for studying than single schools (62.9%) and also they were not performing better than single

schools (55.8%). However, despite most students giving negative views towards mixed schools, a significant proportion of the students had positive views. To verify this finding, majority (79.2%) of students indicated that they would not mind being in a mixed schools.

In relation to students' views towards single schools, two similar proportions (36.7%) of the respondents felt that single schools were better than mixed schools and students in single schools were more disciplined compared to those in mixed schools. In addition, 76.3% and 78.3% of students in single schools confirmed that their comparison with students in mixed schools never made them feel inferior or curse/regret being in single schools respectively. However, over 60.0% of students disagreed that single schools were better than mixed schools and students in single schools were more disciplined compared to those in mixed schools. This shows that some of the students had negative self concept towards single schools. The researcher further sought to determine the differences in academic performances among students in Boys' only, Girls' only and the Mixed schools. He first determined the overall academic performance of the students in their end of term results. Figure 6 has the results.



Mean score in the end of term exam

Figure 6: Students' academic performance in the end of term exams

As shown in Figure 6, overall scores obtained by students at the end of term exams ranged from 2.28 to 11.60 with an average mean score of 5.6799 and standard deviation of 1.95352. This show that majority of the students scored below average. The research further wanted to determine the differences in academic performances among students in Boys' only, Girls' only and mixed secondary schools. The table 16 has results of this analysis.

Table 16 illustrates the results.

Table 16: Difference in Academic Performance Among Students' in Boy School,
Girls Only and Mixed Schools

Type of school	N	Mean	Std. Deviation	Std. Error
Boys' only school	38	6.3995	2.31834	.37608
Girls' only school	37	5.0473	1.16005	.19071
Mixed school	114	6.0567	2.09233	.19596
Total	189	5.9280	2.03826	.14826

As shown in Table 16, mean scores obtained by students in end of term examinations differed significantly from the three types of schools. Results show that boys' only school scored a mean score of 6.3995, followed by mixed school which scored a mean score of 6.0567 and then girls' only school which scored a mean score of 5.0473. This means that boys' only schools were performing well in academic compared to girls' only and mixed schools.

The fourth hypothesis in the study stated that:

H04: There are no statistically significant differences in academic performance in boys' schools, girls' schools and mixed secondary schools' students in Kangema constituency. To test this hypothesis, analysis of variance (ANOVA) test was conducted to determine whether students' academic performance differed against school type. Table 17 presents the results obtained.

Table 17: ANOVA Statistics for Differences in Students' Academic Performance Versus School Type

	Sum of	Sum of df Mean Squar		F	Sig.	
	Squares					
Between Groups	39.037	2	19.518	4.893	.008*	
Within Groups	742.007	186	3.989			
Total	781.043	188	_			

^{*}Significant at *p*<0.05 level

ANOVA test results showed that there was a significant difference in students' academic performance from the three types of schools, at p < 0.05 level. Boys' only schools had higher academic performance followed by mixed school and then girls' only school. These results were not in line with the findings by Yusuf and Adigun (2010) who asserted that, whether a student attends a single-sex school or mixed sexed school, it does not make a difference in his/her academic performance. While Abiam and Odok (2006) found a weak differential between the performance of boys and girls asserted that girls in co-educational schools, because of the presence of boys apparently develop such faculty of power and synthesis that was formerly the exclusive attribute of the boy. However, Eriba and Achor (2010) stated that "...studies have variously shown that the type of school and the teachers' gender do have an influence on a number of variables e.g. academic performance", which is in agreement with UNESCO (2007) which ascribes to single-sex schools especially for girls to enhance performance in Mathematics and Science. The results of the analysis resulted to a rejection of the fourth hypothesis and its alternate that there are statistically significant differences in academic performance in boys' schools, girls' schools and mixed secondary schools' students was accepted.

4.7 Extent to which Guidance and Counselling has Influenced Gender on Self-Concept and Academic Performance among Secondary School Students in Kangema Constituency

Emphasis on achievement outcome creates a unique opportunity for school counselors to become more closely tied to the educational process affecting academic achievement. Guidance and counseling could influence both the academic performance and self concept of secondary school students. According to the Ministry of Education (Republic of Kenya, 2003) guidance and counseling helps in assisting students develop good studying habits, which could positively influence their academic performance. Furthermore, if a student is not able to identify a good study habit, his/her self concept may be affected. The effect of guidance and counseling on self concept and academic performance in males may differ significantly than the resultant effect on the female students. It is in relation to this view, that the study sought to establish the extent to which guidance and counselling has influenced gender on self-concept and academic performance among secondary school students in Kangema Constituency. To address the objective, students were presented with ten items based on effect of guidance and counseling towards academic performance. They were required to state their agreement levels on a Five-point likert scale. The scale ranged from 1-5 with 1 denoting strongly disagree, 2 disagree, 3 uncertain, 4 agree and 5 strongly agree. The mid-point of the scale was a score of 3 signifying that one was neutral. Any scores above 3 therefore, denoted that respondents agreed with the statement while score below 3 denoted that respondents disagreed with the statements. Table 18 illustrates means and standard deviations obtained.

