THE INFLUENCE OF GENDER, SCHOOL FACILITATION AND SUBJECT CHOICE PERCEPTION ON CAREER ASPIRATIONS AMONG SECONDARY SCHOOL STUDENTS IN NANDI NORTH SUB-COUNTY-KENYA

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OCTOBER, 2017

DECLARATION

DECLARATION BY THE CANDIDATE

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DEDICATION

I dedicate this thesis to my father Johana who has been a fountain of inspiration and my mother Rebecca who is a real source of encouragement. To our children for their understanding and support during the entire period of study. May God bless and keep you.

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ABSTRACT

Career choice is a huge responsibility for students since it determines the kind of profession that they intend to pursue in life. As students try to make career choice while in secondary school, they face the problem of matching their career choices with their school performance and subject choices. The main purpose of this study was to find out the influence of the perception of subject choices of secondary school students on their career aspirations. Specifically, the study sought to find out the influence of gender in students' subject choices, to establish the influence of gender in students' career aspirations, to investigate the influence of the school facilitation on the students' subject choices and to find out the influence of the perception of subject choices on the students' career aspirations. It also sought to test the hypotheses based on the objectives. The study was guided by Symbolic Interaction Theory by Blumer. Descriptive Survey Design was employed as it allowed the collection of data through designed questionnaires. This study was carried out in secondary schools in Nandi North Sub-County. The final sample consisted of 235 male and 157 female students. Their inclusion was based on the assumption that they were mature and had selected examinable subjects which eventually will determine the careers they are likely to engage in. Validity of the research tools was determined by having experienced supervisors in the School of Education Moi University, who checked the questionnaires to evaluate the exactness of the items contained in the various instruments, while reliability of the research instruments was established by a pilot study in the neighboring Nandi Central District. The study generated both qualitative and quantitative data. Quantitative data was coded and entered into Statistical Packages for Social Scientists (SPSS Version 17.0) and analyzed using descriptive statistics. Qualitative data was analyzed based on the content matter of the responses. Pearson Product Moment Correlation and Chi- Square Statistics at 0.05 level of significance were employed to test the hypotheses. The study found that there was still gender disparity in the choice of subjects and was also realized in career aspirations. The study concluded that students had developed a career paths that they strived to attain in life and therefore, should be motivated to take the relevant subjects. Different perceptions male and female students have in regards to their ability and competency in those classes influenced choice of subjects. School has a great role to play in influencing students' choice of subjects. The study recommends students to have good attitude towards subjects. They need to consider their interests, personal academic goals while choosing subjects. Teachers should strive to be enthusiastic, knowledgeable, caring, and helpful. Parents need to help students when making their study choices. The school should support subjects and careers decision making.

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LIST OF ABBREVIATIONS

AAUW American Association of University Women

FAWE Federation of African Women Educationists

FEMSA Female Education in Science and Technology in Africa

GER Gross Enrolment Ratio

GST Gender Science and Technology

KCSE Kenya Certificate of Secondary Education

KCSE Kenya certificate of secondary Education

MOE Ministry of Education

NER Net Enrolment Ratio

SCCT Social Cognitive Career Theory

TSC Teachers Service Commission

UNESCO United Nations Educational, Scientific and Cultural Organization

STM Sciences Technology Mathematics

STEM Science Technology Engineering and Mathematics

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.0 Overview

This chapter examines the background of the problem, statement of the problem, the purpose of the study, the objectives of the study, the research questions, and the hypotheses of the study. It also presents the justification, the significance, assumptions, limitations, the scope, theoretical framework and the conceptual framework of the study. The chapter ends with the definition of the key terms.

1.1 Background to the Study

The major goal of education is human development aimed at improving the wellbeing of people to enable them lead productive and fulfilling lives as well as functioning members of the community (Commission of Higher Education, 2003) as cited by Muigai, Kipruto & Korir (2007).The occupational choices of young adolescents have become an area of interest to educational planners and educational psychologists. This is as a result of the awareness by stakeholders of the inherent dangers and frustrations suffered by the young adolescents who find themselves in wrong occupations. Consequently, educational authorities have realized the need for schools to have career counselors who would help adolescents select an appropriate career in line with their capabilities (Penick&Jespen, 1992).

As Schein, (1996) posits, career choices are decisions that should be carefully made if possible with the assistance of guidance counselors/ professionals, because it affects the

entire life of the individual. If appropriate career decisions are taken early in life, the young adolescents may derive satisfaction and fulfillment in life and therefore, contribute towards national development. Failure to make the right career choice may lead to unhappiness, disapproval by the society, and difficulty in coping with life tasks. Schein (1996) notes that career decisions made prior to entry into career are considered to be particularly important. The major subject or subjects taken at high school and higher education level in preparation for employment can be regarded as indicative of individual's choice prior to their entry into a career. Granrose & Portwood, (1987) posits that the stage at which an individual first decides to take specific subjects in high school impacts significantly on an individual's subsequent career trajectory.

Elsworth, (1994) further noted that subject choice is considered as the most important thing for senior secondary school and tertiary students because it is responsive to all sides of learners' interests, needs, preferences and choices. As in the discussion of five Australian schools, independent studies about subject preferences, subject choices and generic interest themes, the result shows that vocational interest themes are relevant to the students for the last two years of study (Elsworth, (1994). Moreover, school subjects have a strong connection with vocational interest, preferences and choices.

Several studies show that new students all over the world are usually faced with dilemma in making career choice decision in their lives (Bandura, Barbaranelli, Caprara & Pastorelli.2001; Cherian 1991; Issa and Nwalo 2008; Macgregor 2007; Mcmahon and Watson 2005; Watson & Stead, 2010). In most cases the choice of careers, subjects, and

courses of study and the subsequent career paths to follow are the nightmare for prospective undergraduate students (Issa & Nwalo, 2008). Most often, choosing the right subject combination leading to the right profession can make the difference between enjoying and detesting the career in future (Watson & Stead, 2010). According to Kniveton (2004), schools can provide career information or career guidance directly or indirectly to influence a students' career choice behavior. School teachers can also identify attitudes, abilities and encourage students to take certain subject combinations or take part in work experience. From the ongoing, this study sought to investigate into the schools and particularly the teachers' influence in students' perceptions of various school subjects and consequently career choices.

A study done by Durosaro and Nuhu (2012) in Ondo State in Nigeria on 'An Evaluation of the relevance of career choice to school subject selection among Ondo state in school going adolescents in Nigeria', the study revealed that students were left in the dark as to the type of subjects they were to offer if they want to pursue certain career. In their study, they established that most adolescents just pick careers based on mere likeness for such jobs simply because it entails the wearing of a uniform or otherwise or may be because their parents or significant others in their lives are involved in such career. They forget the fact that such jobs might have some basic subject requirement. Durosaro and Nuhu (2012) noted with sadness that most secondary school graduates do come up with the problem of course selection in higher institutions owing to lack of guidance in the selection of subjects at the secondary level. When students have faulty selection, they posit, there will be the problem of subject selection for jobs. These categories of students

end up doing the jobs that are not in the least related to their interest or aptitude. Durosaro (1981) noted that there is need for a careful study of the factors motivating career choice in order to play them up to channelize pupils' interest in areas where they are best suited.

Studies carried out in Kenya on career aspirations revealed that gender, degree programs, and parents are some of the major influential factors of career aspirations. Wanyonyi (2003), Kochung and Migunde (2011), Obura and Ajowi (2012) in their studies acknowledged that gender was a major factor motivating career choices. Wasike (2010) and Kipisut (2012) cited parents as a major influence on students' career aspirations. Studies carried out by Muigai et al (2007) on investigating 'Perceived Relevance of Undergraduate Degree Programs to Students' Career Prospects' posited that guidance process of helping students to achieve the self-understanding and self-direction necessary to make informed choices and move towards personal goals should be taken seriously in high schools. Craig (1986) as cited by Muigai et al (2007) points out that it is at the age of 15-24 years that students explore their careers. These are ages when they are in high school and tertiary institutions. However, from the results of their study, Muigai et al (2007) indicated that it was apparent that students are normally left on their own to decide on what careers they would pursue despite not knowing the academic requirements for their choices.

Wabwoba and Mwakondo, (2011) in their research found out that every year, the Kenya Universities and Colleges Central Placement Service (Kuccps) is tasked to determine those students who are expected to join various Kenyan public universities under the

government sponsorship scheme. This exercise, they posit, is usually extensive because of the large number of qualified students compared to the very limited number of slots at various institutions and the shortage of funding from the government. Further, this is made complex by the fact that the selections are done against a predefined cluster subjects vis-a-vis the students' preferred and applied for academic courses. Minimum requirements, they reveal, exist for each course and only students having the prescribed grades in specific subjects are eligible to join that course. Due to this, students are usually admitted to courses they consider irrelevant to their career prospects and not their preferred choices. Therefore, this study is an attempt to examine the influence of students' perception of subject choices on their career aspirations with a view to suggesting ways of assisting teachers, parents and school counselors in guiding the Kenyan students in their subject choices. The study also aimed at examining the influence of gender and school facilitation. It is hoped that the outcome of the study will serve useful purpose to teachers and school career teachers in particular, in their operation in secondary schools.

1.2 Statement of the Problem

Secondary school students' perceptions of various school subjects make the students delay to make the correct subject choices before they finally their career decisions. Students' gender and school facilitation to know about possible careers also contribute difficulties in making career decisions. Studies have shown that lots of students feel the weight of career choices scaring them, and find it difficult in making career decisions. Career choices, made while students are in high school are a major turning point in the

lives of many adolescents. It is important that high school students get appropriate guidance as early as possible on various subject combinations and how they fit in various career choices. This study therefore sought to investigate the influence of gender, school facilitation and students' perception of subject choice and how this impacts on their career aspirations.

1.3 Purpose of the Study

The overall aim of this study was to gain a deeper understanding of the influence of gender, school facilitation and perception of subject choices on secondary school students' career aspirations in Nandi North Sub-County in Nandi County.

1.4 Objectives of the Study

This study was based on the following objectives:

i) To establish the influence of gender on subject choices among secondary school students.

ii) To investigate the influence of gender on career aspirations among secondary school students.

iii) To investigate the influence of the school facilitation on the students' subject choices

iv) To find out the influence of the students' perception of subject choices on their career aspirations.

1.5 Research Questions

This study sought to answer the following questions:

i) How does gender influence subject choices among secondary school students?

ii) How does gender influence career aspirations among secondary school students?

iii) What is the influence of the school facilitation on the students' subject choices?

iv) Does the students' perception of subject choices influence their career aspirations?

1.6 Hypotheses

The hypotheses of this study were as follows:

HO_1: Gender has no significant influence on subject choices among secondary school students.

HO_2: Gender has no significant influence on career aspirations among secondary school students.

HO_3 There is no significant influence of school facilitation on the students' subjects' choices.

HO_4: There is no significant influence of the students' perception of subject choices on their career aspirations.

1.7 Justification of the Study

The selection of subjects in high school dictate the areas the students would wish to specialize in middle level colleges and the universities. This decision has a far-reaching impact on the students' future in terms of lifestyle, status, income, security and job satisfaction. There is need to identify learners' potential interests and match it up with suitable and appropriate career to maximize each individual's potential. The current emphasis in learning is competency based; early identification of learners will facilitate development of such competencies. Most studies in Kenya have focused on gender,

parents, peers and self-efficacy as factors influencing students' choice of careers. Therefore, it is important to carry out a study focusing on perception of subject choices as a factor that impacts students' career aspirations.

1.8 Significance of the Study

The findings of the study are hoped to be of great importance to researchers as it will help develop additional literature in the area of the influence of students' perception of subject choices on their career aspirations in Kenya. The study findings will benefit the government of Kenya in developing and implementing policies that promote proper and informed subject enrolment among students. It is also hoped that the findings will help school administrators, career counselors and teachers to understand more fully the problem faced by students as they choose their career paths. It is critical for these groups to understand that it is indeed at this stage of subject choices that careers paths of students are determined. Also, it is anticipated that the information will help secondary school students to keep a braised of their occupational interests and subject combinations.

1.9 Assumptions of the Study

This study made the following assumptions:

i. That student made their subject choices in form two in all secondary schools.
ii. That the respondents will give relevant and reliable information.
iii. That students know what subject choices and career aspirations mean and the common careers available to them after secondary school.

1.10 Limitations of the Study

The research study focused on three variables gender, school facilitation and perception of subject choices that were addressed by specific objectives; this may deny an opportunity to explore further on other factors that can influence the choice of career aspirations in Kenya's Secondary Schools. The study aims at establishing the influence of students' perception of subject choices on career aspirations of secondary school students in Nandi North Sub-County. Ideally, this study should have been conducted in all the schools in the country but time and financial resource constraints limited the study to Nandi North Sub-County. The study was only confined to sampled form four students, wider perspective could have achieved by included.

1.11 Scope of the Study

This study was concerned with finding out the influence secondary school students' perception of subject choices on their career aspirations in Nandi North Sub-County. The study was confined to public secondary schools in Nandi North Sub-County. Three hundred and ninety two form four students formed the study sample.

1.12 Theoretical Framework

This study was guided by the Symbolic Interaction Theory (Blumer, 1969) which focuses on the process by which an individual focuses on their own actions or the actions of others and the social cognitive career theory (SCCT) which focuses on the influence of contextual factor and individual characteristics on career aspiration. The Symbolic Interaction Theory refers to a process by which an individual relate to their own actions

or the actions of others. Blumer (1969) observed that interactionism consist of three basic premises. First, human beings perceive events on the basis of the meanings that the events have for them. Second, the meanings are a product of social interaction in human society; and third, these meanings are modified and handled through an interpretive process that is used by each individual in dealing with the signs one encounters.

This theory was applicable to the study in that it explains how a student interprets different contexts in a school situation. The meaning, (interpreted here as value) of subjects to a learner is influenced by the job market demands. Additionally, with reference to Cooley's notion of the concept of the 'looking glass self' in Downey (1995), students will interpret their academic abilities with reference to how 'significant others' namely peers and teachers treat them and see their academic ability. Once this interpretation is internalized, one develops an opinion on their academic ability which becomes a self- fulfilling prophecy to shape their attitude towards a subject. Social interaction thus influences final product by shaping attitude which can be changed significantly by that of significant others. Students are vulnerable to external anxieties especially those wielded by teachers and peers on their academic potential. Although their entry behavior may have been positive towards a subject, the opinions of the two will, through interaction, soon become the learner's self-concept of their academic ability.

The above theory is reinforced by Social Cognitive Career Theory (SCCT) developed by Lent, Brown and Hackett in (2002). The theory has grown out of Albert Bandura's Social Cognitive Theory. The theory proposes that career choice is influenced by beliefs the

individual develops and refines through vicarious learning. This is where a person learns something through observation and imitation of others. It is therefore connected with the present study which sought to establish why students choose the subjects they choose which will consequently influence their career aspirations. Through vicarious learning processes, students may pick up prejudices of their parents and other members of the society. For example, learners whose parents say certain careers are for men while others are for women may adopt such attitudes themselves.

The perceptions of a career and subjects may also be influenced by the beliefs the individual develops through social persuasion. Among the socio-cultural factors that influence career development is gender stereotyping. For example, many students may restrict their career choices to careers that are gender stereotyped (Eccles, 1991). Females and males make different choices because of their socialization experiences and the ways social forces structure the opportunities available to them (Astin, 1984). Understanding individual characteristics e.g. gender, outcome expectations and contextual factors is paramount. A curriculum should be designed to help students apply subject content areas to career options to provide meaningful learning experiences. They propose that identification of resources should be done through analysis of students' individual perceptions of what constitutes barriers or resources for them (Tang, Pau & Newmeyer, 2008).

Understanding the factors that influence high school students' career choices is the first step, more importantly, it is necessary to develop a comprehensive and systematic career

development program that involves all the shareholders and provides meaningful learning experience for students to understand the world of work and themselves better.

1.13 Conceptual Framework

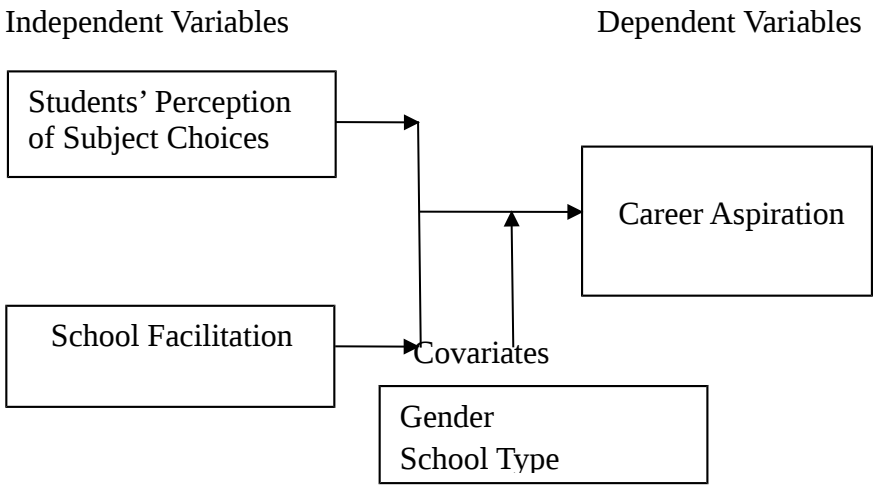

Figure 1.1: Relationship between, Gender, School Facilitation, Perception of Subject Choices and Students' Career Aspirations
Source: Author 2015

A conceptual is defined as an element of the scientific research process in which a specific concept is defined as a measurable occurrence or in measurable terms that basically gives a clear meaning of the concept. Conceptual framework is a diagrammatic presentation of the relationship between dependent and independent variables. In this study, the dependent variable is career aspiration while independent variables are the students' perception of subject choices and school facilitation while gender is the covariate. Subject choices are likely to influence future occupational aspirations of students. This among the specific factors likely to impact on students' career aspirations are the students' gender, and their perceptions of school subjects. The school may negatively or positively influence the students' subject choices and consequently their careers. It is important to note that the following factors do not operate in isolation of

each so that chances are that they are intertwined as demonstrated in the above conceptual framework (Figure 1.1).

