

**ACADEMIC OPTIMISM, SCHOOL ANXIETY, AND FEAR OF
FAILURE AS ANTECEDENTS OF ACADEMIC ACHIEVEMENT AMONG
FORM THREE STUDENTS IN KITUI COUNTY, KENYA**

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**A RESEARCH THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE
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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 for consideration. This research Thesis has been completed by referenced sources duly acknowledged. Where text, data (including spoken word), graphics, data, tables have been borrowed from other sources, including the internet, the sources have been specifically accredited through referencing in accordance with anti-plagiarism regulations.

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DEDICATION

This thesis is dedicated to my beloved parents Alice and Late Stephen with profound gratitude who modeled hard work and resilience throughout their lives without always receiving much appreciation while doing so. To my brothers John, Joseph and Sister Ann for their continuing support.

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ABBREVIATIONS AND ACRONYMS

AOTS	: Academic Optimism Total Scores
ERB	: Ethic Review Board
FFTS	: Fear of Failure Total Score
FoF	: Fear of Failure
GPA	: Grade Point Average
KCPE	: Kenya Certificate of Primary Education
KCSE	: Kenya Certificate of Secondary Education
KNEC	: Kenya National Examination Council
MOE	: Ministry of Education
NACOSTI	: National Commission for Science Technology and Innovation
SAI-SVQ	: School Anxiety Inventory – Short Version Questionnaire
SAOQ	: Student Academic Optimism Questionnaire
SATS	: School Anxiety Total Scores
SPSS	: Statistical Package for Social Sciences
USA	: United States of America

ABSTRACT

Secondary schools in Kenya have been recording poor grades in national examinations in the last five years (2017-2021). This poor performance is worrying because it limits students from joining higher institutions of learning alongside securing jobs in the competitive market. Research has associated poor academic achievement with contextual and psychological factors. This study intended to examine students' academic optimism, school anxiety, and fear of failure as antecedents of students' academic achievement. The primary objective was to ascertain the existence of a correlation between academic optimism, school anxiety, fear of failure, and academic achievement. The predictive weight of academic achievement was also determined given academic optimism, school anxiety, and fear of failure. Martin Seligman's theory of optimism, theory Albert Bandura's social cognitive and Birney and Teevan's fear of failure theory were used to guide this study. The research used an ex post facto research design, and was conducted in Kitui County, Kenya. This research targeted the entire form three students in government sponsored schools in Kitui County in 2023. The sample consisted of 400 students in form three who were chosen from 10 different schools. The schools and participants were selected through purposive and stratified sampling procedures. Simple random technique was also used. Student's academic achievement was inferred from their end of term 2, year 2023 examinations scores. Piloting of the study was done using 20 form three students in schools within Kitui County. The study used descriptive and inferential statistical procedures to analyze the data. Specifically, it used Pearson's Product Moment Correlation Coefficient, Multiple regression and ANOVA. Results from the analysis revealed that student's academic optimism had a positive significant relationship with academic achievement ($r(386) = 0.12, p < 0.05$). On the other hand, school anxiety and fear of failure had a significant negative relationship with academic achievement ($r(386) = -0.24, p < 0.05$); ($r(386) = -0.15, p < 0.05$) respectively. School anxiety was found to be the best predictor of academic achievement scores followed by academic optimism which had a significant and positive predictive value $\beta = -0.22, t(386) = -3.96, p < .05$ and $\beta = 0.13, t(386) = 2.72, p < .05$ respectively. Findings on exploratory analysis reported that student's academic optimism, school anxiety and fear of failure varied by school type. This study may benefit educational policymakers by providing them with insights on developing educational practices that make a school a more pleasant environment for its students.

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 Introduction

The chapter entails the background to the study, a statement of the problem, the purpose of the study, the study's objectives, the research hypothesis, and the significance of the study. It also presents assumptions of the study, limitations, and delimitations. It also discusses the theoretical framework and conceptual framework. Finally, the terms used in the study are operationally defined.

1.2 Background to the Study

Academic achievement is widely regarded as the most important predictor of success worldwide. According to Hagen et al. (2021), academic achievement is the student's class performance as judged by grade reports, teachers' observations, and self-perception. Students with high grades are given priority in training and job positions, which seems to legitimize grade competition in the society (Chan, 2016; Succi & Canovi, 2020). The authors, however, argue that students who receive poor examination results have fewer opportunities for training and employment. As a result, students' academic achievement is a top priority for educators, psychologists, researchers, and policymakers worldwide (Wheatley, 2018).