Table 18: Students' Views on Effect of Guidance and Counseling Towards Academic Performance

Statement		SA		A		U		D	S	D	Mean	S.D
	F	%	F	%	F	%	F	%	F	%	-	
Guidance and counseling	76	31.7	94	39.2	30	12.5	20	8.3	20	8.3	3.8	1.22
teacher have helped us in												
career choice												
The guidance and	90	37.5	72	30.0	26	10.8	27	11.3	25	10.4	3.7	1.34
counseling teacher has												
assisted me to discover my												
strengths and weaknesses												
My academic performance	75	31.3	86	35.8	36	15.0	23	9.6	20	8.3	3.7	1.24
has improved as a result of												
guidance and counseling in												
my school.												
The guidance and	83	34.6	75	31.3	18	7.5	38	15.8	26	10.8	3.6	1.38
counseling teacher has												
helped me improve my												
confidence.												
The guidance and	68	28.3	88	36.7	31	12.9	28	11.7	25	10.4	3.6	1.30
counseling teacher has												
helped adopt effective												
study habits	40	167	<i>c</i> 1	267	20	10.5	5 1	21.2	~ ~	22.0	2.0	1 42
I have been visiting the	40	16.7	64	26.7	30	12.5	51	21.3	55	22.9	2.9	1.43
guidance and counseling												
teacher for help with personal and academic												
personal and academic problems												
I think I have never gained	11	16	10	7.0	26	10.8	55	22.0	120	53.8	1.9	1.17
in any way from the	11	4.0	17	1.7	20	10.8	33	22.3	149	33.0	1.7	1.1/
guidance and counseling												
teacher.												

Key: SA: Strongly Agree A: Agree U: Uncertain D: Disagree SD: Strongly Disagree

As indicated in Table 18, mean scores obtained by students on effect of guidance and counseling towards academic performance ranged from 3.8 to 1.9. Majority of the students obtained mean scores above 3 in most statements, meaning that they agreed with them. The

highest ranked statements were; guidance and counseling teachers have helped us in career choice (3.8), guidance and counseling teacher has helped in discovering weaknesses and strengths (3.7) and also my academic performance has improved as a result of guidance and counseling (3.7). On the other hand, the lowest ranked statements were; I think I have never gained in any way from guidance and counseling (1.9) and I have been visiting the guidance and counseling teacher with personal and academic problems (2.9). Based on the result of the analysis, it emerged that majority of the students felt that guidance and counseling had a positive impact towards students' self concept and also academic performance. Nevertheless, it emerged that most of students were not independently visiting teacher counselors for personal issues and academic problems. This could be influenced by factors such as lack of guidance and counseling rooms in most schools and poor students-teachers relationships.

Figure 7 shows overall scores on effectiveness of guidance and counseling in academic performance among secondary school students.

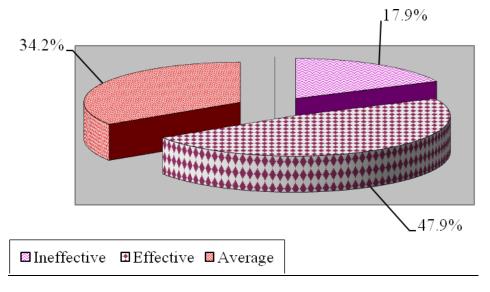


Figure 7: Effectiveness of Guidance and Counseling in Academic Performance

Figure 7 shows that 115 (47.9%) students felt that guidance and counseling was effective in their academic performances, 83 (34.2%) were average while 43 (17.9%) felt that guidance and counseling was ineffective in their academic performance. In relation to these findings, Rutondoki (2000) argues that a student who loses confidence in his or her ability

and who devalues himself or herself lacks concentration and this leads to continuous academic failure. The provision of guidance and counseling services in school may help curb these problems. This implies that guidance and counseling had a positive impact on students' academic performance.

During the interview, teacher counselors reported that guidance and counseling was effective in that it helped students' in realizing their potential, boosting self esteem and improving in academic performance. However, there are challenges which hindered effectiveness of guidance and counseling in most schools. These challenges included; students have a negative attitude towards guidance and counseling, there was lack of support from the school administration, lack of private rooms for guidance and counseling in schools and lack of time due to overloaded workloads. The study also sought to determine whether guidance and counseling had any effect on students' academic performances. Table 19 has the results of the results obtained.

Table 19: Effectiveness of Guidance and Counseling in Academic Performance

Effectiveness of guidance	N	Mean	Std. Deviation	Std. Error
and counseling Effective	90	5.4216	1.73459	.18284
	_			
Average	67	6.1382	2.16454	.26444
Ineffective	32	6.9123	2.19196	.38749
Total	189	5.9280	2.03826	.14826

Table 19 shows that 90 respondents who were of the views that guidance and counseling was effective in students' academic performance obtained a mean score of 5.4254, 67 who were averaged obtained a mean score of 6.1476 while 32 students who felt that guidance and counseling was ineffective scored 6.8820. This implied that guidance and counseling influenced students' academic performance. In terms of the effectiveness of guidance and counseling on students' self concept, the results obtained are in table 20 below

Table 20: Effectiveness of Guidance and Counseling on Students' Self Concept

Effectiveness of guidance	N	Mean	Std.	Std. Error
and counseling			Deviation	
Ineffective	43	30.28	2.914	.444
Average	82	30.57	2.667	.294
Effective	115	30.63	2.333	.218
Total	240	30.55	2.553	.165

As shown in Table 20, mean scores obtained by respondents on effectiveness of guidance and counseling on students' self concept did not differ significantly. Students' who felt that guidance and counseling was ineffective obtained a mean score of 30.28 whereas those who felt that guidance and counseling was effective on students' self concept obtained a mean score of 30.63. This implied that guidance and counseling did not have any influence on students' self concept.

