ABILITY STREAMING, RANKING AND EXTRINSIC REWARDING AS PREDICTORS OF ACADEMIC INFERIORITY FEELINGS AMONG SECONDARY SCHOOL STUDENTS IN KISII COUNTY, KENYA

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DECLARATION

I confirm that this research thesis is my original work and has not been presented in any other university/institution. The thesis has been complemented by referenced works duly acknowledged. Where text, data, graphics, pictures or tables have been borrowed from other works- including the internet, the sources are specifically accredited through referencing in accordance with anti-plagiarism regulations.

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DEDICATION

This thesis is dedicated to my parents; Chrisantus Mogaka and Jane Nyaboke for their undying love and support.

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ABBREVIATIONS AND ACRONYMS

ACT	American College Testing
BFLPE	Big-Fish-Little-Pond Effect
CATs	Continuous Assessment Tests
DTARS	Drexler Teachers' Attitudes on Rewards Systems
ESL	English as a Second Language
GPA	Grade Point Average
KCPE	Kenya Certificate of Primary Education
KCSE	Kenya Certificate of Secondary Education
MOE	Ministry of Education
MSLQ	Motivated Strategies for Learning Questionnaire
NACOSTI	National Council for Science Technology and Innovation
PASCI	Personal and Academic Self-Concept Inventory
SAT	Scholastic Aptitude Test
US	United States

ABSTRACT

There is substantial literature on inferiority complex but scanty research has been done on academic inferiority in relation toability grouping, ranking and the use of rewards on secondary school students.The main aim of this study wastherefore to investigate the predictors of academic inferiority feelings. More specifically, the study was designed to find out the relationship between ability streaming, ranking, extrinsic rewarding and academic inferiority feelings among students who do not perform well. Alfred Adler's theory of individual psychology forms the theoretical framework of the study. The study adopted a mixed methods sequential explanatory research design. It was carried out in Kisii County, Kenya. The target population was all the Form Three students in public secondary schools in Kisii County (29309 students). Proportionate stratified sampling was used to select the top, average and low ranking schools in the county. It was further used to stratify schools into boys' boarding, girls' boarding, mixed boarding, mixed day and boarding and mixed day schools. Simple random sampling was used in the selection of the 400 respondents. The sample consisted of 400 students selected from 20 schools. The research instruments were questionnaires and an interview schedule for the students administered by the researcher. Personal and academic self-concept inventory (PASCI) was used to collect data on academic inferiority feelings and Stephanie Soto Gordon's questionnaire was used to collect data on ability streaming from students. Researcher developed questionnaires were used to collect data from students on ranking and extrinsic rewarding. A pilot study was carried out to validate and ensure reliability of the research instruments.Both descriptive and inferential statistical procedures were used to analyze data using Statistical Package for Social Sciences (SPSS) version 20. The results were presented using frequency tables. The results showed that there was a significant positive relationship between ability streaming, ranking, extrinsic rewarding and academic inferiority feelings.Most of the respondents experiencing moderate feelings of academic inferiority, that is, $r(399) = .31$, $p=0.1$ in ability streaming, $r(399) = .28$, $p=0.01$ in ranking and $r(399) = .32$, $p=0.01$ in extrinsic rewarding. Sex differences were found in ability streaming, ranking and extrinsic rewarding in regard to academic inferiority feelings. Boys experienceda higher level of academic inferiority feelings with a mean of 67.11as compared to girls who had a mean 65.08. A major recommendation of the study was that the ministry of education should try to do away with ranking totally more so within school ranking which leads to ability streaming in schools and extrinsic rewarding thatmake the students feel academically inferior.

CHAPTER ONE

INTRODUCTION AND CONTEXTUALIZATION OF THE STUDY

1.1 Introduction

This chapter looks at the background to the study, statement of the problem, purpose of the study, objectives of the study, research hypotheses and the significance of the study. It also looks at the limitations and delimitations of the study, assumptions of the study, theoretical framework, conceptual framework and operational definitions of terms.

1.2Background to the Study

Globally, education has been viewed as an important investment. It is seen as a critical path to a good life for an individual and subsequently promising economy for a country (Patrinos, 2016). Education system has therefore become very competitive where every student is struggling to emerge the best. Schools are also struggling to emerge top in examinations therefore creating a lot of pressure among students whereby some students fail and some pass. Failure among students attracts consequences like judgment, belittling, class retention and even corporal punishment from teachers and some parents. For improvement in academic performance, teachers have resorted to ranking, ability streaming and extrinsic rewarding resulting to academic inferiority feelings among the low performing students.

Teachers and parents therefore expect students to excel in academics as a result they put a lot of pressure on them. This is done by putting a lot of emphasis on competition, testing, grading and ranking of students. This has led to academic inferiority feelings among students who are not able to get good grades, those who rank low and are in the lowest ranking stream.

Generally, academic performance has been given a lot of focus. It is due to this that teachers have resorted to grouping students according to ability. This is usually done right from form one where students' marks from primary school are used to stream students according to ability (Silva et al.,2020). Ability streaming is done with the belief that those in the lower ability stream will work harder to move to a higher ability group while those in the high ability stream will also be working hard so that they are not demoted to lower ability stream. This will therefore encourage every student to work very hard. This practice may result to stigmatization of students as the low achievers in the low ability streams are looked down upon by the high achievers in the high ability streams. This has been found to be a poor practice that promotes inequity (Francis &Taylor, 2019)

After examinations, and students having been ranked from the top to bottom based on performance, results are either openly displayed on the notice boards for everybody to see or are loudly read out at parade. Subsequently, incentives are given to the best performers while demeaning remarks are given and errors pointed out in a condescending fashion to those who do not measure up to the

parents' and teachers' expectations (Puspita, 2018). The low performers who are not given rewards feel shy resulting to academic inferiority feelings among them. Educational research has been done in this area but much more needs to be done on the predictors of academic inferiority feelings among secondary school students.

Comparison among students has become the norm almost in the entire world. According to Robinson (2018),academic ranking may motivate some students and alienate others. The findings of the study done in Texas revealed that though ranking of students boosts students' outcomes through engagement, it destructs the low achievers from the true purpose of school. It concluded that ranking impacts on individual learners both positively and negatively.In West Bengal, India differently-abled students were allocated different streams according to performance in previous examinations (Barman & Dhara, 2020).

In academia, inferiority is the relative self-comparison and the perception of one's performance in relation to the performance of other students who are at the same level. Adler (1964) defines inferiority feelings in terms of self-comparison resulting to goal striving and subsequently motivating human behavior. He further says that universally, everybody suffers some sense of inferiority of which they try to overcome. It is for this reason that some weak students try to work hard in order to excel. Sometimes their effort is not appreciated by the teachers especially when the teachers' expectations are not met. This often occurs through

unfavourable comparisons of students by the teachers.Those in the lower ability stream may eventually suffer from academic inferiority feelings when they eventually discover that they can never make it to the high ability stream.

Ability grouping implies to some means of grouping students for instruction or achievement so as to reduce their heterogeneity. It can be seen in the form of tracking, streaming or regrouping students of selected subjects. As a result, a group of homogenous classes for the high achievers and for the low achievers is created. The groups are determined by their performance from a previous test. This has been found to greatly influence teacher judgment on students. Teachers in London reportedly perceive ability and attainment to be corresponding to the stream a student is situated(Campbell 2017).

Guill and Koller (2017) defines ability streaming (tracking) as the practice of classifyinglearners by using their previous class academic performance. Within a school, this leads to learners being placed into various classrooms in order to improve on their performance. Alternatively, learners could be classified into various schools. Some can be placed in purely academic schools whereas others can be placed in technical schools. Those that advocatefor streaming believe that streaming can make schooling more efficient by laying more emphasis on the specific needs of a particular group of students. Those that are against streaming believe that it ends up aggravating inequality among learners. According to this

study, evaluating effects of streaming on average student performance is not easy, partly because studies vary in terms of location, culture and nature of partcipants.

Research done in Australia, the United Kingdom and the United States show that within-school streaming is a common practice. Johnstone and Wildly (2016) carried out their research in Australia on the practice of streaming and its effects on secondary school students which included academic, social and emotional learning outcomes and how teachers mediate these effects. Their research painted a negative picture on the practice because it was insufficiently done and therefore the learning outcomes did not significantly improve.Grouping of students into high ability and low ability was advocated but it wasdetrimental to lower ability students who were never happy but felt inferior (Akdoğan & Çimşir, 2019)

In America,stakeholders of traditional high schools debated for a long time on whether ranking system based on Grade Point Average (GPA) was of any value(Robinson, 2018).The ranking system only benefited the high achievers who were always celebrated and awarded. They were always viewed as the role models, selected to the top colleges for the best courses and given the best teachers. This has further led to the demeaning of the importance of American College Testing (ACT) and the Scholastic Aptitude Test (SAT) scores.Overally, it motivates students to perform well in school. On the other hand, Robinson (2018) further observed that other stakeholdersworry that learning may lose meaning as test scores become more important. They feel that ranking will divert students'

true purpose of learning to competing. At the same time, students are always in fear of affecting their GPAs and they therefore avoid challenging but truly educational classes. Additionally, the excellent scores are so difficult to rank because of the close similarity. This requires parsing the GPAs into small fractions inorder to make meaningful distinctions out of the grades. It therefore becomes difficult to get the topmost ranking students in high schools. The schools have therefore resolved to rank students via the broader Latin honors; Magna Cum Laude, Summa Cum Laude and Cum Laude which is a form of ranking still (Robinson, 2018).

Reward-based thinking as a form of motivation has become a norm among most students and teachers in schools. They mostly believe that extrinsic motivation from rewards and other incentives results to short term extrinsically motivated behaviours and high motivation in task performance. These rewards and incentives eventually impact students' intrinsic motivation negatively leading to low motivation in task performance especially once the rewards and incentives are withdrawn. Others argue that the detrimental effects on rewards are not so severe and that they can be used to boost academic achievement (Fatimah, 2017).

In America students are paid inorder to improve on their performance (Warnick, 2017). Learners In Dallas America, are paid in order to read books while in New York, they are given awards for good results in interim assessments. In Chicago, learners are paid for for good performance(Fryer, 2013).Research done in over

200 urban schools on the of effect of financial incentives on student performance found out that in most schools the effect was statistically zero.Warnick (2017) found out that there is a growing number of schools in America practicing ‘cash-for-grades system of motivating students. The cash rewards are given so as to improve students’ academic performance. This has brought a conflict between extrinsic rewarding and other types of motivations. For example, giving money as rewards from teachers may change task perception by students and may sometimes affect behaviour negatively. In some cases, rewards might have the desired short term change in behaviour but weaken intrinsic motivation or become counterproductive with time.

According to Saminathan (2018), success or failure of any individual may affect the way one views himself or herself. The study from South Africa further revealed that a student who surrenders to failure and feels helpless will neither have a high self-esteem nor face the future with hope. The student will always feel inadequate and inferior to others. Such a student will admit his or her failure and will do nothing to avert the situation. Such a student who is encountering an uncontrollable negative situation will have motivational, cognitive and emotional deficiencies such that the student will develop a satisfactory behavior and feelings of inferiority even in cases where positive intervention is possible (Petersonet al., 1993).

In South Africa, extrinsic motivation especially the use of rewards was found to be a great determinant in leaning behaviour and academic achievement. The more students were motivated, the more they improved academically (Tokan & Imakulata, 2019). Learnersin Benin are rewarded with money once they reach their performance target(Blimpo, 2014). The use of incentives creates a very great impact on students' performance. Students who were promised rewards indicated a great improvement on their results as they read towards achieving their set target. Once the incentives were withdrawn, the performance dropped.

Stigmatization among learners in the low ability tracks in Nigeria has brought about feelings of inferiority (Olaoye, 2016). Teachers have been empowered to apply tracking among students in order to maximize their potential in academics. Tracking also endeavours to increase competition among learners and subsequently make the learners improve in their academics. Advantages and disadvantages of tracking are evident whereby disadvantages exceed the advantages. Despite this, the practice has persistently been strengthened and supported by the government.

Academic inferiority could be an issue in Kenya. This is indicated by dismal academic performance in a number of schools. This comes after a national exam has been done and schools ranked according to performance. Rewarding of teachers has greatly contributed to school performance and rank (Kiprop, 2020). Increase of salaries and responsibility allowance is a motivating factor to teachers.

Students who perform well also motivate teachers. Students also need to be motivated so as to do well. Once promised to be given rewards, their performance improves. Motivation especially by the use of rewards helps in improving academic performance (Adamma, et al., 2018). In Nigeria pupils performed better in Mathematics after being given rewards. This helped them to improve the general academic performance.

In Kenya, the fate of learners is determined by their performance in national examinations. The national examinations are done twice, at the end of primary school where pupils sit for the Kenya Certificate of Primary Education (KCPE) and at the end of secondary school they sit for the Kenya Certificate of Secondary Education (KCSE). These examinations are done for the purpose of selecting students into successive levels in the education system (Kellaghan and Greaney, 2009).Depending on the KCPE results, students are placed into schools according to their performance. Those who perform highly are selected to the prestigious national schools while the low performers are selected to the local day schools. KCSE results determine the nature of course one will do. Those who excel pursue prestigious courses while those who do not perform well join the middle level colleges.

Coupled with streaming of students into schools and colleges was ranking of schools and students according to their performance. This was done until 2014 when it was abolished by the Ministry of Education (MOE). The ministry cited

the demerits and the reasons why it decided to abolish the rankings (Burrows, 2014). These include:

Unhealthy competition among schools due to ranking has led to examination irregularities. Most schools and students involve themselves in various exam malpractices so as to rank among the top schools.

Schools' main interest is in the product not the process. The schools' main interest is on the number of As they get and the number of students they qualify to the university no matter the process. At the same time, the subject teachers' main interest is in their subject mean scores and not the resources.

Crude and unethical means have been used by principals and teachers to rank schools without considering the silent pain that teachers, parents and students undergo. This includes forceful retention of weak students, extra levies to parents and too much work for the teachers. Comparing schools with different resources and weighing them on the same scale is not fair. Some schools are more equipped with various structures and other resources for example well equipped laboratories, which some schools do not have.

Some schools have resorted to registering few students for national examinations so as to get a high mean score. This practice is rampant in private schools and therefore they tend to perform better as compared to public schools which have a high number of students.

Some schools have dropped non examination subjects and no longer pay attention to them. These subjects include Physical Education, Life Skills and even Games. These schools do this so that students are able to concentrate more on the examinable subjects.

Due to ranking teachers are drilling students into cramming leading to production of poorly educated students whose target is to pass examinations with a particular grade. This leads to students joining courses they cannot manage to do.

Ranking has affected teachers and learners negatively. Teachers in poorly performing schools are getting demoralized as promotions are pegged to good performance. Such teachers have stayed in one job group for years. Learners get stigmatized leading to some committing suicide because inferiority feelings leading to poor performance and low rankings.

Schools engage in remedial teaching whereby learners are forced to stay until late hours in the night and even over the holidays.This is the time during which drilling in readiness for examinations is done. This denies students time to relax, be with their parents and siblings and enjoy life as children.

Academically, Kisii County has also been ranked low among other counties for many years now. According to the Kisii County Director's office 2018 statistics, the KCSE examination mean in 2017 and 2018 was 3.03 and 3.34 respectively. Ochoro and Monyangi (2014) attributed this to high enrolment rate coupled with

lack of enough teachers for effective teaching and learning process. Academic inferiority feelings which could be due to ranking, ability streaming and extrinsic rewarding which are highly embraced in schools could be leading to low academic performance in Kisii County.

Closely related to academic inferiority feelings, is ranking. During ranking, students are compared among themselves and against some set standard. This sometimes can be accompanied by rewarding to the ones who measure up to the set standards. Those who do not measure up to the required set standards are harshly judged by teachers and parents; they are belittled and sometimes caned. This is worsened by Parents' high expectations who get happy when their children succeed and get upset when they fail. When the students persistently do not succeed, they feel very helpless, academically inferior and stop putting in any more effort.

1.3 Statement of the Problem

Feelings of inferiority in academics could be one of the challenges low achieving students in secondary schools could be dealing with. This could be due to high expectations form teachers and parents on academic performance. Students have been missing out on competitive courses in the universities because of poor academic performance.This has resulted in individual learners failing to get prestigious jobs and not living up to the individual or societal expectations. Many schools have therefore introduced strategies that they hope would lead to

competition among students in order to enhance good academic performance. Such strategies include; ability streaming, ranking and extrinsic rewarding. Unfortunately, this is done without looking at the effect it may have on low performers who end up developing academic inferiority feelings. Students with academic inferiority feelings usually display low performance, become academically disengaged and some even drop out of school.

Research done in Britain reported a positive correlation between ability grouping within schools and student inferiority (Houtte et al.,2012). In the United States of America, research done on comparisons between students' performance reported that comparing of studentsresulted to a sense of inferiority among the low achieverswhile it brought about a sense of inspiration among the high achievers (Burleson et al., 2005). In Zimbabwe, studies demonstrate that, self-concept was an important mediating and predictive variable for academic achievement (Dambudzo & Schulze, 2012).

In Kenya, research has been done on self-handicapping, defense pessimism (Wawire, 2010), academic motivation (Mutweleli, 2014), class retention and self-concept (Amadalo et al., 2009) in relation to academic achievement. Very little attention has been given to academic inferiority feelings. In Kisii County, where performance is very dismal, there is paucity of research done to investigate the predictors of academic inferiority feelings among secondary school students. The central problem of this study was therefore to investigate the relationship between

ability grouping, ranking, extrinsic rewarding and academic inferiority feelings among secondary school students in Kisii County, Kenya.

1.4 Purpose of the Study

The purpose of this study was to investigate the predictors of academic inferiority feelings among form three students in Kisii County. The study intended to explore the extent to which ability streaming, ranking and extrinsic rewarding are practiced in schools. The study further investigated how these practices consequently predict academic inferiority feelings among secondary school students.

1.5 Objectives of the Study

The study was guided by the following objectives:

i. To establish the relationship between ability streaming and academic inferiority feelings among secondary school students.
ii. To determine the relationship between ranking and academic inferiority feelings among secondary school students.
iii. To establish the extent to which extrinsic rewarding relates to academic inferiority feelings among secondary school students.
iv. To investigate the interrelationship among ability streaming, ranking, extrinsic rewarding,and academic inferiority feelings among secondary school students.

1.6 Research Hypotheses

The study was guided by the following hypotheses:

H_{a1}: There is a relationship between ability streaming and academic inferiority feelings among secondary school students.

H_{a2}: There is a relationship between ranking and academic inferiority feelings among secondary school students.

H_{a3}: There is a relationship between extrinsic rewarding and academic inferiority feelings among secondary school students.

H_{a4}: There is aninterrelationship among ability streaming, ranking, extrinsic rewarding and academic inferiority feelings among secondary school students.