1.14 Operational Definition of Key Terms

The following terms were used in the study to mean:

Career aspirations- Fields of vocational, academic, and sociological endeavors explored for the purpose of satisfying personal, economic, and intellectual goals. According to this study, the term is taken to mean the broad opportunities that exist for lifelong vocations. These vacations are set out in a framework of strategies moving toward personal goals.

Perception- the way in which something is regarded, understood or interpreted. In this study it refers to the process of gathering information through senses, organizing and making sense of it and therefore will aid in making decision on what subjects to take.

Subject Choices- according to oxford dictionary the word choice means an act of choosing between two or more possibilities. In this study, subject choices refer to an opportunity provided by the school in the course of study where boys and girls carefully select subjects taught by the school for the purpose of their study, used based on students interest/liking of the subject and their academic ability.

School Facilitation- the Macmillan dictionary defines facilitation as the act of assisting the progress or improvement of something. For this study, it is taken to mean the school's role and its policies in helping students in making subject choices, e.g. talks by professionals, visit places of interest etc.

Secondary schools: This is an education level in Kenya that precedes primary education in the Kenya's curriculum system which follows 8.4.4 systems where students sit for the KCSE to signify transition to the next level.

Influence – the capacity to have an effect on student's behaviour on the choices of subjects they make.

Student –someone who is studying in order to enter a particular profession.

CHAPTER TWO

LITERATURE REVIEW

2.0 Overview

This chapter is a review of the literature related to the study. This study was basically concerned with finding out the influence of students' perception of subject choices on their career aspirations in secondary school in Nandi North Sub-County. Major studies were discussed individually and minor studies with similar results or limitations were discussed as a group. Literature was obtained from research journals, dissertations and theses, books, newspapers, magazines, Ministry of Education circulars, pamphlets, booklets, seminar papers as well as from websites on the internet. Literature on the, the influence of gender in subject choices and career aspirations, the influence of the school facilitation on the students' subject choices and the influence of students' perception of subject choices on students' career aspirations were reviewed.

2.1 Education and Career Development

The vision 2030 for the education sector is to have globally competitive quality education, training and research for sustainable development, while the mission is to provide, promote, and co-ordinate the provision of quality education, training and research for the empowerment of individuals to become responsible and competent citizens who value education as a lifelong process. To achieve this vision, strategic areas, namely, access, quality, equity, science, technology and innovation have been identified for support based on their impacts on the economic, social and political pillars (Government of Kenya, 2007).

Education is a fundamental right which must be provided to every Kenyan, according to the principles of political equality, national unity, social justice and human dignity, freedom of religion and conscience, freedom from ignorance and disease, equal opportunities for all citizens, irrespective of race, religion, sex or color, equitable distribution of the national income, and the promotion and preservation of the cultural heritage. The general goal is to prepare and equip citizens to function effectively in their environment and to be useful members of society (Unesco, 2010).

Education should foster nationalism, patriotism and promote national unity, the social economic, technological and industrial needs for national development, individual development and self-fulfillment, sound moral and religious values, social equality and responsibility. Furthermore, education should promote respect for and development of Kenya's rich and varied cultures, international consciousness and fosters positive attitudes towards other nations, promote positive attitudes towards good health and environmental protection (Unesco, 2010).

Enrolment at the secondary level grew from 30,000 in 1963 to almost 500,000 in 1983. The number of secondary schools increased from 3,657 in 2001 to 4,247 in 2006 to 6,484 public and private schools in 2007. The gross enrolment ratio (GER) increased from 88.2% in 2002 to 107.4% in 2006. The GER for boys was 110.2% and for girls 104.6%. The net enrolment ratio (NER) increased from 77.3% in 2002 to 86.5% in 2006 (estimated 91.6% in 2007). The primary completion rate has increased from 59.5% in 2001 to 76.8% in 2006 and 81% in 2007. However, in 2007 there were more boys

(86.5%) completing primary education than girls (75.7%). The transition rate from primary to secondary increased from 46.4% in 2002 to 60% in 2006 (Republic of Kenya, 2008).

Despite the milestones made over the years in the access of equal opportunities in all levels of education, there still seem to be a glaring disparity in the enrollment in courses at tertiary level. Table 2.1 shows the Kenya Universities and Colleges Central Placement Service (Kuccps 2014/2015) enrollment of students per gender in Moi University to some selected courses.

Table 2.1. Undergraduate Enrolment by Gender (2014/2015-1st yrs, Moi University)

Course	Male	Female	Total
Mechanical Engineering	90%	10%	20
Dental Surgery	80%	20%	10
B.A	39%	61%	248
B.Ed(sc)	76%	24%	206
Agri. Econ.	61%	39%	88
Computer Science	88%	12%	34
Electrical Electronics	85%	15%	20
Nursing	39%	61%	28
Civil Aviation	67%	33%	45
Linguistics	36%	64%	84
Law	47%	53%	55

Source: Moi university administration (2014).

For students, it is not a matter of having access to university education but the subjects that the students study in higher education and in secondary school. The choice of subjects determines the kind of work that is open to the individual after training or school. The current study seeks to establish the students' perception and gender disparity

that exist in subject choices among high school students and perception of subject choices which could offer an explanation of the gender disparity witnessed at the university level in the courses chosen by the students and in the world of work.

2.2 Gender and Students' Choices of Subjects in Secondary Schools

All over the world, Students look forward to the opportunity to choose their academic plans and classes (Smith, Feldwisch & Bell, (2006). According to the enhanced cognitive engagement theory, allowing students to choose which classes they enroll will increase motivation and independence which in turn increases a student's cognitive processing and performance (Flowerday & Schraw, 2003). However, the task of subjects is very complex with multiple considerations, most of which overlap with one another. Students are influenced by the different academic portions of the class such as the value of the content, the structure, and the workload. They also have to decide what is important to them with regards to their interests, personal academic goals, and their schedule. But students do not make these decisions alone because they do occasionally seek advice from their family, faculty, and/or friends (Flowerday & Schraw, 2003).

According to Barnes & Mclnerney, (2005); Lyons, (2006) a vast array of factors has been considered to be influential in enrolments and subject choice, particularly gender and achievement (Skelton, Francis & Read (2010). Similarly, Ainley, Robinson, Harvey, Beavis, Elsworth & Flemming, (1994) in their study among Australian students, identified a range of external factors which constraint subject selection including diminished subject availability, limited time frame for subject selection, time tabling

restrictions, compulsory subjects, tertiary prerequisites, eligibility for entry to tertiary courses. They assert that internal issues such as locus of control, self-assessment of ability, vocational awareness, gender and interest in the subject offered also appear to affect the manner in which the students choose subjects.

According to Tenenbaum (2008), the gender of a student can often affect their enrollment in a class. Men and women can have different values, and there are also certain standards or expectations that vary between genders. Tenenbaum asserts that gender differences are especially apparent in high school aged students. Females are less likely to enroll in science and math classes compared to men, but more likely to enroll in English classes. Nagy, Trautwein, Baumert, Koller and Garrett, (2006) explains that one reason for such disparity could be the different perceptions men and women have in regards to their ability and competency in those classes because students are more likely to enroll in classes where they think they can excel.

In their study in America, Riegle-Crumb, Farkas & Muller (2006) posit that, females often score better in science despite the fact that men often think they are better in that subject. This finding is reinforced by (Grebennikon, 2009) who found out that females often expect more from their education than men do and therefore put forth more effort and have high levels of school engagement. But despite the scores indicating that girls are capable, the gender gap still exists in classes like science and math. The main reason for this could be that, according to Tenenbaum, (2008) in a study in the U.K, parents use double the amount of discouraging comments towards daughters than they do to sons

when it comes to the subjects their children take, which only enforces the stereotypes that already exist about gender differences leading females to feel less secure in certain subjects and opting to take other classes. In their research, Ainley & Ainley (2011a) found out that having a general interest in learning science predicts both current and intended future participation in science related activities and concluded that where science education is perceived as personally important to students and where they are doing well, a strong interest in learning science will result.

In their study on ‘Student Engagement of Men and Women in science, math, engineering and technology classes (SMET) majors‘ Zhao, Carini, and Kuh (2005) posit that, despite some differences, research has indicated that the gender gap is closing between college males and females' perception of their abilities. They have found that women in SMET are becoming either equal to or more satisfied with their college experience than males which leads to their greater academic success and the continuous closing of the gender gap in certain course enrollment. Malgwi, Howe & Burnaby, (2005) posit that as students go from high school to college, they often become more alike in the choices they make in regards to what they study. Interest in the subject is still one of the main factors of enrollment regardless of gender (Malgwi et al, 2005). However, females find more importance in a subject that has clear assessment requirements, provides constructive feedback, and has a fair amount of work throughout the study period (Grebennikon, 2009).

Some studies in Africa, similarly, reveal that there is gender disparity in subject choices among female and male students. At a conference organized by the Federation of African Women Educationists (FAWE), it was acknowledged that in many African states, girls are still restricted to studying what is perceived to be “soft option” Subjects, which has limited their access to scientific and technical disciplines in institutions of higher learning (Ramani, 2004). In a study carried out in 1999 by Female Education in Science and Technology in Africa (FEMSA, 1999), it was found out that certain subjects, such as home science was considered as meant for girls while certain subjects such as woodwork and metalwork was meant for boys. The imbalance trends also continue to tertiary level (Dlamini, Ngenye & Dlamini, 2004).

According to Jansen (2003), the issue of career choice and aspirations is aptly expressed in curriculum scholarship concerned with school subjects which focuses on their nature, design, and organization effects on learning and teaching, and attitudes among various categories of learners. Gordon (1995) asserts that even though schools may offer girls and boys the same school subject options, girls still tend to opt for the subjects perceived as feminine and those formally offered to girls only. Jansen (2003) adds to this argument by asserting that in South Africa, school subjects remain a powerful organizational reality in post-colonial institutions because of the way they channel learners into various career trajectories. Despite various initiatives towards integrating subjects or attempting towards inter-disciplinary curricula, some school subjects continue to enjoy a superiority complex while others endure an inferiority complex (Gordon, 1995). According to Dorsey (1996) & Marira (1991), studies of school subjects are often fragmented and proceed with insu-

lar discourse of the discipline. They assert that these studies also tend to be conservative, focusing on technical limitations or deficiencies in teaching, learning and curriculum and assessment within the context of a particular school subject or subjects and their relative importance and suitability for boys or girls, thus setting the stage for the perpetual gender stereotyping of occupations. Certain subjects were deemed a male or female domain. Gordon (1995) & Dorsey (1996) concur that in Zimbabwe, the general perception among educators on the nature and power of subjects is that mathematics and science subjects are a preserve for boys while languages and humanities are considered a female domain.

Hassan (2008) reported that many Nigerian secondary schools have incongruent patterns between the aspiration or no vocational interest and subject combinations for the school certificate examination. This is a pointer to the fact that most adolescents lack adequate information about their self-concept and the information on the world of work available and also manifest lack of interest (Arowolo, 2010). Furthermore, Arowolo asserts that, the growing need for vocational guidance in schools is based on the assumption that “nobody can choose what he or she is not interested in or know nothing about”. He posits that schools through streaming practices stereotype the participation of girls and boys in secondary school technology subjects. Kithyo and Petrina (2002) argue that boys tend to be more equipped and oriented towards science and technology. Boys in mixed schools are also encouraged to enroll and perform well in these subjects. Furthermore, girls’ schools do not offer technology subjects such as engineering; instead they offer domestic science and secretarial subjects.

According to Whitelaw, Milosevic & Daniels, (2000) in Nigeria, sex is probably the most important variable related to pupils' attitudes to science. Many studies for instance, Francis & Greer (1999), Jones, Howe & Rua (2000), reported that males have more positive attitudes toward science than females. Also, Osborne, Simons &Collins (2003) stressed that there is still a bias against physical sciences held by girls, suggesting that at an individual level the overwhelming majority of girls still choose not to do physical science as soon as they can. In the same vein, Aigbomian (2002) observed that boys perform better than girls in science, technical and mathematical subjects.

In a study done by Ndalichako & Komba (2014) in Tanzanian context, students joining secondary schools are supposed to take nine subjects namely Mathematics, English, Kiswahili, Biology, Civics, Physics, Chemistry, Geography, and History. In their third year of schooling, students are allowed to select one of the following optional bias subjects: Science, Business, Agricultural Science, Technical and Home Economics subjects. Thus, students opting to take science continue with Physics and Chemistry while those who are not opting for science bias could drop those subjects. Students are allowed to take a minimum of 7 and a maximum of 10 subjects. In some cases, they posit, the choice of the optional subjects taken is not purely a matter of students' decision. It all depends on the availability of such subjects in their school. Due to unavailability of teachers and insufficient teaching and learning facilities, some optional subjects are offered to a very small scale within a limited number of schools.

According to (Nosek, 2006), a national indicator in Kenya of implicit gender-science stereotyping was related to a nation's sex differences in science achievement and by extension, to other markers of diverse scientific leadership. The research thus attributes low enrolment of girls in science to lower parental expectations and encouragement. Nosek further asserts that, girls are socialized into characteristics of dependence, nurturance and passivity. They therefore develop a set of attitudes and beliefs that do not promote high levels of achievement and participation in science. According to Wasanga (1997), the majority of girls in Kenya found science subjects difficult and they perceived science subjects to be more useful to boys. In the same vein, Aghenta, (1989) found that perceived difficulties of science occupations was a significant factor preventing girls from entering Science, Technology and Mathematics (STM) fields. Nosek further points out that the attitude that one holds towards science appears to be a powerful predictor of achievement in the respective field. A poor attitude to STM was a barrier to access of STM related fields but conversely, a good or positive attitude was one of the several factors that facilitated performance in STM.

Drew (2011) posits that it could be argued that today the gender gap in STEM, meant as a women's gap in science, is no longer the most relevant question. Rather, the main issue is the persistent gender heterogeneity occurring in STEM studies and later careers. Men and women are indeed both quantitatively present in sciences, but differently enrolled in them. As found by (Drew, 2011), 58% of all bachelors, masters and doctorate in biology are awarded to women in the United States. More than 50% of the total number of PhD students in medicine and biological science are women, while they are a minority in

physics, mathematics and statistics, computer and engineering (European Commission 2009) as cited by Drew (2011). This gender heterogeneity follows a traditional gender role division, structuring a general order among male–dominated sciences and female-dominated sciences that might be considered the most topical issue distinguishing the gender gap in STEM studies and careers at present time (Drew, 2011).

Secondary school education in Kenya is designed to enable the youth to play an effective role in the life of the nation by impacting on them the necessary skills and knowledge and inculcating the right attitudes. According to Ayot and Patel as cited by Githaiga (2011), this is achievable through the 8-4-4 system of education which provides a diversified education consisting of twenty seven subjects in Secondary school curriculum. Mokaya, (2014) a lecture in one of the Kenyan universities, posits that during the course in high school, the students are taught many subjects out of which some are their favorite and some are tiresome. The Koech commission in reviewing the 8-4-4 system of education noted that there was need to reduce examinable subjects in secondary schools to a minimum of seven subjects and a maximum of nine in order to lessen the curriculum burden, thus the need for subject choices.

One alienable right granted to secondary school boys and girls in Kenya is the right to choose subjects at form two that they would like to pursue further and sit for at the form four examinations. Under the 8-4-4 system of education, it is stipulated that a boy and a girl cannot, in all honesty, sit for all subjects offered at the end of secondary school course. The Kenyan education system comprises of twenty seven subjects at secondary

school level, the current Kenya National Examination Council, guidelines has categorized the subjects into five major groups.

Group 1 - English, Kiswahili and Mathematics

Group 2 - Biology, Physics and Chemistry

Group 3 - History and Government, Geography, Religious Education.

Group 4 - Agriculture, Computer, Homescience, Woodwork, Metalwork, Building & Construction, Power Mechanics, Electricity, Drawing & Design, Aviation Technology or Computer

Group 5 - Music, Business Studies, French, German, Arabic or Kenyan Sign Language).

However, the candidates must enter for at least seven subjects selected from the above groups as follows: - All the three subjects in Group One, at least two subjects from Group Two, at least one subject from Group Three, At least one subject from the remaining groups 2, 3, 4 and 5. Candidates can sit for a maximum of nine and the extra one or two subjects can be selected from any of groups 2,3,4 and 5 (KNEC, 2006).

From the above requirements it can be noted that only subjects in group one are compulsory. The rest of the 4 groups involve subjects that must be selected and these are the elective subjects, boys and girls require career guidance to be able to make informed decisions on subject choices. The choice of which subjects to study in third and fourth forms has been an issue to many of the students; an issue that has since received varied

interpretations among the students themselves and the various stakeholders in the education fraternity. It is of paramount importance for students to make the right choice of subjects for this will impact them negatively or positively for the rest of their lives. From the literature reviewed, Stereotyping starts from the subject choice level and by the time students come to choose careers, they have internalized gender norms. The present study seeks to establish the influence of perception of subjects of secondary school students and imbalance trends in subject choices.

2.3 Gender and Career Aspirations of Secondary School Students.

Career aspiration refers to the broad opportunities that exist for lifelong vocations. These vacations are set out in a framework of strategies moving towards personal goals. Fields of vocational, academic, and sociological endeavors are explored for the purpose of satisfying personal, economic, and intellectual goals. According to Hewitt (2010), factors influencing career choice can either be intrinsic or extrinsic or both. Hewitt further states that most people are influenced by careers that their parents favour, others follow the careers that their educational choices have opened for them, some choose to follow their passion regardless of how much or little it will make them while others choose the careers that give high income. Students' perception of being suitable for particular jobs also has been found to be influenced by a number of factors including ethnic background, year in school, level of achievement, choice of science subjects, attitudes and differences in job characteristics (McQuaid and Bond, 2003). Furthermore, Pummel, Harwood and Lavallee (2008) reports that external influences that helps to shape an individual's career choice are also influenced by significant others through social support from peers.