To verify these results, Analysis of Variance (ANOVA) test was employed based on the fifth hypothesis of the study which stated that:-

H05: Guidance and counseling has had no statistically significant influence on self concept and academic performance among secondary school students in Kangema constituency. The statistic was calculated at two levels. The first level shows influence of guidance and counseling in student's academic performance while the second level illustrates influence of guidance and counseling on students' self concept. Table 21 present results obtained on effectiveness of guidance and counseling in students 'academic performance

Table 21: ANOVA Statistics on Effectiveness of Guidance and Counseling in Students' Academic Performance

	Sum of Squares	df	Mean Square	\mathbf{F}	Sig.
Between	57.041	2	28.521	7.327	.001*
Groups					
Within	724.002	186	3.892		
Groups					
Total	781.043	188	-		

^{*}Significant at p<0.05 level

Table 21 shows that guidance and counseling had a significant influence on students' academic performance, at p<0.05 level. This means that the more the provision of guidance and counseling in schools the higher the academic performance among the students and vice versa. In line with these results, Border and Drury (1992) have quoted previous studies that have shown that increased academic achievement, academic persistence, school attendance and positive attitude toward school were as a result of school counseling. For instance, Lee (1993) found that classroom guidance lesson led by counselors can "positively influence students' academic achievement in Mathematics".

Similarly, Sink and Stroh (2003) found out that improved academic achievement resulted from effective school guidance and counseling services. Brown and Trusty (2005), however, found that there is little support for the idea that comprehensive developmental school counseling programs improve achievement and that most of the studies done have been mainly focused on elementary students. Whiston (2002) also concurred with the findings of Brown and Trust. His findings stated that there is not enough documentation of the positive effects of school counseling interventions and that in a data driven era, there will be more demands for evidence that demonstrates these positive effects. In spite of this lack of evidence, there is a sense among many researchers (Brown & Trusty, 2005; Whiston, 2002; Whiston & Quinby, 2009) that school counseling interventions do serve to promote academic success. With regard to the findings obtained the hypothesis that guidance and counseling had had no statistically significance influence on academic performance was rejected. The study concluded that guidance and counseling has had statistically significance influence on academic performance.

Table 22: ANOVA Statistics on Effectiveness of Guidance and Counseling in Students' Self Concept

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.027	2	2.013	.307	.736
Within Groups	1553.373	237	6.554		
Total	1557.400	239			

Significant at *p*<0.05 level

Based on the ANOVA test, result in the table 22 illustrates that guidance and counseling did not have any significant influence on students' self concept, at p<0.05 level. Contrary to the findings, Wiggins & Wiggins (1992) found that self-concept is often linked with a student's level of success in school. Students who primarily received individual counseling services had greater gains in self concept and decreased need for school counseling help. It is based on the results presented above that part of the fifth hypothesis that guidance and counseling has had no statistically significant influence on self-concept was accepted.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The purpose of the study was to establish the influence of gender on self-concept and academic performance among secondary school students in Kangema constituency, Murang'a County, Kenya. The specific objectives for the study were: (i) to find out the influence of gender in academic performance among secondary school students (ii) to determine the influence of gender on self-concept among secondary school students (iii) to establish the relationship between students' self-concept and academic performance in secondary schools (iv) to determine whether there are differences between boys' schools, girls; schools and mixed secondary students in self concept (v) to establish the extent to which guidance and counseling has influenced gender on self-concept and academic performance among secondary school students in Kangema Constituency. The study was guided by Branden (2001) Self Concept Theory and adopted a descriptive survey research design to target 24 secondary schools, 6,168 students and 24 teacher counselors. Stratified random sampling was used to select 240 students while purposive sampling was used to select 12 teacher counselors, giving a total of 252 respondents. Questionnaires for students and interview guide for teacher counselors were used as the tools for data collection.

5.2 Summary of Findings

The following is a summary of the main findings of the study:-

(i) Influence of Gender in Academic Performance Among Secondary School Students

Results of this study demonstrated that male students obtained higher mean scores on academic performance and overall scores of self concept in comparison to the female students. The t-tests statistics revealed that there were significant gender differences in academic performance, meaning male students were performing well in academics compared to their female counterparts. These findings therefore call for the enhancement of gender equity on academic performance at all levels of education which the Millennium development goal advocates for.