1.7 Assumptions of the Study

The study was based on the assumption that;

i. Ranking, ability streaming and extrinsic rewarding predict academic inferiority feelings.
ii. The outcome variable under study is related and influenced in the direction required by the theory.
iii. The instrument used will elicit detailed information on academic inferiority feelings.

iv. Respondents will provide information which is genuine on the items in the questionnaires.

1.8 Limitations and Delimitations of the Study

1.8.1 Limitations of the Study

The study was done with a limited sample size within the Kisii County. The results therefore cannot be used to make generalizations to larger populations apart from the population from which the sample was drawn. Self-report items used in the questionnaires could also be subjective. The researcher therefore used a wide range of items so as reduce subjectivity.

1.8.2 Delimitations of the Study

The study was delimited to form three students in secondary schools in Kisii County. Form one and two students were left out as they were still settling down and adapting to the secondary school education system. Form four students were also not included as they were having a busy schedule with examinations and other programmes. The study was also delimited to secondary schools only leaving out students from other levels like primary schools, colleges and universities. Secondary school students understand ability streaming, ranking and extrinsic rewarding more than primary school students. These factors also affect them more than they affect students of higher levels of learning. The study focused on students only without focusing on teachers. Students are the ones

directly affected by ability streaming, ranking and extrinsic rewarding and therefore able to give a clear picture on their effects.

Finally, the study focused on ranking, ability streaming and extrinsic rewarding as variables that predict academic inferiority feelings among secondary school students. Other factors that may lead to academic inferiority feelings like grading and class retention were not investigated.

1.9 Significance of the Study

This study may be significant to all school stakeholders. The results of this study may make students to work to their potential and not to the expectations of their teachers and parents. This study may also be of importance to the parents so that they may understand their children and stop putting so much pressure on them when they fail to measure up to their standards but instead help them in the cultivation of self-worth. The findings of the study may reveal to the teachers and the school management the role of within-school ranking, ability grouping of students, and extrinsic rewarding on academic inferiority feelings among students. It may also help the policymakers in understanding the role of grading and ranking of schools and students. The findings of the study may add to the existing literature on the relationship between ability streaming, ranking and extrinsic rewarding and academic inferiority feelings among secondary school students.

1.10 Theoretical and Conceptual Framework

1.10.1 Theoretical Framework

Individual Psychology Theory (Adler, 1923)

Alfred Adler developed the first holistic theory of personality, psychopathology and psychotherapy that was intimately connected to a humanistic philosophy of living. From his point of view, when one feels encouraged, they feel strengthened with new ability, get a feeling of belonging and will generally be cooperative and will connect with others. On the other hand, discouragement brings about unhealthy competition, withdrawing and giving up. Alfred Adler viewed inferiority feelings as a condition that can trigger ones creativity. It is a condition normal to everybody which makes one to strive for higher levels of achievement. The desire to overcome inferiority and become successful can motivate human behavior making one to achieve higher levels of development. This is often moderated by social environments. He believed that nobody is born perfect. The physical inadequacies in young children make them feel inferior to those around them. People therefore try to overcome the inferiority feelings early in life (Adler, 1964).

Previous research suggests that feelings of inferiority may serve as a stepping stone to achievement rather than just as an obstacle (Strano & Petrocelli, 2005). Other studies have investigated a one-dimensional self-esteem definition of inferiority (Mehrabian, 2000) or related constructs like motivation (Covington,

1992; Dai, 2000) in connection to achievement or success. The current research adds to the topic by investigating the role of ability streaming, ranking and extrinsic rewarding as predictors of academic inferiority feelings. Students who are placed in the poor performing classes, those who are ranked low and are never given rewards are likely to suffer from academic inferiority. This makes them feel inadequate in their studies.

In schools, students try to overcome their inferiority feelings by trying to work towards excellence and compete with those who do better than them. Unfortunately, this is watered down by teachers and parents who try to make unhealthy comparisons through ranking, extrinsic rewarding, and ability streaming. This kills the students' motivation and therefore they stop putting any more effort. This study therefore looks at the relationship between ranking, ability streaming, extrinsic rewarding and academic inferiority feelings among students in, Kisii County.

Figure 1.1

Conceptual Framework: Ability Streaming, Ranking and Extrinsic rewarding as Predictors of Academic Inferiority Feelings

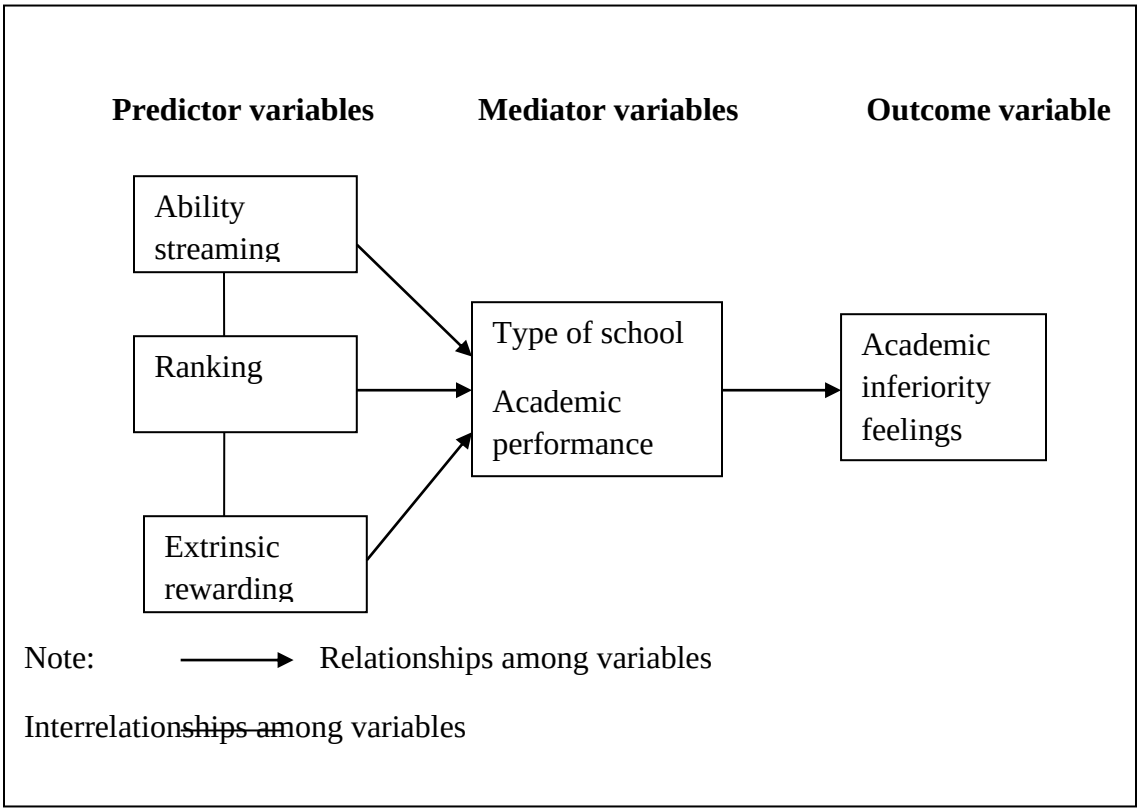


Figure 1.1 shows the various predictors of academic inferiority feelings. These predictors include ranking, ability streaming and extrinsic rewarding which determine academic inferiority feelings. A student's stream and class position will determine his/her academic feelings. A student who ranks low and therefore placed in the low performing stream is likely to feel inferior academically unlike the one who ranks high and placed in the high performing stream. The low

performing group become helpless and gets contented with their usually low performance. They do not struggle to putany more effort since nobody recognizes their efforts. Similarly, a student who is never rewarded extrinsically no matter how little they improve may feel inferior academically. Furthermore, students who are in the low ranking schools also tend to feel inferior to those in the top ranking schools.

1.11 Operational Definitions of Terms

Ability streaming- splitting students into classes or schools based on their academic ability and class performance. It is used in this study to refer to the classification of students according to ability whereby those who perform well are placed in different classes and those who perform poorly are placed in different classes. The two categories of students are taught separately.

Academic inferiority feelings –a relative comparison which reflects a student's self-concept in terms of academic performance and their perception of significant others in their lives. It is a situation whereby a student feels academically weak and unable to compete with others. It is used in this study to show how students perceive themselves when they fail to do as expected by their teachers, parents and even other students.

Extrinsic rewarding – these are tangible rewards, positive comments or actions from teachers to students to motivate them and reinforce performance. In this study, it is used to show how the students who perform well are motivated by being given tangible incentives in order to boost performance. This is reflected by the students' score (above average).

Ranking - thisis the placing of students in a list according to performance. In this study, it refers to the act oflisting of students from the best performing to the worst performing in a class or in a stream. This is done in schools after assessments have been done and students given grades.

Tracking - classifying and grouping of students into classes or schoolsaccording to academic ability. In this study, it refers to separating of students into various classes or schools depending on their academic achievement levels. This is done after subjecting students to some exams. It has been assumed to be a successful way of getting good results in schools.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter contains a review of related literature in relation to ranking, ability streaming, extrinsic rewarding and academic inferiority feelings. It also reviews the inter-relationship between ability streaming, ranking and extrinsic rewarding.

2.2 Relationship Between Ability Streaming and Academic Inferiority Feelings Among Students

Ability streaming in secondary schools has been found not to have any benefits in improving student academic results but it increases inequity (Wildy & Johnston, 2018). According to this study, teachers often prefer working in streamed classes without understanding the effect they mediate on the students. Using a qualitative case study approach, the study sought to understand how teachers conceptualise the students in the streamed classes. In-depth interviews were carried out among 18 teachers in selected schools in Western Australia. The findings indicated that teachers saw high and low streams as having homogeneous characteristics while students in mixed ability classes were more heterogeneous. The study did not focus on the role of abiliy streaming on the students' academic feelings which is the intent of the current study.

In another study, Aguero and McCabe (2020) noted that if learners are streamed at the beginning of secondary school, there is instrumental motivation on students in the high ability strand as compared to students in the low ablity strand. Instrumental motivation plays an important role in students' views where those in the high strand view themselves to bemore in control of their choices as compared to those in the low ability strand tend to be ambivalnt over transition.The study was carried out among 157 learners between 11 and 12 years at the beginning of their bilingual secondary education after being streamed into two. Structured interviews and questionnaires were used in data collection basing the study on the Grounded Theory. This study laid more emphasis on ablity streaming in relation to insrumental motivation as compared to the current study that relates ability streaming to academic inferiority feelings.

Further research in the United States (Beard, 2018), calls for a fresh redefinition of tracking or ability streaming as one of the practices in the education sector. The research investigated on the effects of tracking on academic performance and its ability to instill inequality among learners and the unethical practice of dividing learners along intellectual lines. This research informs the researcher of the harmful effects the practice has on the low performing students whose majority come from the African American race despite the fact that their school attendance is at the same rate or even higher than their peers. The findings further highlight on the way the African American students are always the least prepared for educational opportunities(Beard, 2018). According to the research therefore, there

is need to relax the tracking or ability streaming policies in order to have an equal distribution of various levels of students' wellbeing in terms of academic achievement.The research did not focus on role of tracking or ability streaming on academic inferiority feelings as one of the harmful effects among the low performing students.

In a related study, Akdoğan and Çimşir (2019) carried out a researchlinking inferiority feelings to subjective happiness. According to the study carried out among 283 students attending a public university in Turkey during the 2017/2018 academic year,inferiority feelings lead to self-concealment therefore causing loneliness.The results confirmed that self-concealment and loneliness act as mediators between inferiority feelings and subjective happiness. A multiple regression analysis was used in data analysis whereby it revealed that inferiority feelings, loneliness, self-concealment, age and gender significantly explain happiness at a level of 35% ($R2=0.35$, $F(5,276)=30.27$, $P<.001$) with loneliness and inferiority feelings being the only significant predictors of subjective happiness. The study did not seek to find out the relationship between inferiority feelings and academics which is the main aim of the current study.

Elsewhere, ability grouping has been seen to be a practice that has caused inequity among students. The inequity evidently comes out when the students are inequitably and inaccurately allocated into groups (Taylor and Francis, 2019). The study aimed at finding out whether ability grouping may be improved so as to do

away with inequity. A survey and an interview were carried out among 126 English secondary schools. The intervention study revealed that when schools are encouraged to allocate students and move them between groups according to equitable principles by participation in a best practice intervention, equity improved. Non-attainment factors were disregarded during the allocation. The study further revealed that subjective and biased information was still used in most schools to group students. Additionally, other schools still use the inequitable practice of streaming but still claim to be using the attainment practice. The findings further showed that other factors such as timetabling, finance and teacher values and beliefs of student ability and progression limit the improvement in equity. The study recommended that strategies should be sought to encourage schools to change their grouping practices. The study largely focused on the resultant inequity due to inequitable and inaccurate grouping rather that the resultant feelings of academic inferiority due to the grouping practices.

A study done in Malaysian schools, found out that one of the strategies in academia that caters for ability differences is by placing students in ability classes(Mansor et al., 2016). According to the study, prior academic performance was used to permanently place students in their ability classes for the whole year. The study was conducted in three elementary schools using interviews. Its major aim was to find out the advantages and disadvantages of streaming and its effect oncontent delivery. A total of 9 teachers and 10 students agreed that ability grouping is better than mixed grouping. One of the advantages is that, lesson

planning becomes easier on part of the teacher, reduced peer pressure and hence better performance on the part of the student.This system is majorly exam oriented and it encourages inter-ability socialization therefore impacting negatively on self-esteem and achievement motivation. Qualitative research approach was used as a primary instrument for data collection and analysis. Semi-structured interviews supported by questionnaires were also used for data collection. The participants were 3 primary schools from sub-urban areas, 9 teachers and 30 students.Unlike this study, the current study used students only without including teachers. This was to get the true picture on how ability streaming impacts on students alone and not teachers. A bigger sample size was also used in order to get a detailed report on the study. The study also failed to discuss academic inferiority feelings as one of the disadvantages of streaming.

In Denmark, for vocational schools to increase retention of students it was important for the schools to stream students into courses according to their ability. Grouping was done using their previous academic qualifications.In relation to this,a study was done with the low ability students so as to explore their feelingsin regard to their course (Tanggard et al., 2015). The study drew from theories of student drop-out and engagement (Finn, 1989) and on the differentiation-polarization theory (Garmoran, 2010) concerning the effects of streaming students into ability-based classes. From the findings, disengagement and dropping out of the low ability students in vocational schools was evident when ability streaming was practiced. The study suggested that the mixed ability grouping can help to

curb the problem of disengagement and dropping out of school. This study was done in vocational schools where ability grouping was practiced whereas the current study was done among secondary schools where students were placed into classes according to ability. In addition, this study uses student drop-out and engagement theory and differentiation-polarization theory unlike the current study which used the individual psychology theory which clearly explains the causes of inferiority feelings among individuals.

Similarly, Ramberg (2016) carried out a study on streaming students according to ability on Swedish upper secondary schools. Results revealed that 43% of the schools use ability streaming to separate high achievers from low achievers in educational settings. The target population was all the upper secondary schools in Sweden. Streaming was commonly based on core subjects like mathematics where low achievers scored poorly. This system was considered unethical, undemocratic and it promoted inequality especially to the low achievers. Low-achievers were likely to suffer from delinquency, dropout, low self esteem, inferiority complex and other social problems. The research participants were all the upper secondary school principals of the year 2010/2011, that is, 950 principals with the use of questionnaires. This is unlike the current study which used students only (*N=400*) as the intention was to get the feelings of the students when they are grouped according to ability. The current study also focused on streaming based on the general performance rather than performance on specific subjects.

In West London, Madeline and Koshy (2016) carried out research with an intention of exploring students' feelings and experiences on ability grouping. The study was done among selected independent girls' secondary schools. Questionnaires and focus group interviews were used among 260 girls between 12 and 16 years. Software Package for Social Sciences (SPSS) was used for analysis. A paired sample t-test was completed which allowed comparisons to be made between responses given by particular participants in the curriculum subjects of science, modern foreign languages, English and Physical Education. Pupils benefited from ability grouping as they were able to study together harmoniously and consult each other at the same level enabling lessons to be carried out at the right pace for their ability. Pupils worked with the fear of being moved down to a low-achieving class therefore they worked under pressure so as to maintain their performance. Some few pupils reacted positively to the pressure. On the contrary, pupils in mixed ability groups felt less anxious and confident.A few felt challenged by others in their classes and felt disappointed when they failed to catch up with their peers. A bigger sample of 400 students from 20 schools was used in the current study for a more reliable result. An interview schedule that collects data from individual participants was also used unlike focus group interviews that collect data based on the feelings of a group.

Ability grouping within schools and ability grouping within classrooms based on prior academic performance, past literacy skills, students' socio-economicand

cultural background might affect students' academic achievement (Chiu et al., 2017). In this study, reading tests were carried out among 208,057 students in grade four, their parents, teachers and principals from 40 countries where streaming and tracking were practiced. An experimental study was done using 150 schools and 4000 students representing each country. On comparing reading and writing skills across schools where streaming was practiced, it was revealed that fourth-grade students were better in reading while their peers had similar reading and writing skills across schools(school streaming) but not across classrooms within schools. From the results, streaming led to higher reading and writing achievement while tracking led to lower reading and writing achievement. The general academic performance was also studied in schools that practiced streaming and tracking. In both categories of schools, the difference in academic performance was insignificant. This study was limited to academic performance, reading and writing achievement but did not focus on academic inferiority feelings as a result of streaming and tracking.

In a related study, Stabler et al., (2017) compared the academic self-concept between low achieving students and high achieving students when learning separately and when learning together. The study was carried out in schools that classified students into high and low achievers using prior academic performance. Results indicated that low achieving students only showed a low academic self-concept when learning with high achieving students.The study aimed at

scrutinizing students' class achievement against students' academic self-concept in Germany. The study used a sample of 6,463 grade seven students from 285 classes and multilevel path models. The results showed that there was a significant positive relationship between a student's initial class academic achievement and subsequent academic achievement throughout the year. Similarly, academic self-concept was also positively affected throughout the year.Students with high academic achievement displayed high self-esteem while those with low academic achievement displayed a low self-esteem.The study also investigated academic achievement and self concept at the beginning of the year, by mid-term and by the end of the year among grade seven students using mediation analysis. According to the study, students displayed a low academic achievement and negative self-concept at the beginning of the year. Mid-term class-average achievement mediated students' academic achievement at the end of the year and not mid-term self-concept. Academic inferiority feelings among students was not investigated.