Poor academic achievement has attracted research attention as it remains a significant international concern. According to the Program for International Student Assessment (PISA) despite the governments worldwide actively engaging in initiatives to enhance student performance, students have consistently continued to record poor grades (Gamazo et al., 2018). In the USA, Perry and Ramon (2016) reported that despite the efforts made by the educators, and the government, student's academic achievement

seemed to deteriorate. Further, they reported that among the factors affecting academic achievement was attitude and teaching. Perry and Ramon (2016) give recommendations on other variables that predict academic achievement.

In Africa, despite many governments investing heavily to ensure students achieve academic excellence, academic underachievement has been recorded in various countries. In South Africa, a decline in education standards and quality have been reported in Botswana (Makwinja, 2017). In West Africa, evidence points at academic underachievement as one of the key issues in education in countries like Ghana emphasizing the need to search for factors that may enhance learner's academic achievement and take care of the falling educational standards (Ani, 2017).

In Kenya, good academic achievement in secondary schools is highly valued as it prepares students for vocational training or university education (Kaburi, 2019; Kieti, 2018; Wara et al., 2018). However, performance indices show that academic achievement remains very low among secondary school students (Kaburi, 2019; Kitur et al., 2020). Despite the fact that the candidature for the KCSE has been rising for the past decade, the national pass rate has continually remained low (Kitur et al., 2020). For instance, the KCSE national means for 2017, 2018, 2019, 2020, and 2021 were 4.03, 2.72, 3.95, 3.71, and 3.82, respectively (KNEC, 2021). Additionally, most KCSE candidates have consistently received low grades that have limited their chances to advance in their education and employment. Notably, in the KCSE results for the years 2017, 2018, 2019, 2020, and 2021 where only 123365, 169492, 149717, 117,602, and 121,216 students scored C+ (minimum qualification to university) and above, respectively (KNEC, 2021).

It should be noted that previous KCSE performance reveals consistent county-specific disparities, and Kitui County is notable with contrasts in KCSE performance. In the years 2017, 2018, 2019, 2020, and 2021, for instance, the County registered means of 4.89, 4.10, 4.52, 3.89, and 3.93, respectively. Even more significant, the means for the sub-counties in Kitui showed a stark contrast in KCSE means over the previous five years. Of interest is the Mwingi North Sub-County, which registered KCSE means of 3.48 in 2017, 3.21 in 2018, 2.92 in 2019, 3.10 in 2020, and 2.96 in 2021. These poor performance trends highlight the importance of investigating various predictors of academic achievement among secondary school students in Mwingi North Sub-County.

As part of the effort to come up with knowledge and novel interventions for improving academic achievement in secondary schools, studies on variables that influence secondary school students' academic achievement have been carried out in Kenya (Ireru, 2015; Muthoni & Mutweleli, 2020; Muthui & Mutweleli, 2020; Mutua et al., 2020; Mwangi et al., 2018; Mwaniki et al., 2020; Ngunu et al., 2019; Oyoo et al., 2020; Wara et al., 2018). Despite interventions by researchers, governments, and other stakeholders, the low performance of students in KCSE persists. Although the aforementioned studies were well articulated and can be used to further knowledge about academic achievement, they have not adequately solved the problem of academic underachievement. Some of these studies have focused on generally academic achievement in Kenya, which does not specifically represent the situation in Mwingi North in Kitui County. Most studies have focused on Nairobi and Kiambu Counties, which are largely urban or peri-urban counties. Students from different counties may have educational experiences that contrast those of their counterparts in such counties. Notably, the aforementioned studies have not specifically investigated how academic

optimism, school anxiety, and fear of failure relate to academic achievement in Kitui County.

Several researchers, (Ardura and Galán, 2019; Ates & Ünal, 2021; Azeem, 2018; Bal-Taştan et al., 2018; Jiang et al., 2021; Khesht-Masjedi et al., 2019; Konaklı & Uysal, 2022; Sharma & Pandey, 2017; Wara et al., 2018; Zarrin et al., 2020) investigated various variables influencing public secondary school learners' academic achievement. These scholars seem to agree that academic optimism, school anxiety, and fear of failure are all controlled by the orbitofrontal cortex in the brain, hence the relevance of these variables to student's achievement which is also controlled by that part of the brain.