Kochung and Migunde (2011) states that there are often certain benefits that people expect to come with the chosen career as they make career choices. These benefits are referred to as outcome expectations. The outcome expectations include: availability of jobs, employment security, prestige associated with the profession, availability of advancement, ability to choose career specialization, self-employment opportunity and opportunity to apply skills and knowledge while some chose the careers that give high income. Discrimination in certain professions also prevents students from choosing certain careers (Kochung and Migunde, 2011). According to Wahl and Blackhurst (2000), a number of external factors have been found to influence adolescents' career aspirations, including gender, parental influence, socioeconomic status, and early school experiences. They point out that the role of gender in adolescent occupations has been given much attention.

All over the world new students are usually faced with a dilemma in making a career choice decision in their lives Watson, McMahon, Croft and Els (2010). According to Gottfredson (2005), in the United States the age of 13 and 14 adolescence have developed two cognitive competences related to career development i.e. self-concept and perception about occupations. During adolescence, students have achieved an adult level understanding of the sex type and prestige level of common occupations. Gottfredson argues that adolescents start to eliminate occupational choices based on sex types and prestige levels. For example, female students might avoid choosing occupations that are perceived as too masculine such as mining and also might consider eliminating choices

that are perceived as having low social prestige status such as a career as a house maid. According to Creed, Conlon & Zimmer-Gembeck, (2007) girls tend to aspire to a narrower range of occupations than boys because they believe many jobs are unsuitable for them whereas boys have a greater occupational understanding, focus and see more occupational opportunities than girls.

In regard to gender differences in career development aspects, studies in America have shown that females have different career patterns than males (Krakauer& Chen, 2003), and females have been found to have higher scores on career commitment than men (Chung, 2002). Gender differences also have been found in six of John's L Holland's confidence levels (Betz &Gwilliam, 2002). Pertaining to interests, females and males were found to have differences on Holland's six interest types as well (Ryan, Tracey, & Rounds, 1996).

Holland (1985) contended that people are most productive when there is a good fit between their personality types and their career. He proposed six personality types and these are as follows: The Realistic personality types possess manual skills but he is aggressive and unsociable. Farming, Forestry, Engineering and Architecture are examples of careers this personality type can fit into. The Investigative personality makes extensive use of his intelligence. Thus, he is always thinking, organizing ideas and trying to understand things. Medicine, Geology, Mathematics and Physics fit very well into this occupational environment. The social personality type detests physical activities and is endowed with skills for inter-personal relationship. He is friendly, caring and enjoys

imparting knowledge to others. Environments that match this personality type are Foreign Service, Social Welfare, Lecturing and Guidance and Counseling. The Artistic personality type is highly interested in creative activities where he can express his emotions. Thus, he prefers individual work to group work. Occupational environment where this personality can strive well are Fine Art, Music, Mass Communication and Theatre Arts. The Enterprising personality type possesses verbal skills with which he influences others and also obtains power and status. Examples of occupational environments where this personality type can thrive well are Law, Catering, Political Science, Public Administration and Estate Management. The Conventional personality type is opposed to change: He is rule-regulated and enjoys ordered and systematic activities. Environments that match this type of personality are Accounting, Banking, Library Science and Secretarial Work.

In their study in South Africa, Watson, McMahon, Croft and Els (2010) found that the majority of aspirations were for social type occupations followed by investigative type occupations, with boys aspiring more for investigative and girls more for social type occupations. The same study reported that more than 80% of the total sample aspired to high status occupations. Gender differences in interests also were found on another classification system of interests the “Data/ Things” and “People/ Ideas” dimensions, underlining Holland’s RIASEC(Realistic, investigative, Artistic, Social, Enterprising and Conventional) studies have confirmed that females are inclined to fall on the people side of the ‘People/ Ideas’ dimensions (Lippa, 1998).

The Gender, Science & Technology (GST) and Gateway Tool Kit (2004) report on gender informs that: “generally, women are underrepresented in almost every area of recognized scientist activity.” Even in areas where women are statistically well represented at lower and medium levels. The report also indicates that “A number of other studies have shown that women’s employment is heavily concentrated in a few occupations. They work typically as home and farm helpers, nurses, lower-school teachers, secretaries and so on. Compared to men with similar qualifications, tasks and responsibilities, women are over-represented in part-time employment or unemployment and in low paid unsecured jobs”. The sex-role identification is learned very early in life.

In many African societies, there are careers that are deemed male or female domains and society strives to inculcate this mindset in boys and girls during socialization (Momsen 2000). It is in this light that Gutek (1998) posits that throughout the world, work is gender –segregated as women tend to occupy jobs that are often less superior to those of their male counterparts. Gutek cites the fact that women are forced to occupy gender-defined roles and that though they are free to occupy any position they want depending on their ability, they are often afraid of negative consequences associated with a woman engaging in what is often deemed gender- role – deviant behavior. The fact that women who succeed academically and thrive professionally are deemed deviant (Momsen 2000) shows the controlling effect of gender socialization on female students and the career options available to them. Some variations in career preferences of male and female students owing to socialization patterns and gender stereo-type have been observed and

this trend is said to pose some threat to students' ability to maximize their potentials in the contemporary world (Griffin & Hammis, 2003).

In a study by Natalie (2006), young adults through interaction with the context of family, school and community learn about and explore careers which ultimately lead to their career choice. Furthermore, Perera and Velummayilum (2008) point out that career choice is usually a product of one's socialization since society's gender role; socialization determines what roles males and females should aspire. They observed that according to theories on gender roles and work, masculinity is characterized traditionally as dominance and competiveness, while, in contrast, women select careers that have regular hours of work to enable them to fulfill family obligations.

In his study of career choice of Nigerian youths, Salami (2006) found that many youths made wrong career choices due to ignorance, inexperience, peer pressure, advice from friends, parents and teachers, or as a result of prestige attached to a certain jobs without adequate vocational guidance and career counseling. Similarly, Sax (1994) examined students' initial interest in Science careers, factors influencing career choices during college, and how these factors differ between male and female students. Sax found that men who abandoned career aspirations appear to be driven by financial concerns while women were more concerned with the social good of their career choice. In a similar vein, Perry (2006) asserts that adolescent career choice is influenced by life context, personal attitudes, and educational attainment. Perera and Velummayilum (2008) posit that in most cases the career choice for girls and boys from all perspectives is influenced

by the values that are held, on what either gender can do, on the basis of the held stereotypes, from the socialization process. They add that the problem is aggravated by lack of proper guided procedures for post-secondary education, lack of appropriate information from school career counselors and parents.

But despite some differences, there are indications from the literature reviewed that the gender gap is closing between college males and females' perception of their abilities. Zhao, Carini, and Kuh (2005) have found that women in science, math, engineering and technology classes (SMET) are becoming either equal to or more satisfied with their college experience than males which leads to their greater academic success and the continuous closing of the gender gap in certain course enrollment. However, Linderman (2010) notes that upon examination of research related to Sex differences among career aspiration it was found that results greatly varied. He asserts that there was a trend however, in relation to the timeline of this research. In the 1970’s he posits, research stated that girls had higher career aspirations than boys, in the 80’s boys were found to have higher aspirations than girls, and research in the past decade has all found that sex did not play a role in the career aspirations of middle and high school students.

Studies carried out in Kenya on career aspirations revealed that gender, degree programs, and parents are some of the major influential factors of career aspirations. Wanyonyi (2003), Kochung and Migunde (2011), Obura and Ajowi (2012) in their studies acknowledged that gender as a major factor motivating career choices. Wasike (2010) and Kipisut (2012) cited parents as a major influence on students’ career aspirations. As

Mokaya (2014) posits, one major problem faced by almost all the students after completing high school is to which direction they should go to make a bright future. That is basically why choosing a career is a huge responsibility. It is one of the most important decisions one ever makes. He asserts that a good career is one of the greatest blessings one will ever experience, while a bad career is one of life's greatest curses. He further points out that those who take control and choose their careers tend to derive more joy and satisfaction from their work, but choosing work takes work. According to Mokaya, while in the past prospects were limited by economic and social factors, in the current world, one can choose from a wider range of available careers and training opportunities which go with them. For some, Mokaya (2014) notes, especially those that just finished their form four, the large number of career choices available is enough of a problem. Clearly, others get overwhelmed by the number of career choices available. This confusion is also because of unawareness among students about their hidden talents and interests thus need a carrier test to detect and polish it.

In a study carried out by Muigai et al. (2007) in Moi University investigating "Perceived Relevance of Undergraduate Degree Programs to Students' Career Prospects" posit that guidance process of helping students to achieve the self-understanding and self-direction necessary to make informed choices and move towards personal goals should be taken seriously in high schools. Craig (1986) as cited by Muigai et al (2007) points out that it is at the age of 15-24 years that students explore their careers. These are ages when they are in high school and tertiary institutions. However, from the results of their study, Muigai et al (2007) indicated that it appears that students are normally left on their own to decide on what careers they would pursue despite not knowing the academic requirements for

their choices. The subject combination is key to students' careers in Kenya. The gender disparity that is witnessed in career aspirations has its origin at secondary school level where subjects are chosen. As Griffin & Hammis, (2003) put, some variations in career preferences of male and female students owing to socialization patterns and gender stereo-type have been observed and this trend is said to pose some threat to students' ability to maximize their potentials in the contemporary world. It is of paramount importance therefore, to investigate the influence of gender on students' career aspirations.

2.4 School Facilitation and Students' Subject Choices

Current researches on occupational aspirations have been conceptualized within theories that have more readily recognized the influence of contextual factors. The social cognitive theory by Lent, Brown and Hackett (2002) for example holds that occupational aspiration are influenced by different socialization practices that adolescents are exposed to as well as adolescents internalization of these different experiences. It focuses on the interaction between adolescents' cognitive personal variables and the contexts which may limit or encourage personal urgency in career development (Patton & Creed, 2007).

As Diemer (2007) puts it, schools are in the most strategic positions to impact on career aspirations and expectations. This is mainly due to the existing school based resources such as vocational interest inventories and career seminars. Schools (Carison & Matthews, 1987) develop cultures and ways of doing things which become unique to each particular school. According to Kniveton (2004), schools can provide career

information or career guidance directly or indirectly to influence a student's career choice behavior. Kniveton adds that, school teachers can also identify aptitudes, abilities and encourage students to take certain subject combinations or take part in work experience.

In a study carried out by Female Education in Science and Technology in African (FEMSA, 1999) in Nigeria, it was established that schools through streaming practices stereotype the participation of girls and boys in secondary school technology subjects. The study found out that certain subjects such as home science was considered as meant for girls while certain subjects such as woodwork and metal work as meant for boys. Based on their study in Kenya secondary schools, Kithyo and Petrina (2002) argue that boys' schools tend to be more equipped and oriented towards science and technology subjects while girls' schools do not offer technology subjects such as engineering; instead they offer domestic sciences and secretarial subjects. They assert that by the time students come to choose careers, they have internalized gender norms.

According to Weishew and Penk (1993), the school where one is educated plays an important influence on one's career choice. In his study in America, Garrahy (2001) noted that schools are social institutions that reinforce gender appropriate behavior, interest and occupations. Such constructs including curricular subjects, quality of teaching, student participation in school activities, school practices and policies and learning materials for the student were found to impact on career choice among learners (Bojuwoye & Mbanjwa, 2006).

In his study in South Africa, Spade (2001) found that gender difference in the learners' experiences start at pre-school and continue through their educational careers. Teachers like parents are viewed as key players in the career paths that young people eventually pursue especially girls (Barnett, 2007). In her study in Nigeria, Denga (2004) found that sex-role stereotypes exist among boys and girls in primary schools as they aspire for traditional occupations. This implies that parents' and teachers' beliefs influence those children's self-perceptions of ability and consequently career choice. Similarly, in some studies in South Africa, Bojuwoye and Mbanjwa (2006) found that career choices of tertiary students from previously disadvantaged schools are negatively impacted by lack of finance, lack of career information, poor academic performance and unsatisfactory career counseling services. Watson and Stead (1994) identify the school system as one of the important contextual factors that need to be considered in the career decision behaviour of South African adolescents. They posit that students who have been exposed historically to better career education services at the secondary school level may evidence greater career decidedness at the tertiary education level than more disadvantaged students. Another study by Maree and Beck (2004) indicates that in disadvantaged communities, schools with career counseling programmes were under-utilizing the facility which was also viewed as too expensive. In his study, Maree (2009) found that many learners passed grade 12 without having received career counseling in any form and consequently denied the opportunity to apply for acceptance into sought after fields of study at tertiary training institutions.

In fact, studies show some teachers encourage students to take some subject options that are congruent with aptitudes and abilities that they identify (Falaye & Adams, 2008). They emphasize that the school should support career decision making for this will go a long way to encourage students' choice of subjects. In addition, students need information about the structure and content of subjects they want to study. This will help to influence their choice of the subject. Research studies in Nigeria by Igun and Obayan, (2007), showed that students need information about the structure and content of the programmes they are considering providing an understanding of what a particular discipline involves. Peel (1998) argues that students often receive conflicting advice from parents, teachers, friends and career advisers, and upon entering senior secondary school there can be miss-match between expectations and actual experiences. The difficulty students may have in obtaining informed advice can influence their choice of subjects.

From the Kenya National Examinations Council KCSE Report (2008), Journal of Research in Education and Society; Volume 4, April 2012, 15 percentage candidatures for physics for the years 2009, 2010, and 2011 were 30.41%, 26.69% and 26.78% respectively. The other science subjects had figure above 90%. In the same year, physics was better performed than biology and chemistry. According to the report, this showed that although students have the ability to score high grades in physics, other factors were hindering them. It may be that the attitude that students develop towards a subject is dependent on their experiences in school.

2.5 Students' Perception of Subject Choices and their Career Aspirations

Every student has his/her own perception of the values attached to the specific subjects that they would wish to undertake, a series of factors play an important role on the value

associated with the subject, these can include the suitability in the job market, career choice etc. In the world all over, students have to choose subjects at some points in their school life and this has significant bearing to their future plans in the world of work. Vondracek, Hostetler, Schulenberg and Shimizu (1990) in their study among Japanese and American students, explored issues relating to indecision about future careers and the impact this can have on choices relating to post-compulsory-study. They stated that career indecision should be recognized as a normal state in the career development process. Indecisions, they posit, may results from inability to regard any careers viable, difficulties choosing between too many occupations or problems deciding on alternatives when the most preferred option is not a realistic possibility.

Curran &Rosen, (2006) asserts that classes with set expectations and the ability to actually meet those expectations are very likely to positively influence a student's choice in enrolling in a course. The knowledge a student gains in a class can be beneficial and desired by a student because they simply want to gain knowledge; however, students may also prefer quality of education because of the relevancy and perceived value it can have on their life once they graduate, including their search for employment. According to Nagy, Trautwein, Baumert, Koller, and Garrett (2006), high school students are likely to enroll in subjects that will pertain to what they want to study in college. Students in secondary schools are then greatly influenced by the potential for career opportunities and advancement; therefore, the more valuable a subject is to a future career, the greater the likelihood a student will enroll in it (Ackerman & Gross, 2006).

According to Curran and Rosen, (2006), a student's attitude about an instructor has a large impact on their attitude toward a class. If instructors are inflexible and unclear, they are much more likely to be difficult to learn from, which is a major concern for students (Smith, Feldwisch & Bell, 2006). Subject teachers play a crucial role in taming students choices over which science subject to go for. Some teachers are perceived by the students to be good teachers and this will influence students into his class while students perceive other teachers not to be the right teachers for such subjects this will reduce the rate of the subject by the students.

Australian studies (Ainley, Robinson, Harvey-Beavis, Elsworrth & Fleming, 1994) identified a range of external factors which constrain subject selection including diminished subject availability, limited timeframe for subject selection, timetabling restrictions, compulsory subjects, tertiary prerequisites, and eligibility for entry to tertiary courses. Internal issue such as locus of control, self-assessment of ability, vocational awareness, gender and interest in the subject offered also appear to affect the manner in which students choose subjects (Ainley et al., 1994). Watson & Stead, (1994), posit that institutional and societal constraints often require that a choice be made by students when they are still relatively young. They posit that transition or crisis points are forced, in many cases prematurely by the educational system despite the fact that many students have not made a firm decision about post-school careers.

Studies in Africa similarly, reveal that students’ perception of subject choices impacts significantly on their career paths. At a conference organized by the Federation of African

Women Educationists (FAWE), it was acknowledged that in many African states, girls are still restricted to studying what is perceived to be “soft option” Subjects, which has limited their access to scientific and technical disciplines in institutions of higher learning (Ramani, 2004). In Kenya, it was reported at a workshop organized by Kenyatta University and the World Bank, on gender main-streaming in public universities, that although gender disparities in students’ enrolment exist at all levels of higher education, they are particularly wide at higher degree levels especially in sciences, with special reference to mathematics and technical disciplines. It was also reported that women academicians are concentrated in what is perceived as traditional female social science and education disciplines (Ramani, 2004). Tenenbaum, (2008) asserts that the gender of a student can often affect their enrollment in a class. Men and women can have different values, and there are also certain standards or expectations that vary between genders. He notes that gender differences are especially apparent in high school aged students. Females are less likely to enroll in science and math classes compared to men, but more likely to enroll in English classes. One reason for this could be the different perceptions men and women have in regards to their ability and competency in those certain classes because students are more likely to enroll in classes where they think they can excel (Nagy et al., 2006).

Education system in Kenya allows students to choose their career paths in secondary education, depending on the subjects they opt to specialize in. The choice is further affirmed through the performance in Kenya Certificate of Secondary Education (KCSE). At this time; most of them are between ages 17-18 years. Despite the positive changes

that have taken place in Kenya's education system, students continue to take subject combinations which limit their chances for middle college training and entry to university. In the absence of proper career guidance, career decisions are influenced by factors such as academic performance and training policies, gender and available career information (Eshiwani, 1983; Maritim, 1980). The greatest challenge in students' career choice in many schools is lack of exposure for teachers and students. Students make ignorant career decisions based on how far the teachers guide them out of the career information supplied from institutions of higher learning (Kariuki, 2006a). Gichohi (2005) argues that:

...there has never been a serious effort in Kenya to help students make right career choice. In most cases the students are entirely left alone. They grope in the dark and when they make the choice, they enroll for studies they know.