Academic self-perception is not static in the course of schooling in German (Becker & Neumann, 2016). Several factors in school contribute to changes in academic self perception including individual and class environmental factors. According to the findings of the study, performance of peers in class is important in determining changes in academic self-perception. Students perform well when they are with peers of equal academic ability but when placed with students of

high academic ablity, they do not perform well. This could be due to reported lower academic self-perception but when in lower ability classes they perform well due to reported higher academic self-perception,an effect known as big-fish-little-pond effect (BFLPE) (Stabler, et al., 2017). Big-fish-little-pond effect was found to be present in all levels of learning but it diminishes as one proceeds to higher levels of learning. Using contextual information, a sample drawn from fourth graders who transited from elementary school to secondary school showed that big-fish-little-pond effectexists in both levels.The current study used a sample from secondary school only without involving primary school students.

Unlike the previous study, Dumont et al., (2017) carried out an investigation on secondary schooltrackingand how it regulates students' academic potential beliefs and their beliefs regarding their labour market chances. The study analyzed how tracking relates to school disengagement. Majorly, the study distinguished two main features of tracking: the social context of tracking which is indicated by the mean achievement of the student in relation to their schoolmates and tracking which is indicated by future opportunities operationalized by their educational certificates. These two distinguishing features were disentangled by the study using a questionnaire. A total of 2,155 students from low-track schools, 23 intermediate-track schools and 35 comprehensive schools in Berlin participated in the study.The results showed that educational certificates mattered more than beliefs in labour market chances in shaping a student's academic potential beliefs

and school disengagement.The study revealed that, intermediate school-leaving certificates helped improve students' academic performance henceacademic perception. Students were therefore more engaged in school and believed that they will get jobs faster. Their class performance, the performance of their colleagues and their ability stream did not matter. On the other hand, achievement of students' schoolmates was relevant to academic self perception whereby those who achieved low had low academic self-perception. Unlike this study that focuses on school disengagement, the current study narrowed down its focus on academic feelings using a smaller sample.

A related study by Tereshchenko et al.,(2019) in England analyzed the feelings of students in mixed ability grouping done on the basisof their prior attainment. Focus group discussions and individual interviews were used to collect data from 89 students aged between 11 and 12 years from 8 secondary schools that practised mixed ability grouping in Mathematics and English. The study revealed that students with low class attainment had a strong preference for mixed ability grouping than those students with high class attainment. With ability grouping, those in the higher track benefited more than those in the lower track.Usingrandomized control trial design,it was revealed that students with low prior attainment spoke positively about the practice of mixed ability grouping while students with higher prior attainment spoke negatively about mixed-ability grouping of students. Middle attainers appeared more divided than the other two

groups. In addition to individual interviews, the current study has used questionnaires for collection of quantitative data so as to get detailed data. The study further focused on academic feelings of the learnersrather than just positivity or negativity towards ability grouping.

In the United States of America and in the United Kingdom, tracking is organized within school and it has got great effects(Houtte & Stevens, 2015), whereas in many European countries such as Belgium, tracking is commonly organised between schools. In this study, Houtte and Stevens (2015) examined whether the negative effects of tracking among students were due to the systems in place in within-school tracking and between-school tracking or because of the tracking itself. The study investigated whether there was a relationship between the track a student is and the student's feeling. The study was carried out among 85 secondary schools in Flanders based on the Flenish Educational Assessment data. Three multilevel analyses of 11,872 3^{rd} -5^{th} grade students clustered in 146 tracks both between and within school tracking made the representative sample.Fromthe findings, within-school tracking impacted negatively on the lower track students. This mainly affected the lower track students who were constantly demeaned and humiliated by the higher track students in school. Theyeventually lost faith in education and purely depended on pure luck to pass examinations than hard work (Houtte & Stevens, 2015).The study focused on negative feelings rather than academic inferiority feelings that the current study is intending to establish.

In another studyMazenod et al., (2018) noted that ability or attainment grouping leads to labelling of students by teachers influenced by their expectations of the high and low ability groups. The study's major interest was to find out the teachers' expectations on students. A sample of597 teachers of Mathematics and English in lower attainment classes across 82 schools in England was surveyed using a mixed methods design.From the findings, 53% of the teachers strongly felt that there are some activities that the low attainment group could not manage. This group therefore required specific approaches of teaching and learning so as to nurture and safeguard them through school. They felt that this group required more practical work than theory work. This made the low attaining students feel inferior to others. The teachers greatly undermined their potential such that the students remained helpless. The study concluded that grouping of students has impacted them negatively lowering their attainment and self confidence. The teachers' confidence in the low attainers was lowered too once the students were grouped.Unlike this study which used teachers to get students' feelings, the current study used students themselves to get their academic feelings.

A related study was carried out by Tripathy (2017), which aimed at determining the effect of academic achievement on inferiority-insecurity feeling. A sample of 100 adolescents was used whereby 50 of the participants were high academic achievers (25 boys and 25 girls) and 50 were low academic achievers (25 boys and 25 girls). Inferiority and Insecurity Questionnaires were used for collecting data. From the researcher's findings, there was no significant difference between

those ranked as high achievers and low achievers (both boys and girls) on the level of inferiority-insecurity feelings. Academic achievement had the same impact on them. When grouped into ability groups, high-achieving students gain more form ability grouping while the low-ability students do not gain but instead it damages their well-being (Belfi & Damme, 2012). Therefore according to the study, gender has no significant effect on inferiority feelings. Unlike this study which focused on inferiority-insecurity feelings, this current study focused on academic inferiority feelings with a larger sample size of 400 participants for a better result.

According to Francis et al., (2017), grouping of pupils according to ability within schools has still persisted despite the fact that the practice negatively impacts on the outcome of the learners in the low-attainment group. The grouping is done using prior academic achievement where low performers are placed in a different class from the high performers.The hypothesis in the study that ability grouping impacts pupils' self-confidence was explored and supported. This therefore precipitated the self-fulfiling prophecy.Survey data from 11,546, 11 and 12 year old pupils in ability sets was used.Both individual and focus group interviews were used in data collection to explore the hypothesis. A sample of 66 pupils was used to find out the relationship between set placement and self-confidence in learning among pupils. The study revealed a significant relationship between set placement and general confidence among pupils in the set subject.From the

pupils' qualitative responses it was evident that set placement or ability grouping promoted a self fulfilling prophecy. Evidence of internalized labels among pupils was also realized. The labels stemmed from both teachers and students themselves.Qualitative analysis further revealedthe detrimental impact of placement in low sets on self-perception and academic feelings among the learners.This study used interviews only in data collection while the current study used questionnaires as well. In addition to the self fulfiling prophecy, Alfred Adler's theory of Individual Psychology was also used to establish the students' academic inferiority felings. The study sought to find out the relationship between self placement and self confidence unlike the current study which sought to find out the relationship between ability streaming and academic inferiority feelings.

Giersch (2016) noted thatinequalities among learner outcomes was due to tracking which is a common feature in most school organizations. Tracking was done whereby high performers were placed in different classes from the low performers. In both groups, high-stakes testing policieswere used in measuring learning. These instruments were considered too narrow to be relied on in assessing students' progress in order to place them in their various tracks. A longtudinal study was done that followed school students from public high schools in North Carolina through the state university. The students were placed in different tracks and monitored throughout their schooling with an aim of examining the different outcomes associated with tracking. The upper and lower

track students were compared while achievement on high stake tests was controlled for. The results showed that the upper track students performed better throghout high school than the lower track students. On transiting to college, the upper track students still performed better whereas the lower track students performed poorly while others dropped out. The study utilized a longtudinal data set that follows one cohort of North Carolina school students from public high school through the state university system to examine the different outcomes associated with academic track. When comparing the upper and lower track students while controlling for achievement on high-stake tests, results evidently indicated that the upper track students do better in college as compared to the lower track students. These tests strongly predict college success for upper track students and failure for lower track students.Focus group interviews revealed that these differences were due to different methods of instruction in each track.The contribution of academic inferiority feelings to these differences in performance and college success was not investigated.

In Kenya, Ukanda and Othuon (2020) sought to find out the relationship ability grouping and the achievement in Mathematics among male students in Kisumu County. The study employed a factorial research design among a population of 240 form three students from public boys' secondary students. Stratified random sampling technique was used to select a sample of 48 students from the different ability level streams. The study indicated that a student's ability group (high,

medium, low or mixed ability) had a significant effect on achievement in Mathematics ($p<.05$). Those placed in a high ability group had a high capacity of understanding tasks presented to them and therefore performed better unlike those placed in a low abilty group whose understanding capacity of tasks was low and therefore pereformed dismally in Mathematics. The study did not explore further the effect of streaming on academic feelings which is the intent of the current study.

2.3 Relationship Between Ranking and Academic Inferiority Feelings Among Students

Kalaivani (2017) carried out a study in Vellore District, India to examine the relationship between inferiority complex and academic achievement of high school students in Vellore district. The study used 200 low ranking high school students who were randomly selected from various schools within the district. Survey method of research was adopted where an InferiorityComplex instrument developed by Sorenson was used. The findings indicated that there was a positive relationship between inferiority complex and academic achievement with 0.05 and 0.01 level of significance. The study further indicated that there was a high level of inferiority complex low ranking among high school students. There also existed significant impact with respect to gender, type of family and medium of instruction. The current study used Personal and Academic Self-concept (PASCI) inventory among secondary school students that looked at inferiority in academia

unlike the Inferiority Complex instrument that only focuses on inferiority complex. Furthermore, the study focused on inferiority complex and failed to focus on academic inferiority feelings among high school students.

In another study, Silva et al., (2020) noted that performance in secondary schools is usually determined by the results achieved in national examinations which are usually done at the end of secondary education. The study was carried out in the university of Porto and Catholic University of Porto in Portugal among 10,000 students for three years. The study was carried out on first year students to benchmark secondary schools on their ability to lead students to success in higher education. The results indicated that schools' ranking based on schools' ability to prepare students for university success is quite different from ranking based on results from national examinations. Students were placed in universities depending on their ranking in national examinations. This greatly determined the student's success in higher levels of learning and consequently success in future challenges. This study unlike the current study did not relate student ranking to academic inferiority feelings.

In another study, the government stratifies student population into three classes, that is, scheduled castes, backward classes and general classes in regard to their socioeconomic status (John et al., 2020). Academic performance in relation to this governmental ranking of students was examined. The variables under study included psychological measures of self esteem and life satisfaction.

Demographic variables like gender, age and family income were also examined as covariates. A convenient sample of 858 Indian adolescents from grade X and XI were used in conducting the study. Using a multilevel regression model, it was established that the relationship between governmental classes and academic performance was significantly positive whereby higher level of class predicted better academic performance. It was further revealed that students from the same school environment performed differently based on their social status. This study related governmental student social ranking in relation to their self esteem, life satisfaction and academic performance but did not relate it to academic inferiority feelings which is the intent of the current study.

Alves (2017) carried out a study on the directors of secondary schools' opinion on school ranking in Portugal. The major purpose of the study was to investigate whether ranking of schools is one of the factors that can influence the performance of schools. Two directors from two grouped schools and from one non-grouped school in northern Portugal were interviewed using semi-structured interviews. The three interviews were audio recorded and later on transcribed and analysed. The results of the study indicated that external evaluation of schools affects the directors, teachers and students. The positioning of a school determines the school's social position and hence granting them recognition and additional funds. If the positioning is low, a school is threatened loseits social register, minimal funding with no recognition at all. Consequently, this leads to students

performing dismally and hence missing out promotion and graduation. This study did not seek to find out on the academic feelings of the students of which the current study seeks to investigate using a larger sample of participants. Additionally, the current study used questionnaires in addition to interviews to collect data from students.

Academic ranking is a common practice in various institutions for various reasons. In Ukraine, ranking is a tool used for implementing quality management in higher institutions (Slyusarenko, 2020). Ranking is a mechanism for measuring quality, performance and effectiveness of higher education. It further helps institutions to effectively manage the institutions. It also helps students to work hard so that their institution can rank among the top institutions. Results from the comparative analysis indicated that ranking has necessitated some institutions to improve on quality, performance and effectiveness of their institutions. The study did not relate ranking to the academic feelings of students and this is the major focus of the current study.

In another study, Limangura (2018) found out that ranking had manydisadvantages as compared to advantages to the learners. According to the study,‘stakeholders’ perception towards ranking in secondary schools in the West Pokot Sub-County, Kenya’,rankinghas ledto early coverage of the syllabus as it motivates teachers. Ranking has also led to change of institutional practices and has made all teaching activities to be geared towards passing examinations

neglecting all other aspects of education. Ranking has not only brought about unhealthy competition among departments, teachers and learners in schools but also among different categories of schools.

Limangura (2018) further noted that ranking can be inspirational and motivating to performing students but it can also be detrimental to the underperforming students as it kills their morale.However, since ranking was abolished in Kenya students do not care much about how they perform. The study adopted the descriptive survey method research design while cluster and purposive sampling methods were used to get sample participants.A total of 229 students, 34 teachers, 7 principals and 4 Ministry of Education officials were included in the sample. Questionnaires and interviews were used for data collection while descriptive statistics was used in quantitative data analysis. The current study used 400 students as they were the target of academic inferiority feelings without involving other stakeholders. The study did not focus on academic inferiority feelings of which this current study is trying to investigate.

In another study, an investigation was done by Oambar et al., (2018) to find out the influence of district ranking system on students' achievement scores in national examinations. A sample of 300 students who had sat for the national examinations from 10 schools was used in data collection using researcher developed questionnaires and 10 focus group interviews were conducted too. Using SPSS for data analysis, results indicated that district ranking system had a

significant positive influence on students' achievement score in the national examinations. Those who were ranked at the top in district ranking performed well in national examinations while those who ranked bottom did not perform well in the national examinations. The study did not relate district ranking to academic feelings.

Murphy and Weinhardt (2018) investigated the importance of ordinal rank among primary school students.They found outthat, despite a student's underlying ability, ordinal academic ranking significantly affects secondary school academic achievement. The impact has a long term effect on the student that can last throughout secondary school.Using data from the English school students,results indicated that during ranking a student's ordinal position in a class impacts one's later cardinal achievement. Naturally occurring differences also contribute a lot in impacting class rank whereby the male students' achievement is influenced considerably more than the female students' achievement.Moreover, the high ranking pupils seem to be linked more in important non-cognitive skills, confidence and self-esteem. It makes some students feel more superior or inferior than others. The study was carried out among 16,122 students using a longitudinal survey method in England. Unlike this study, the current study used a smaller sample of 400 respondents among secondary school students in Kenya for regional diversification. A correlational study was used in order to establish relationship between ranking and academic inferiority feelings instead of a longitudinal survey.

Njiru et al., (2019) established thatstudent-teacher relationship greatly influences students'academic performance in Mathematics. This was revealed from their study on the effects of performance ranking in Mathematics on students' and teachers' identity development.Fromthestudy, there was a clear indication that ranking students according to their performance in Mathematics was beneficial both to the teacher and to the student. It helps the student to measure their ability in relation to the other students in class therefore motivating them to work harder. In addition, a good rank strengthens the relationship between the teacher and the student, therefore students put a lot effort to avoid ranking low as teachers are friendlier to top ranking students than the low ranking students.

It was further noted that performance ranking in Mathematics also enables students to align themselves to their preferred careers (Njiru et al., 2019). Similarly it promotes peer identification where studentsdo ability grouping as far as mathematics is concerned so as to improve on their performance.Ranking motivates teachers of mathematics in furthering their studies in mathematics and other related courses.The study was done among 1989 students and 101 teachers in Embu County, Kenya. Mixed methods research design was used with data being collected using a one-on-one semi-structured interviews and focus group discussions. This is unlike the current study that used a smaller sample of 400 students without involving teachers as the researcher was seeking to find out about academic inferiority feelings among students which this study did not

highlight on.Additionally, the current study focused on all subjects in general unlike this study that only focused on Mathematics.

Samuels (2014) noted that students are different and they all learn in different ways and have different needs.According to this study, an education system can lead to development of inferiority and superiority complex in students as they all have varying needs. From the existing literature on self-esteem, self-worth and self-perception on students, the study noted that inferiority complex is a creation of the culture of competition and comparison in the classroom leading to anxiety, depression and other behavioural problems. The researcher employed the heuristic methodology in an examination of data from his personal experience to discover the events that caused his inferiority complex to develop. In his study, the researcher was the object of his research. He used his documents like report cards, teachers' reports, psychological assessments and medical records to examine the events that contributed to his feelings of inferiority in school.He found out that if such students do not find enough emotional support from teachers and peers, they could easily quit school due to the feelings of inferiority. Unlike this study that used the researcher as an object of research, the current researcher used 400 respondents to find out the relationship between ranking and academic inferiority feelings.

A study done in Sweden found out that assessment for grading was majorly based on class tests though there were other factors influencing the assigning of grades.

Parents' performance expectations and pressure from different agents inside and outside school also influence grading and consequently ranking of students (Gomez, 2017). A qualitative research which included face-to-face interviews with 25 active and qualified teachersin Southern Sweden for four weekssuggested that classroom interactions and assessment practices for grading and ranking may benefit students, teachers, and the society as a whole. The study did not seek to find out the relationship between ranking and academic inferiority feelings among secondary school students.

Houtte (2017) carried out a study to find out whether study involvement is gendered and the relationship between track rank and study involvementamong boys and girls. The study was conducted in Flanders, Belgium where data was collected from a sample of 11,872 third and fifth grade students. This sample was drawn from 146 tracks being a representative sample of 85 secondary schools.From the results of the study, track ranking had an impact on both boys' and girls' involvement in studies, though the influence was more on boys than girls.Boys' involvement in studies reduced as compared to that of girls.In addition, track rank affected boys more negatively as compared to girls therefore enlarging the gender gaps in the lower tracks.The boys therefore felt inferior to the girls and this affected them throughout their stay in school.The study further revealed that girls benefited more in their well-being and self-concept from single-sex classes than boys whose self-concept and well-being were negatively affected(Belfi & Damme, 2012). The study further revealed that girls in arts

tracks were, on average, more involved in studying than girls in academic tracks. The study did not focus on the academic feelings of the students in academics generally rather than in varied tracks.

2.4 Relationship Between Extrinsic Rewarding and Academic Inferiority Feelings

Rewarding students in order to motivate them academically has become the order of the day. Fatimah (2017) investigated the students' perception on learning English when they were offered rewards by their teacher. The survey research method was employed on grade eight students in Kembaran. Questionnaires and an interview were used to collect data from a sample of 143 students whose results were then analysed. From the analysis, there was a clear indication that student' responses toward the teacher's rewards in learning English was good leading to an improvement in performance. The results showed that 91.7% of the students strongly agreed with the teacher's rewards in learning English. The students were happy and enthusiastic in learning English when the teacher used rewards. This study focused its concern on the subject of English only with a smaller sample unlike the current study that focuses on general academic feelings when rewards are used. The study never linked the use of rewards to academic inferiority feelings.