(ii) Influence of Gender on Self-Concept Among Secondary School Students

Self concept is the cognitive aspect of self and generally refers to the totality of a complex, organized and dynamic system of learned beliefs, attitudes and opinions that each person holds to be true about his or her personal existence. Self concept and achievement are dynamically interactive and reciprocal. In this regard, the study found out that majority (93.3%) of the students had positive self concept. However, the study findings revealed that female students had higher positive self concept than male students and therefore a conclusion was made that there were significant gender differences on students' self concept, at p<0.05 level.

(iii)Relationship Between Students' Self-Concept and Academic Performance In Secondary Schools

In relation to the third objective, the study established that there was a relationship between students' academic performance and their self concept level. The study showed that students with high level of self concept performed better in academics compared to those with low self concept. This therefore indicates that an increase in students' self concept leads to an improvement in academic performance.

(iv) Differences Between Boys' Schools, Girls' Schools and Mixed Secondary School Students in Self-Concept.

The study found out that mean scores obtained by students in end of term examinations differed significantly from the three types of schools. Results of the analysis revealed that boys' only schools were performing well in academics compared to girls' only and mixed schools. A conclusion was therefore, made that there was a significant difference in students' academic performance from the three types of schools, at p<0.05 level.

(v) Extent to which Guidance and Counselling has Influenced Gender on Self-Concept and Academic Performance Among Secondary School Students

Regarding this objective, the study established that most (47.9%) students felt that guidance and counseling was effective in their academic performances. ANOVA test results revealed that guidance and counseling had a significant influence on students' academic performance, at p<0.05 level, meaning that the more the provision of guidance and counseling in schools the higher the academic performance among the students and

vice versa. This illustrates that guidance and counseling programme in school is achieving one of its goals which is concerned with all the activities that are related to the student's academic performance and adjustment to his/her educational environment (Republic of Kenya, 2003). However, in terms of influence of guidance and counseling on students self concept, the study findings revealed that mean scores obtained by respondents on effectiveness of guidance and counseling on students' self concept did not differ significantly, at p<0.05 level. This implied that guidance and counseling did not have any influence on students' self concept.

5.3 Conclusions

Based on the findings of the study, the following conclusions were made:

- (i) That student's gender influenced their responses on aspects measuring self concept, and that there were significant gender differences in academic performance whereby male students obtained higher mean scores compared to the female students.
- (ii) That female students had higher positive self concept compared to the male students, meaning that there were significant gender differences on students self concept.
- (iii)That there was a significant relationship between the students self concept and academic performance, meaning that increase on students self concept leads to an improvement in academic performance.
- (iv) That, boys only schools were performing well in academic compared to girls' only and mixed schools, meaning that there was a significant difference in students' academic performance from the three types of schools.
- (v) That guidance and counseling had a significant influence on students' academic performance, meaning that the more the provision of guidance and counseling in schools the higher the academic performance among students. At the same time, guidance and counseling did not have any influence on students self concept.

5.4 Recommendations

Based on the conclusions of the study, the following recommendations were made

- (i) Guidance and counseling services should be provided to the female students based on self-concept to improve academic performance.
- (ii) Frequent counseling sessions should be organized in schools especially among male students based on self-concept to improve in the domains of verbal, honesty, trustworthiness and same sex relations.
- (iii)To improve academic performance among students in schools, administrators and teacher counselors should guide and counsel students on their self-concept. This is because both have indicated a significant relationship in the study.
- (iv)School administrators should strengthen guidance and counseling in schools by ensuring that there is a room set for individual counseling. The teacher counselors work load should also be minimized to give them enough time to have rapport with the students.

5.5 Suggestions for Further Research

Based on the findings of the study the following suggestions were made for further research:

- (i) A study should be carried out to determine the effects of academic performance based on gender among secondary school students.
- (ii) A study should be carried out to examine the impact of low self-concept on academic performance among secondary school male students.
- (iii) A study should be undertaken to assess the significant relationship between the students' self-concept and academic performance.

REFERENCE

- A Report from the Office of Her Majesty's Equal Opportunities Commision (1996). *Chief Inspector of Schools and the Equal Opportunities Commision*. London: HMSO.
- Abiam, P.O., Odok, J.K. (2006). Gender Factors in Students' Achievement in Mathematics in Different Branches of Secondary School Mathematics. *Journal of Education Technology Cross River University of Technology, Akamkpa, 1*(3), 161-166.
- Acosta, E. S. (2001). The Relationship between School Climate, Academic Self-Concept and Academic Achievement. Dissertation Abstract International Section A: *Humanities and Social Sciences*, 62(5-A): 1717.
- Akande, W. A. (2010). How well do you know me: Culture and the self. *Sociologija*. *Mintisirveinksmas*, 1(26), 131-146.
- Amezcua, J.A & Picardo, M.C. (2000). Gender Differences in Self-Concept in Adolescent Subjects 16, 207-214.
- Amittai, F.A. (2008). The Gender Theory.
- Azizi Y. & Jaafar, S. L. (2005). *Development of Self Concept, Pahang*: PTS Publishing Sdn Bhd.
- Barbara, E. & Arlie, R.H. (2002). *Global Woman: Nannies, Maides and Sex workers in the new economy*: Carlifornia; Henry Holt Company, LLC.
- Bell, J. (1993). *Doing your Research Project*, Open University Press, Maidenhead, Philadelphia.
- Border, L.D. & Drury, S.M. (1992). Comprehensive School Counselling Programmes. A Review for policy Makers and Practitioners. *Journal; of Counselling and Development*, 70, (4), 487-498.
- Borg, W. R., & Gall, M. D., (2003). *Educational Research; An Introduction*, (5th ed) New York: Longman.
- Branden. N. (2001). The Psychology of Self Esteem. A Revolutionary Approach to Self-Understanding That Launched a New Era in Modern Psychology. Jossey-Bass, A Wiley Company. San Francisco.
- Brown, D. & Trusty, J. (2005). School Counselors, Comprehensive School Counseling Programs and Academic Achievement: Are School Counselors Promising more than they can Deliver? *Professional School Counseling*, 9(1), 1-8.