Academic optimism is a concept that pertains to the collective beliefs, attitudes, and expectations held by members of an educational institution (such as teachers, administrators, and staff) regarding the overall effectiveness and potential for success of that institution. Anderson et al. (2018) reported that irrespective of socioeconomic status, academic optimism has a direct connection with academic achievement and may affect a student's level of accomplishment. Students' academic optimism is believed to anchor on factors such as collective efficacy, academic emphasis, and faculty trust (Montecinos et al., 2022). Collective efficacy posits that parents, teachers, and faculty can influence student learning positively, whereas academic emphasis refers to push or press for behaviors in a school aimed at students' academic achievement (Ates & Ünal, 2021). Faculty trust, on the other hand, describes that when teachers, parents, and students work together, students' learning can improve. Academic optimism creates a positive and supportive educational environment that fosters high expectations,

collaborative efforts, and a belief in the potential for success. This, in turn, can lead to improved academic achievement for students.

The relevance of school anxiety as an antecedent of academic achievement is underscored in several current studies. According to Azeem (2018), anxiety is an excited state of the nervous system, resulting in a sense of tension, nervousness, and worry inflicted on an individual. School anxiety is a type of anxiety connected and related to academic situations (Da et al., 2014). Some students, driven by school anxiety, fail to realize their full academic potential in a setting that allows them to demonstrate their abilities to the greatest extent possible (MacCann et al., 2020). In addition, Steinmayr et al (2018) argue that school anxiety has an inverse relationship with academic achievement through irrelevant thoughts, preoccupation, reduced attention, and concentration. Other researchers argue that learners found with high degrees of test anxiety perform poorly and are to a lesser extent motivated to strive for excellence (Azeem, 2018; Khesht-Masjedi et al., 2019).

Fear of failure refers to the desire to avoid failing because being seen as incompetent can make a person feel ashamed, embarrassed, and humiliated (Jackson, 2017). According to Mofield and Peters (2021), fear of failure is a powerful motivator for many successful people. On the contrary, the fear of failing at something can be vital since it is connected to accomplishment, mental health, moral development, and physical health (Amin, 2020). Stress related to fear of receiving poor grades and pressure to achieve high grades can cause students to become apathetic or disengaged from their studies, resulting in poor performance (Martins et al., 2018). Evidence shows that students confronted with the fear of performing poorly in their academic endeavors may engage in risky behaviors like procrastination as they avoid the consequences of

their actions (Cooper et al., 2018; Kaur et al., 2021; Ronnie and Philip 2021). In light of this background, the proposed study aimed to explore the relationship between academic optimism, school anxiety, fear of failure and academic achievement among secondary schools in Kitui County. In addition, it aimed to study the predictive model of academic optimism, school anxiety, and fear of failure on academic achievement.

1.3 Statement of the Problem

Academic achievement among students in the KCSE examination in Kitui County has declined for the last five years (2017 to 2021). In the same period, compared to the National mean score, Kitui County has recorded a relatively higher mean. However, Mwingi North Sub -County mean scores have remained lower than both the national and the county mean scores. Poor academic achievement within the county may lead to many students losing the opportunity to join higher institutions of learning alongside securing jobs in the competitive global market. Students who miss these rewarding life opportunities may have reduced earning potential, which may be associated with financial problems later in life. Additionally, if this problem is left unaddressed, students may become disengaged in education and develop a cycle of poor educational attainment. Furthermore, it may lead to the widening of the achievement gap between different socioeconomic groups in the society. Therefore, it is necessary to investigate further some of the variables linked to either low or high academic achievement.

The study's background makes it quite clear that academic optimism, school anxiety, and fear of failure are essential variables in predicting students' academic achievement. However, most research on these variables has been done in developed countries. Furthermore, few studies concentrated on secondary school students, with the majority concentrating on college and university students. Given different socio-cultural factors,

students from developed countries may have different educational experiences from that of their counterparts in mostly, developing countries. Furthermore, from a developmental perspective, the study variables may vary among students attending higher educational institutions of learning and those in secondary schools. For instance, it is unclear how these three variables (academic optimism, school anxiety, and fear of failure) can predict secondary school student's academic achievement in a developing country like Kenya.