In Kenya, the students' career choices are to a large extent determined by academic performance, and by the subject clusters designed by the ministry of Education. For instance, in the Ministry of Education Career Handbook (2009), the subject clusters of each college and university programs are clearly outlined. For example, a student must obtain a minimum coverage grade C+ in the best seven subjects, including three compulsory ones (English, Kiswahili and Mathematics) to be admitted into any of the universities.

Even though studies in Nigeria conducted by Ogungbemi and Ajayi (2009) have shown that adolescents think and plan their education in relation to their future vocational goals, experience revealed that lack of guidance at the time of selection often shatter the plans for them. This study is an attempt to examine the influence of the perception of subjects

chosen by students at the secondary level for the Kenya certificate of secondary Education (KCSE) on their career aspirations with a view to suggesting ways of assisting teachers, parents and school counselors in guiding the Kenyan students in their subject choices.

2.6 Summary

This chapter has reviewed and critiqued the pertinent literature on 'The influence of the perception of subject choices on secondary school students' career aspirations'. Studies carried out many in developed world and a few from developing countries have been reviewed. The literature reviewed reveals that gender, peers, parental influence, role models, self-efficacy, availability/lack of information as the major influences of career decisions in Kenya as revealed by the researches carried out. Every school/institution wants to be successful and have desire to get constant progress in students' performance. The current era is highly competitive and learning institutions are not spared as the enrolment of form four graduates into higher institutions of learning and the pursuant of courses thereof depend on their subject combinations in secondary schools. The preceding discussions therefore, have revealed the importance of a comprehensive career guidance programmes in schools where students can be guided on subject choices and choices of careers. A student's journey towards realizing his career begins with the choices of subjects that a student makes and this critical step is made in high school.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.0 Introduction

This chapter presents procedures and methods that the study employed, in order to obtain data needed for the study. The chapter therefore comprises study area, the research design, study population, sample size and sampling procedures, research instrument, validity and reliability of the research instrument, scoring the instrument, data collection procedures and ethical issues.

3.1 Area of Study

The study was conducted in Nandi North District of Nandi County. Its Headquarters is at Kabiyet Township. It borders Nandi Central district to the South, Uasin-Gishu to the East and to the North and Kakamega County to the West. The district is divided into two Divisions namely: Kabiyet and Kipkaren. Nandi North district is within the Nandi County, with a latitude of 0^0 and 0 34” and a longitude of 34^0 34” / 35^0 25E, Altitude 1300-2500 (Refer to appendix viii). According to the 2009 census, the County is estimated to have a total population of 752,965 of this 102,281 or 13.6% is urbanized population. This increasing population is likely to raise the demand for places at all levels of education. The main economic activities in the area are livestock keeping, maize farming, tea farming among other smaller economic engagements. The major towns near the area include Eldoret, Kapsabet and Nandi Hills provide opportunities of employment of the kinds to be found in any major city. Opportunities in construction engineering, Health Sciences, Sport Sciences, Hospitality and many other economic activities are

common. The school children therefore require up-to-date information on all these professional activities. The information from the DEO's office of the district indicates that there had not been adequate career sensitization in the district. Additionally, the district was chosen because it has all the school types: boys, girls and mixed schools that were used to generate data.

3.2 Research Design

A research design is a basic arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure (Mugenda & Mugenda, 2003). This study employed descriptive survey design. Descriptive survey design deals with the incidence, distribution and interrelations of educational variables. It gathers data at a particular point in time with the intention of describing the nature of the existing conditions, identifying the standards against which existing conditions can be compared and determining the relationship that exists between specific events (Orodho, 2005). The design of the research was based on the survey method which is an attempt to collect data from a representative sample of the population in order to determine the current status of that population with respect to one or more variables, and generalize its findings (Mugenda & Mugenda, 2003).

Survey is good and an easy way to collect data from the point of views or opinions, information on attitudes and reasons for behavior (Nachiamas 1996). Descriptive survey design seeks to obtain information that describes existing phenomena by asking individuals about their perceptions, attitudes, behavior or values (Mugenda and Mugenda, 2003). According to Babbie (2004) a survey includes cross-sectional and longitudinal

studies using questionnaires of structured interviews for data collection, with the intent of generalizing from a sample to a population. The design was adopted because the population to be studied was large to be observed directly and thus useful because of the economy both in time and money of taking a sample of population to generalize results for the whole population, resulting to in-depth, rich and meaningful research findings.

3.3 Study Population

Population refers to an entire group of individuals, events or objects having a common observable characteristic (Mugenda& Mugenda, 2003). Population is the aggregate of all cases that conform to same designated case of specifications (Nachiamas, 1996). Information at the District Education Office indicated that the district had 48 pubic secondary schools of which 5 were boys', 8 were girls' and 35 were mixed (see Table 3.1). The target population was 12,528 secondary students drawn from all the 48 public secondary schools in Nandi North District (DEO's Office, Statistics Department, 2014). Out of the accessible population of 2614, a sum of 1567 was boys while 1047 were girls. The boys and girls were in mixed schools and single sex schools. There were 736 boys who were in boys schools while 831 were in mixed schools. There were 514 girls who were in girls schools while 533 were in mixed schools.

3.4 Sample Size and Sampling Procedure

Sampling is the process of selecting a sub-set of cases in order to draw conclusions about the entire set. A sample is a small part of a large population, which is thought to be representative of a larger population. Any statements made about the sample should be true for the entire population. According to Cohen (2003), determinants such as expense,

time and accessibility frequently prevent researchers from gaining information from the entire population, therefore there is need to obtain a smaller group of subset of the total population in such a way that it is representative of the total population under study. For the purpose of this study, 15% of the accessible population was selected using stratified random sampling technique which gives each item in the population an equal probability of being selected. According to (Gay, 2001) a sample of 10 - 30% is representative to a given population. To get the sample, the schools were first stratified according to the three types namely: boys', girls', and mixed schools. Stratified random sampling was used to select a representative sample of form four male and female students from the selected schools. This implies that a sample size of 392 students was drawn from 2614 form four students. The final sample consisted of 235 male and 157 female students. Use of form four students is quite significant since they had done four years of secondary education and were preparing to sit for K.C.S.E at the end of four year program. It is at the end of form four where transition occurs in one's career plans. It was therefore hoped that they were mature, had career plans and would give more realistic responses.

Table 3.1: Secondary Schools by Type and Gender

Type of School	**Number of Schools**	**accessible Population**		**Sample Size**	
		Boys	**Girls**	**boys**	**girls**
Girl Schools	8	_	514	_	77
Boy Schools	5	736	_	110	_
Mixed Schools	35	831	533	125	80
Total	**48**	**1567**	**1047**	**235**	**157**

Source: District Education Office, Kabiyet (2014)

3.5 Research Instruments

The main instruments of data collection were questionnaires (appendix II). Questionnaire is a convenient tool especially where there are a large number of subjects to be handled because it facilitates quick and easy derivation of information within short time (Borg & Gall, 1983). The students' questionnaires were used. It consisted of sets of items that the respondents were required to respond to independently. The items were of both open ended and close ended response types. It had items which sought information on: section (A) Students' background information, (section B) Students' perspectives on subject choices, (section C) Students' perspectives on career aspirations, section (D) The influence of the school facilitation on students' subject choices and section (E)The influence of students' perception of subject choices on their career aspirations. Questionnaire enables one to collect a large amount of information within a reasonable time limit. This method is also cost effective and can enable easy coding and analysis of information collected.

3.6 Validity and Reliability of Research Instruments

In order to ensure that the study generated correct findings, the research instrument (refer to appendix ii) had to be valid and reliable. The validity and reliability of research instruments is discussed below:

3.6.1 Validity of Research Instruments

Validity is an essential element for research instruments. Validity is concerned with the question "Am I measuring what I intend to measure?" There are several types of validity:

construct, content, concurrent and predictive validity. This study used content validity evidence for the instruments which were used to measure the influence of the students' perception of subject choices on their career aspiration. The problem of validity arises because measurement in the social sciences is, with very few exceptions, indirect (Nachiamas, 1996). Validity of an instrument or scale is the success of the scale in measuring what it sets out to measure, so that differences in individual scores can be taken as representing true differences in the characteristics under study. The usual procedure in assessing validity is to use professionals in a particular field (Mugenda & Mugenda, 2003).Validity of the research tools was determined by having experienced supervisors in the School of Education Moi University, who checked the questionnaires to evaluate the exactness of the items contained in the various instruments. In view of their suggestions, the tools were revised and used in the collection of data.

3.6.2 Reliability of Research Instruments

Reliability refers to the degree to which the scores obtained with an instrument are consistent measures (Frankel& Wallen, 2000). Reliability therefore is concerned with degree of consistency or agreement between two independently obtained tests scores (Mugenda & Mugenda, 2003). In this research study, the internal reliability index was established using Cronbatch alpha coefficient of Reliability. This was obtained by use of split –half reliability where the responses obtained through pilot study were split into odd and even items and the scoring was done and their correlation was obtained. The reliability index was r=.73 and this showed that the instrument was 73% reliable to be used for this study. The internal consistency reliability was preferred because it gave

consistent measures of different items based on four sub-scales namely; influence of gender in students' subject choices, influence of gender in students' career aspirations, the influence of the school facilitation on students' subject choices and the influence of students' perception of subject choices on their career aspirations. This method was used because it required only one session. The researcher carried out the pilot study in three schools in the neighboring Nandi Central district, where the research instruments were administered to form four students. The district used for the pilot study has similar characteristics with the study area. This is because the area of study and the pilot district are under one county-Nandi County, the socio economic activities of the people in the two sub-counties are similar.

3.7. Scoring the Instrument

Closed-ended items were awarded numerical scores. The participants were required to give their perceptions on the extent to which they feel about some items and were scored according to the feeling it portrayed on a five point Likert scale. The student responded by making a choice from the five possibilities provided. Based on the Likert scale used Strongly Agree-5, Agree-4, Undecided-3, Disagree-2, and Strongly Disagree-1. The scoring was done as follows: Section B on the student's perception of subject choices: the sub-scale had 20 items on a five point Likert scale (9-28). Minimum score was 20 while a maximum score was 100. Negative score was 20-52, ambivalent score was 53-68 and positive score was 69-100. Section C on students' perception of career aspirations the scoring was done as follows: the subscale had 17 items on a five point Likert scale (29-45). The minimum score was 17 and the maximum score was 85. Negative score was 17-

44, ambivalent score was 45-58 and positive score was 59-85. Section D on the influence of the school facilitation in students' subject choices the scoring was done as follows: the sub-scale had 9 items on a five point Likert scale (46-54). The minimum score was 9 and the maximum score was 45. Negative score was 9-23; ambivalent score was 24-31and positive score was 32-45. Open-ended questions were analyzed on the basis of item by item as answered by respondents.

3.8 Data Collection Procedures

The researcher sought permission from the relevant authorities. The researcher was issued with a letter from the Dean, School of Education Moi University (Appendix iii) for purposes of getting a research permit and authorization from the Ministry of Education (Appendix v). Upon getting the research permit (Appendix iv) the researcher proceeded to the area of study through the District offices who issued letters (Appendix vi) allowing the researcher to carry out research in the area of study. The students were notified through the school heads by means of letters of the researcher's intention to carry out a study in their schools. The letter requested the principals to allow the researcher to use the School for purposes of the study. The respondents were made aware on the aim of the study and were requested to participate in the study in order to achieve the objectives of the study. The researcher then personally administered the research instruments. Clarifications were made where required and sufficient time was allowed for the respondents to make their responses. The researcher personally collected the completed questionnaire from the respondents and those who would have not responded given more time and the researcher collected them later.

3.9 Ethical Issues in Data Collection

The respondents were made aware of the aims of the study. In the process of carrying out the actual study, consent was obtained, all the respondents remained anonymous and confidentiality of the information was assured. The study considered all the respondents equally. The researcher reported the findings honestly and objectively. All the support received was acknowledged.

3.10 Data Analysis and Presentation

Data analysis refers to examining what has been collected in a survey, experiment and making deduction and inferences (Kombo & Tromp, 2006). Data collected in this study was analyzed descriptively using frequencies, charts, percentages and the research hypotheses were tested using Pearson Product Moment Correlation coefficient and Chi-square at 0.05 level of significance.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.0 Introduction

This chapter deals with data analysis, presentation, interpretation and discussion of the research findings. In the first section, descriptive statistics are used to provide background information of the respondents who participated in this study. The second section presents the analysis of the responses to the specific objectives of the study as provided by the respondents in the questionnaires. The purpose of this study was to establish the influence of secondary school students' perception of subject choices on their career aspirations in Nandi North sub-county. This study was based on the following objectives:

i. To establish the influence of gender in students' subject choices.
ii. To establish the influence of gender in students' career aspirations.
iii. To investigate the influence of the school facilitation on the students' subject choices.
iv. To find out the influence of secondary school students' perception of subject choices on their career aspirations.

4.1 Response Rate

The research instruments were administered to 392 form four students in Nandi North sub-county, Nandi County. Out of 392 questionnaires administered, 364 were completely filled-in and returned, making a response rate of 92%. According to Mugenda & Mugenda (2003) a response rate of 50% is adequate for analysis and reporting; a rate of

60% is good and a response rate of 70% and over is excellent; therefore, this response rate was adequate for analysis and reporting.

4.2 Background Information

The purpose of this study was to examine the influence of secondary school students' perception of subject choices on their career aspirations in Nandi North Sub-county, Kenya. In order to achieve the objectives of this study, the students were provided with a list of items whose responses would indicate their gender and subject choices, their gender and career aspirations, the influence of school facilitation and the influence of students' perception on their subject choices on career aspirations. The responses on each of the mentioned aspects are presented in the following sub-sections:

4.2.1 Gender of the Respondents

The respondents were asked to state their gender. The responses are shown in fig. 4.1.

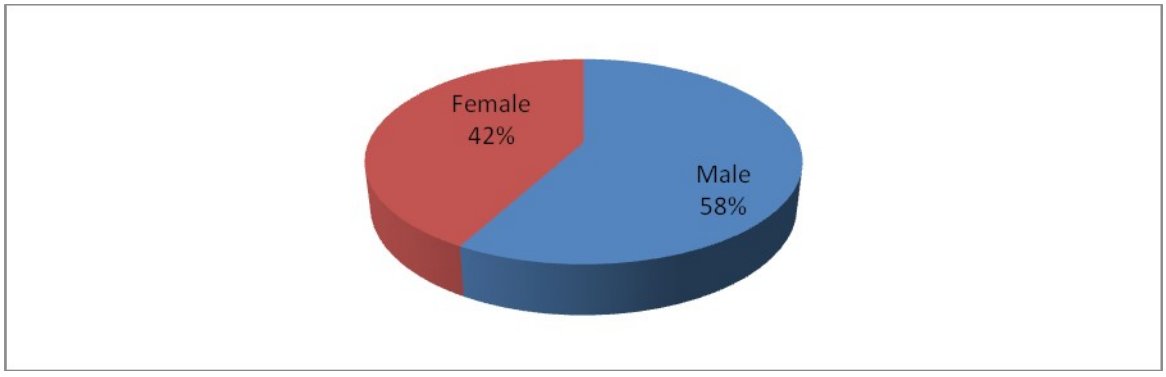

Fig 4.1: Gender of students

As shown in fig. 4.1, a total of 58% of the respondents were male while 42% were female. This implies that there were more male respondents than female.

4.2.2 Criteria Used to Select Subjects

The respondents were asked to state the criteria used to select subjects. The results are presented in fig. 4.2.

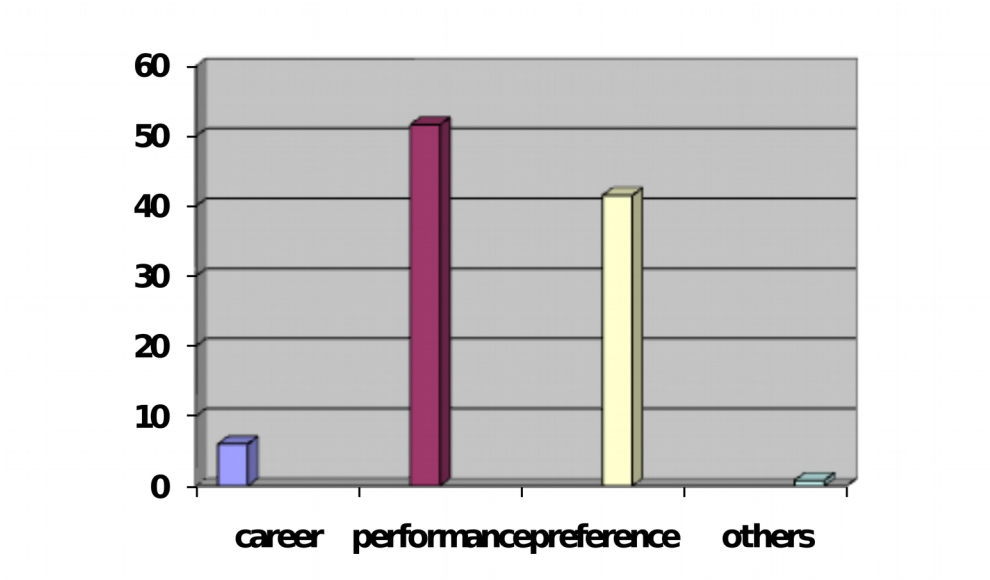

Fig 4.2: criteria used to select subjects

As shown in fig. 4.2, the students were asked to indicate the criteria used in their schools to select subjects and the response were as follows; 51.6% said it was according to the performance in the subjects, 41.5% stated that they selected the subject according to what subject one prefers. Another 6 % (22) stated that it was according to the students' career aspiration and lastly 0.8% stated other criteria were used.