- Cokley, K. O. (2000). An Investigation of Academic Self-Concept and its Relationship to Academic Achievement in African American College Students. *Journal of Black Psychology*, 26, 148-164.
- Coley, R. (2001). Differences in the Gender Gap: Comparison Across Racial/Ethnic Groups in Education and Work: Educational Testing Service Policy Information Center.
- Enos, H.N.N (2008). The Status Interpretation and Opportunities for Gender Equity in the Kenyan Education System.
- Eriba, J.O. & Achor, E.E. (2010). Effects of School type and Teacher Gender on Classroom Interaction Patterns in Integrated Science Classes. *Brunei International Journal of Science and Mathematics Education*, 2(1), 48-58.Retrieved online from www.shbieejournal. files.wordpress.com on 28/11/2011
- Esple, E. and Jolly, S. (2005). Gender And Sex: A Sample of Definitions: New York.
- Fleming, J.S & Whalen (1990). *Personal and Academic Self-Concept Inventory* (*PASCI*):Student Self-Concept Inventory subscales: Academic Ability, Verbal Ability, Math Ability
- Fraenkel, J.R. & Warren, N.E (1990). *How to Design and Evaluate Research in Education*. New York; MC Graw-Hill Inc.
- Freud, S. (1900). *The Interpretation of Dreams*. In the Complete Psychological Works of Sigmund Freud. London: The Hogarth Press, 1962.
- Gallagher, T. (2001). Equal Opportunities Commission Conference on Boys and Girls in the 21st Century: Gender Differences in Learning.
- Gilligan, T. (1989). Asymmetric Information and Legislative Rules with Heterogeneous Committees. *American Journal of Political Science*.
- Hay, D.F (1997). Postpartum Depression and Cognitive Development: New York; Guilford Press.
- Hay, I, Ashman, A.F, Van-Kraayenoord, C.E. (1998). Educational Characteristic of Students with High and Low Self-Concept, Psychology in the School 35(4): 391-400.
- Human Rights and Equal Opportunity Commission Annual Report 1997-98. Government Press. Nairobi.
- Jyotsna, F.K (2006). *Boys Underachievement in Education*. An Exploration in Selected Commonwealth Countries.

- Kamau, M. (1986). A Comparative Study of the Occupational Aspirations of the Physically Handicapped Secondary School Studies and the Actual Job Placement of these Graduates. Unpublished Master's Thesis, Kenyatta University.
- Kerlinger, F. (1986). Foundations of Behavioural Research (2nd edition). New York: Holf and Winston Inc.
- Kothari, C. R. (2007). *Research Methodology; Quantitative Techniques*, New Delhi: Vikas Publishing House PVT Ltd.
- Lee, R. S. (1993). Effects of classroom Guidance and Counselling on students Achievement. *In Elementary Scholl Guidance and Counselling*. 27 (3), P. 163-171.
- Lyon, M. A. (1993). Academic Self-concept and its Relationship to Achievement in a Sample of Junior High School Students. *Educational and Psychological Measurement*, 53, 201-210.
- Machargo, J, (1991). The teacher and self-concept in his or her students: Theory and practice. Madrid. Escuela Espafiola.
- Maritim, E.K (1984). The Academic Self-concept and Teachers Perception: Their Relationship to Grade Attainment in Rural Kenya. Unpublished Doctoral Dissertation, Harvard University.
- Marsh, H. W. (1989). Age and Sex Effects in Multiple Dimensions of Self-concept: Preadolescence to Adulthood. *Journal of Educational Psychology*, 81, 417–430.
- Marsh, H.W. (2002). Physical Self-concept: Theory, Measurement and Research. *Keynote Address to International Congress of Sports Psychology, Skiathes, Greece. J. Hellenic Psychol. Soc.* 9, 459 493.
- Marsh, H.W., & Yeung, A.S. (2007). Causal effects of academic self-concept on academic achievement: Structural equation models of longitudinal data. *Journal of Educational Psychology*, 89, 41-54.
- Martin, K. & Acuna, C. (2002). SPSS for Institutional Researchers. Pennsylvania: Bucknell University Press.
- Maxine, B.A, Pievvette, H.S, & Michael, A.M (2005). Gender Through the Prism of Difference. Third Edition: Oxford University Press.
- Mboya, M.M. (1998). Self-Concept of Academic Ability as a Function of Sex, Age and Academic Achievement among African Adolescents. *Perceptual and Motor Skills* 87(1): 155-161.