A similar research by Putra (2019) on the analysis of giving rewards to students established that positive rewards made the students enthusiastic, happy,

motivated, and diligent. Their spirit to study English had improved. Rewards were given to the students who gave correct answers to questions only while negative rewards were given to those who could not give the correct answers. The study was done at Taman Bacaan Masyarakat Asoka, in Indonesia. The research used a qualitative research design whereby observation and interview were employed. A sample of 1 teacher and 15 students was used. Data reduction and data display were used to analyze data.The current study focuses on academic inferiority feelings on those who are not given any award in general performance which this study does not focus on. Additionally, larger sample and the use of questionnaires were also employed in the current study.

A related study was done aiming at finding out and describing the rewards given by teachers in learning Mathematics among grade five students (Sri & Syahrilfuddin, 2020). This was a qualitative study carried out in the odd semester 2019/2020. The results indicated that the provision of rewards by the teachers, in the form of verbal, non-verbal and tangible prizes impacted on the students' motivation. They became enthusiastic in learning and their self confidence increased too. The study focused on rewarding in mathematics only unlike the current study which looks generally at academics. Additionally, the study did not look at whether rewarding was one of the factors that led to academic inferiority feelings especially to those who were never rewarded.

Philosophical and ethical questions concerning cash-for-grades have been examined (Warnick, 2017). It was conspicuously noted that a growing number of schools have begun experimenting with giving rewards to children in order for them to improve their academic performance. Only a few schools try to first of all investigate whether such incentives work to increase academic performance or not. The study further investigated whether the cash incentives are more coercive or a form of corruption thancurrently accepted educational practices. The study further compared cash incentives for to grade incentives. The results indicated that cash incentives are uniquely problematic in an educational environment. This leads to philosophical and ethical questions concerning cash-for-grades. The study did not link the cash incentives for grades to academic inferiority feelings among students.

In a different study, it was revealed that rewards and punishments in the classrooms were necessary for student motivation in learning English. Rewards increase student motivation and punishments stop undesirable behavior (Puspita, 2018). The researcher sought to find out the kind of rewards and punishments used by teachers among grade four students in Kaliputu. It also sought to find out about the students' responses towards the implementation of punishments in the study of English.Observationmethod was used to collect data concerning the kind of rewards and punishments that teachers were using. It was also used to find out about the responses towards punishments by the students. It was revealed that praise, respect and gifts were used as rewards while physical punishment was

used to stamp out undesirable behavior. Student motivation was enhanced when reward was applied appropriately hence enhancing student motivation. Students felt happy and found it fun learning English and hence their grades improved. Those punished became better and never repeated the same mistakes and they felt that it was a consequence of their actions. Generally, the response towards rewards and punishment was positive. The study did not try to investigate the impact of rewards on low achievers who were never rewarded.

In a related study done in Indonesia, Puspitasari and Usman (2020) related reward giving to learning motivation. From the study, it was evident that rewarding had a significant negative influence on learning motivation. Some learners assumed that not all rewards can increase learning motivation. Additionally, the low performing students did not see any impact that was created by giving rewards. The high performing students were always motivated to learn once rewards were given to them. A quantitative research method was used in this study with a total of 200 respondents. Data was collected using questionnaires and later analysed using SPSS version 22 and Amos version 23. The results indicated that the rewarding variable had a ratio value of $2.557>1.96$ and P value of $0.001<0.05$. This study did not relate rewarding to academic inferiority feelings among the learners.

Wagner and Riener (2015) established that non-monetary incentives are more effective than monetary incentives, though this greatly depended on the socio-economic background of the pupils.A field experiment was conducted to

determine the effectiveness of non-monetary incentives on pupils' achievement on a mathematical multiple choice test. Money, a medal, a letter of praise to the parents and a delegation of choice over incentives were used.When non-monetary incentives were used, pupils performed better than when pupils were rewarded with money. This was also found to be more cost effective, easily implementable and more long-lasting than giving monetary awards in motivating pre-high school pupils.Additionally, they found out that predetermined monetary incentives crowd out intrinsic motivation of pupils. A sample of 2,113 high–achieving pupils in secondary schools in Germany was used of which 43% of the pupils were female while 57% were male. This study explored the effectiveness of non-monetary incentives on pupil achievement in mathematics multiple choice test. It failed to explore the relationship between the use of incentives and academic inferiority feelings of pupils

In Liberia, a study was done to explore the nature of motivation used to improve the learning outcomes of Liberian junior and senior high school students. Gbollie and Keamu (2017) carried a correlational research and found out that motivational belief component of extrinsic goal orientation was the most preferred belief by the students. The researcher used a cross-sectional quantitative research design with 323 participants from 2 counties whereby 162 were male and 161 were female. Participants were drawn from 8 public schools and 7 private schools. Motivated Strategies for Learning Questionnaire (MSLQ) was adapted and used. Data analyses were conducted using SPSS 17.0. The findings indicated that extrinsic

motivational belief was significantly correlated to academic performance. Unlike this study, the current study used 400 participants from 20 secondary schools in order to yield a better result. Further, this study only concentrated on academic performance unlike the current one where the researcher explored the relationship between extrinsic rewarding and academic feelings.

Similarly**,** in Malawi incentives were used to motivate top performers on a final exam. Berry et al., (2017) carried out a field experiment to find out the effect of two alternative merit-based scholarship designs (Standard and Relative) for grade 5 to grade 8 students.In both groups, scholarships were being awarded whereby in the Standard program only top performers were awarded regardless of the baseline test score. For those in the relative program one had to reach the baseline score, then they were grouped and only the top performers from each group were awarded a scholarship. Mid-term exams were also administered and feedback randomly provided to a subset of students. As part of the feedback, students were ranked in order performance. Results showed that merit based scholarships, that is, Standardand Relativeprogramsbenefited and assisted improve test scores for the top performers only who were likely to win the scholarships. It killed the motivation to study for those who were less likely to win the scholarships and therefore significantly decreased their test scores.A total of31 public primary schools and 7,386 students participated in the study. This study failed to link the use of incentives to academic inferiority feelings which is the intent of the current study.

Behrman et al., (2015) carried out a field experiment to find out the effect of three performance incentive schemes. A randomized experiment was done among 88 Mexican high schools with over 40,000 students. Three treatment groups were manipulated whereby in treatment 1 individual incentives were given for performance on curriculum-based Mathematics test to students only, treatment 2 to teachers only and treatment 3 to both individual students, teachers and administrators. The control group was not given any incentives, but was subjected to the tests.The results of the study revealed that treatment 3 indicated the greatest impact, a smaller impact was indicated by treatment 1 whereas there was no impact indicated by treatment 2. This clearly indicates that use of incentives leads to a great improvement in performance of students. The study did not investigate on the effect of incentives on low performers who never receive the incentives.

In another study, research was carried out to find out the grade eight students' motivation in learning English after being given rewards at the SMPN 3 Rambah in Malaysia (Kasyulita & Armelida, 2019). A descriptive qualitative research design was employed in carrying out the research whereby a questionnaire and interview were used in data collection. The study was purposely carried out to find out the students' motivation in learning English after being rewarded and their opinion in English learning. Out of the 60 samples used, 57 students were classified in having strong motivation in learning English after being given rewards while 3 students were classified as having fair motivation. The use of

rewards therefore improved students' motivation in learning English. The study did not find out the impact of rewards on academic feelings of the students.

In almost a similar study, Levitt et al., (2016) used a randomized field experiment among high school freshmen in a low performing school to establish the impact of performance based incentives on academic achievement.Various targets like behaviour, grades and test scores were set which had to be met. Financial incentives were given at the end of each month for those who had met their targets.The findings indicated that, monthly financial incentives motivated students to do well in their set targets especially those who were below the achievement threshhold for more than one year.Those in the treatment group therefore continued to outperform those in the control group.Additionally,it wasrevealed that the programme significantly impacted students on meeting the achievement threshold. Students in the treatment group greatly improvedespecially those who were below the achievement threshold as compared to the students in the control group. This trend continued a year after the incentives were stopped particularly for the students who were below the achievement threshold.Boys were found to be more consistent in performance than girls, an indication that they were more responsive to short term rewards than girls.The level of academic inferiority feelings was not measured.

Chao et al., (2015) carried outa field experiment in non-formal schools in Indian slums to find out whether incentives had an effect on school attendance. It was

established that when incentives were given, the average attendance of students was increased but once the incentives were removed the average attendance of students decreased.After incentives were withdrawn, the attendance of students declined especially for those who previously had low baseline attendance. Their test scores also decreased from a previous 78% to 65%. Those with high baseline attendanceand good test scores previously returned to their previous level of performance.A lower self esteem and a lower interest in school among students were also reported.It was therefore concluded that incentives only help a few students but generally it is detrimental to students who are below average whom these incentives are actually expected to help. After the incentives are withdrawn, they become worse than before. The study took place using a sample of 816 grade 3 students across 5 cities. This is unlike the current study that used a smaller sample to specifically investigate the relationship between rewarding and academic inferiority feelings.

Burgess et al., (2016)carried out a field experiment to analyze the impact of rewarding students' efforts on performance of high stakes assessments during one school year. In the study, 10,000 students drawn from 63 low-income high schools participated. Taking advantage of the large sample, they compared between financial and non-financial rewards to find out on the variations of their effects on students' performance.The high-ability students indicated agreat improvement of 10%-20%whilethe low-ability students indicated a slight improvement of 5%. Almost all of them maintained their class positions despite

the improvement. In Math and Science scores, improvement among the high ability students was between 0.16 and 0.20 standard deviations respectively.The study did not focus on the effect of incentives on academic inferiority feelings especially to the low ability students.

In a related study, Adamma et al., (2018) carried out a detailed study on the influence of extrinsic motivation on pupils' academic performance in Mathematics in Owerri Imo State in Nigeria. Using a descriptive research design with a sample of 200 out of a population of 3056 primary six pupils, the study established that motivation due to extrinsic rewarding improves academic performance of pupils. Using the Academic Motivation Scale and the Mathematics Achievement Test, the study revealed that there were gender differences when pupils were extrinsically motivated. The study sought to find out the relationship between extrinsic rewards and academic performance unlike the current study that sought to find out the relationship between extrinsic rewarding and academic inferiority feelings. Furthermore, the study focused only on the use of rewards on Mathematics while the current study focused on the use of rewards generally in academia.

Additionally, Emefa et al., (2020) carried out a literature based study on the impact of extrinsic motivation on junior high school students' interest in reading comprehension in Hohoe Municipality in Ghana. The study revealed that extrinsic rewards are essential factors that directly impact on the development of

comprehension skills. It further revealed that teachers are the real models and motivators in arousing students' motivation. From the literature that was reviewed, the study recommended that teachers should make learning enjoyable and that the classroom should stimulate and increase their confidence and self encouragement. This study examined the impactof extrinsic rewarding in making the classroom enjoyable, stimulating students and increasing their confidence and self stimulation unlike the current study that tries to find out the relationship between extrinsic rewarding and academic inferiority feelings.Furthermore, the study was literature based while the current one used questionnaires and interviews.

In another study, motivation through rewards has been found to be a very important element especially in science subjects which learners always perceive to be difficult (Wangui, 2017). The study was carried out to purposely assess the effect of motivational strategies used during instruction of Chemistry. Form two students and teachers were the targeted from public schools from Thika-east district, Kenya were the targeted population. Interview schedules, observation and Chemistry tests. Using SPSS in data analysis, results indicated that the most used strategy by the teachers promoted extrinsic motivation leading to better performance of students in secondary school especially in chemistry. The researcher recommended the need to sensitize teachers of chemistry on the importance of intrinsic motivation. The study focused on extrinsic rewarding in

relation to academic performance but not academic feelings which is the intent of the current study.

2.5 Interrelationship among Ability Streaming, Ranking, Extrinsic Rewarding and academic inferiority feelings Among Students

Yahaya et al.,(n.d.)sought to find out the correlation between different extrinsic motivational factors, academic self-perception and academic performance in mathematics. The research was carried among students in secondary schools in Negeri Sembilan, Malaysia. In their research, they used 203 form four students who were selected using random sampling method. A self-designed questionnaire was used to collect data. One of the extrinsic motivational factors under investigation was use of monetary rewards which was found to have a significance of 3.34 and standard deviation of 0.55. The findings revealed that students who were given monetary rewards performed better and had a higher self perception as compared to those who were not given monetary rewards. Unlike this study which focuses on extrinsic rewarding and performance in mathematics, the current study focused on the relationship between extrinsic rewarding and academic inferiority feelings in a student's general performance especially for those who were never rewarded.

Another study carried out in Nigeria indicated that gender differences were significant in the academic achievement of highly motivated and lowly motivated students in Mathematics (Abdurrahman & Garba, 2018). When motivated by the

use of rewards, female students perform better as compared to male students whereas without motivation male students perform better than female students. The findings further indicated that females who were never motivated had a low performance in Mathematics and had a low academic self perception. An ex-post facto research design was used with a population of 137,914 junior secondary school students in Kebbi State, Nigeria. A sample of 383 students was used. The study focused on the use of rewards on the performance of male and female students in Mathematics unlike the current study that focused on the use of rewards on academic feelings among male and female students.

Feelings of inferiority due to academic performance may interfere with a student's development (Marta et al., 2018). In this study, inferiority feelings caused by academic performance of students was medium. Using a quantitative research design among 38 students, the study revealed that 50% of the students in the Islamic Junior High School in Negeri experienced medium levels of inferiority. The study did not relate ability streaming, ranking and extrinsic rewarding to academic inferiority feelings which is the intent of this study.

Academic systems tend to compare students or schools in relation to academic performance. Pulford et al., (2018) carried out a study on social comparisons and class rank in academic settings in relation to gender and self-confidence. Using a 27-item scale, academic social comparison was measured in relation to academic self-confidence in a sample of university students. The study revealed that making

a downward academic social comparison was not commonly reported and did not relate to academic confidence. Confidence in speaking, hard Information Technology and numeracy were lower in the students who made more upward social comparison. Additionally, the less the students reported that they were being socially and academically compared, the more confident they were in tasks like reading, writing, and time management. The results further indicated that female students tended to make more upward academic social comparisons and less downward academic social comparisons than male students. The results further indicated that academic confidencewas neither higher nor lower in students who reported to be making more downward academic comparisons. The study further reported a negative impact on academic confidence of upward social comparison in 6-9 weeks. The study investigated a lot on academic self-confidence unlike the current study which carried out an investigation on academic inferiority among high school students.

In another study, the concept of academic futility was used to understand track differences in academic achievement (Houtte, 2016). Student's judgment for future rewarding and willingness to be at school was studied among 4500 first grade secondary school students clustered in 119 tracks in 57 schools. The results indicated that there is a higher sense of academic futility in technical and vocational tracks than in academic tracks. Further in the academic tracks, rewarding of the best performing students intensified the feelings of futility among learners especially those in the lower racks. The study focused on

academic achievement and academic future futility rather than academic inferiority feelings while in school.

In Kenya, a study was carried out on the effect of rewards on teacher performance and school ranking in public secondary schools in Kericho County (Kiprop, 2018). Guided by the expectancy theory, the findings indicated that extrinsic rewards affected the performance of teachers and hence their commitment. This in return improved the schools' ranking. The study was carried out among a population of teachers with a representative sample of 48 teachers who were selected using simple random sampling. A questionnaire was used to collect data. This study failed to find out the relationship between the use of rewards among students and hence their ranking and the impact they had on their academic feelings which the current study investigated.

2.6 Summary of Literature Review

From the literature review, most of the studies have focused on ability streaming, ranking and extrinsic rewarding on academic achievement but not academic inferiority feelings. Most of the studies on academic feelings have observed that, it is a problem among many students. Majority of them have been done in the developed countries among universities, colleges, primary schools and a few in secondary schools. Furthermore, the findings from most of the studies reported a positive correlation between academic inferiority feelings and academic performance. Very few of the studies have sought to find out the relationship

between ranking, ability streaming, extrinsic rewarding and academic inferiority feelings among secondary school students. Therefore there is need for this kind of study to be conducted in Kenyan secondary schools so that, teachers, parents and students can understand the role of ranking, ability streaming, and extrinsic rewarding on academic inferiority feelings among secondary school students. In Kenya, ability streaming, ranking and extrinsic rewarding are the strategies used by teachers to ensure that they achieve academic excellence. These strategies are very detrimental to the students since they create competition which is not healthy. To the low performers, ability streaming, ranking and extrinsic rewarding could be factors affecting them adversely not only by causing a decline on their intrinsic motivation but also by making them feel academically inferior.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

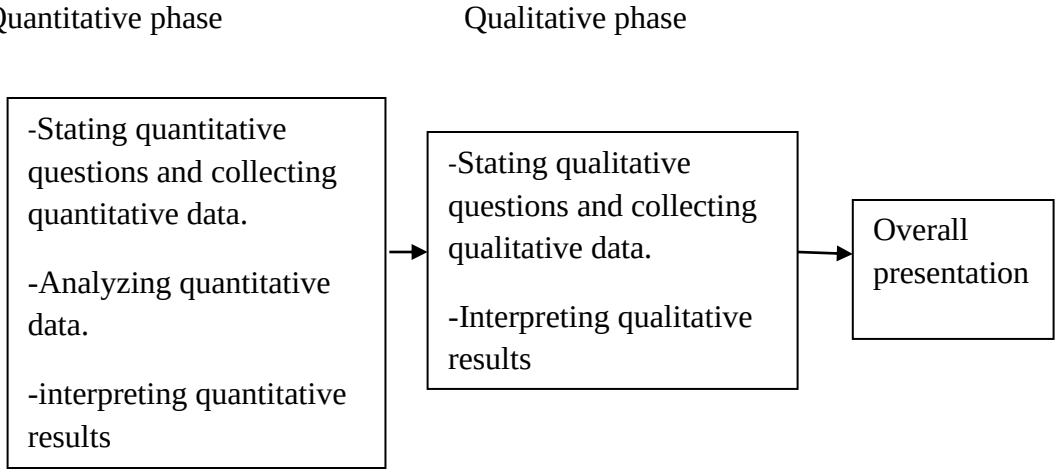
The focus of this chapter is on the methodology that was adopted in conducting this study, more specifically, the research design, research variables, location of the study, population, sampling techniques, samplesize determination, research instruments, data collection and finally data analysis.

3.2 Research Design

Mixed methods sequential explanatory research design was used in the collection of data. This research design involves collecting, analyzing and interpreting both quantitative and qualitative data in a single study (Creswell & Plano, 2011). In this design, the researcher began with the collection and analysis of quantitativedata and then the qualitative datain two consecutive phases as shown in figure 3.1.

Figure 3.1

Quantitative and Qualitative Phases



In the quantitative phase, descriptive survey method was used whereby the use of questionnaires was employed. In the qualitative phase, an interview was carried out in order to better understand the students' academic feelings.

According to Creswell (2013), the mixed methods design yields data that is more comprehensive therefore increasing the generalisability of the results. Furthermore, the method ensures a broader range of research questions as the researcher can use more than one approach. The results from the methods can also validate each other and provide stronger evidence for a conclusion.