4.3 Students' Subject choices

The study sought to establish the subjects selected by the students from each of the optional groups. The results are presented in the following sub-sections:

4.3.1 Group two Subjects Selected

Concerning the subjects the students chose from group two, fig.4.3 shows the responses.

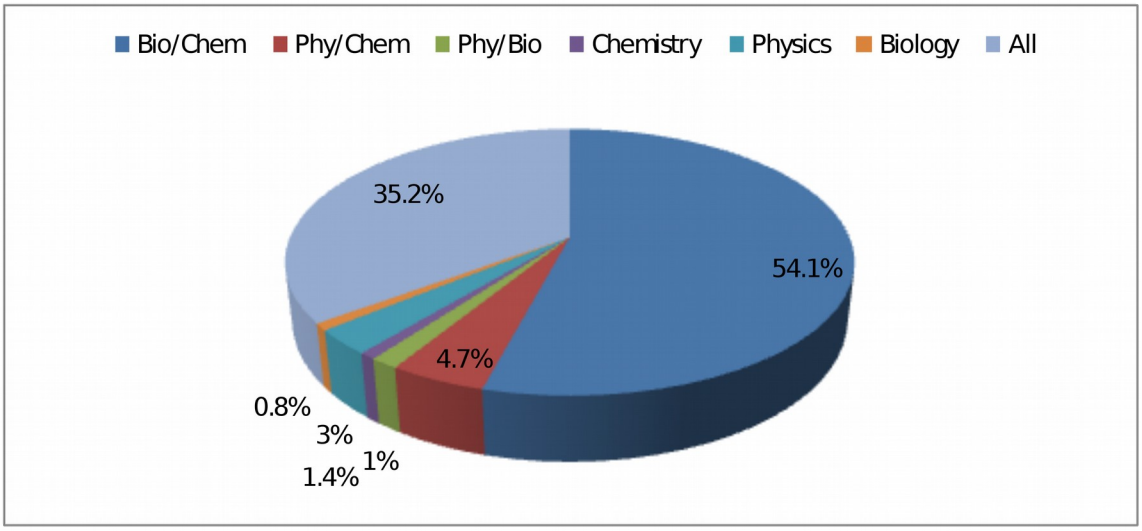

Fig. 4.3 Group two subjects

Fig. 4.3 shows that 54.1% of the respondents stated that they do Bio/Chem while 35.2% chose to do all the sciences. Another 4.7% stated that they chose Phy/Chem, 3% chose Physics, 1.0% chose Phy/Bio, 1.4% of the respondents chose Chemistry and another 0.8% had chosen Biology.

4.3.2 Group three subjects selected

The respondents were required to state the subjects they selected from group three. These are humanities which include Religious Education, Geography and History. The responses are shown in Table 4.1

Table 4.1 Humanities selected

Subjects	Frequency	Percentage (%)
CRE/GEO	87	23.9
CRE/History	146	40.1
Geo/History	16	4.4
Religious studies	16	4.4
Geography	70	19.2
History	27	7.4
All	2	0.5
Total	**364**	**100**

As shown in Table 4.1, 40.1% of the respondents stated that they chose CRE/History, 23.9% had chosen CRE/GEO, whereas 4.4% had chosen Geo/History. There were 19.2% who choose Geography while 7.4% of respondents had chosen History and 4.4% chose Religious Studies, finally only 0.5% chose to do all the humanities.

4.3.3 Group Four subjects selected

Fig. 4.4 shows students responses on the subjects they chose from group four.

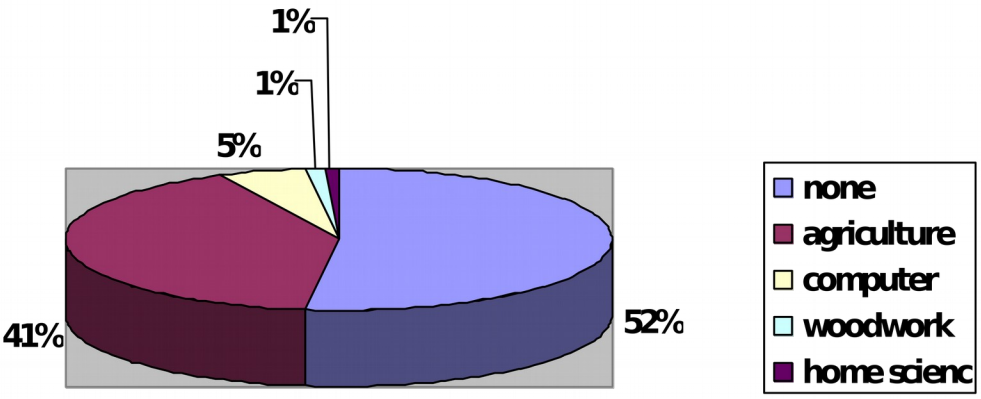

Fig. 4.4 Technical subjects

The study found out that Technical subjects are not popular among many students. Fig.4.4 shows that 51.9% of the respondents never chose any technical subject, 40.9%

stated that they chose Agriculture, 5.3% had chosen computer while another 1.1% of the respondents chose to do woodwork and only 0.8% had chosen Home Science.

4.3.4 Group Five subjects selected

The students who participated in this study were asked to state the subjects they chose from group five. The responses are presented in Table 4.2.

Table 4.2 Creative subjects

Subjects	Frequency	Percentage (%)
Business Studies	219	60.2
French	4	1.1
German	1	0.3
Arabic	1	0.3
Kenyan Sign Language	4	1.1
Music	2	0.5
None	133	36.5
Total	**364**	**100**

In the above table, majority (60.2%) of the respondents stated that they chose Business Studies, whereas 36.5% never chose any creative subject, 1.1. % had chosen French, and another 1.1% chose to do Kenya Sign Language. There were 0.3% who chose German, 0.3% of the respondents chose Arabic and finally 0.5% of the respondents chose music subject.

4.3.5 Influence of Gender on Subject Choices

The study sought to establish the influence of gender on students' subject choices. The results were as follows:

Cross tabulation was done in order to establish the subjects selected from group two by gender. The results are presented in Table 4.3.

Table 4.3: Cross Tabulation of Gender and Group two Subjects Selected

Gender		GROUP TWO SUBJECTS							Total
		Bio/chem.	Phy /chem	phy/ Bio	Chemistry	Physics	Biology	All	
MALE	Frequency	93	10	4	3	9	0	92	211
	%	25.5	2.7	1.1	0.8	2.5	0.0	25.3	58.0
FEMALE	Frequency	104	7	1	0	2	3	36	153
	%	28.6	1.9	0.3	0.0	0.5	0.8	9.9	42.0
Total	Frequency	197	17	5	3	11	3	128	364
	%	54.1	4.7	1.4	0.8	3.0	0.8	35.2	100.0

The secondary school curriculum is structured in a way that a student has to at least take two science subjects. This study found out that girls go for Biological sciences while boys favor Physical sciences. As shown in Table 4.3, Biology/Chemistry combination was selected by 54.1% of the students who participated in this study, of which 25.5 % (N=364) were male students while 28.6 %(N=364) were female. It can be inferred that 44.1 %(n_1=211) of the male students chose Biology/Chemistry whereas 68.0%(n_2=153) of the female students chose Biology and Chemistry from group two subjects. This implies that more female students chose Biology and Chemistry combination from group two as compared to the male students. Physics/Chemistry was chosen by 4.7 %(N=364) of the students who participated in this study of which 2.7 %(N=364) were male students and 1.9 %(N=364) were female students.

It should be noted that 35.2 %(N=364) of the students chose all the subjects in group two whereby 25.3 %(N=364) were male students while the remaining 9.9 %(N=364) were female.

Further statistical analysis indicates that there is a significant relationship between gender and the selection of subjects in group two. These results are presented in Table 4.4.

Table 4.4: chi-square results on gender and group two subject choice

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	29.403	6	.000
Likelihood Ratio	32.277	6	.000
Linear-by-Linear Association	18.731	1	.000
N of Valid Cases	364		

As shown in Table 4.4, a chi-square value of 29.403 was obtained with d.f. =6 and $p<0.05$. Since $p<0.05$, it implies that there is a significant relationship between gender and group two subjects.

It was important for this study to establish the relationship between gender and selection of subjects in group three. The findings are shown in Table 4.5.

Table 4.5: Cross Tabulation of Gender and Group three Subjects Selected

Gender		GROUP THREE SUBJECTS							
		CRE/Geo	CRE/Hist	GEO/Hist	Rel.	Geo.	Hist.	All	Total
GENDER Male	Frequency	28	77	16	6	55	27	2	211
	%	7.7	21.2	4.4	1.6	15.1	7.4	0.5	58.0
Female	Frequency	59	69	0	10	15	0	0	153
	%	16.2	19.0	0.0	2.7	4.1	0.0	0.0	42.0
Total	Frequency	87	146	16	16	70	27	2	364
	%	23.9	40.1	4.4	4.4	19.2	7.4	0.5	100.0 %

Table 4.5 shows that 7.7 %(N=364) of the students who participated in this study were male students who chose CRE/Geography combination while 16.2 %(N=364) were female. A further 21.2% were male students who chose CRE/History whereas 19.0 % (N=364) were female. It is instructive to note that more (67.8%, n_2=153) female students chose CRE/Geography while more (52.7%, n_1=211) male students chose CRE/History. However, a small proportion (0.5%, N=364) of the students who participated in this study chose all the subjects in group three. The findings of the study indicate that History, History/CRE combination is popular among the boys while CRE, Geography/CRE combination is popular among the girls. Further statistical analysis indicates that there is a significant relationship between gender and the selection of subjects in group three. These results are presented in Table 4.6.

Table 4.6: Chi-square results on Gender and group Three Subject Choice

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	72.952	6	.000
Likelihood Ratio	90.143	6	.000
Linear-by-Linear Association	52.001	1	.000
N of Valid Cases	364		

As shown in Table 4.6, a chi-square value of 72.952 was obtained with d.f. =6 and $p<0.05$. Since $p<0.05$, it implies that there is a significant relationship between gender and group three subjects selected by the students who participated in this study. This relationship was also revealed through the descriptive statistics that indicated that there were more female students who chose CRE and CRE/Geography combination whereas more male students selected History and CRE/History combination.

Cross tabulation of gender and group four subjects selected by the respondents was done and the results presented in Table 4.7.

Table 4.7: Cross Tabulation of Gender and Group four Subjects Selected

		Technical Subjects					Total
		computer	agriculture	woodwork	home science	none	
GENDER	MALE Frequency	14	93	2	0	102	211
	%	3.8	25.5	0.5	0.0	28.0	58.0
	FEMALE Frequency	5	56	2	3	87	153
	%	1.4	15.4	0.5	0.8	23.9	42.0
Total	Frequency	19	149	4	3	189	364
	%	5.2	40.9	1.1	0.8	51.9	100.0

As indicated in Table 4.7, 28.0 %(N=364) of the students who did not choose any subject from group four were male students while 23.9 %(N=364) were female. Another 25.5 %(N=364) of the students who chose agriculture from group four subjects were male whereas 15.4 %(N=364) were female.

Results on the relationship between gender and group four subject choice are presented in Table 4.9. The results show that gender and selection of group four subjects is not significant as indicated by a p-value of 0.071 which is greater than 0.05.

Table 4.8: chi-square results of gender and group four subject choice

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.619	4	.071
Likelihood Ratio	9.793	4	.044
Linear-by-Linear Association	3.592	1	.058
N of Valid Cases	364		

Table 4.9 shows cross tabulation of gender and group five subjects selected.

Table 4.9: Cross Tabulation of Gender and Group five Subjects Selection

		Creative subjects							Total
		business	French	German	Arabic	sign language	music	None	
MALE	Frequency	114	4	1	1	2	1	88	211
	%	31.3	1.1	0.3	0.3	0.5	0.3	24.2	58.0
FEMALE	Frequency	105	0	0	0	2	1	45	153
	%	28.8	0.0	0.0	0.0	0.5	0.3	12.4	42.0
Total	Frequency	219	4	1	1	4	2	133	364
	%	60.2	1.1	0.3	0.3	1.1	0.5	36.5	100.0

Table 4.9 reveals that 31.3 %(N=364) of the students who chose business studies were male while 28.8 %(N=364) were female. Further, 24.2 %(N=364) of the students who did not choose any group five subjects were male as 12.4 %(N= 364) were female.

Table 4.10 shows the chi-square results on the relationship between gender and group five subjects selected by the students who participated in this study. The study found out that Business Studies was the only subject in group five that was offered in all schools. Other subjects in this group such as Foreign Languages, Music and Kenyan Sign Language were not offered in most schools. Most of the subjects in group five seem to be irrelevant in relation to the aspirations of the students regardless of gender of the students.

Table 4.10: chi-square results on gender and group five subject choices

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.318	6	.079
Likelihood Ratio	13.562	6	.035
Linear-by-Linear Association	6.123	1	.013
N of Valid Cases	364		

The results recorded in Table 4.10, show that there is no significant relationship between gender and group five subjects selected by the students who participated in this study. The results obtained indicates a chi-square value of 11.318 and a p-value of 0.079 with degrees of freedom=6.

Cumulatively, the study sought to establish whether there exists a relationship between gender and subject choices. This was done using the scale provided in chapter three where the students' perception on subject choices was categorized into negative, ambivalent and positive. Using the observed scores from the raw data, the findings indicate that a high percentage of male and female were ambivalent as far as subject choices was concerned. The specific descriptive statistics on the difference in students' perception on subject choices based on gender is presented in Table 4.11.

Table 4.11 Descriptive statistics on students' perception on subject choices

	Subject choice							
	Negative		**Ambivalent**		**Positive**		**Total**	
	f	%	f	%	f	%	f	%
Gender								
Male	50	13.7	105	28.8	58	15.9	211	58.0
Female	38	10.4	84	23.1	31	8.5	153	42.0
Total	**88**	**24.1**	**189**	**51.9**	**89**	**24.4**	**364**	**100.0**

As shown in Table 4.11, 28.8 %(105) of the male students and 23.1 %(84) of the female students who participated in this study were at ambivalent as far as subject choice is concerned. The findings also reveal that there were more male students (15.9%) who were positive towards subject choices than female students (8.5%). Further, 13.7 %(50) of the students were male with negative perception towards subject choice as compared to 10.4 %(38) of the students who were female students with negative perception towards subject choices.

There was need to establish statistically whether there exists a relationship between gender and subject choices. The results are presented in Table 4.12. This was necessary in testing the first null hypothesis:

HO_1: There is no significant relationship between students' subject choices and their gender.

Chi-square was used to test the first hypothesis. The results are shown in Table 4.13.

Table 4.12: chi-square results on relationship between gender and subject choice

	Value	df	Asymp. Sig. (2-sided)
Chi-Square	2.40	2	.001
N of Valid Cases	364		

As shown in Table 4.12, a chi-square of 2.40, d.f. =2 and p-value of 0.001 was obtained. Since $p<0.05$, the null hypothesis was rejected. This implies that there is a significant relationship between gender and subject choice. This supports the descriptive statistics that indicated that there were more male students who were ambivalent towards subject choices than the female students.

4.4 Students' Career Aspirations

The students who participated in this study were asked to state what they would like to do after KCSE. The findings are presented in Table 4.13.

Table 4.13: What students would like to do after KCSE

Responses	Frequency	Percentage (%)
Start Business	71	19.5
Join university/college	149	40.9
Do Computer packages	80	22.0
Look for a job	57	15.7
Train as an Athlete	4	1.1
Join a driving school	3	0.8
Total	**364**	**100**

Table 4.13 shows that 19.5% of the respondents would start a business after KCSE, however, 40.9% stated that they will join University/College. Another 22% stated that they will do computer packages, 15.7% stated that they will look for a job, another 1.1% stated that they wanted to be athletes after KCSE and only 0.8% of the respondents wanted to join driving school after they finish their KCSE.

The participants were further asked to state the courses they would pursue in the university or college. The responses are tabulated in fig. 4.5.

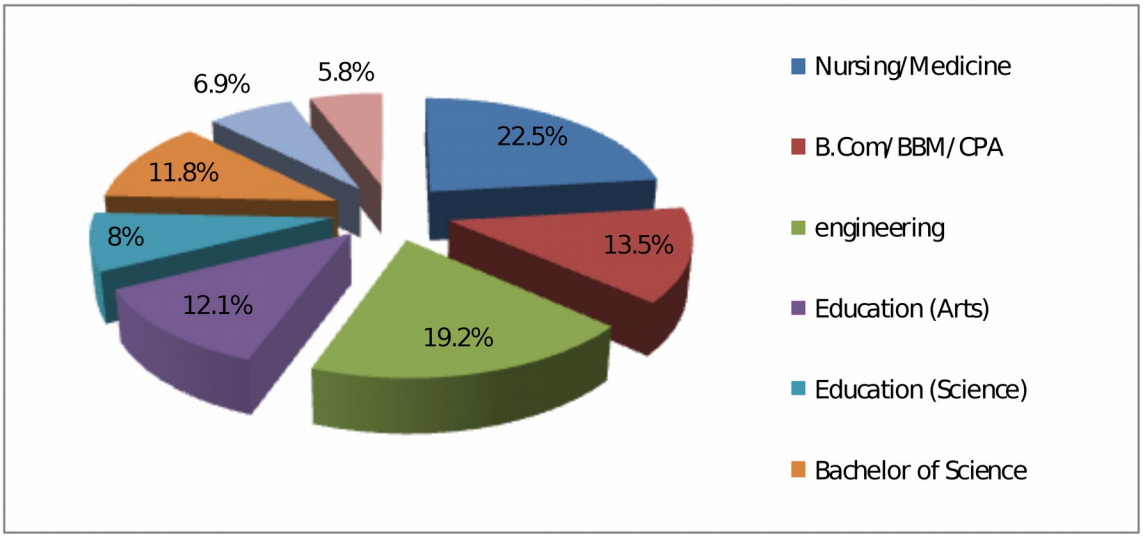

Fig. 4.5: Course to pursue in University/College

Fig. 4.5, 22.5% of the respondents would like to pursue Nursing/Medicine if they go to University; 13.5% stated that they will pursue B.Com/BBM/CPA at the university/College, another 19.2% of the respondents wished to undertake Engineering

when they join University/College. There were 12.1% who would like to do education(Arts), 11.8% wished to pursue Bachelors of Science at the university/College, while 6.9% would like to pursue Mass Communication/journalism and finally 5.8% stated that they would wish to pursue Information Technology (IT) when they go to university/college. This implies that majority of the students would wish to pursue nursing/medicine or engineering courses in the university.