- Mcadam, E.K. (1986). Cognitive Behavior Therapy and its Application with Adolescents Journal of Adolescents. *Journal of Adolescence.* 9, 1-15.
- Ministry of Education, (2007). *Gender Policy in Education* in Kenya, Nairobi: Nairobi, Government printers.
- Muganda, K.C. (2002). Gender *Equity in Education and Children at Risk: The Role of Distance and Open Learning*. Makerere University, Kampala-Uganda.
- Mugenda, O.M. & Mugenda, A.G. (1999). Research Methods: Quantitative and Qualitative approaches. Nairobi; Acts press.
- Munez, J.C, Garcia, M.& Roces, C. (1998). *Causal Relationship Between the Self-Concept and Academic Achievement*. International Conference on Motivation. Thessaloniki, Greece.
- Muthaka D. and Mwangi, S.K (2002). *The Role of University Education in Socio-Economic Development of the Economy*. Paper presented at the first exhibition by the Kenyan universities on May 24th, 2002 at KICCC, Nairobi
- Muthoni, B. M. (1998). A Study of the Relationship between Self-Concept and Educational Aspirations of the Disabled Persons. Unpublished M.Ed Thesis Kenyatta University.
- Myers, D.G. (2002). *Social psychology*. Seventh edition. The McGraw-Hill companies Inc. New York.
- Nassiuma, D.R. (2000). Survey sampling: Theory and Methods. Njoro Kenya: Egerton University press.
- Owenns, A.M. (2003). "*Boys' brains are from Mars*." National Post. Retrieved February 2005 from national coalition of Girls schools.
- Pattern, P. (1998). Understanding Gender Differences that may Occur in Classroom Settings. National Parent Information Network.
- Pintrich, P.R (2000). The role of goal orientation in self-regulated learning. In M.Boekaerts, P.R pintrich & M.Zeidner (eds), *Handbook of self-regulation: Theory, research and applications.* San Diego, CA: Academic Press.
- Pollack, W. (1998). *Real Boys: Rescuing Our Sons From the Myths of Boyhood*. United States. Owl Books Publishers.
- Postigo, Y. Perez, M. & Sanz, A. (1999). A Study about Gender Differences in Solving Scientific Problems, 17, 247-258.

- Quek, C.L., Wong, A.F. & Franser, B.J (2002). Gender Differences in Perception of Chemistry Laboratory Classroom Environments. *Queensland Journal of Educational Research*, Vol.18.
- Republic of Kenya (2002). The Children Act 2001. Nairobi; Government printer.
- Republic of Kenya (2005). Ministry of Education, Science and technology. *Education Statistical booklet*. Nairobi. MOEST. Government printers.
- Republic of Kenya (2007). Ministry of Education. *Gender policy in Education*. Nairobi; Government printer
- Republic of Kenya (2007). Ministry of Gender, Children and Social Development; Gender policy in education in Kenya. Nairobi. Government printers.
- Republic of Kenya (2008). Ministry of Education, Science and technology. *Enrolment and K.C.S.E Performance in Kenyan Secondary Schools*. Nairobi. MOEST. Government printers.
- Republic of Kenya, (2003). *Education Sector Strategic Plan (ESSP) 2003-2005*, Nairobi: Government Printer.
- Republic of Kenya, (2009). Ministry of Education: Teachers' Service Commission; *Teachers' Image* vol 16. Nairobi; Government printers.
- Robins, R. W., Trzesniewski, K. H., & Tracy, J. L. & Gosling, S. D. (2002). Global Self-Esteem across the Life Span. *Journal of Psychology and Aging, 17* (3), 423–434.
- Rogers, C.R. (1947). Some Observations on the Organization of Personality. *American Psychologist*, 2, 358-368.
- Rutondoki, E.N. (2000). *Guidance and Counselling*. Makerere University. Institute of Adult and Continuing Education.
- Sink, C.A. & Stroh, H. R. (2003). Raising Achievement Test Scores of Early Elementary School Students through Comprehensive School Counselling Programmes. *In Professional School Counselling*, *6*, 352-364.
- Skinner, B.F. (1953). Science and Human Behavior. New York: Free Press.
- Strein, W. (1993). Assessment of Self Concept: Eric Digest; *School Psychology Review* 22, 1-6.
- Tajfel, H & Turner, J.C. (1986). The Social Identity Theory of Intergroup Behaviour in the Psychology of Intergroup Relations. Chicago: Nelson Hall.