3.3Research Variables

In this study, the outcome variable was academic inferiority feelings which was measured at the ordinal scale of measurement. The predictor variables were ranking, ability streaming and extrinsic rewarding of students. Ranking and ability streaming were measured at ordinal scale of measurementwhile extrinsic rewarding of students was measured at the interval scale of measurement.

3.4Locale

The study was carried out in Kisii County, Kenya. This location was chosen because Kisii County is one of the counties that register a high number of students in KCSE. Majority of them could be experiencing academic inferiority and hence do not do well (Onderi et al., 2015). In 2015, when thisstudy was done, the county registered 21,500 students which was 4.11% of the total number of students in Kenya up from 19,969 students in 2014 which was 4.13% of the total number of students in Kenya (KCSE Essential Statistics, 2015). In 2014, the KCSE statistics from the Kisii County Director's office show that, Kisii County had a mean score of about 5.38 points out of the possible 12 points which is an equivalent of a mean grade of C-. In 2015, the mean score rose to a mean grade 5.67 out of the possible 12 points.

In 2018, 26,997 students sat for KCSE. The statistics from the County Director of Education showed that only 12.34% of the students qualified to join the university, with the minimum entry grade of a C+ (Table 3.2) while 87.86% did

not qualify to join the university. The mean for the county was 3.34 in 2018 down from 3.29 in 2017.Ranking of the 11 Sub-Counties was done where the leading Sub-County emerged with a mean of 4.27 and the last one had a mean of 2.58. This was after the Sub-County Directors of Educationranked their schools and submitted the result to the County as shown in Table 3.1.Furthermore, a study done by Makworo et al., (2014) on psychosocial factors affecting academic performance in Kenyenya Sub-County, Kisii County revealed that 51.7% of the girls and 40.5% of the boys have a negative self-concept. He recommended further research on inferiority feelings as one of the factors affecting students' attitude towards secondary school education in the entire Kisii County as their performance is dismal.

Table 3.1

Kisii County Kenya Certificate of SecondaryExamination Ranking (2018)

Sub-County	Rank	No. of candidates	Mean	C+ and above
Masaba South	1	3701	4.74	754
Kisii Central	2	3660	4.07	657
Nyamache	3	3882	3.88	376
Kitutu Central	4	2217	3.65	365
Kenyenya	5	3362	3.32	367
Gucha	6	1011	3.45	119
Kisii South	7	2255	3.24	181
Marani	8	2013	3.16	125
Gucha South	9	2034	2.99	178
Etago	10	1685	2.58	37
Sameta	11	1177	2.12	87
Total		26,997	3.34	3246

Further analysis shows that more than 60% of those who qualify to universities are those from the few top ranking schools while only 40% of the other students are from the low and average ranking schools. In 2011, some schools were elevated to national status by the ministry of education. According to the Kisii

Director of Education, the national schools are top ranking and they also produce many students who qualify to the university though there are other small sub-county schools that compete well with them. The researcher's intention therefore is to find out the real causes of academic inferiority feelings.

3.5Target Population

The target population composed of all the form three students in public secondary schools in Kisii County that have presented candidates for national examinations for at least three years while the accessible population was all the form three students in selected public secondary schools in the Kisii County that have presented candidates for national examinations for at least three years. The form three students are the ones affected by the KCSE national school ranking as they are the next candidate class. According to the 2018 statistics from the Kisii County Director's Office the total number of form three students was 29,309 students from 370schools, a population that made it easy for the researcher to draw a required sample from. Form three students are most preferred because they have been in secondary school for three years and have already selected subjects that they will sit for during K.C.S.E examinations and are therefore expected to be working very hard to achieve their expected target. Mutweleli (2014) noted that, these are the students who are more than ever before expected to be getting more serious with their studies.

3.6 SamplingTechniques and Sample SizeDetermination

3.6.1 Sampling Techniques

Proportionate stratified sampling was used to stratify schools into top ranked schools (National), average ranked schools (Extra County) and low ranked schools(County) and further into boys' boarding schools, girls' boarding schools, mixed boarding, mixed day and boarding and mixed day schools. Simple random sampling was then used to get the required participants from each of the schools that were involved in the study. According to Mugenda (2008) simple random sampling gives each element in the population an equal probability of getting into the sample.

The researcher got the required number of participants by first visiting schools that practice ability streaming, ranking and extrinsic rewarding. The lowest ranked stream among the form three classes was the one specifically targeted as it was the one likely to experience academic inferiority feelings.

3.6.2 Sample Size Determination

A total of 20 schoolswere selected through stratified random sampling. Participants were then randomly sampled from each school using paper folds with 20 of them written 'yes' and the rest written 'no' making a total of 400 students (See Table 3.2). This helped in fulfilling the requirements of efficiency, representativeness and reliability (Kothari, 2004).

Table 3.2

Sample size determination

Population				Sample size		
School category	Schools	Students Girls	Students Boys	Schools	Girls	Boys
Top ranked schools						
Boys' boarding	10	-	1880	2	0	40
Girls' boarding	8	1040	-	2	40	0
Average ranked schools						
Boys' boarding	32	-	3400	2	-	40
Girls' boarding	27	2760	-	2	40	-
Mixed day	10	560	720	2	20	20
Mixed day & boarding	18	760	906	2	20	20
Low ranked schools						
Boys' boarding	25		2720	2	-	40
Girls' boarding	21	2460	-	2	40	
Mixed day & boarding	12	1040	1220	2	20	20
Mixed day	36	1520	2100	2	20	20
Total	200	10140	12946	20	200	200
Grand total	100%	23086(100%)		10%	400(1.73%)	

Source: Kisii County Director of Education

3.7 Research Instruments

This section gives a description of the research instruments that were used to collect data on ability streaming, ranking, extrinsic rewarding and academic

inferiority feelings. The instruments elicited both quantitative and qualitative information on the variables.

3.7.1 Questionnaires

The use of questionnaires was most preferred as it could reach a large audience at the same time and it is also a faster way of collecting data. Questionnaires were used for collecting quantitative data (See Appendix A). They were divided into two parts. The first part consisted of the participant's personal information and school characteristics. The second part sought information on the participant's academic feelings using PASCI's student self-concept inventory and ability streaming using Stephanie Soto Gordon's questionnaire. These two questionnaires were adapted after seeking and getting permission from their developers. Information on ranking and extrinsic rewarding was sought using researcher designed questionnaires. The questionnaire took approximately 25 minutes to respond to. The researcher also used an interview schedule (See Appendix D) to gather qualitative information.

The participants responded to the ability streaming scale, academic ranking scale, extrinsic rewarding scale and academic inferiority scale. A full description of the scales and the scoring procedure is given in appendix A and B. The respondents were required to give their views regarding comprehensibility and clarity of content. The pilot study also helped to reveal whether the anticipated analytical techniques that were used were appropriate. The data of the four scales was

subjected to Cronbach's Alpha reliability whose results yielded a reliability index of 0.91. This was very high and therefore the four scales were appropriate for use.

a) PASCI'S Student Self-concept Inventory

Students' academic inferiority feelings was measured using PASCI (Personal and academic self-concept inventory) which is an extension of the Fleming-Courtney scales (See Appendix C part iv). It is a 20 item questionnaire that seeks to measure students' feelings regarding their academic ability (e.g. "do you ever feel less capable academically than others in your class?") with each item rating on a five point scale from 1 point - *never* to 5 points -*very often*. The scores on the scale range from 20 indicating high academic inferiority feelings to 100 indicating low academic inferiority feelings. A pilot study was carried out on a sample of 48 form three students from three different schools that were not included in the main study. This was done to pretest the questionnaire for purposes of determining the reliability and validity of the questionnaire. After test-retest was done, Cronbach's Alpha reliability was used to determine the instrument's reliability for the current sample. The reliability for this scale was found to be 0.79. This reliability was considered high enough and therefore, the scale was adapted. This questionnaire took averagely 7 minutes to complete it.

b) Stephanie Soto Gordon's Questionnaire on Ability Streaming

This is a questionnaire that was used to collect data on ability streaming (See Appendix C). It was constructed by Stephanie Soto Gordonof the University of Toronto on ability groupings in an ESL (English as a Second Language) secondary classroom in 2010. The questionnaire contained 30 items for the students seeking information on their feelings regarding ability streaming, on a scale of 1 point (*strongly agree*)-5 points (*strongly disagree*). The items were reduced to 20 items for the sake of relevance to the participants. A score of 100 shows low feelings of inferiority while a score of 20 which shows high feelings of inferiority. Permission to use the Stephanie Soto Gordon's questionnaire was sought from the author.

It was subjected to piloting in order to ascertain validity and reliability of the questionnaire. From the pilot study, some questions that were too hard for the participants to understand were modified to make them understandable. After the piloting, Cronbach's Alpha reliability was used to determine the reliability of the questionnaire before it was used. The results yielded an internal consistency of 0.87 as compared to the reported reliability of 0.84 hence its suitability for adaption. The questionnaire took averagely 7 minutes to complete.

c) Academic Ranking Scale

A researcher-developed questionnairewas used to collect data on ranking of students (See Appendix Bii). It is a 20 item questionnaire administered to the students requiring responses on how comfortable they are with ranking of students both within and between schools. Piloting of this instrument was done in 3 schools among 48 participants in order to check on its content validity and reliability. A total of 16 participants were taken from each category of the schools, that is, top ranking, average ranking and low ranking schools. The participants were also selected from three types of schools that is, boarding girls', boarding boys' and mixed day school.

It used a likert scale of measurement for scoring ranging from 1(*strongly agree*) to 5 (*strongly disagree*). A score of 100 shows low academic inferiority feelings while a score of 20 shows high feelings of academic inferiority. After the piloting, Cronbach's Alpha reliability was used to determine the reliability of the questionnaire before it was used. The results yielded reliability index of 0.7. This was considered good enough and therefore the scale was used.

d) Extrinsic Rewarding Scale

An 11 item researcher-developed questionnaire was used to elicit responses on extrinsic rewarding done in schools after students have done well in examinations. It is a questionnaire with a scale ranging from 1 point (*strongly agree*) to 5 points

(*strongly disagree*). It was piloted in 3 schools among 48 participants in order to check on its validity and reliability. A score of 55 shows low academic inferiority feelings while a score of 11 shows high feelings of academic inferiority. The questionnaire took averagely 5 minutes to complete.

3.7.2. Interview Schedule

Students from the low ability streams were interviewed in order to shed light on the findings derived from the quantitativeanalysis. Simple random sampling was used to select 6 students per school to participate. This made a total of 120 students. The qualitative findings were not dependent on quantitative findings neither were they meant to test the quantitative data.

3.8 Pilot Study

Pilot study was carried out as a preliminary study before the main study. It was carried out to ensure validity and reliability of the instruments whereby it was used to determine and address areas of difficulty and those that could be confusing and offensive to the respondent. The research instruments were pre-tested so as to work out any issues that could arise within the group. It was to ensure that the instrument served the purpose they were designed for. The instrument was then revised and used for the main study. A total of 24 students from 3 schools with the same characteristics as those of the target group participated in the pilot study. These students were not included in the main study.

3.9 Validity and Reliability Determination

Validity of Instruments

To ensure content validity and construct validity, a range of items were used for each construct. According to Mugenda (2008), content validity is assured by having enough content and putting the items in a form that can be administered to the relevant population. The instruments were given to peer reviewers and experts from the department of Educational Psychology who judged the validity, relevance and competence of items so as to elicit the anticipated responses. They reviewed the appropriateness of the items selected in order to improve on the content validity. Their recommendations were incorporated in the final scale.

Reliability of Instruments

Reliability of the instruments was done through the test-retest method. This was done during piloting where the respondents responded to the questionnaires for the first time. The same questionnaires were again administered after two weeks to the same respondents. The scores were recorded and correlated to check for their reliability. Piloting was necessary in order develop and test the adequacy of the instruments. It was also done so as to identify any logistical problems relating to the instruments. Cronbach's coefficient alpha was used to check the correlation among the variables in order to determine the level of reliability.

3.10 Data Collection

3.10.1 Logistical and Ethical Considerations

Logistical Considerations

Before starting the research, the researcher first obtained clearance from graduate school Kenyatta University authorizing the researcher to seek clearance from National Council for Science, Technology and Innovation (NACOSTI) to conduct the study. The researcher then sought a research clearance permit from NACOSTI to carry out the research (Appendix F). Clearance was also sought from the County Director of Education (Appendix G) allowing the researcher to carry out research within the schools in the county. Finally, the researcher wrote a letter to the principals in the various selected schools requesting them to allow the researcher to carry out the research in their schools. The researcher then visited the sampled schools and conducted familiarization meeting with each school principal. The purpose of the study and the anticipated benefits of the research to the school were explained to the principals and the appropriate day and time for collecting data was booked.

Ethical Considerations

The participants were informed about the purpose of the research. Confidentiality and anonymity was assured. This was done by reminding the participants not to write their names on the questionnaires. They were also assured that no risks were

to be involved.Finally, a letter of consent was given to the participants so that they were able to participate in the study at their own free will (see appendix A).

3.11 Actual Data Collection

Data collection was done by the use of questionnaires since they were considered to be cheaper, economical to use and free from interviewer bias (Kothari, 2004). The participants were informed about the aim of the study by the researcher. They were given instructions on the completion of the rating scales. They were then given the questionnaires and allowed to complete them. They were informed that it was not an exam and therefore requested to take about twenty five minutes however, time for completion was flexible. All the explanations required by the participants were given by the researcher. After filling the questionnaires, they were handed in to the researcher who thanked the participants for participating.

An interview schedule was conducted after the administration of the questionnaires. This method was appropriate since it yields more detailed information, though it is time consuming (Kothari, 2004). Six students from each school making a total of 120 students were used. The students were selected using simple random sampling. After the informed consent, the interviews were carried out.

3.12 Data Analysis

After data collection, the SPSS programme version 20 was used to analyze quantitative data. The information was then transferred to several tables for tallying. This ensured that the right figures for each objective have been attained. Descriptive statistics was then be used to describe the information gathered through the questionnaires. After which, inferential statistics was used to test the significance of the results obtained concerning ability streaming,ranking, extrinsic rewarding and academic inferiority feelings. The null hypotheses for the study were:

H_{01} There is no significant relationship between ability streaming and academic inferiority feelings among secondary school students. This wastested by Pearson product moment correlation coefficient.

H_{02} There is no significant relationship between ranking and academic inferiority feelings among secondary school students. Thiswastested by Pearson product moment correlation coefficient.

H_{03}There is no significant relationship between extrinsic rewarding and academic inferiority feelings among secondary school students. Thiswas tested by Pearson product moment correlation coefficient.

H_{04}There is no significant relationship between ability streaming, ranking and extrinsic rewarding among secondary school students. The statistical test that was used was multiple regression analysis.

Analysis of qualitative data which is non-numerical was also done in order to derive an explanation concerning academic inferiority feelings. The deductive approach whereby the research questions acted as a guide in grouping and analyzing data was used. This was then used to give the summary and conclusion concerning academic inferiority feelings.

CHAPTER FOUR

FINDINGS, INTERPRETATION AND DISCUSSION

4.1 Introduction

In this chapter, the study findings are presented, interpretations and discussions of the results are also given in line with the stated objectives and hypotheses. This chapter is organized into the following sections;General and demographic information, results, interpretation and discussions of the study.

4.2 General and Demographic Information

This section gives general information on the return rate of the questionnaires and demographic data. It gives information on the type of schools, school ranking and the gender of the respondents.

4.2.1 Return Rate

The researcher visited all the sampled schools and administered the questionnaires to the respondents and ensured that they were properly filled and collected. A total of 399 (99.8 %) respondents filled in the questionnaires properly and handed them over to the researcher. This represents 200 boys and 199 girls.

Table 4.1

Return Rate

School Type	Gender		Expected	Actual	%
	M	F	M and F	M and F	
BB	120	0	120	120	100
GB	0	120	120	119	99.2
MDB	40	40	80	80	100
MD	40	40	80	80	100
Total	200	200	400	399	99.8

Note: BB=Boys Boarding GB=Girls Boarding MDB=Mixed Day and BoardingMD= Mixed day %= Percentage M= Male F= Female

Table 4.1 shows that 120 boys were expected to respond from boys' boarding schools, and all of them properly filledand handed in thequestionnaire to the researcher which made 100 % of the total number of respondents from boys' boarding schools. A total of 120 girls from girls' boarding schools were expected respond, but 119 of the girls properly filledand handed inthe questionnaire which is 99.2 % of the total number of girls from girls' boarding schools. In the mixed day and boarding schools 80 respondents were expected to respond to the questionnaires, that is, 40 boys and 40 girls. All of them (100%) responded to the questionnaires properly and handed them to the researcher. In mixed day schools, 80 respondents were expected to respond from each category, that is, 40 boys and

40 girls and all of them responded to the questionnaire properly and collected them. A total of 399 participants were able to fill in the questionnaires properly and collect them.

4.2.2 Demographic Data

Table 4.2
Type of School and Gender

		Gender				
		M	%	F	%	Total
School type	BB	120	30	0	0	120
	GB	0	0	119	29.8	119
	MD	40	10	40	10	80
	MBD	40	10	40	10	80
Total		200	50.1	199	49.9	399

		M	%	F	%	T	%
School ranking	Top ranking	30	7.5	36	9.0	66	16.5
	Average ranking	98	24.6	97	24.3	195	48.9
	Low ranking	72	18.0	66	16.5	138	34.6
Total		200	52.4	199	47.6	399	100

Note: M= Male, F=Female, T=Total BB= Boys Boarding GB= Girls Boarding MD= Mixed Day MDB= Mixed Day and Boarding %-=Percentage

The participants' gender was cross tabulated with type of school and school ranking and the results are shown in Table 4.2. The table shows that the male participants were slightly more than the female participants (50.1% boys, 49.9%

girls). More male participants (30%) were from boarding schools as compared to mixed day or mixed day and boarding schools which were represented by a total of 20%. The same applies to girls where girls from boarding schools were 29.8% as compared to girls from mixed schools where they were 20%, that is, 10% from mixed day schools and another 10% from mixed day and boarding schools. Almost an equal number of boys and girls participated from boys' boarding and girls' boarding schools (30% and 29.8%). On school ranking, 16.5% of the respondents were from the top ranking schools, 48.9% from average ranking schools and 34.6% from low ranking schools. There were more boys from average ranking schools (26.8%) as compared to low ranking (18.0%) and top ranking (7.5%). More girls participated from average ranking schools (22.1%) as compared to low ranking schools (16.5) and top ranking schools (9.0%).

Table 4.3

Type of school

Type of school	F	%	Cumulative %
Top ranking	66	16.5	16.5
Average ranking	195	48.9	65.4
Low ranking	138	34.6	100.0
Total	399	100.0	

Note: F= Frequency, %= Percent

Table 4.3 shows the number of students from different types of school that participated in the study. A very small percentage (16.5%) were from top ranking

schools, 34.6% were from low ranking schools while almost half of the participants (48.9%) were from average ranking schools. This shows that more students were from average ranking schools as compared to top and low ranking schools.