4.4.1 Guide on career decision

The study sought to find out the person that is influential in helping the students in making a career decision. The findings are shown in fig. 4.6.

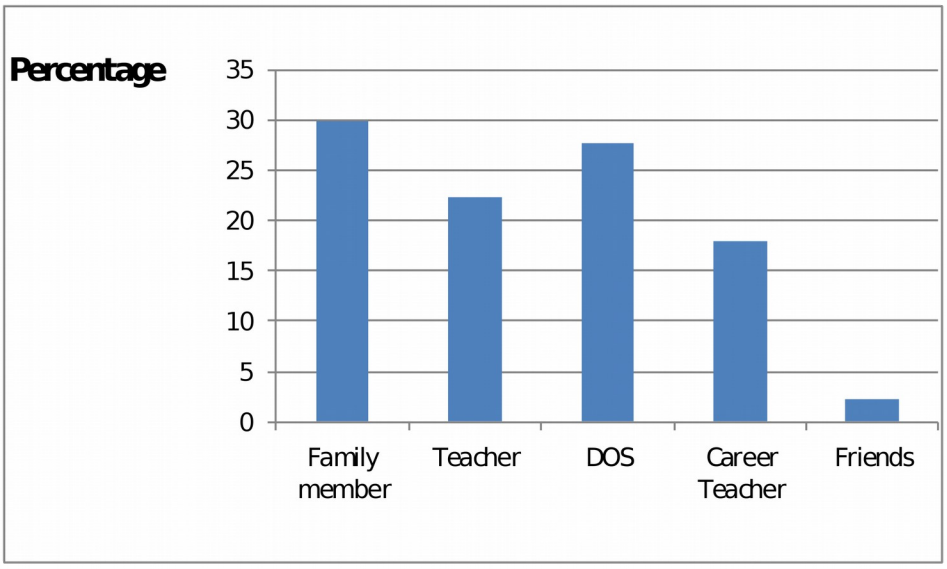

Fig. 4.6: Who Guided You in Making Career Decision?

Fig. 4.6 shows that 29.9% of the respondents stated that their family member guided them when making career decision, whereas 22.3% said that they were guided by their teachers, 27.7% stated that director of studies guided them on their career decision while

17.9% of the respondents said that they got guidance from their career teachers and only 2.2% stated that it was their friends who guided them in their decision.

The students who participated in this study were asked to state the person who was in charge of guidance in their school. The responses are as shown in Table 4.15.

Table 4.14: Who is in Charge of Career Guidance in their school?

	Frequency	**Percentage (%)**
Director of studies	62	17.0
Career Teacher	109	29.9
Guidance& Counseling teacher	52	14.3
Subject Teacher	53	14.6
Deputy Principal	88	24.2
Total	**364**	**100**

Table 4.14 shows that 29.9% of the respondents stated that the career teacher was in charge of career guidance in their school; however 24.2% stated that Deputy Principal was in charge of career guidance. Another 7% stated that director of studies was in charge of career guidance in their school while 14.6% stated that their subject teacher was in charge and another 14.3% said that guidance and counseling teacher was in charge of career guidance in their school. From these findings, it can be deduced that career guidance in most schools is not well established. There was no clear cut and known person who handled career guidance in most schools. It was established that it was handled by too many different people. Since this is a critical issue in students' lives, it should be delegated to one specific person who should be given a known title in all schools and trained appropriately to discharge the duty.

4.4.2 Influence of Gender on Career Aspirations

The study sought to determine the influence of gender on students' career aspirations. The responses are presented in Table 4.15.

Table 4.15: Career Aspiration and Gender

		Nursing/medicine	Bcom /BBM /CPA	Engineering	Law	Education	Bachelor of Science	Mass comm /journalism	Information technology	Total
Male	Frequency	38	18	58	33	13	22	14	15	211
	%	10.4	4.9	15.9	9.1	3.6	6.0	3.8	4.1	58.0
Female	Frequency	44	31	12	11	17	21	11	6	153
	%	12.1	8.5	3.3	3.0	4.7	5.8	3.0	1.6	42
Total	Frequency	82	49	70	44	30	43	25	21	364
	%	22.5	13	19.2	12.1	8.2	11.8	6.9	5.8	

Majority of the students (15.9%, N=364) who would wish to pursue engineering courses were male while majority (12.1%, N=364) of the female students would like to pursue Nursing or Medicine courses in the universities. It was established that there were more female students (8.5%, N=364) who would wish to pursue business related courses as compared to male students (4.9%, N=364). From these findings, it can be concluded that students' choice of subjects have a bearing to their career aspirations.

4.4.3 Students Perception of Career Aspirations

The respondents were asked to state their perception of career aspiration. The responses are presented in Table 4.16.

Table 4.16: Students' Perception of Career Aspiration

Factors	**Agreed**		**Undecided**		**Disagreed**		**Total**	
	F	**%**	**F**	**%**	**F**	**%**	**F**	**%**
Career decision is an important decision in my	351	96.5	7	1.9	6	1.6	364	100

life								
Making a career decision is difficult	123	53.8	24	6.6	217	59.6	364	100
I know what I wish to pursue after KCSE	299	82.1	33	9.1	32	8.8	364	100
I am not yet sure of what I wish to pursue after school	48	13.2	36	9.9	380	76.9	364	100
My academic performance will determine what I will pursue in future	303	83.2	13	3.6	48	13.2	364	100
I have adequate information on what I wish to pursue after KCSE	248	68.1	26	7.1	90	24.7	364	100
What I wish to do in future was influenced by the subject choices I made	246	77.6	9	2.5	109	30.0	364	100
My parents/guardian influenced what I wish to do in future	120	63.4	13	3.6	231	33.0	364	100
My career guidance teacher had an influence on what I wish to pursue in future	160	43.9	16	4.4	188	51.7	364	100
I consulted my friends when I was making the decision on what I wish to do I future	108	29.1	22	6.0	234	64.3	364	100
I chose the course because I know I can easily get a job	166	55.6	43	11.8	155	32.6	364	100
I chose the course because it is prestigious	99	27.2	38	10.4	227	62.4	364	100
I wish to pursue the course I have chosen because somebody did and is successful	159	43.7	24	6.6	181	49.7	364	100
My choice of what I want to pursue in future changed when I made subject choices	068	18.7	21	5.6	275	77.8	364	100
I cannot pursue what I wish to after KCSE because my parents/guardian cannot afford to finance it	38	10.4	43	11.8	283	77.8	364	100
The subjects I chose cannot allow me to pursue what I wish to in future	18	4.9	12	3.3	334	91.8	364	100
Right now I am not sure of what I wish to do in future, I will decide when the KCSE results are out	60	16.5	27	7.4	277	76.1	364	100

The results indicate that 96.5% who were the majority stated that they agreed that career decision is an important decision in their life whereas 1.6% disagreed and only 1.9% were undecided. There were 59.6% who agreed that making career decision is difficult while 33.8% of them disagreed and 6.6% only were undecided. The majority, 83%, agreed that they know what to pursue after KCSE however 8.8% disagreed and 9.1% of

respondent were undecided, another 13.2% of the respondents agreed that they are not yet sure of what they wish to pursue after KCSE but 76.9% of the majority disagreed and only 9.9% were undecided. Moreover, 83.2% of the majority respondents agreed that their academic performance will determine what they will pursue in future while 13.2% disagreed and only 3.6% were undecided, 68.1% agreed that they have adequate information on what they want to pursue after KCSE while 24.7% disagreed and 7.1% were neutral, 77.6% of the respondents who were the majority agreed that what they wish to do in future was influenced by the subject choices they made whereas 30% disagreed and only 2.5% were undecided. Another 4.9% of the respondents agreed that the subject they chose cannot allow them to pursue what they wish to in future, however, 91.8% disagreed and only 3.3% were undecided. There were 16.5% of the respondents who stated that they were not sure of what they wished to do in future, and that they will decide when the KCSE results are out while 76.1% who are the majority disagreed and only 7.4% of the respondents were neutral.

Furthermore, 63.4% agreed that their parents/guardian influenced what they wish to do in future however, 33% who were the majority disagreed and only 3.6% were undecided. There were 43.9% who agreed that their career guidance teacher had an influence on what they wish to pursue in future whereas 29.1% agreed that they consulted their friends when they were making the decision on what they wish to do in future while 64.3% disagreed and 6% of them were undecided

Also, 55.6% stated that they chose the course because they know they can easily get a job, however, 32.6% disagreed and 11.8% of them were neutral. Another, 27.2% of the respondents agreed that they chose the course because it is prestigious while 62.4% disagreed and only 10.4% were neutral. Another, 43.7% of the respondents agreed that they wish to pursue the course they have because somebody did and is successful while 49.7% disagreed. Another 77.8 % agreed that their choice of what they want to pursue in future changed when they made subject choices while 18.7% disagreed. However, 10.4% of the respondents agreed that they cannot pursue what they wish to after KCSE because their parents/guardian cannot afford it but 77.8% disagreed and only 11.8% were neutral.

Table 4.17 shows the overall perception of the students towards career aspiration. The items were 17 on five point Likert scale. Therefore the minimum score is 17 and the maximum score is 85. A score of 17-44 implies negative perception while a score of 45-58 shows an ambivalent perception. However, a score of 59-85 indicates positive perception.

Table 4.17 Overall Students' Perception of Career Aspiration

Factors	**Mean**
Career decision is an important decision in my life	1.3
Making a career decision is difficult	3.5
I know what I wish to pursue after KCSE	1.8
I am not yet sure of what I wish to pursue after school	3.4
My academic performance will determine what I will pursue in future	2.0
I have adequate information on what I wish to pursue after KCSE	2.4
What I wish to do in future was influenced by the subject choices I made	2.5
My parents/guardian influenced what I wish to do in future	3.5
My career guidance teacher had an influence on what I wish to pursue in future	3.1
I consulted my friends when I was making the decision on what I wish to do I future	3.6
I chose the course because I know I can easily get a job	3.0
I chose the course because it is prestigious	3.5
I wish to pursue the course I have chosen because somebody did and is successful	3.1
My choice of what I want to pursue in future changed when I made subject choices	3.8
I cannot pursue what I wish to after KCSE because my parents/guardian cannot afford to finance it	4.1
The subjects I chose cannot allow me to pursue what I wish to in future	4.4
Right now I am not sure of what I wish to do in future, I will decide when the KCSE results are out	4.0
Total	**53.0**
Overall Mean	**3.1**

Table 4.17 shows that the overall score was 53 which imply that the students' perception of career aspirations was ambivalent.

Relationship between gender and students career aspirations was established using the scale provided in chapter three where the students' perception on career aspiration was categorized into negative, ambivalent and positive. The findings indicate that a high percentage of male and female were ambivalent as far as career aspirations were concerned. The specific descriptive statistics on the difference in students' perception on career aspirations based on gender is presented in Table 4.18.

Table 4.18 Descriptive statistics on the Influence of Gender on Career Aspiration

	Career Aspiration							
	Negative		**Ambivalent**		**Positive**		**Total**	
	f	%	f	%	f	%	f	%
Gender								
Male	45	12.4	94	25.8	72	19.8	211	58.0
Female	35	9.6	82	22.5	36	9.9	153	42.0
Total	**80**	**22.0**	**176**	**48.4**	**108**	**29.6**	**364**	**100.0**

The findings presented in Table 4.18 shows that majority (48.4%) of the respondents were ambivalent as far as their perception towards career aspiration is concerned. However, a slightly higher percentage of male students were ambivalent than the female students (25.8% against 22.5% respectively). Table 4.19 further shows that 19.8 %(211) of the students who participated in this study were male and were positive in career aspiration as opposed to 9.9 %(36) of the female students who were positive in career aspiration. Further, 12.4 %(45) were male students who had low perception towards career aspirations while 9.6 %(35) were female students with low perception towards career aspirations. Further statistical analysis was done to establish the relationship between students' career aspiration and students' gender. The hypothesis tested was stated as follows:

HO_2: There is no significant relationship between students' career aspiration and their gender. The hypothesis was tested using chi-square. The results are presented in Table 4.19.

Table 4.19: chi-square results on Career Aspiration and Gender

	Value	df	Asymp. Sig. (2-sided)
Chi-Square	3.004	2	.000
N of Valid Cases	364		

As shown in Table 4.19, a chi-square of 3.004, d.f. =2 and p-value of 0.000 was obtained. Since $p<0.05$, the null hypothesis was rejected. This implies that there is a significant relationship between students' career aspiration and their gender, where more male students had a positive career aspiration than female students.

4.5 The influence of School Facilitation Students' Subject Choices

Concerning the influence of the School Facilitation on their subject choices, Table 4.20 shows the responses.

Table 4.20: School Facilitation and Subject Choices

Factors	Agreed		Undecided		Disagreed		Total	
	F	%	F	%	F	%	F	%
Career programmes are organized in my school	213	48.5	12	3.3	139	48.2	364	100
There is an active career department in my school	202	45.5	16	4.4	146	50.2	364	100
There are literature materials on career in my school library	220	50.4	37	10.2	107	39.4	364	100
I find career guidance programmes organized in school beneficial.	240	58.0	30	8.2	94	35.8	364	100
My school should offer several subjects to give students a wide a range to choose from	317	87.1	17	4.7	30	8.2	364	100
My school provide information on cluster subjects for various courses	198	54.4	21	5.8	145	39.9	364	100
My school offers all subjects in group 2,3,4&5	67	18.4	12	3.3	285	78.3	364	100
In my school, students are given the freedom to choose subjects as they wish	271	74.5	13	3.6	80	22.0	364	100
My school offers adequate guidance before students make their subjects choices	305	63.8	9	2.5	50	33.7	364	100

The study sought to find out school facilitation and subject choices in schools.

Table 4.20 shows that 48.5% of the respondents agreed that career programmes are organized in their school while 48.2% disagreed and 3.3% were undecided. Another 45.5% of the respondents agreed that there is an active career department in their school but 50.2% disagreed and 4.4% were undecided. There were 50.4% of the respondents who stated that there are literature materials on career in their school library while 39.4% disagreed and 10.2% were undecided. Also 58% of the respondents agreed that they find career guidance programmes organized in beneficial whereas 35.8% disagreed and only 8.2% were neutral.

There were 87.1% who stated that schools offer several subjects to give students a wide range to choose from while 30 % disagreed and only 4.7% were undecided. Moreover, 54.4% of the respondents agreed that their school provide information on cluster subjects for various courses but 39.9% disagreed and only 5.8% were neutral. Further, 18.4% of the respondents agreed that their school offers all subjects in group 2, 3, 4 and 5 whereas 18.3% disagreed and only 3.3% were undecided. Another 74.5% of the respondents agreed that in their school students are given the freedom to choose subjects as they wish, however 22% disagreed and 3.6% were neutral. Lastly 63.8% of the respondents agreed that their school offers adequate guidance before students make their subject choices while 33.7% disagreed and only 2.5% of the respondents were undecided. While many respondents in this study appreciate the fact that they are given adequate freedom to choose subjects, there is still need for schools to offer a wide range of subjects in group 4 and 5 and enhance availability of information regarding subject choices and clusters.

The overall influence of the school facilitation on students' subject choices is presented in Table 4.21.

Table 4.21: School Facilitation and Students' Subject Choices (overall)

Statement	Mean
Career programmes are organized in my school	2.7
There is an active career department in my school	2.8
There are literature materials on career in my school library	2.6
I find career guidance programmes organized in school beneficial.	2.4
Schools should offer several subjects to give students a wide a range to choose from	1.7
My school provide information on cluster subjects for various courses	2.9
My school offers all subjects in group 2,3,4&5	3.9
In my school, students are given the freedom to choose subjects as they wish	2.2
My school offers adequate guidance before students make their subjects choices	1.9
Total	**23.1**
Overall Mean	**2.6**

There were 9 items measuring the students' perception on school facilitation on a five point Likert scale. The minimum score is 9 while the maximum score is 45. The findings indicate that the influence of school involvement in students' subject choices was ambivalent.

4.6 Students' Perception of Subject Choices

The Students' Perception of Subject Choices was investigated and the responses are stated in Table 4.22.

Table 4.22: Students' Perception of subjects' choices

Factors	Agreed		Undecided		Disagreed		Total	
	F	%	F	%	F	%	F	%
I chose subjects based on what I wish to pursue in future	344	64.5	9	2.5	11	33.0	364	100
I chose subjects that I enjoy	231	63.4	11	3.0	122	33.5	364	100
I chose subjects because they are easy	73	20.1	21	5.8	268	74.1	364	100
I chose subjects that I perform well in	294	80.3	12	3.3	58	16.0	364	100
I chose the subjects because I liked the teacher	42	11.6	23	6.3	299	82.1	364	100
I chose subjects because my friend was taking it	8	2.2	1	0.3	355	97.5	364	100
My parents(s)/guardian influenced me to take the subject	106	29.2	17	4.7	241	66.2	364	100
I talked to my guidance counseling teacher about what subjects to choose	247	67.8	18	4.9	99	27.2	364	100
I chose the subject without getting adequate advice	25	6.8	25	6.9	314	86.2	364	100
I chose the subject without finding about the subject combination required in the course I wish to pursue	29	8.0	18	4.9	317	87.1	364	100
I am satisfied with the subjects I chose	345	94.7	0	0.0	19	5.2	364	100
I am dissatisfied with the subjects I choose	30	8.2	8	2.2	326	89.6	364	100
I received adequate guidance before I chose the subjects	297	81.6	26	7.1	41	11.3	364	100
My school offers all subjects I wish to choose	241	66.2	18	4.9	105	28.8	364	100
My school has made some subjects to be taken by all students in my school	262	72.0	20	5.5	82	22.5	364	100
The policy in 23 above has disadvantaged me in my subject choices	105	63.5	28	7.7	231	28.8	364	100
There are subjects in group 2,3,4&5 which are not offered in my school and I wish to take them	191	52.5	21	5.8	152	41.8	364	100
The arrangement in 25 above disadvantaged me in the choice of subjects I made	125	58.0	28	7.7	211	34.4	364	100
I have adequate information on the cluster subjects required for the course I intend to pursue in future	264	72.6	27	7.4	73	20.1	364	100
I perform well in the subjects I chose	351	96.5	7	1.9	6	1.6	364	100

As shown in Table 4.22, 64.5% of the respondents agreed that they choose subjects based on what they wish to pursue in future while 33.0% disagreed and only 2.5% of them were neutral. There were 63.5% of the respondents who stated that they chose subjects that they enjoy while 33.7% disagreed and only 3% of them were neutral. Majority (74.1%) of the respondents' stated that they didn't choose subject because they are easy while 20% agreed and only 5.8% were neutral. Another 80.8% of the respondents agreed that

they chose subjects because they perform well, however 16% of the respondents disagreed and only 3.3% were neutral. There were 82.1% of the respondents who stated that they didn't choose the subject because they liked the teacher while 11.6% of the respondents agreed that they chose subjects because they liked the teacher and 6.3% were neutral.