In Kenya, most of the educational researchers who have done related studies on psychological constructs influencing student's academic achievement have focused on academic identity status, achievement goals, academic resilience, academic mindsets, academic motivation, self-regulated learning, self-handicapping and defense pessimism (Ileri, 2015; Mukolwe, 2015; Mutua, 2018; Mutweleli, 2014; Wawire, 2010). Locally, despite these three variables (academic optimism, school anxiety, and fear of failure) being reported to have an association with academic achievement, they have not extensively been researched across the counties in Kenya. Furthermore, the majority of these research have been done with university students in some developed countries. In an attempt to fill this gap, this study sought to establish how academic optimism, school anxiety, and fear of failure relate to academic achievement among learners in secondary schools in Kitui County, Kenya.

1.4 Purpose of the Study

This study aimed at exploring the correlates of academic outcomes among secondary school learners in Kitui County, more specifically, academic optimism, school anxiety, and fear of failure.

1.5 Research Objectives

The following were the objectives of the study, aiming to:

- i. Investigate the relationship between academic optimism and academic achievement.
- ii. Examine the relationship between school anxiety and academic achievement.
- iii. Investigate the relationship between fear of failure and academic achievement.
- iv. Establish the predictive model of academic achievement from academic optimism, school anxiety, and fear of failure.

1.6 Research Hypotheses

The following hypothesis guided the study:

H_{a1}: Academic optimism and academic achievement are statistically related.

H_{a2}: School anxiety and academic achievement are statistically related.

H_{a3}: Fear of failure and academic achievement have a statistically significant relationship.

H_{a4}: Academic optimism, school anxiety and Fear of failure have a statistically significant predictive value on academic achievement.

1.7 Assumptions of the Study

This study proceeded under the assumption that the variables being examined were related and influenced one another in the way that the theory dictated. Moreover, it assumed that the participants gave truthful responses to the questionnaire items. It also assumed that the academic records available served as valid measures of academic achievement. The final assumption was that students had some level of academic optimism, school anxiety, and fear of failure and that these could be measured.

1.8 Limitations and Delimitations of Study

1.8.1 Limitations of the Study

One limitation of this study was its limited scope, which encompassed only a chosen number of secondary schools in Kitui County. The fact that different schools in Kenya have different experiences and experience different problems may limit this study's generalizability to all Kenyan secondary schools. In addition, this study relied on self-reports which could have introduced an inevitable level of subjectivity. However, to minimize the chances of subjectivity the researcher assured respondents of the anonymity and confidentiality of their responses to encourage honest and unbiased feedback. The researcher emphasized that the individual responses will not be linked to their identity and that no ranking was intended. The study was also entirely correlational, thus causal inferences about academic optimism, school anxiety, fear of failure, and students' academic achievement could not be drawn.

1.8.2 Delimitation of the Study

The study specifically examined Kitui County and the analysis of the findings was limited to that County. Generalizing the findings from Kitui County to other parts of Kenya was a delimitation. In addition, the study dealt with three variables that influence academic achievement: academic optimism, school anxiety, and fear of failure despite there being many variables that predict academic achievement. This was because there was limited data on how these variables predict academic achievement. Furthermore, the interpretation of data was based on data collected among Form three learners from 10 government schools in the Mwingi North sub-county, Kitui county.

1.9 Significance of the Study

The study added to the literature on how academic optimism, school anxiety, fear of failure, and academic achievement can predict students' academic achievement, among secondary school learners in Kenya. Furthermore, it will provide policymakers and educators with valuable insights on how academic optimism, school anxiety, and fear of failure impact students' academic achievement and well-being. Additionally, this research may contribute to our understanding of the psychological factors influencing how students perform in school. The study may benefit educational theory by providing insight into how students think and feel about school. This information may improve educational practices and make school a more positive experience for students.

1.10 Theoretical and Conceptual Framework

1.10.1 Theoretical Framework

Three theories formed the basis of this study: The theory of optimism (Seligman & Csikszentmihalyi, 2000), the social learning theory (Bandura, 1989), theory of fear of failure (Birney et al., 1969). These theories are summarized in the context of this study.

1.10.1.1 Theory of Optimism (Seligmans & Csikszentmihalyi, 2000). The theory posits the possibility of cultivating a cheerful outlook. It emphasizes that with a more optimistic attitude in life, we are in a far better position to improve our well-being. This study was centered on academic optimism, which refers to communal cultural perception of the strength and capacities of a school, where optimism is the overriding theme that integrates collective trust and collective efficacy with an academic emphasis aimed at academic achievement.