4.3 Results of the Study

The results of the study were presented in line with the objectives. Descriptive statistics for each objective were given. Inferential statistics was then used to test the null hypothesis followed by the discussion of the findings.

4.3.1 Relationship between Ability Streaming and Academic Inferiority Feelings

a. Description of participants' ability streaming and academic inferiority feelings

The objective of this study was to find out the extent to which ability streaming influences academic inferiority feelings. Ability streaming scores of the participants were analyzed to get the range, mean, standard deviation, skewness and kurtosis as shown in Table 4.4.

Table 4.4

Description of Participants Academic Ability Streaming Score

	Range	Min	Max	*M*	*SD*	*Sk*	*Kur*
ASS	80.00	40.00	137.00	91.36	15.46	-.57	.7

Note: N=399; ASS = Ability Streaming Score; *M*= Mean; *SD*=Standard deviation; *Sk*= Skewness; *Kur*= Kurtosis

The results in Table 4.4 show that the minimum score was 40.00 while the maximum score was 137.00 with a range of 80.00. The mean score was 91.36 and the standard deviation 15.46. The coefficient of skewness was -0.57meaning that the participants rated themselves highly.Kurtosis was 0.7 which showed that the distribution was leptokurtic. This means that the distribution had a longer and fatter tail and its central peak is higher and sharper, meaning that many values concentrated around the mean.

The participants' ability streaming score was further used to categorize the students as having low, moderate or high levels of inferiority feelings.

Table 4.5

Levels of Academic Inferiority Feelings due to Ability streaming

Levels of AIF	F	%
Low	18	4.5
Moderate	331	83
High	50	12.5
Total	399	100.0

Note: AIF= Academic Inferiority Feelings F= Frequency %= Percentage

From Table 4.5 a small percentage (4.5%) of participants displayed low levels of academic inferiority feelings due to ability streaming. Majority of the participants (83%) had moderate feelings of academic inferiority due to ability streaming, whereas another small percentage (12.5) had high levels of academic inferiority feelings due to ability streaming.

Table 4.6

Participant's Academic Inferiority Feelings

	N	Range	Min	Max	Mean	S	skew	Kurt
AIFS	399	67.00	25.00	92.00	64.94	11.24	-.8	1.06

Note: N=Total participants; Min= Minimum; Max= Maximum; S= Standard deviation SK= Skewness; Kurt= Kurtosis

The data in Table 4.6 shows that the range is 67.00 while the minimum score and maximum score is 25.00 and 92.00 respectively. The mean is 64.94, standard

deviation 11.24 and the skewness is -0.8 meaning that the distribution is highly skewed, while kurtosis is 1.06 which showed that the distribution is platykurtic.

b. Hypothesis Testing

Hypothesis testing was done to find the relationship between ability streaming and academic inferiority feelings. The following null hypothesis was tested:

H_{01}: There is no significant relationship between ability streaming and academic inferiority feelings.

Table 4.7

Relationship betweenAbility Streaming and Academic Inferiority Feelings

		ASS	AIF
ASS	Pearson Correlation	1	.305
	Sig. (2-tailed)		.000
	N	399	399
AIF	Pearson Correlation	.305	1
	Sig. (2-tailed)	.000	
	N	399	399

Correlation is significant at the 0.01 level (2-tailed).

Note: ASS=Ability Streaming Score AIF=Academic Inferiority Feelings

This hypothesis was tested by subjecting the data to a bivariate correlation analysis using Pearson's product moment correlation co-efficient. The results showed that, there was a significant and positive relationship between ability

streaming and academic inferiority feelings r (397) = .31, p =0.00 as shown on Table 4.7. The null hypothesis was therefore rejected.

c) Discussion of results

This finding shows that there is a significant relationship between ability streaming and academic inferiority feelings. According to Wildy and Johnston (2018), streaming students into ability groups leads to increased inequity. Though teachers preferred this system because of the homogeneous characteristics of the students, the weaker students suffered as they felt less equal to the others. These findings did not support the findings of the current study. The findings by Aguero and MacCabe (2020) do not support this hypothesis. According to this study, ability streaming at the beginning of secondary education intensifies instrumental motivation of the high ability group making them more at ease and in control of their academics. The low ability group is never motivated and therefore they experience more ambivalence over transition. Similarly, the current findingsdid not support the findings of Taylor and Francis (2019) whereby ability grouping was found to be a poor practice bringing about inequity among students. According to the study, this was due to inequitable and inaccurate allocation of students into the groups.

The findings of this study were contrary to what Akdoğan and Çimşir (2019) found out from their longitudinal study. From their investigation, majority of the students experience self-concealment and consequently loneliness due to

inferiority feelings. This denies a student subjective happiness while in school. These findings support the findings of the current study.

Beard (2018) also noted of the negative effects of tracking on the lower achieving tracks that mostly comprised of African-American students. In order to cater for the students' well being and academic achievement, there was need for detracking. This could also help in equitable distribution of both human and material resources.

A study done in Malaysian schools was also supported by the current study. In Malaysia, students of different abilities were allocated different streams so that their individual needs could be attended to in their various educational settings (Mansor et al., 2016). This was a management strategy whereby streaming resulted to permanent groupings of students for the whole year. The previous year's examination results were used as placement criteria. According to the study, streaming resulted to inter-group comparisons that were in favour of the higher ability group. The high ability group had high levels of self-esteem and confidence which enabled them to perform better than the rest. Streaming also limits peer support that lower ability students could have got from the higher ability groups. At the same time, it was discovered that streaming led to teachers practicing double standards and hence paying less attention to the lower ability groups. Teachers often claimed that, the lower ability class had discipline issues as compared to the high ability group.

The findings of the current study were in favour of Ramberg (2016). The study argued that grouping of students into different groups according to ability exposes students to an increased level of differentiation. It adversely affects the low achievers' academic perception and hence academic achievement. This poses the risk of delinquency, dropout, low self esteem, inferiority complex and other social problems.The high achievers are always advantaged in terms of academic achievement and personal well being. Madeline and Koshy (2016) in their study also concluded that though ability grouping is advantageous to the high achievers' group, sometimes it creates pressure on them so as to maintain a standard. It also creates fear of being moved to a lower group if they do not measure up to the required standards. For the low achievers, mixed ability grouping makes them feel more relaxed and confident.

The findings of the current study did not support the findings of Chiu et al., (2017) which revealed that grouping similar students together may affect their reading achievement in school. Streaming that is done within schools and tracking that is done within classrooms based on past literacy skills, family socio-economic status and reading attitudes is usually detrimental to the low achievers' reading achievement.The study revealed that fourth-grade students had higher reading test scores when their schoolmates had similar reading and writing skills (school streaming) across schools but not across classrooms within schools. It was

therefore concluded that streaming was linked to higher reading achievement while tracking was linked to lower reading achievement.

Stabler et al., (2017) reported that the academic self-concept of low achieving students is negatively affected when they are sorrounded by the high achieving students. This brings about the effect of big-fish-small-pond effect (BFLPE). According to the study, class average achievemnt affects individual student's academic achievement and academic self-concept.The results of the study further showed that class average achievement at the beginning of the school year and the negative effect on academic self-concept at the end of the school year were mediated by mid-term achievement but not mid-term academic self-concept which had a long term effect.

The findings of the current study also supported the findings of Becker and Neumann (2016). From the study, it was noted that ability streaming benefited high achievers mostly. It was observed that equally able students are more comfortable and perform better in low-achieving classrooms than when in high-achieving classes, an effect commonly known as BFLPE.On the contrary the findings of the study did not support Trangard et al.,(2015) which revealed that achievement of students' schoolmates and tracking was only relevant to students' academic self-concept and the level of engagement among the low ability students and not on their academic feelings.

The current study supports Dumont et al., (2017) that those who achieve low have a low academic self-perception. On the other hand, Tereshchenko et al., (2019) reported that students with lower prior attainmentpreffered mixed attainment grouping and spoke positively about it while students with higher prior attainment were not for mixed attainment grouping and spoke negatively about it. The lower prior attainment group performed better in classes of mixed ability as compared to students of higher prior attainment whose performance remained the same when placed in classes of mixed ability.According to Houttte and Stevens (2015), students in the lower track were more likely to lose faith in education than other students and put luck above working hard. They developed a sense of futility because of their low rank position. In support of the current study, Mazenod et al., (2018) also noted that teachers labelled students in specific attainment classes according to their expectations of the group. The study further observed that low attaining students were given more practical work as teachers strongly felt that these students could not manage some activities done by the high attainment group. These made the students in the low attainment classes have a low academic perception about themselves and hence felt inferior.

Francis et al., (2017) noted that within school segregation of pupils by attainment had a damaging impact on the self-perception and the academic feelings on students in the low attainment group. Tracking also produces inequalities among student outcomes (Giersch, 2016) where students in the upper track perform better

than those in the lower track.After testing, chances for success in college for the upper track students was highly predictable just like chances for failure for lower track students. The tests were a clear evidence to the lower track students that their chances of success were very low hence low academic inferiority feelings. The findings of this study were in support of the findings of the current study.

4.3.2 Relationship between Ranking and Academic Inferiority Feelings

a.Descriptive Analysis on Academic Ranking

The participants' academic ranking was analyzed using the academic ranking scores. The analysis was done in order to get the range, the mean, the standard deviation, skewness and kurtosis of the scores. The results were presented in Table 4.8.

Table 4.8

Description Analysis of Academic Ranking

N		Range	Min	Max	Mean	SD	Skewness	Kurtosis
ARS	399	63.00	27.00	90.00	60.00	12.40	-.07	-.18

Note: N=399 Min= Minimum Max= Maximum SD=Standard Deviation

The results in Table 4.8 show that the minimum score was 27.00 while the maximum score was 90.00. The mean score was 60.00 while the standard deviation was 12.40. The coefficient of skewness was -.07, the kurtosis was -.18

and the range was 63.00. The distribution of academic ranking scores was negatively skewed (skewness = -0.07) meaning that the distribution is approximately symmetrical and kurtosis of -0.18 which shows that the distribution of the values was platykurtic.

The participants' academic ranking score was further used to categorize the participants' academic inferiority feelings as being low, average or high. The findings of the levels of academic ranking are presented in table 4.9.

Table 4.9

Levels of Academic Ranking

Levels	F	%
Low	37	9.3
Moderate	291	72.9
High	71	17.8
Total	399	100.0

Key: F- Frequency %- percentage

Results from Table 4.9 show that majority of the participants have moderate feelings of inferiority, that is, 72.9%. 17.8% of the participants have high feelings of inferiority while a small percentage of the participants, 9.3% have got low feelings of inferiority.

b. Hypothesis Testing

Hypothesis testing was done to find the relationship between ranking and academic inferiority feelings. This is in line with the second objective of the study. The following null hypothesis was used:

H_{02}: There is no significant relationship between ranking and academic inferiority feelings among secondary school students.

Table 4.10

Relationship betweenRanking and Academic Inferiority Feelings

		AIF	ARS
AIF	Pearson Correlation	1	.276
	Sig. (2-tailed)		.000
	N	399	399
ARS	Pearson Correlation	.276	1
	Sig. (2-tailed)	.000	
	N	399	399

Correlation is significant at the 0.01 level (2-tailed).

Note: AIF=Academic Inferiority Feelings ARS=Academic Ranking Score

The hypothesis was tested by subjecting the data to bivariate correlation analysis using the Pearson's product moment correlation coefficient.

The results in Table 4.10 show that, there was a significant and positive relationship between ranking and academic inferiority feelings r (399) = 0.28, p =0.01. The null hypothesis was therefore rejected.

C. Discussion of Results

The current study supported the findings of Kalaivani (2017). According to the study, ranking has become a norm in most schools. Students who are ranked low usually develop feelings of inferiority. The study discovered a positive relationship between inferiority and academic achievement. On the other hand the current study did not support the findings of (Slyusarenko, 2020) which revealed that ranking was used as a mechanism to measure the quality, performance and effectiveness of higher education in Ukraine. It necessitated some institutions to work towards quality and better performance so as to rank among the top institutions.

The findings of the study did not support the findings of Silva et al., (2020) who found out that a student performance and ranking in the national examinations was largely used to place the student in the university. This greatly determined the student's success in higher levels of learning and consequently success in future challenges. However, according to John et al., (2020) ranking of schools into various classes according to socioeconomic status affected the students' academic performance while the students in the low rank performed dismally. In the long

run, there is an ever widening gap in the performance of students in the low ranking schools and those in the high ranking schools.

The current study did not supportAlves(2017)which investigatedthe schools' ranking in the opinion in directors of secondary schools. The study found out that external evaluation of school and hence ranking threatens schools with loss of recognition, loss of additional funds and poor academic performance of students. Njiru et al., (2019) indicated that performance ranking assisted teachers and students in getting feedback on their various levels of capability as either mathematics teachers or mathematics students.It was also used to influence teachers to further their studies in mathematics and other areas. It further indicated teachers of mathematics are friendlier to students who are at the top of the rank, and therefore performance ranking served as a motivation for students to work hard so as to have a good relationship with their mathematics teachers.

The current study supports the findings of Limangura (2018) on stakeholders' perception towards ranking in secondary schools' national examinations. 53% of theteacher respondents believed that only students who are ranked high are motivated to work harder and maintain a higher rank while the ones who rank low are never motivated to work harder. Only 29.5% disagreed on the same while 23.5% of the respondents were undecided. 87% of the principals spoke of ranking impacting negatively on performance in schools more especially on the low performers.Among the student respondents, 66.4% argued that since ranking was

abolished, they are more comfortable since no one cares about their performance. Only 27.1% are comfortable with ranking while 6.6% were undecided. Similarly, Berry et al., (2017) also revealed that ranking improved test scores for high performers only while it killed the motivation to study for the low performers.

The current findings partly support the findings byOambar (2018). The study revealed that district rankingdisadvantaged students who were ranked low in the district. Those who ranked top always performed well in their national examinations while those who ranked low always performed dismally in the national examinations.Similarly, the current findings support the findings of Murphy and Weinhardt (2018) whereby ordinal rank position influenced non-cognitive skills especially feelings of inferiority and superiority among students. According to the study, a higher rank position meant more confidence and higher feelings of superiority.On the other hand, low rank position meant low confidence and high feelings of academic inferiority.

The current study reports contrary findings to Njiru et al., (2014) who revealed that ranking helps students to rank themselves as they identify themselves with their peers who are of the same ability within their classes. In mathematics, it is a motivation for students to work hard so as to get a closer relationship with their teachers as teachers are friendlier to students who rank top. This was reported after subjecting students and teachers to semi-structured interviews whereby 68% of the teachers and 68% of the students were for performance ranking.

Samuels (2014) reported similar findings to the findings of the current study whereby the education system contributes a lot to the formation of inferiority complexes among students. He found out that comparisons and competition among students often leads to inferiority complex.

4.3.3 Relationship between Extrinsic Rewarding and Academic Inferiority Feelings

a. Descriptive Analysis of Extrinsic Rewarding

The participants' feelings on extrinsic rewarding was analyzed to get the range, mean and standard deviation of the scores. The results are presented in table 4.11.

Table 4.11

Description of Extrinsic Rewarding Scores

	N	R	Min	Max	Mean	SD	Sk	Kur
ERS	399	36	15.00	51.00	33.87	6.7	-.27	-.24

Key: ERS- Extrinsic Rewarding Score, R-Range Min-minimum, Max-maximum, SD-Standard Deviation, Sk- Skewness, Kur-Kurtosis

The results in Table 4.11 show that the range was 36; minimum score was 15.00 while the maximum score was 51.00. The mean was 33.87 and the standard deviation was 6.7. The coefficient of skewness was -.27 meaning that the distribution is approximately symmetrical while the kurtosis was -.24 meaning that the distribution was platykurtic.

The participants' extrinsic rewarding score was further used to categorize students' academic feelings into high, moderate or low. The results are shown in Table 4.12.

Table 4.12

Levels of Extrinsic Rewarding

Levels of extrinsic rewarding	F	%
Low	27	6.8
Moderate	296	74.2
High	76	19.0
Total	399	100.0

Note: F=Frequency %= percent

Table 4.12 shows that majority of the participants (74.2%) have moderate academic inferiority feelings due to extrinsic rewarding, while 19.0 % have high feelings of inferiority due to extrinsic rewarding. Only 6.8% have low feelings of inferiority due to extrinsic rewarding.

b. Hypothesis Testing

In order to determine the relationship between extrinsic rewarding and academic inferiority feelings, the following null hypothesis was tested.

H_{03}: there is no significant relationship between extrinsic rewarding and academic inferiority feelings among secondary school students.

Table 4.13

Relationship betweenExtrinsic Rewarding and Academic Inferiority Feelings

Correlations

		AIF	ERS
AIF	Pearson Correlation	1	.315
	Sig. (2-tailed)		.000
	N	398	398
ERS	Pearson Correlation	.315	1
	Sig. (2-tailed)	.000	
	N	398	399

Correlation is significant at the 0.01 level (2-tailed).

Note: AIF=Academic Inferiority Feelings

ERS=Extrinsic Rewarding Score

This hypothesis was tested by the use of bivariate correlation analysis using Pearson's product moment correlation coefficient. The results showed that there

was a significant positive relationship between extrinsic rewarding and academic inferiority feelings (r (397) =0.32, =0.01), (as shown in Table 4.13). The null hypothesis was therefore rejected.

C. Discussion of the Results

The current study supported the findings ofFatimah (2017), whereby it was revealed that offering a reward made students happy and enthusiastic in learning. According to the study, when teachers offer rewards the students' attitude and perception in learning improves.Similarly,Putra (2019) found out that the use of rewards in learning English made students enthusiastic, happy, excited and more motivated to learn English. Negative rewards were given to those who did not do well in English which the teachers found to be an inconveniencing punishment. This study partly supported the current study. On the other hand, a literature review from a research done by Sri and Syahrilfuddin, (2020) did not highlight on the effect of extrinsic rewarding on academic feelings but on students' motivation in learning Mathematics. According to the research done, it was noted that students become more enthusiastic in participating while learning Mathematics and their self-confidence increased too. These findings did not support the current study.

The findings of this study did not support Warnick(2017) where it was noted that paying cash for grades raised philosophical and ethical questions. It was evident that such incentives did not work to increase academic performance. It was found

to be more coercive and corruptive than the currently accepted educational practices.

Wagner and Riener (2015) found out that proper use of incentives motivates the students to prepare well for tests and reduces the anticipated negative effects that are associated with external rewards among low performers. This brings about a better performance among the low performers as they tend to choose rewards that are valuable to them and to their parents.These findings donot support the current study. The study further found that there existed significant gender differences with the use of incentives on the pupils. The test performance of boys significantly decreased in the treatment (-3.661, P= 0.005). This decrease was not statistically significant for girls. The same findings were reported by Burgesset al., (2016) where incentives lead to the increase in test performance for both the high performers and the low performers.