It is further indicated that 97.5% of the respondents stated that they didn't choose the subjects because their friends were taking it while 2.2% agreed that they chose subjects because their friends were taking it and only 0.3% were neutral. There were 66.2% of the respondents who stated that their parents/guardian did not influence them to take the subject, 29.2% agreed that they were influenced by their parents/guardians and only 4.7% of the respondents were neutral. Another, 67.8% agreed that they talked to their guidance and counseling teacher about what subjects to choose whereas 27.2% disagreed and only 4.9% were neutral. The study found out that students seek advice on what subjects to take from subject teachers and guidance and counseling teachers more than the family members.

The study also found out that there were 86% of the respondents who stated that they chose the subjects after getting adequate advice while 6.8% disagreed and 6.9% of the respondents were neutral. Another 87.1% stated that they didn't choose the subject without finding about the subject combination required in the course they wish to pursue while 8% agreed and 4.9% of them were neutral. There were 94.7% of the respondents who stated that they are satisfied with the subjects they chose while 5.2% disagreed.

Moreover, 89.6% of the majority respondents disagreed that they are not satisfied with the subject they chose while 8.2% agreed and 2.2% of them were neutral. There were 81.6% who agreed that they received adequate guidance before they chose the subject while 11.5% disagreed and only 7.1% were neutral. Majority of the students showed satisfaction in the subjects they chose, this was due to the adequate advice they received prior to making their subject choices. This overemphasizes the importance of furnishing students with adequate information about subject clusters and careers.

As shown in the table, 66.2% agreed that their school offers all subjects they wish to choose. However, 29.8% disagreed and only 4.9% were neutral. Another 72% of the respondents agreed that their school has made some subjects to be taken by all students in their school while 22.5% disagreed and 5.5% were neutral. As shown in Table 4.25, 63.5% of the respondents agreed that this policy has disadvantaged them in their subjects' choice, 28.8% however, disagreed and only 7.7% were neutral. There were 52.5% who agreed that there are subjects in group 2, 3, 4 and 5 which are not offered in their school and they wish to take them while 41.8% disagreed and only 5.8% were neutral, moreover 58% agreed that the arrangement disadvantage them in the choice of subjects they made whereas 34.4% disagreed and only 7.7% were neutral. Another 72.6% of the respondents agreed that they have adequate information on the cluster subjects required for the course they intend to pursue in future but 9.5% disagreed and 5.5% of them were neutral. Schools not offering some subjects and making others compulsory to all students were issues of concern to many students.

The overall perception of the students towards subject choices is presented in terms of means in Table 4.23.

Table 4.23: Perception of Influence of Subjects' Choices

Statement	**Mean**
9. I chose subjects based on what I wish to pursue in future.	1.3
10. I chose subjects that I enjoy.	2.6
11. I chose subjects because they are easy.	3.8
12. I chose subjects that I perform well in.	2.1
13. I chose the subject because I liked the teacher.	4.3
14. I chose the subject because my friend was taking it.	4.8
15. My parent(s)/guardian influenced me to take the subject.	3.6
16. I talked to my guidance counseling teacher about what subjects to choose.	2.4
17. I chose the subject without getting adequate advice.	4.3
18. I chose the subjects without finding about the subject combination required in the course I wish to pursue.	4.3
19. I am satisfied with the subjects I chose.	1.4
20. I am dissatisfied with the subjects I chose.	4.5
21. I received adequate guidance before I chose the subjects.	2.0
22. My school offers all subjects I wish to choose.	2.4
23. The school has made some subjects to be taken by all students in my school.	2.3
24. The policy in 23 above has disadvantaged me in my subject choices.	3.5
25. There are subjects in group 2, 3, 4 & 5 which are not offered in my school and I wished to take them.	2.8
26. The arrangement in 25 above disadvantaged me in the choice of subjects I made.	3.4
27. I have adequate information on the cluster subjects required for the course I intend to pursue in future.	2.2
28. I perform well in the subjects I chose.	1.9
Total mean	**59.9**
Overall mean	**2.99**

There were 20 items measuring the influence of students' perception of subject choices on their career aspirations at five point Likert scale. Therefore the minimum score is 20 whereas the maximum score is 100. Table 4.23 indicates that the overall mean was 59.9(60). This implies that the mean ranges 53-68 implying that the students' perception of subject choices was ambivalent.

4.7 Relationship between Perception of Subject Choice, Career Aspiration and School Facilitation

The table below is a correlation matrix showing the relationship between the variables used in this study.

Table 4.24: Subject Choice, Career Aspiration and School Facilitation

	Career aspiration	Subject choice	School facilitation
Career aspiration	1	0.380**	0.016**
Subject choice	0.380**	1	0.062**
School facilitation	0.016**	0.062**	1

**. Correlation is significant at the 0.05 level (2-tailed).
Sig. (2-tailed) .000
NB: N=364

This output was paramount for a preliminary look at multicollinearity. Pearson's product moment correlation coefficient was used to test the third and the fourth hypotheses stated as follows:

HO_3 There is no significant influence of the school facilitation on students' subject choices.

HO_4: There is no significant influence of the perception of the students' subject choices on their career aspirations.

Pearson's product moment correlation coefficient was used to check the actual strength of the relationship between variables. Correlation analysis indicates a significant relationship between subject choices and school facilitation($r=0.062$, $\rho<0.05$). This implies that there was a positive, relationship between subject choices and school facilitation.

The results further reveal that subject choices and career aspiration has a positive correlation coefficient($r=0.380$, $\rho<0.05$). This indicates a significant relationship between the students' subject choices and their career aspirations. However, the correlation is weak, though positive. This correlation coefficient implies that the perception of the students' subject choices influences their career aspirations.

4.8 Summary

The findings indicates that there were more male(28.8 %) students than female(23.1 %) students who were at ambivalent as far as subject choice is concerned. The findings also reveal that there were more male students (15.9%) who were positive towards subject choices than female students (8.5%). The inferential statistics on the relationship between students' subject choices and their gender indicated that the relationship was significant ($\chi2= 2.40$, d.f. =2, $p=0.001$). This implied that there was a significant relationship between gender and subject choice. The study also obtained a chi-square of (3.004, d.f. =2 and p-value of 0.000) for relationship between students' career aspiration and their gender. Therefore, there is a significant relationship between students' career aspirations and their gender. The study further sought to establish the influence of the school facilitation on the students' subjects' choices. The study established that there was a significant, positive correlation coefficient ($r=0.062$, $\rho<0.05$) between subject choice and school facilitation. The study further reveals that students' perception of subjects choices had a significant positive correlation with career aspirations ($r=0.380$, $\rho<0.05$) implying that students' perception of subject choices impacts their career aspirations.

CHAPTER FIVE

5.0 SUMMARY, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Overview

This chapter presents summary of the findings and conclusions. Recommendations from the study and suggestions for further research are also included in this chapter. The chapter is based on the findings of the preceding chapter, objectives of the study and the research questions that were to be answered by the study. The study used quantitative approach to data analysis. This chapter is divided into four sections. The first section presents a summary and the discussions of the research findings, the second part presents conclusions, and the third contains recommendations and lastly suggestions for further research. The study was designed to investigate on the influence of secondary school students' perception of subject choices on their career aspirations. The researcher sought to investigate: The influence of gender on students' subject choices, the influence of gender on students' career aspirations, the influence of the school facilitation on the students' subject choices and the influence of the perception of subject choices on the students' career aspirations.

5.2 Summary and Discussions

This study investigated whether the students' perception of subject choices had any influence on their career aspirations. The factors investigated were' influence of gender on subject choices and on their career aspirations, the influence of the school facilitation on the students' subject choices and the influence of the students' perception of subject choices on their career aspirations.

5.2.1 Gender Differences in Subject Choices

The first factor under investigation in this study was influence of gender on students' subject choices. This study attempted to find out whether there were any significant differences between male and female students' choice of subjects. This study established that gender influences subject choices among secondary school students. The results depicted significant difference between subject choices made by male students and those by female students. The findings indicated that there was significant correlation between the two variables. Therefore, it can be said there is significant relationship between gender and students' subject choices. Majority of the male students were taking all the science subjects (Biology, Physics and Chemistry), whereas only 28.1 % of the female students were taking all the science subjects. Male students dominated in physics and all the combinations of science subjects except in Biology and Chemistry where there were more female students than male students.

The findings of this study indicate that gender gap still exist in sciences. The findings of this study agree with (Murithi, 1996) that female students have been noted to shy away from Physics citing the reason being the tedious mathematical calculations involved in such subjects. These findings are further buttressed by Wasanga (1997) who posits that the majority of girls found science subjects difficult and they perceived science subjects to be more useful to boys. In the same vein, Osborne et al. (2003) stressed that there is still a bias against physical sciences held by girls, suggesting that at an individual level the overwhelming majority of girls still choose not to do physical science as soon as they can. In the same vein, according to (Drew, 2011), it could be argued that today the gender

gap in STEM, meant as a women's gap in science, is no longer the most relevant question. Rather, the main issue is the persistent gender heterogeneity occurring in STEM studies and later careers. Men and women are indeed both quantitatively present in sciences, but differently enrolled in them. As found by (Drew, 2011), 58% of all bachelors, masters and doctorate in biology are awarded to women in the United States. More than 50% of the total number of PhD students in medicine and biological science are women, while they are a minority in physics, mathematics and statistics, computer and engineering (European Commission, 2009) as cited by (Drew, 2011).

On group three subjects, the findings of this study indicated that majority of the female students liked CRE and Geography as compared to male students who preferred History and CRE. The study found out that group three subjects are not popular with students. This was due the fact that many students found these subjects inconsequential to their future careers. Furthermore, the choice of group three subjects was found to be affected by time table restrictions in most schools. The study found out that some schools blocked History/Religious education while others Geo/Religious education and others Geo/History. These findings concurs with that of (Ainley, Robinson, Harvey, Beavis, Elsworth & Flemming,1994) who found out that Australian students identified a range of external factors which constraint subject selection including diminished subject availability, limited time frame for subject selection, time tabling restrictions, compulsory subjects, tertiary prerequisites, eligibility for entry to tertiary courses.

Gender disparity in the selection of technical (group four) subjects was found to be well pronounced than in other subject groups. It is indicated that there were more male students who were taking Agriculture than female students. It is further indicated that more male students were taking computer studies as compared to female students. The study also found out that Woodwork was offered in boys' schools while Homescience was offered in girls' schools. A number of subjects in this category were not offered in all secondary schools in the sub-county, these subjects include: Art and Design, Metalwork, Building and Construction, Power and Mechanic, Electricity, Drawing and Deign and Aviation Technology. The findings of this study revealed that many schools are ill-equipped to offer technology subjects, thus the small number of students taking these subjects. Agriculture was found to be the only subject offered in all schools. Computer studies was offered in a few schools and taken by only a few students. Homescience and Woodwork were offered in very few girl and boy schools respectively. These findings are in agreement with those of Female Education in Science and Technology in African (FEMSA, 1999) who posits that schools through streaming practices stereotype the participation of girls and boys in secondary school technology subjects. One agenda of vision 2030 is to achieve equity in gender participation in all spheres of the economy. It is important therefore, for schools to foster the achievement of this ambition by getting rid of the biasness that exist in subjects offered in boys' and girls' schools, especially in technology subjects to respond to the needs of country's development agenda.

In group five subjects, the findings indicated that majority of the female students were taking business studies as compared to of the male students. There were no female and

few male students who were taking French, German or Arabic subjects. There were few students taking Kenyan Sign Language. Group four and five subject choices were greatly affected by diminished subject availability.

On students' perception of subject choices, the findings of this study indicate that the value of subjects to majority of the students is tied to their career aspirations and their ability in the subject. Many expressed having considered their career aspirations while choosing their subjects. These findings concurs with that of Nagy et al. (2006), who posit that high school students are likely to enroll in subjects that will pertain to what they want to study in college. Furthermore, Onoyase and Onoyase (2009) contends that all careers have their subject requirements ; therefore, the more valuable a subject is to a future career, the greater the likelihood a student will enroll in it (Ackerman and Gross, 2006). Many students in this study disagreed that they chose subjects because they were easy, this finding is similar to that of (Babad and Tayeb, (2003) and Wilhelm, (2004) who found that majority of the students will choose classes based on its high quality of learning rather than the deciding based on the instructor and/or the ease of the class. In fact, according to Wilhelm (2004), students are four times more likely to choose a class where they have the opportunity to learn a "great deal" of knowledge even if the class requires a lot of readings and assignments. In addition, Nagy et al (2006) posit that, students are more likely to enroll in classes where they think they can excel.

However, According to Curran and Rosen, (2006), a student's attitude about an instructor has a large impact on their attitude toward a class. If instructors are inflexible and

unclear, they are much more likely to be difficult to learn from, which is a major concern for students (Smith, Feldwisch & Bell, 2006). Subject teachers play a crucial role in taming students choices over which science subject to go for. Some teachers are perceived by the students to be good teachers and this will influence students into his class while students perceive other teachers not to be the right teachers for such subjects this will reduce the rate of the subject by the students.

5.2.2 Gender Differences in Career Aspirations

The second objective was to establish the influence of gender on students' career aspirations. The findings revealed that majority of both male and female students would like to join university or college after KCSE. While a few, both male and female students stated that they wanted to start businesses when they complete their KCSE. However, the data demonstrates that there is statistically significant difference in gender and career aspirations. Majority of the male students would wish to pursue engineering courses while majority of the female students would like to pursue Nursing or Medicine courses in the universities. It was also established that there were more female students who would wish to pursue business related courses as compared to male students. The findings of this study agree with that of American Association of university women (AAUW) (1992), who found out that women in the U.S, constituted only about 20 percent of engineering majors and were holding only 9 percent of engineering jobs. Even in medicine and health related careers where women comprised 77.1 percent of those employed in these fields, most of the women were nurses, 97 percent of all nurses were females.

Majority of the respondents stated that their family guided them when making career decision, the director of studies was ranked second followed by the career teacher , the role of a teacher was ranked fourth while the least number of respondents indicated their friends as giving them guidance. These findings agree with those of Okeke (2000) which revealed that parents have significant effect on students' choice of career. In the same vein, according to (Malgwi et al., (2005)), parents are more likely to influence students' decisions than guidance counselors or teachers. Also, Migunde et al. (2012) posit that family members are considered as the most influential followed by teachers. According to this study, friends are less influential. This finding agrees with that of Migunde et al. (2012) who also found out that as students interact with their friends, some of them take into consideration the career advice they receive, however, their advice is of less importance as compared to family members, teachers and career counselors. The director of studies is ranked second as being influential after family members. This can be attributed to their role as students' advisor in academic affairs. Teachers are also considered as of more influence compared to career counselors. This means that, more students seek career advice from teachers whom they feel more comfortable with as compared to career counselors.

This study also sought to find out students' perception of their career aspirations. Majority stated that career decision is an important decision in their life and that their academic performance is important in achieving their career goals. This finding agree with that of Mokaya,(2014) who observed that, One major problem faced by almost all

the students after completing high school is to which direction they should go to make a bright future. That is basically why choosing a career is a huge responsibility. It is one of the most important decisions one ever makes Mokaya asserts.

Though slightly half of the respondents in this study indicated that they had adequate information on what they wish to pursue in future, still a number are not certain of their future career life because of career indecisiveness, lack of information and inadequate career advice. Mokaya, (2014) overemphasizes the importance of providing students information on careers when he posits that while in the past prospects were limited by economic and social factors, in the current world, one can choose from a wider range of available careers and training opportunities which go with them. For some, he posits, especially those that just finished their form four, the large number of career choices available is enough of a problem. Clearly, others get overwhelmed by the number of career choices available. While slightly over half of the students were satisfied that the subjects they took are a stepping stone to their career aspirations, some are dissatisfied citing that the subjects were not offered in their schools or time tabling restrictions could not allow them pursue them or the restrictions brought by the school policies, where the school make some subjects to be done by all students.

5.2.3 School Facilitation and Students' Subject Choices

The study sought to establish the influence of the school facilitation on the students' subject choices. The results indicated that slightly over half of the respondents agreed that career programmes were organized in their schools and that there was an active career

department in their school. Similarly, there were 50.4 percent of the respondents who stated that there are literature materials on career in their school library and that they find career guidance programmes organized being beneficial. These findings imply that career departments are not developed in most schools. These findings agree with that of Muigai et al. (2007) who expressed the need for schools to have working guidance and counseling departments to help students make informed choices. It is important, they posit, for secondary schools to have active career departments, organize career programmes and avail career related literature to their students. Further, this observation agree with that of Maree (2009) who found out that many learners passed grade 12 without having received career guidance in any form and consequently denied the opportunity to apply for acceptance into sought after fields of study at tertiary training institutions. He asserts that schools are in the most strategic positions to impact on career aspirations and expectations. This is mainly due to the existing school based resources such as vocational interest inventories and career seminars (Diemer, 2007).