- Taneja, V.R. (1991). Educational Thought and Practice. The Gender Divide, Performance Difference Between Boys and Girls at School. A Report from the Office of HMSO Commission London-1996.
- The World Bank (2005). *The Millenium Development Goals: Eliminating Gender Disparity in primary and secondary education.*
- U.S Department of education, National centre for education statistics (2000). *Trends in educational equity of girls and women* (NCES 2000-030). Washington D.C: U.S Government printing office (ed 440. 210).
- U.S Department of Educational National Centre for Education Statistics (2000). *Trends in Education Equity of Girls and Women (NCES 2000-030)*. Washington D.C: U.S. Government Printing Office (ED 440 210).
- UNESCO, (2007). Single Sex Schools for Girls and Gender Equality in Education: Advocacy Report. Retrieved on 5/8/2011 from www.unescobkk.org/elib/publication.
- Whiston, S.C & Quinby. (2009). Review of School Counseling Outcome Research. *Psychology in the Schools*, 46(3) 267-272.
- Whiston, S.C. (2002). Responses to the Past, Present and Future of School Counseling: Raising Some Issues. *Professional School Counseling*, 5(3), 148-157.
- Wiegers, I.M & Friere, I. H. (1977). Gender, Female Traditionality Achievement Level and Cognition of Success and Failure. *Psychology of Women Quarterly*, 2, 125-137.
- Wiggins, J. D. & Wiggins, A. H. (1992). Elementary Students Self-esteem and Behavioral Ratings Related to Counselor Time-task Emphases. *The School Counselor*, 39(5) 377-381.

APPENDIX A STUDENTS' QUESTIONNAIRE

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Please fill in the blank space	by ticking	the appropriate box	and be as honest as possible.				
1. Gender: Male []	Female []					
2. Name of the school:							
3. School type: Boys only [] (Sirls only []	Mixed school []				
4. Indicate the mean score and grade obtained in the end of last term exams							
Mean score							
Mean grade							

Below is a list of statements dealing with your general feelings about gender differences in relation to self-concept and academic performance in your school. Tick the most appropriate

Key: SA: Strongly Agree A: Agree U: Uncertain D: Disagree SD: Strongly Disagree

	Statement	SA	A	U	D	SD
1)	I am satisfied with myself					
2)	I am not satisfied with my current grade in school					
3)	I am comfortable with my maths teacher					
4)	I am good in science subjects					
5)	I am comfortable with languages					
6)	I am happy with maths double lessons					
7)	I am good in co-curricular activities					
8)	I do not enjoy using official languages in school					
9)	I am discouraged in my studies by my parents					
10	I like visiting the school library at all					
	times					

Section B:

Key: SA: Strongly Agree A: Agree U: Uncertain D: Disagree SD: Strongly Disagree

	Statement	SA	A	U	D	SD
1)	I am happy with the school work I do					
2)	I am proud of my report form					
3)	I am satisfied with my school work					
4)	In the kind of things we do in schools I feel that I am good as the other students in my class					
5)	I believe I have the ability to get good grades in school					
6)	I feel worthless in class					
7)	I see my self as among the best learners in class					
8)	I think I take a longer time than my classmates to understand the lesson					
9)	Even if I work harder, I would not be able to achieve better marks.					
10	I dislike it when my teachers ask me questions in class					

Section C:

Tick $[\sqrt{\ }]$ where appropriate

Key: SA: Strongly Agree A: Agree U: Uncertain D: Disagree SD: Strongly Disagree

Statement	SA	A	U	D	SD
1. Boys are more interested in Education than					
girls.					
2. Most parents prefer educating boys than girls					
3. Drugs are a big threat to the boy child's					
education					

4. Boys have more advantages in Maths and			
Sciences than girls.			
5. Almost all careers tend to favor boys than girls.			
6. Boys are more serious in school than girls.			
7. Girls are more favored by parents and teachers			
in school than boys.			
8. Boys tend to ask more trivial questions to gain			
teachers attention than girls.			
9. Girls are more talented in academic than boys.			
10. Boys can handle more serious and difficult			
responsibilities than girls			

Section D:

Tick $[\sqrt{\ }]$ the most appropriate

Statement	Yes	No
1. Do you appreciate being in your current schools		
2. Are you proud of being born a boy or girl?		
3. Would you mind being in a mixed school?		
4. Are single schools better than mixed schools?		
5. Do mixed schools perform better than single schools?		
6. Mixed schools offer better and conducive environment for		
studying than single schools.		
7. Are students in singe schools more disciplined than those in		
mixed schools?		
8. Are there more education challenges in mixed schools than in		
single schools?		
9. Do you curse or regret for being in a single school?		
10. Does your comparison with those in mixed schools ever make		
you feel inferior?		

SECTION E

Guidance and counselling

Tick $[\sqrt{\ }]$ the most appropriate

Key: SA: Strongly Agree A: Agree U: Uncertain D: Disagree SD: Strongly Disagree

Statement	SA	A	U	D	SD
I have been visiting the guidance and					
counselling teacher for help with personal and					
academic problems					
The guidance and counselling teacher has					
helped me improve my confidence.					
I think I have never gained in any way from					
the guidance and counselling teacher.					
My academic performance has improved as a					
result of guidance and counselling in my					
school.					
Guidance and counselling teacher have					
helped us in career choice					
The guidance and counselling teacher has					
helped adopt effective study habits					
The guidance and counselling teacher has					
assisted me to discover my strengths and					
weaknesses					

APPENDIX B

PASCI

STUDENT SELF-CONCEPT INVENTORY

Form:	Gender:	[]Male [] Female

Instructions

Please answer each item on the table below by ticking ($\sqrt{}$) against the most appropriate blank. Please use the key given.