Berry et al., (2017) revealed that incentives significantly reduced the test scores and motivation to study for the low performers who were least likely to win scholarships. Incentives only motivated the top performers who constantly won the incentives and therefore always positively responded to the program. This revelation was in support of the current study.On the contrary, Kasyulita and Armelida, (2019) reported that use of rewards on students with low motivation in learning English led to the students developing a strong motivation in learning English.

The results of the study are in support of the study carried out by Chao et al., (2015) where incentives were given for school attendance. It was reported that incentives increased the average attendance of the students and consequently an improvement in academic performance. High ability students registered the same school attendance and academic performance during when incentives were given and after the incentives were withdrawn. On the contrary, low ability students' attendance and academic performance declined greatly after incentives were withdrawn. The study further reported lower interest in school and display of lower expectations for the low ability students. They tended to show some psychological inferiority in themselves. The incentives did not help the students it was meant to help but instead it adversely affected them.

The current study was not in support of Puspita(2018) whereby the results indicated the use of rewards and punishments were embraced by students as they motivated them. The use of praise, respect and gifts made them improve on their grades while the used of physical punishments when appropriately applied motivated them to improve on their behavior and academic performance. On the contrary, Puspitasariand Usman (2020) revealed that not all rewards can increase learning motivation. The high achieving students believed that the use of rewards increases learning motivation whereas the low achieving students did not see any impact in giving rewards. In another study, Fryer (2011) also established that in the United States, students were paid to read books, for getting good classroom grades and for good performance on interim assessments. The impact of all this

was statistically 0.Gbollie and Keamu (2017) found out that students preferred extrinsic motivation and could only perform well when promised rewards. This has helped to damage intrinsic motivation among students. The results of the study showed a strong correlation between extrinsic motivational belief and academic performance.

The current study supported the findings of Berry et al., (2017) that merit based scholarships significantly decreased test scores especially for those that were less likely to win the scholarships. It only improved test scores and self-perception for high performers. It also revealed that ranking which is an incentive in itself improved test scores for high performers only while it killed the motivation to study for the low performers.

Behrman et al., (2015) revealed that financial incentives and non-financial incentives were equally effective for younger students while older students only responded well to financial incentives. The motivation of older students died immediately incentives were withdrawn while for younger students, motivation lasted for sometime before it completely died.Generally, the study found out that all motivating power vanishes when incentives delay and absence of immediate incentives leads to low effort among students and hence low performance. Levitt et al., (2016) indicated that there is a great and significant effect among students enabling them to meet their set achievement standard. When compared with the control group, those who are given incentives outperform their peers who are

never given incentives even a year after the use of incentives stopped. Therefore the overall effect of incentives is modest and has assisted in academic improvement of students.

Similarly, Adamma et al., (2018) found out that extrinsic motivation went a long way in assisting the pupils improve their academic performance. Wangui (2017) also found out that motivation due to extrinsic rewards helped students improve their performance in chemistry. The findings of these studies partly supported the findings of the current study.

4.3.4Relationship between ability streaming, ranking, extrinsic rewarding and academic inferiority feelings

The researcher investigated the relationship between ability streaming, ranking and extrinsic rewarding as variables that predict academic feelings of students.

b. Hypothesis Testing

The following null hypothesis was tested in order to determine the relationship between ability streaming, ranking, and extrinsic rewarding in relation to academic inferiority feelings.

H_{04}: there is no significant relationship between ability streaming, ranking and extrinsic rewarding among secondary school students.

Multiple regression analysis was used to test the hypothesis.

Table 4.14

Model Summary on the Relationship between Ability Streaming, Ranking and Extrinsic Rewarding

Model	R	R Square	Adjusted R Square	Std. Error Estimate
1	.4[a]	.14	.126	10.51

Predictors: (constant). ARS, ASS, ERS

Key: ARS- Academic Ranking Score, ASS-Ability Streaming Score, ERS-Extrinsic Rewarding Score

The resultant multiple regression table provides *R, R^2* adjusted *R* and the standard error of estimate. Table 4.14 shows that the value of R, that is, the multiple correlation coefficient is 0.4 which indicates a moderate level of prediction. The *R* Square (the coefficient of determination) is 0.14 which means that predictor variables explain 14% of variability of the outcome variable.

a. Discussion of Results

Houtte (2016) found out that academic achievement of students in the lower track led to future academic futility. Track differences, academic achievement and rewarding of the best performers led to the intensification of future futility. Students in technical and vocational tracks were more affected by tracking than

Table 4.15

One way Anova

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6787.767	4	1696.942	15.368	.000[b]
	Residual	43395.662	395	110.422		
	Total	50183.430	399			

a. Dependent Variable: AIF b. Predictors: (Constant), ARS, ASS, ERS

Key: AIFS- Academic Inferiority Feelings Score, ARS- Academic Ranking Score, Score, ASS- Ability Streaming Score, ERS- Extrinsic Rewarding Score

The *F*-ratio in table 4.15 tests whether the overall regression model is a good fit for the data. The table shows that the independent variables statistically significantly predict the dependent variable, F (4,395) =15.368, P<.0005. This significance shows that the null hypothesis was rejected.

students in academic tracks. These findings did not support the current study.

In another study, rewards for teachers improved their performance and hence the ranking of their schools. Basic salary, overtime payment and cash for scores significantly affected performance for teachers in Kericho County, Kenya. The current study did not support these findings.

4.4 QualitativeAnalyses

Qualitative research is important as it gives the interviewee greater freedom of expression and the ability to give authentic answers without any restrictions. Data that is collected in qualitative research is based on people's perception and opinion. The data is therefore dependent on participants' observation and personal experiences.

Qualitative analysis is done in order to get a personal insight perspective of the respondents' views on their academic feelings. It gives the respondent the opportunity to express themselves more on various issues. The qualitative component provided insight on issues that are not provided for or those that are not exhaustively addressed by the quantitative methods. The respondents' broad views and their realistic feelings are explored using qualitative methods. Furthermore, qualitative research allows for detail-oriented data to be collected. Restrictions are minimized and therefore many details are given. It is within the

details that genuine insights tend to be found. It enables the researcher to explore the respondents' views of the world.

4.5Qualitative Findings

Data was collected though not without some few challenges. Firstly, a lot of clarification had to be done for the respondents to fully understand the questions. Despite the much clarification, some still answered some questions irrelevantly. For this reason, not all the responses were provided for in the findings. Only data from the respondents that was well interpreted and responded to giving correct information was presented. Some respondents were not able to respond well in the English language, therefore from time to time Kiswahili language was used in communication. Their responses were then interpreted and recorded in English.

Four respondents from each school were interviewed separately so as to get their views on academic feelings. One of the problems encountered is that some of the respondents especially girls were shy and took time to be free with the interviewer. Therefore in the first few minutes, they could only give one word answers and then later once they became more free, they could provide exhaustive answers. In some schools, especially the day schools, it was a challenge for most of the respondents to express themselves in English. The use of Kiswahili was very common even to the extent that some of the questions had to be explained further to them in Kiswahili so that they could have a better understanding of the questions. The respondents seemed to understand some of the issues under focus

though some of the issues seemed to confuse them. A lot of explaining and clarification had to be done before they could exactly comprehend some of the aspects under study.

The results presented revolve around the objectives of the study on ability streaming, ranking and extrinsic rewarding which predict academic inferiority feelings. Diverse ways in which academic inferiority feelings occur were illustrated in various ways during the interview in regard to experiences in school. Regarding the treatment of students from different streams by the teachers, Beryl said without fear that she hates some teachers because they also hate them especially the girls from their class. According to her, this is because their class is always attributed to failure. “Our class is form 3 Green which is always ranked last in exams, and every teacher in fact hates us”.

Linet from Beryl’s class confessed that she overheard a teacher tell another that our class is so hopeless and there is no need of teaching them. When she was asked how this makes her feel, she said that she does not struggle to get good grades, after all nobody will appreciate her. She openly revealed that she takes the last position in class and this does not affect her at all. Previously she could be punished because of the poor performance, but she prefers to stay outside doing a punishment rather than being taught in class by teachers who hate her. Furthermore she also does not care about what the other students think of her when she takes the last position in class.

Silole reported that there is nothing she hated as watching others get awards while her only duty was to clap for them. “Since I joined secondary school, I have never received an award, even when I show great improvement, nobody appreciates me’’.Mary, a new girl in the school does not have friends in school. She happened to be behind the syllabus from her former school, but nobody is willing to lend her notes to copy. Unfortunately the grade from her former school was an ‘E’ and for this reason, all girls seem to discriminate her. This has made it hard for her to cope with boarding school life as her former school was a day school.

Ombasa, who is in a mixed school, reported that he wishes to move from his class to any other class. He wishes he could get boys who are hard working so that he can join in on discussion groups. The members of his class are all jokers and they do not like reading. He says that he cannot approach members of the other classes because they look down upon the members of his class. Grace also gave the same sentiments. Her worst moment in school is during the release of exams. “I do not like the way teachers call out our names on parade for a thorough scolding when we fail exams”.

According to Vincent, their school ranks among the last not only in joint exams but also in co-curricular activities. Therefore anytime they participate in a competition, he is always sure that they will rank among the last schools. Ombati notes that their stream (Form 3D) is always ranked last during exams where either

form 3A or form 3B ranks top. “That is why teachers have labeled us as form 3dander heads)’’. The whole class has therefore despaired because they feel that nothing good can come out of them. George who could barely express himself well in English simply said that school is just like jail. “I was made to repeat form three and am simply tired of school)’’. Kaiser who is from the same class as George and Ombati says that he is comfortable in his class. He says that the whole class just needs to work hard and they can make it. He says that he is only uncomfortable when teachers do not appreciate them when they show some improvement.

Some respondents with low academic inferiority feelings reported that they do not have a problem with the ranking that is done within their school. When asked about what he feels when he is ranked among other students who perform better than him, Richard said that it challenges him to work harder so that he can better his performance. “What I don’t like is the scolding from the teachers and lack of appreciation when one improves”, he says.Just like Richard, Abuga reported that though he does not perform to the teachers’ expectations, he does not mind the ranking that is done at school. What he hates is the way the result is displayed on the notice board so that everyone even from form one gets to know their position in the class. He also hates the labeling that is done by the teachers and the other students. “They call our class form three ‘Waste’ instead of form three West because they believe that we shall all go to waste”

Joshua, who suffers from very high academic inferiority feelings seems not to be bothered about performance. When asked on how often they do exams, he irrelevantly explains how he hates to be in school especially boarding school, he had rather be in a day school. “I do not like the way we are always doing exams which do not help us. Exams are for those who do well and those who are always rewarded wasting the school resources. I do not feel comfortable in this school,” he adds. When asked about the position he takes in his class, he is adamant to talk about it.

Kennedy who is in the same class feels almost the same way too. He says that for the teachers who insist on a good result, he always has to find a way of cheating of which he has always succeeded in doing. At one point he has performed so well and was given an award after cheating almost in the whole paper. “ It felt nice when my name was called out on parade, clapped for and then later awarded for showing the greatest improvement in that subject”.

Beatrice confesses that most part of the term she is absent from school. She avoids exams as much as possible because after all she knew she will always be promoted to the next class. “Nobody can make me repeat a class, it is against the government policies. The only exam I will be serious about is the KNEC exam. Nobody cares whether I perform well or not, after all, I always take the last position in class”. Daisy, who happens to be a friend to Beatrice says she also has

no interest in doing exams, in fact she never revises. “Exams are for those who perform well”, she says. Though she refused to reveal the position she takes in her class, she said that she would never desire to change her stream, because according to her, they are all at the same level unlike the other classes where they are all hard working.

Verah and Juliet who seem to have low academic inferiority feelings seem very different from their colleagues in the same class. They rank themselves above average and they feel that they are in the wrong class. They said that they could do better if they were in a different stream where there is competition. They enjoy discussion groups especially when they are mixed with students from the better performing streams. “I don’t blame our teachers for calling us lazy because most of our classmates are lazy”, says Juliet.

4.6Discussion of Findings

The objective here was to dig deeper and find out how much ability streaming, ranking and extrinsic rewarding predict academic inferiority feelings. From the quantitative data analysis it was evident that majority of the students from low performing classes experience high academic inferiority feelings. From the qualitative data majority of the students who suffer from high academic inferiority feelings do not care a lot about school. They are just in school to complete the system without minding much about their performance.

Form the interview, ability streaming predicts academic inferiority feelings more than ranking and extrinsic rewarding. This arises especially from the way the students are treated by the teachers which is demeaning. This makes them feel inferior to an extent that they cannot join in on group discussions with other students or even interact freely with them.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter is divided into four main sections. The first section consists of the summary of the findings of the study, the second section shows the implications of the findings, the third section, conclusions based on the findings are drawn and finally the fourth section gives the study recommendations for policy and further research.

5.2 Summary of the Findings of the Study

This study was formulated to investigate the predictors of academic inferiority feelings among form three students in Kisii County, Kenya. The study also investigated the gender differences in academic inferiority feelings. The study explored the interaction effect between the type of schooland ranking of the school.

The first objective of the study was to establish the relationship between ability streaming and academic inferiority feelings among secondary school students in Kisii County. There is evidence that there exists a significant and positive relationship between student ability streaming and academic inferiority feelings. Majority of the students suffer from moderate academic inferiority feelings that is caused by ability streaming. It is only a very small percentage of students who

experience very low levels of academic inferiority due to ability streaming and another small percentage of students form high levels of academic inferiority feelings.

The second objective of the study was to determine the relationship between ranking and academic inferiority feelings among secondary school students. It was found out that there was a significant and positive relationship between academic ranking and academic inferiority feelings. Majority of the students displayed moderate academic inferiority feelings due to ranking as compared to a small percentage of students with very high and very low levels of academic inferiority feelings.

The third objective of the study was to establish the extent to which extrinsic rewarding relates to academic inferiority feelings among secondary school students. It was discovered that there was a positive and significant relationship between extrinsic rewarding and academic inferiority feelings whereby majority of the students displayed moderate academic inferiority feelings. A small percentage of the students suffer from high academic inferiority feelings though a smaller percentage of students suffer from low feelings of academic inferiority due extrinsic rewarding.

The fourth objective was to investigate the relationship between ability streaming, ranking and extrinsic rewarding among secondary school students. The current

study found out that is a significant relationship between ability streaming, ranking, extrinsic rewarding and academic inferiority feelings.

5.3 Conclusions

This study has resulted intovarious conclusions. The results have presented some evidence of existing relationship between ability streaming, ranking, extrinsic rewarding and academic inferiority feelings. Firstly, from the study, there was evidence of positive and significant relationship between ability streaming and academic inferiority feelings. From the quantitative analysis, ability streaming leads to moderate feelings of inferiority among students. The high performing students tend to do well when grouped according to ability unlike the low performing students who do poorly when grouped according to ability. The high performers tend to feel more superior as compared to low performers who feel inferior. The low performers feel discriminated, isolated and looked down upon when grouped separately. From the qualitative findings, majority of those placed in the lower ability stream experience high levels of academic inferiority. They feel discriminated against and have lost all hope.

Secondly, the study showed that ranking which is highly embraced within majority of the school systems has positive and significant influence on academic inferiority feelings. It was found that ranking intimidates the low performers and the low performing schools. In the national exams, ranking of schools and students is not done but in most schools, within-school ranking is usually done.

According to the qualitative analysis, ranking which is done and then displayed to the other students tends to create feelings of inferiority among low achievers and makes them academically inferior to the others. Students in the low performing schools tend to given up and they are almost sure that no matter how much they work, they cannot measure up to the standards of the high performers.

Thirdly, it was evident from the analysis that giving rewards had a significant and positive relationship with academic inferiority feelings. From this research, it is clear that tangible rewards tend to boost the self-concept of those awarded, but greatly disorients those who are not awarded especially when they have struggled to improve on their low grades. It creates high levels of academic inferiority in them.

Finally, the analyses between ability streaming, ranking and extrinsic rewarding were hypothesized to have a positive significant predictive value on academic inferiority feelings. In schools where students are ranked and then streamed according to ability, they were found to have high academic inferiority feelings. This is made worse when rewards are given to the high ability stream and the high achievers. Those not rewarded develop feelings of academic inferiority.

5.4 Recommendations

Based on the findings of the study, the following recommendations for policy and further research were made:

5.4.1 Policy Recommendations

a) To the Ministry of Education

i. Since ranking was found to have positive and significant influence on students' academic inferiority feelings, the ministry of education should intervene into the education sector to ensure that teachers stop ranking students especially within school.

ii. The Ministry of Education should also make an intervention towards ability streaming which is done in schools. It should advice the school management on the impacts of ability streaming which has been found to have a positive and significant predictive value on academic inferiority feelings.

iii. Too much emphasis is laid on exams for one to transit from one level to another. The government through the Ministry of Education should advice the policymakers to come up with strategies that schools can employ to overcome the over-emphasis on examinations resulting to low esteem and low achievement orientation which finally results to academic inferiority feelings.

iv. The ministry should re-evaluate the streaming of students into those that join national, extra county and county schools which is done according to

the performance of pupils in their Kenya Certificate of Primary Education (KCPE). With this type of streaming students in the county day schools happen to be the ones who scored very low marks and will persistently score low marks because after all that is where they feel they belong. Intervention should be sought so that these students in the low performing county day schools do not feel academically inferior to those in the high performing national and extra county schools.

b) To teachers

School guidance should be done on teachers on the effect of extrinsic rewarding on students. Teachers should also be encouraged to look for alternative ways of motivating students who do well without discouraging the ones who are not able to do well. Teachers should try to inculcate and embrace intrinsic motivation among the students rather than extrinsic motivation. Any little improvement on the low performers should also be appreciated.

c) To parents

Parents should also be advised not to put too much pressure on their children but should understand and appreciate their academic potential.

d) To students

Students should do their best regardless of the stream they are in and where they are ranked as they mostly do not have control over school policies.

5.4.2 Recommendations for Further Research

The following suggestions were made in consideration for further research:

i. Findings of this study have shown that ability streaming, ranking and extrinsic rewarding have a significant and predictive value on academic inferiority feelings. However, the study was among form three students only. There is need for further research among the rest of the classes in secondary school.

ii. The results of this study carried out in one county will be generalized to the rest of Kenyan secondary school student population. There is need for further research in the rest of the counties in order to control for the effects of cultural, geographical and economical differences.

iii. The findings of this research have indicated that ability streaming, ranking and extrinsic rewarding are great contributors of academic inferiority feelings. Further research should be done to determine whether there could be other factors apart from these ones that could contribute to academic inferiority feelings. Home and other school factors like grading and class retention should be studied to find out their contribution to academic inferiority feelings.

iv. From the study, it was assumed that ability streaming, ranking and extrinsic rewarding were the only factors that led to academic inferiority feelings which obviously affects their academic performance in class.