Though Majority of the respondents agreed that their school offers adequate guidance before students make their subject choices and that they are given the freedom to choose subjects as they wish, however, majority of the subjects in group four and five were not offered thus denying students a wide range to choose from. This generally indicates that the school can impact the students' subject choices negatively or positively. It is critical for all schools to have a working career guidance to help students make informed decisions on subject choices and careers. The findings of this study concur with that of (Ainley, Robinson, Harvey, Beavis, Elsworth & Flemming,1994) who found out that

Australian students identified a range of external factors which constraint subject selection including diminished subject availability, limited time frame for subject selection, time tabling restrictions, compulsory subjects, tertiary prerequisites, eligibility for entry to tertiary courses. The findings of this study revealed many schools are ill-equipped to offer technology subjects, thus the small number of students taking these subjects. Agriculture was found to be the only subject offered in all schools. Computer studies was offered in a few schools and taken by only by a few students. Home science and Woodwork were offered in very few girl and boy schools respectively. These findings are in agreement with those of Female Education in Science and Technology in African (FEMSA, 1999) who posits that schools through streaming practices stereotype the participation of girls and boys in secondary school technology subjects.

Further, the study found out that girl schools do not offer subjects such as woodwork and metal work instead they offer domestic science such as Homescience . This also applies to the boys' schools which offer woodwork but do not offer subjects such as Home science. This implies that certain subjects such as Homescience was considered as meant for girls while certain subjects such as woodwork and metal work as meant for boys. These findings are reinforced by Kithyo and Petrina (2002) argue that boys' schools tend to be more equipped and oriented towards science and technology subjects. They noted that girls' schools do not offer technology subjects such as engineering; instead they offer domestic sciences and secretarial subjects. By the time students come to choose careers, they posit, they have internalized gender norms. The overall perception of students concerning the role of their schools in facilitation of subject choices was ambivalent. This

may imply that schools' role in guiding students in subject choices has not been felt. It seems schools have not done enough to guide students effectively. Though the results on the hypothesis indicated that the school influenced subject choices of students, the relationship is weak implying that the schools play the role but not effectively.

5.2.4 Students' Perception of Subject Choices and their Career Aspirations

The fourth objective of the study was to determine the influence of the perception of subject choices on the students' career aspirations. The study established that 60 percent of the students consider subjects and academic performance important to their career aspirations. A number of respondents admitted seeking advice when they were making subject choices. Also, 64 percent of the students choose subjects based on what they wish to pursue in future. These findings agree with those of (Elsworth, Beavis, Airiley & Fabris, 1999) who put it that subject choice is considered as the most important thing for senior secondary and tertiary students because it is responsive to all sides of learners' interests, needs preferences and choices. However, the study established that 30 percent of the respondents are unsure of the implications their subject choices have on their chosen careers. This finding concurs with that of Muigai et al., (2007) who raised the concern of students being left alone to decide on what careers they would want to pursue while they may not know the academic requirements for their choices.

However, majority of the respondents stated that they didn't choose subjects because they were easy nor because of the teacher. This implies that majority of students have realized the importance of subjects to their future occupations and therefore, the difficulty of the

subjects is no longer an issue. In Kenya, the students' career choices are to a large extent determined by academic performance, and by the subject clusters designed by the ministry of Education. It is of paramount importance therefore, for schools to give their students adequate information on these requirements.

Majority of the students in the study indicated that they seek advice on subject choices from the subject teacher and guidance and counseling teacher. Many students have realized the importance of academic performance and subjects to their careers and therefore they plan for their future by taking the right subjects. The students who participated in this study indicated that some of the challenges they encountered while making decision on subject choices were; schools making some subjects to be taken by all students thus curbing their freedom of choice. In the same vein, they indicated that their schools do not offer some subjects especially in group four and five which are consequential to their careers.

5.3 Conclusions

From the findings of the study, it can be concluded that gender is factor that impacts on the choices of subjects that students make. In this study, male students dominated in all the combinations of science subjects except in Biology and Chemistry where there were more female students than male students. It was found that majority of the female students chose to do Biology and Chemistry combination as opposed to the male students who favored physical sciences. Though from group three (humanities) subjects are not popular among high school students, the findings also indicated that the choices in this

group took a gendered perspective with more female students taking CRE and Geography. Male students preferred Geography and History. The findings also reveal that there were more male students who were taking Agriculture than female students in group four subjects. In group five subjects, majority of the female students preferred business studies as compared to male students. Results of the hypothesis on subject choices indicate that the relationship is significant implying that there is significant influence of gender on students' subject choices.

Concerning gender differences in career aspirations, the findings of the study indicate that majority of the male students would wish to pursue engineering courses while majority of the female students would like to pursue Nursing or Medical courses in the universities. It was also established that there were more female students who would wish to pursue business related courses as compared to male students. These findings are reinforced by the results on the hypothesis testing which indicate that there was significant relationship between students' gender and their career aspirations.

It was further found that half of the schools had career programmes and literature materials on careers in their school library. Majority of subjects especially in group four and five were not offered in most schools to give students a wide range to choose from. Though guidance and counseling departments were active in some schools, about 30% of the schools had theirs non-operational. This generally indicates that there is a significant relationship between the influence of the school and students' subject choices. The results indicate that students are ambivalent about the role of school facilitation on subject

choices. This implies that the schools may not have done enough guidance to impact students on their subject choices.

On the whether students' perception of subject choices influence their career aspirations, the study established that half of the students choose subjects based on what they wish to pursue in future and the subjects that they perform well in. In the same vein, enjoyment of the subject was also cited having influenced choice of subjects. However, majority of the respondents stated that they don't choose subjects because they are easy nor because of the teacher. The participants also acknowledged that making a career decision is an important decision in their life and they sought guidance on career matters. The importance attached to subjects was evident. It was established statistically that there was a significant relationship between the perception of the students' subject choices and their career aspirations.

5.4 Recommendations of the Study

Based on the findings of this study, the following recommendations are made;

i. Schools should ensure that they have working Career guidance departments with staff trained to offer the students services to achieve self-direction necessary to make informed choices and move towards personal goals.
ii. Programmes that will help the learners to have a positive attitude towards learning and take variety of subjects are recommended in schools.

iii. There is also need for schools to be equipped to be able to provide a variety of subjects especially in group 4 & 5 to enable students to have a wide range of options to make in order to take care of individual needs of the students.

5.5 Suggestions for Further Study

The following are areas suggested for further study;

1) A similar study can be conducted in a wider area(county or the whole country)
2) A study should be conducted to establish the perception of the teachers towards subject groupings and how this affects the performance of the learners in those subjects.

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APPENDIX I: INTRODUCTORY LETTER

Eliseba Magut
Moi University,
Department of Educational Psychology,
P. O. Box, 3900,
Eldoret
lizmagut@gmail.com
Mobile. 0722 435 014
20th July 2014

Dear Respondent,

RE; "The Influence of Students' Perception of Subject Choices on Career Aspiration of Secondary School Students in Nandi North Sub-County".

I am a Postgraduate student in Moi University, School of Education, Department of Educational Psychology. I am carrying out a research on the above mentioned title. The purpose of this letter is to request you to respond to the questionnaire given. The information will be used purely for the purposes of this study and will be treated with absolute confidentiality. Do not write your name in the questionnaire.

Thanks in advance.

Yours faithfully,
Eliseba Magut.

APPENDIX II: STUDENT'S QUESTIONNAIRE

This is not a test. It is an educational study. All the information you give will be treated with confidentiality and only used for analytical purposes of this study. Please give your honest views by filling in the blank spaces or putting a tick [√] in the appropriate space.

SECTION A: BACKGROUND INFORMATION.

1. Please indicate your gender. Male [ ] Female [ ]

2. Please indicate your type of school:

a) Boys' school [ ]
b) Girls' school [ ]
c) Mixed school [ ]

3. Indicate the criteria used in your school to select subjects (tick where appropriate)

a) According to performance in the subject [ ]

b) According to the student's career aspiration [ ]

c) According to the student's preference [ ]

d) Other, specify ……

4. Indicate the subjects that you chose in each group.

Group two-sciences (Biology, Physics, Chemistry)

...……..

……

Group three – humanities (Religious Education, Geography, History)

……
…

……
…

Group four – Technical (Computer, Agriculture, Art & Design, Woodwork, Home science, Metalwork, Building Construction)…….

……..
..

Group five – Creative (Business Studies, French, German, Arabic, Kenyan Sign Language,Music) ……..

……

5. What would you like to do after K.C.S.E? …….

6. If you go to the university or college, which course would you wish to pursue?

……
……..

7. Who guided you when you were making your career decision?.....

……

……

8. Who is in charge of career guidance in your school?.....

……

……

……

SECTION B: STUDENTS' PERSPECTIVES ON SUBJECT CHOICES.

Indicate the extent to which you agree with the statements below which form the basis of your perception on subject choices. Tick only once against each statement.

KEY: SA- Strongly Agree, A- Agree, U- Undecided, D- Disagree, SD- Strongly Disagree

	SA	**A**	**U**	**D**	**SD**
9. I chose subjects based on what I wish to pursue in future.					
10. I chose subjects that I enjoy.					
11. I chose subjects because they are easy.					
12. I chose subjects that I perform well in.					
13. I chose the subject because I liked the teacher.					
14. I chose the subject because my friend was taking it.					
15. My parent(s)/guardian influenced me to take the subject.					
16. I talked to my guidance counseling teacher about what subjects to choose.					
17. I chose the subject without getting adequate advice.					
18. I chose the subjects without finding about the subject combination required in the course I wish to pursue.					
19. I am satisfied with the subjects I chose.					
20. I am dissatisfied with the subjects I chose.					
21. I received adequate guidance before I chose the subjects.					
22. My school offers all subjects I wish to choose.					
23. The school has made some subjects to be taken by all students in my school.					
24. The policy in 23 above has disadvantaged me in my subject choices.					
25. There are subjects in group 2, 3, 4 & 5 which are not offered in my school and I wished to take them.					
26. The arrangement in 25 above disadvantaged me in the choice of subjects I made.					
27. I have adequate information on the cluster subjects required for the course I intend to pursue in future.					

28. I perform well in the subjects I chose.					

SECTION C: STUDENTS' PERCEPTION ON CAREER ASPIRATIONS

Indicate the extent to which you agree with the statements below which captures your opinion on career aspirations. Tick only once against each statement.

KEY: SA- Strongly Agree, A-Agree, U-Undecided, D- Disagree, SD-Strongly Disagree

	SA	**A**	**U**	**D**	**SD**
29. Career decision is an important decision in my life.					
30. Making a career decision is difficult.					
31. I know what I wish to pursue after KCSE.					
32. I am not yet sure of what I wish to pursue after school.					
33. My academic performance will determine what I will pursue in future.					
34. I have adequate information on what I wish to pursue after KCSE.					
35. What I wish to do in future was influenced by the subject choices I made.					
36. My parents/guardian influenced what I wish to do in future.					
37. My career guidance teacher had an influence on what I wish to pursue in future.					
38. I consulted my friends when I was making the decision on what I wish to do in future.					
39. I chose the course because I know I can easily get a job.					
40. I chose the course because it is prestigious.					
41. I wish to pursue the course I have chosen because somebody did and is successful.					
42. My choice of what I want to pursue in future changed when I made subject choices.					
43. I cannot pursue what I wish to after KCSE because my parents/guardian cannot afford to finance it.					
44. The subjects I chose cannot allow me to pursue what I wish to in future.					
45. Right now I am not sure of what I wish to do in future, I will decide when the KCSE results are out.					

SECTION D: THE INFLUENCE OF THE SCHOOL ON STUDENTS' SUBJECT CHOICES.

Indicate the extent to which you agree with the statements below which captures your perception on the influence of the school on subject choices.

KEY: SA-Strongly Agree, A-Agree, U- Undecided, D-Disagree, SD-Strongly Disagree

	SA	A	U	D	SD
46. Career programmes are organized in my school.					
47. There is an active career department in my school.					
48. There are literature materials on career in my school library.					
49. I find career guidance programmes organized in school beneficial.					
50. Schools should offer several subjects to give students a wide a range to choose from.					
51. My school provide information on cluster subjects for various courses					
52. My school offers all subjects in group 2, 3, 4&5.					
53. In my school, students are given the freedom to choose subjects as they wish.					
54. My school offers adequate guidance before students make their subject choices.					

THANKS

Appendix III: Introduction Letter from the Dean School of Education

MOI UNIVERSITY

Tel. Eldoret (053) 43555
Fax No. (053) 43555

P.O. Box 3900
Eldoret, Kenya

SCHOOL OF EDUCATION

REF: MU/SE/PG/54 DATE: 14th August, 2014

The Executive Secretary
National Council for Science and Technology
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,

RE: RESEARCH PERMIT IN RESPECT OF
ELISEBA C. MAGUT ~ EDU/PGP/1004/12

The above named is a 2nd year Master of Education (M.Ed) student at Moi University, School of Education, Department of Educational Psychology.

It is a requirement of her M.Ed studies that she conducts research and produces a thesis. Her research is entitled:

"The Influence of Students' Perception of Subject Choices on Their Career Aspirations in Nandi North District. Nandi County".

Any assistance given to her to facilitate the successful conduct of her research will be highly appreciated.

Yours faithfully,

14 AUG 2014

PROF. J. N. KINDIKI
DEAN, SCHOOL OF EDUCATION

JNK/lba

Appendix IV: Research Permit from Ministry of Higher Education

THIS IS TO CERTIFY THAT:
MS. ELISEBA CHEBICHII MAGUT
of MOI UNIVERSITY, 0-30303
kabiyet,has been permitted to conduct research in *Nandi County*

on the topic: *THE INFLUENCE OF STUDENTS PERCEPTION OF SUBJECT CHOICES ON THEIR CAREER ASPIRATIONS IN NANDI NORTH. NANDI COUNTY*

for the period ending:
31st December,2014

.....
Applicant's Signature

Permit No. : NACOSTI/P/14/8504/4385
Date Of Issue : 19th December,2014
Fee Recieved :Ksh 1,000

.....
Secretary
National Commission for Science, Technology & Innovation

REPUBLIC OF KENYA

National Commission for Science, Technology and Innovation

RESEARCH CLEARANCE PERMIT

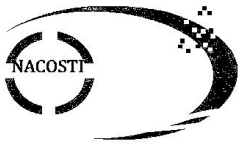
Serial No. A

CONDITIONS: see back page

CONDITIONS

1. You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit
2. Government Officers will not be interviewed without prior appointment.
3. No questionnaire will be used unless it has been approved.
4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
5. You are required to submit at least two(2) hard copies and one(1) soft copy of your final report.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice

Appendix V: Research Authorization from Ministry of Higher Education



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,
2241349, 310571, 2219420
Fax: +254-20-318245, 318249
Email: secretary@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

9th Floor, Utalii House
Uhuru Highway
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No.

Date:

19th December, 2014

NACOSTI/P/14/8504/4385

Eliseba Chebichii Magut
Moi University
P.O. Box 3900-30100
ELDORET.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"The influence of students perception of subject choices on their career aspirations in Nandi North, Nandi County,"*** I am pleased to inform you that you have been authorized to undertake research in **Nandi County** for a period ending **31st December, 2014.**

You are advised to report to **the County Commissioner and the County Director of Education, Nandi County** before embarking on the research project.

On completion of the research, you are required to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

SAID HUSSEIN
FOR: SECRETARY/CEO

Copy to:

The County Commissioner
Nandi County.

The County Director of Education
Nandi County.

Appendix VI: Research Authorization from the County Commissioner

THE PRESIDENCY

MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT

Tel: 053 52621, 52003, Kapsabet
Fax No. 053 – 52503
E-mail:
nandlcountycommissioner@gmail.com
When replying, please quote

Ref: No.NC.EDU/4/1/VOL.11/(63)

County Commissioner's Office,
Nandi County
P.O. Box 30,
KAPSABET.

7th January, 2015

Eliseba Chebichii Magut
Moi University
P.O. BOX 3900-30100,
ELDORET.

RE: RESEARCH AUTHORIZATION

This is in reference to letter No. NACOSTI/P/14/8504/4385 dated 19th December, 2014 from the Secretary/CEO, National Commission for Science, Technology and Innovation on the above subject matter.

You are hereby authorized to conduct a research on **"The influence of students' perception of subject choices on their career aspirations in Nandi North Sub County"** within Nandi County for the period ending 31st March, 2015.

Wishing you all the best.

M. P. SAKWA (MS),
County Commissioner,
NANDI.

Copy to:

Deputy County Commissioner,
NANDI NORTH.

Appendix VII: Research Authorization from County Director of Education

MINISTRY OF EDUCATION SCIENCE AND TECHNOLOGY

Telephone:Kapsabet 0773044624
E-mail: cdenandi@yahoo.com
Fax: 05352084
When replying please quote

REPUBLIC OF KENYA

County Director of Education's Office
Nandi County,
P. O. Box 36,
KAPSABET.

Ref. NDI/CDE/GEN/1/VOL.1/181

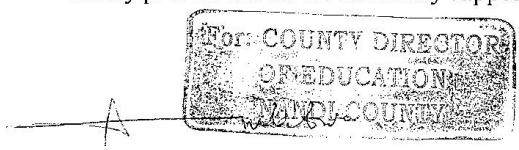
7/1/2015

Eliseba Chebichii Magut
Moi University
P.O Box 3900-30100
ELDORET.

RE: RESEARCH AUTHORIZATION.

The above named person has been given permission by the CDE to carry out research on ***"The influence of students perception of subject choices on their career aspirations in Nandi North, Nandi County."***

Kindly provide her all the necessary support she requires.



ARITA BWANA
FOR: COUNTY DIRECTOR OF EDUCATION,
NANDI COUNTY.

Appendix VIII: Nandi North District-Administrative Boundaries.