Key: PN- Practically Never; VO- Very Often

		PN	VO
1.	Do you often think of yourself as an outstanding student?		
2.	How much do you worry about whether other people will		
	regard you as a success or a failure in your job or in school?		
3.	Do you ever think that you have more ability in mathematics		
	than most of your classmates?		
4.	Do you ever feel less capable academically than others at your		
	grade level?		
5.	Do you think of yourself as a worthwhile person?		
6.	Have you ever thought that you had a greater ability to read		
	and absorb articles and textbooks than most people?		
7.	How often do you have difficulty expressing your ideas in		
	writing for class assignments?		
8.	Most of the time, do you genuinely like yourself?		
9.	Do you ever doubt that you are a worthy person?		
10.	Do you think of yourself as a generally competent person who		
	can do most things well?		
11.	How often do you feel concerned about what other people		
	think of you?		

12.	How much do you worry about criticisms that might be made		
	of		
	you by others?		
13.	Do you ever feel especially proud of, or pleased with, your		
	looks and appearance?		
14.	Do you often feel nervous or self-conscious when called upon		
	to speak in front of others?		
15.	How often do you feel that you have a strong sense of		
	self-respect?		
16.	Are you often concerned that your school performance is not		
	up to par?		
	NC- Not at all confident; VC- Very confident	NC	VC
17.	Compared with others, how confident do you feel in your		
	mathematical abilities?		
18.	When you have to write an essay to convincingly express your		
	ideas, how confident do you feel that you have done a good		
	job?		

APPENDIX C

INTERVIEW SCHEDULE FOR TEACHER-COUNSELLORS

Ge	nder of Teacher Counsellor	Male	Female	Age				
Scl	School Type of School							
1.	Have you received any training r	elated to guidance and	counselling?					
2.	For how many years have you se	rved in this school as a	teacher counsellor	?				
3.	How often do students visit your	guidance and counsell	ling office to seek h	nelp?				
4.	In your opinion, how has guidan	nce and counselling in	npacted on student	s' academic				
	performance?							
5.	Has guidance and counselling be	en effective in boostin	g students' self-cor	ncept.				
6.	What challenges do you encounted	er in executing your gu	idance and counse	lling duties?				
7.	Suggest possible solutions to the	challenges mentioned	above.					

APPENDIX D

KCSE PERFORMANCE BY GENDER YEARS 2009 TO 2011 IN KANGEMA DISTRICT

Year	Gender	Entry	Mean score	Grade
2013	Boys	716	4.360	D^+
	Girls	724	3.642	D^+
2012	Boys	781	5.230	C-
	Girls	764	4.306	D^+
2011	Boys	915	5.585	С
	Girls	953	4.588	C-
Total	Boys	804	5.058	C-
	Girls	814	4.178	D^+

Source: DEO's Office Kangema (2012)

LETTER FROM THE UNIVERSITY



Tel: 051-62276//9/62280/-4 Fax: 051-62213



UNIVERSITY

P.O. Box 536 Egerton, Kenya

EMAIL: regadmin@egerton.ac.ke

DEPARTMENT OF PSYCHOLOGY, COUNSELLING AND EDUCATIONAL FOUNDATIONS

22nd October, 2012

TO WHOM IT MAY CONCERN

RE: MASTERS' STUDENTS' FIELD RESEARCH

It is a requirement for our Master of Education students to carry out a field research for their project report. The research can be carried out in institutions of learning or other institutions that the student may be interested in.

I therefore wish to introduce to you Benson M. Kiiru registration number EM16/1632/06 for your kind assistance in his study entitled: "Influence of Gender on Self-concept and Academic Performance among Secondary School Students in Kangema constituency, Murang'a County, Kenya

Please, accord him the help he may need in order to achieve this objective. While he is carrying out the research, he is familiar and bound by the ethical standards of collecting information, safeguard of the same, and using the findings pro-actively.

On behalf of the University, I wish you well and thank you for your partnership in the training of our students

Sincerely,

22 OCT 2012

PSYCHOLOGY,

Dr. Owen Ngumi, Ph.D

CHAIRMAN, DEPARTMENT OF PSYCHOLOGY, COUNSELLING AND EDUCATIONAL FOUNDATIONS.

For: Vice-Chancellor- Egerton University

Egerton University is ISO 9001: 2008 Certified

LETTER FROM THE MINISTRY OF EDUCATION

REPUBLIC OF KENYA



TELEPHONE: 0711924983, 0736573465 Email:deoKangema@yahoo.com When replying please quote; REF: KGM/ GEN/41VOLI/30

MINISTRY OF EDUCATION

District Education Office, P.O Box 115, KANGEMA 26th October, 2012

Benson M. Kiiru, EM16/1632/06 Egerton University, P.O. BOX 536 EGERTON

REF: RESEARCH AUTHORIZATION:

Following your application for authority to carry out research on "Influence of Gender on Self-concept and Academic Performance among Secondary School Students in Kangema District Secondary Schools for a period ending 30th November, 2012.

On completion of the research, you are expected to submit one soft copy to this office.

Julia W. Komunga

District Education Office RANGEMA DISTRICT