Further studies should consider investigating other possible consequences of the above predictors in schools apart from academic inferiority feelings.

v. This study was done with students from secondary schools only. A similar study should be replicated to students from different levels of learning to include primary schools, colleges and universities so as to find out the extent to which ability streaming, ranking and extrinsic rewarding relates to academic inferiority feelings at these levels of learning. The measurement scales used in the study should be modified and standardized so as to suit the students from the different levels of learning.

vi. The current study targeted the student population only as participants. A similar study should be done to include principals, teachers, parents and other stakeholders who greatly contribute to the education sector.

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APPENDICES

Appendix A: Consent Form for Students' Questionnaire

I agree to participate in the study entitled "Predictors of Academic Inferiority Feelings Among Secondary School Students in Kisii County, Kenya" conducted by Mogaka Moraa Sakina as part of her PhD research.

From the researcher's introduction, I understand the purpose of the study fully.

I understand that, upon request, I may have a full description of the results of the study after its completion.

I understand that the researcher intends to publish the findings of the study.

I understand that participation is voluntary, and that I am free to withdraw from this study at any time without negative consequences.

I understand that the information that I will give will be treated with utmost confidentiality.

I HAVE READ AND UNDERSTOOD THIS CONSENT FORM AND I AGREE/DO NOT AGREE TO PARTICIPATE IN THE STUDY.

Date _____

Appendix B: Student's Demographic Information

Please read the following questions carefully and fill in the blank spaces or put a tick (√)

1. Are you ☐ Male
   ☐ Female
2. Name o your school? _____
3. Type of school
   Boys' boarding ☐
   Girls' boarding ☐
   Mixed day ☐
   Mixed day and boarding ☐
4. What is the level of your performance?
   a) A
   b) B
   c) C
   d) D

Using the scale below, indicate what you feel about being allocated to streams according to performance in your school. Tick the right choice in the spaces provided.

Totally agree (TA) Agree (A) Undecided (U) Disagree (D) Totally Disagree (TD)

1 2 3 4 5

i. Stephanie Soto Gordon's Questionnaire on Ability Streaming

		TA 1	A 2	U 3	D 4	TD 5
1	I like working with students of almost the same performance as mine					
2	Teachers are available to provide me with the time I need for learning in my class.					
3	I like classes where we are grouped according to performance because we move at the same pace.					
4	In classes with students of the same ability, sometimes I find the work too hard.					
5	In classes with students of the same ability, I am able to do a lot of independent work with the help of my friends.					
6	In classes with students of the same ability, we cannot assist each other because we are all at the same level.					
7	Classes with students who have the same ability have no fun because there is no competition.					
8	I cannot do well because I lack an opportunity to share with students of different academic performance.					
9	Sometimes I feel angry because some teachers spend more time in the classes with better performing students than the rest.					
10	I like working in groups with students who have different performance abilities.					
11	My performance has been hampered due to ability streaming.					
12	Ability streaming encourages me to work harder towards					

	better placement.					
13	I am happy with my participation in the community outside the school such as jobs and clubs.					
14	When grouped in classes according to ability, I feel more superior to others.					
15	I feel I cannot fit well in a different stream than mine.					
16	Ability streaming does not provide intervention for improvement for those in the lowest stream.					
17	I feel discriminated by my fellow students especially those in the better performing streams.					
18	When I am with students from other classes, I sometimes fear to join in on discussions					
19	When I am in class with students from other streams, I am not able to ask for help.					
20	When students from other schools come to our school, I feel too shy to get involved in activities.					
21	Ability streaming has led to negative perception of myself.					
22	Outside class, I am too shy to get involved in activities.					
23	Ability streaming encourages poor performance especially in the lower performing streams.					
24	I am never excited about studying.					
25	In my class, some teachers do not help us to feel positive about ourselves.					
26	I am not happy sometimes because some teachers do not make themselves available for us.					
27	Sometimes I am nervous to speak in class because other students may laugh at me.					
28	When doing group work, I like working with students who are at the same academic level as I am.					
29	Class assignments are always too hard for me.					
30	I just hate school because teachers have labeled us according to our ability.					

ii) Academic Ranking Scale

1	Performance is never a concern to me ever since ranking was abolished.					
2	I am not comfortable with the grading system in my school.					
3	I work very hard because I want to be ranked top.					
4	Am always anxious when exam results are about to be released to us.					
5	I do not mind the position I take in class, as long as I get the grade I want.					
6	It makes me feel uncomfortable when another student gets to know the grades I score in exams.					
7	I do not like the teachers' comments at the report book for example excellent, poor.					
8	Some students cheat in exams because they fear to be ranked bottom and hence being punished.					
9	I do not like it when our results are pinned on the notice board.					
10	I will do anything it takes to get a grade that will take me to the university					
11	We long left top rank positions to the top schools.					
12	Students who are ranked low are made to repeat the same class.					
13	Those who rank low are always caned or given punishment by the teachers.					
14	I never work hard because I will never make it to the top.					
15	I will avoid exams if possible					
16	When teachers praise me for good results, I fear because I may not maintain my position.					
17	I am always afraid that people may find out that I am not as capable as they think I am.					
18	I tend to remember the incidents in which I have not done well more than those I have done well.					
19	I sometimes get afraid when I think of the grade I will score in KCSE because others will discover how much ability I really lack.					
20	I feel discouraged if I am not ranked top in examinations.					

iii)Extrinsic rewarding

1	Am happy when those who excel are given awards in school					
2	I do not mind when other students get awards and I do not get					
3	Awarding students after every exam is a great expense to the school					
4	Any time I am clapped for after I do well, I get the urge to work harder.					
5	Any time I improve in my exams, my parent/guardian awards me.					
6	I never put more effort because no matter how much I improve, nobody recognizes me.					
7	My teacher never appreciates me, even if I improve. He/she always scolds me.					
8	I feel more motivated when I get award like money, books and sweets after a good performance.					
9	Awards should be used more than verbal or written praise.					
10	I only work hard because I know I will get an award					
11	I feel bad because some teachers like punishing those who do not perform well.					

iv) PASCI's (Personal and academic self concept inventory) on academic inferiority feelings

Never rarely undecided often very often

1 2 3 4 5

		Never 1	Rarely 2	Undecided 3	often 4	Very often 5
1	How often do you think of yourself as an outgoing student?					
2	How often do you worry whether people will regard you as a success or a failure in school?					
3	How often are you troubled with failure in exams?					
4	Do you ever think that you have more ability in academics than most of your classmates?					
5	How often do you feel less capable academically than others in class					
6	How often do you feel you have a greater ability to read and absorb articles and textbooks than most students?					
7	Most of the time, do you genuinely like yourself?					
8	How often do you often think of yourself as a generally competent person who can do most things well?					
9	Do you feel confident about your academic abilities?					
10	How often do you think you lack ability to do well in some subjects?					
11	How often do you worry about criticisms that might be made by your teachers?					
12	Are you frequently concerned about					

	your ability to do well in school?					
13	How often do you feel proud of or pleased with your academic performance?					
14	When you have done an exam or assignment, how often are you worried or concerned about it?					
15	How often do answer questions in class and feel convincingly confident that you have got them right?					
16	How often do you feel that your academic performance is far below that of your classmates?					
17	How often are concerned that your school performance is not as expected?					
18	How often do you feel that your teachers hold you in high regard?					
19	Do you sometimes feel that your teachers don't accept you the way you are?					
20	I often feel that the others around me are more intelligent than I am.					

Appendix C: Consent Form for Interview Schedule for Students

I agree to participate in the study entitled "Predictors of Academic Inferiority Feelings Among Secondary School Students in Kisii County, Kenya" conducted by Mogaka Moraa Sakina as part of her PhD research.

From the researcher's introduction, I understand the purpose of the study fully.

I understand that, upon request, I may have a full description of the results of the study after its completion.

I understand that the researcher intends to publish the findings of the study.

I understand that participation is voluntary, and that I am free to withdraw from this study at any time without negative consequences.

I HAVE READ AND UNDERSTOOD THIS CONSENT FORM AND I AGREE/DO NOT AGREE TO PARTICIPATE IN THE STUDY.

Date _____

Appendix D: Interview Schedule for Students

Ranking

1. How many exams do you do in a term in your school?
2. How are the results released to you? Are they pinned on the notice board or they are read out to you?
3. When results are released, which position do you usually take?
4. Are you comfortable with your position rank?
5. Given a chance, are you able to do better than this?
6. How comfortable are you when other students get to know about your performance?
7. In your county, in what position does your school rank?
8. How important is it to you when others students know that your school can never measure up to their school?
9. When you go out for competitions with other schools, do you sometimes feel that your school can not do well as other schools?

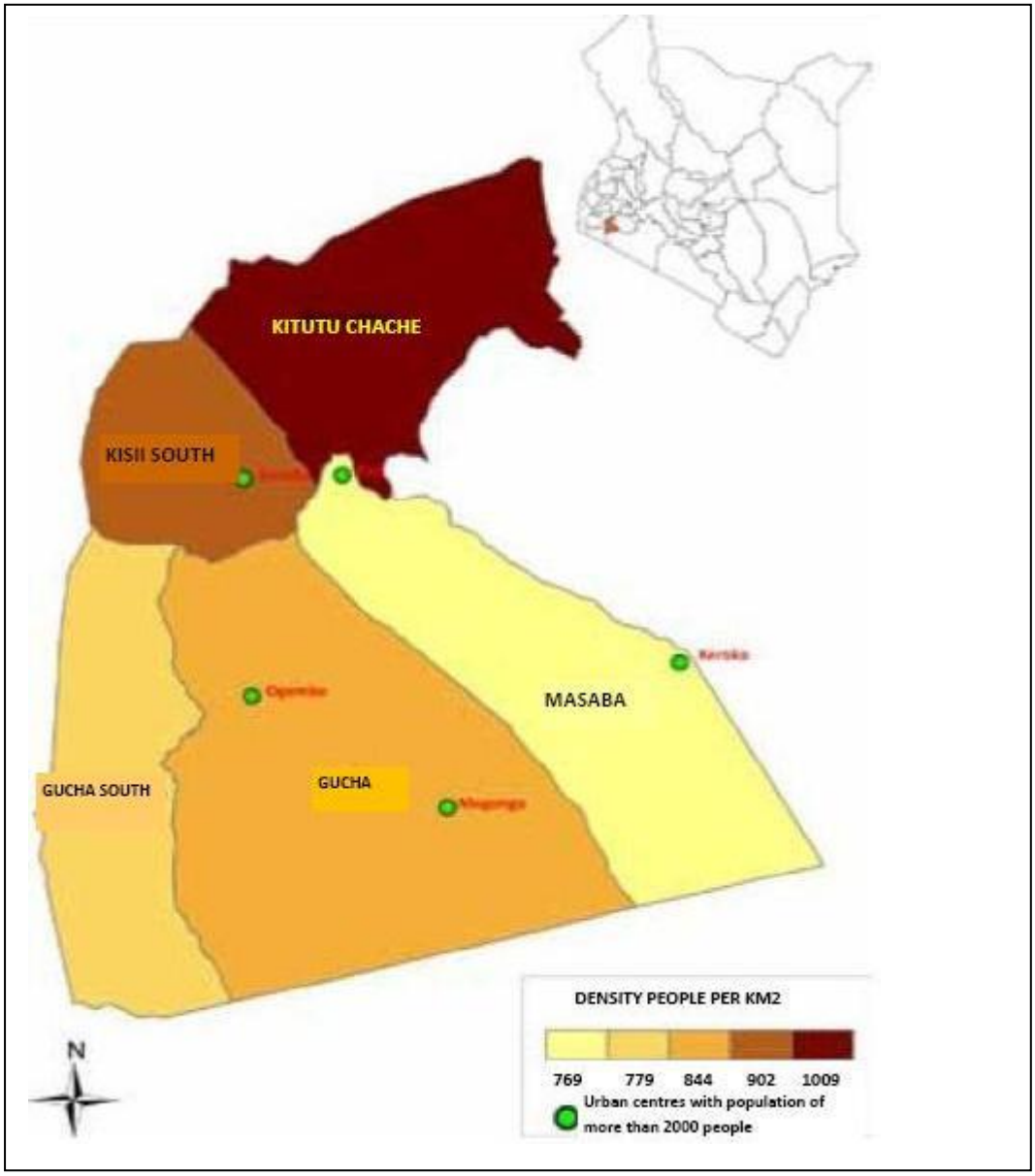
Ability Streaming

1. Which is your stream?
2. Does the name of your stream suggest the academic ability of your stream?
3. Which criteria do teachers use to classify you into various streams?
4. If you were given a chance to shift to another stream which one would you opt for? Why?
5. In your view, do your teachers treat the students from different streams equally?
6. Do you think of yourself as a student who is below or above average?
7. If you were to be placed in a different stream, will your performance be better?
8. Why do you think some streams don't perform as well as others?
9. If you are to put together with students from other streams, how freely would you participate in a group discussion?

Extrinsic Rewarding

1. After the release of exams, are those who do well rewarded by the teachers? How?
2. Have you ever shown some improvement in an exam? How were you rewarded by the teachers?
3. Have you at one time not performed as per the teachers' expectations? What did the teachers do about it?
4. Are you ever awarded when you improve in your exams?
5. Does receiving or missing of an award make you perform better or worse?
6. What efforts do you put to ensure that you also get awar

Appendix E: Area of Study Map

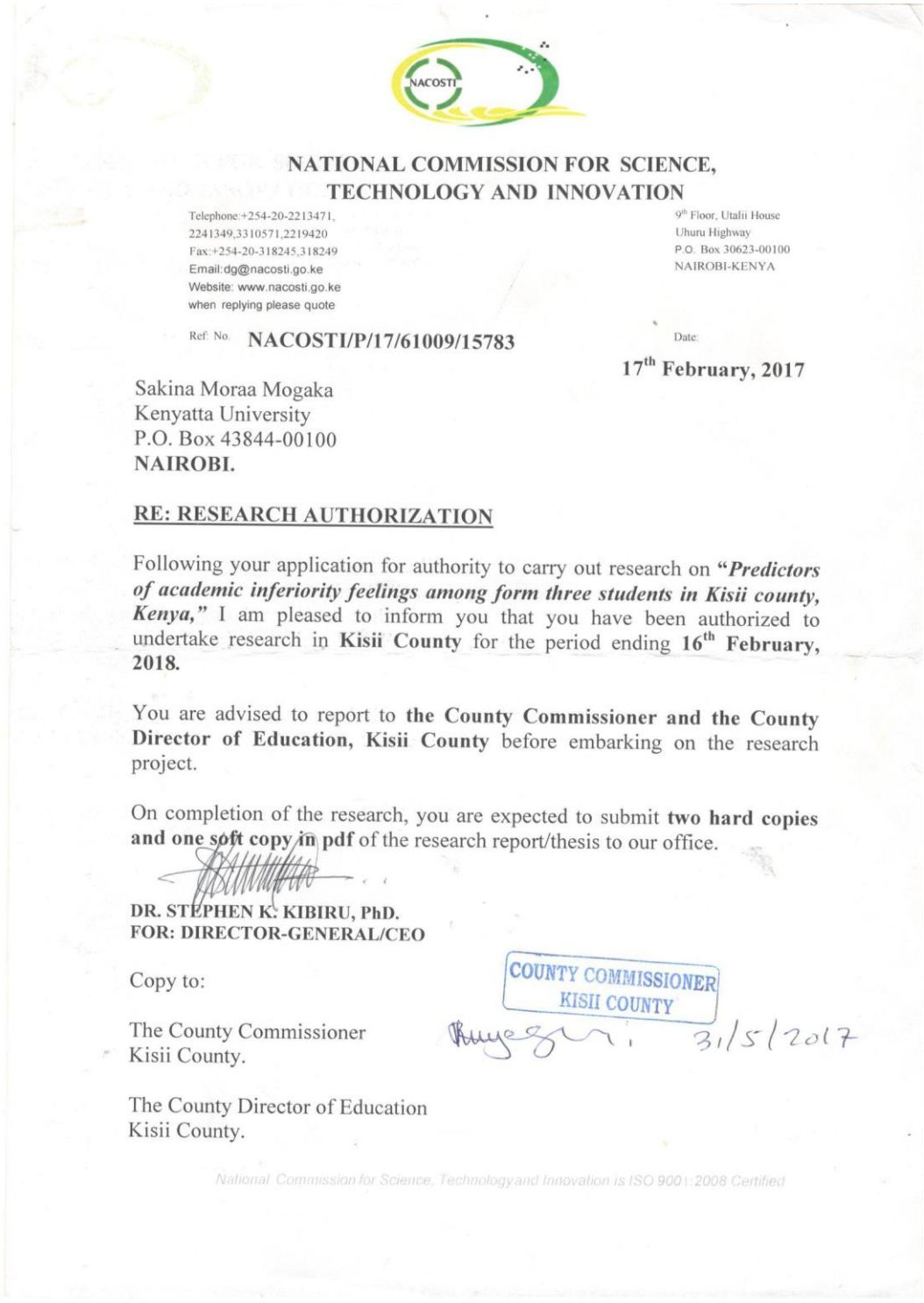


Key

N - North

KM – Kilometres

Appendix F: Research Authorization



NATIONAL COMMISSION FOR SCIENCE,
TECHNOLOGY AND INNOVATION

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NAIROBI-KENYA

Ref: No. **NACOSTI/P/17/61009/15783**

Date: **17th February, 2017**

Sakina Moraa Mogaka
Kenyatta University
P.O. Box 43844-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Predictors of academic inferiority feelings among form three students in Kisii county, Kenya,"*** I am pleased to inform you that you have been authorized to undertake research in **Kisii County** for the period ending **16th February, 2018.**

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

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

DR. STEPHEN K. KIBIRU, PhD.
FOR: DIRECTOR-GENERAL/CEO

Copy to:

COUNTY COMMISSIONER
KISII COUNTY
31/5/2017

The County Commissioner
Kisii County.

The County Director of Education
Kisii County.

Appendix G: Research Clearance Permit

THIS IS TO CERTIFY THAT:
MS. SAKINA MORAA MOGAKA
of KENYATTA UNIVERSITY, 0-40200 KISII,has been permitted to conduct research in *Kisii County*

on the topic: *PREDICTORS OF ACADEMIC INFERIORITY FEELINGS AMONG FORM THREE STUDENTS IN KISII COUNTY, KENYA*

for the period ending:
16th February,2018

.....
Applicant's Signature

Permit No : NACOSTI/P/17/61009/15783
Date Of Issue : 17th February,2017
Fee Recieved :Ksh 2000

.....
Director General
National Commission for Science, Technology & Innovation

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 Officer 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

REPUBLIC OF KENYA

National Commission for Science, Technology and Innovation

RESEACH CLEARANCE PERMIT

Serial No.A 12956

CONDITIONS: see back page