According to Seligman, optimism is a catalyst of transition in the focus of psychology from fixing the worst things in life to fostering positive characteristics. He says that

optimism is not only influenced by cognitive processes but also by affective and behavioral events. For example, the construct of academic optimism consists of three components (Hoy et al., 2006). Each of these constructs is characterized by optimism and responsibility. Collective efficacy is a cognitive group belief that focuses on students' perception and trust in teachers. Based on this theory, students who trust teachers and also believe that teachers are easy to talk to and are ever ready to help them in school are more likely to achieve better grades than their counterparts that think teachers are not good at teaching as they benefit less from the teacher's support in that school.

The behavioral component addresses the student perceptions of academic emphasis involving push for certain behaviors in schools. Students who perceive their school as serious about learning, and that good grades are recognized, are likely to achieve higher academically than those who feel that getting good grades in their school is not recognized. The affective component of the theory explains the student's faculty trust, which is associated with the student's identification with the school. More specifically, this component focuses on how a student feels as part of the school. For students to succeed in academic work, they should feel that the school is one of their favorite places and that most things taught in schools are worth learning.

The theory supports the belief that the three concepts of collective efficacy, academic emphasis, and faculty trust contributively align to provide a positive academic culture: academic optimism (Hoy & Miskel, 2013). Some researchers in their study of academic optimism, college retention, and performance, found that higher optimism among the students was coupled with higher academic grades, possibly because optimistic traits were associated with low school anxiety (Solberg Nes et al., 2019).

1.10.1.2 Socio-Cognitive Learning Theory (Bandura, 1989). Social learning theory was used in this research to explain how people feeling anxiety exhibit apprehension and avoidant behaviors which often inhibit their daily performance as also contextualized in academic settings. Social learning theory speculates that children learn by observing and emulating others' behavior. According to this theory, school anxiety may develop when children observe adults around them behaving in anxious or stressed ways in response to school-related demands or tasks. Over time, these children may come to internalize these behaviors and respond to school in similarly anxious ways (Bandura & McClelland, 1977). Additionally, children who have experienced personal trauma or stressors in their lives may be more likely to develop school anxiety, as they may see school as a place that is unsafe or unpredictable.

Applying social learning theory in the context of the growth of children's school anxieties, it is reasonable to anticipate that parents and teachers use direct instruction and modeling techniques to influence their children's levels of school anxiety, both consciously and unconsciously. Within school anxiety, there are three levels. High, moderate and low. A student with higher anxiety levels concerning aggression may experience rapid breathing when people think people criticize them in school. These students may develop a negative attitude towards school and are less likely to achieve academically. Research has also shown that students with lower anxiety levels on social evaluation are likely to ask and answer questions in class and participate fully in class activities without being worried about what others will say about them. This student is likely to achieve higher academically and get good grades. Additionally, a student who is anxious about academic failure may tremble when they show their school report to their parents. These students experiencing elevated levels of anxiety are less inclined to achieve high grades. According to Bandura (1989), it is vital to remember that some

methods may be used unintentionally, as the parents or teachers are completely unaware of what they are doing or how it may affect their children in any way. Both the parents and the school should intervene to reduce school anxiety among students and work to create a supportive and predictable environment where children feel safe and know what to expect each day.

Using the same theory, Muta et al. (2020) correlated types of anxiety and female student's academic performance in Dagoretti, Kenya. Muta and colleagues reported a significant correlation between the girls' school anxiety and academic achievement. This theory complements the theory of optimism. For instance, higher optimistic students tend to be higher academic scorers than lower optimistic students. It means that students with higher academic optimism are likely to be low or moderately anxious on school-related matters and have higher fear of failure, and then more likely to achieve better academically. Thus, given that optimism is important in improving academic achievement in students, it is anticipated that optimism, school anxiety, and fear of failure are interdependent.

1.10.1.3 Fear of Failure Motivation Theory (Birney & Teevan, 1969). This school of thought postulates that people are motivated to avoid failure because they believe that failure will lead to negative outcomes. These negative outcomes may include social disapproval, personal embarrassment, uncertain future, or even upsetting important others. Researchers have described fear of failure to be structured into high, moderate and low levels. Students with high levels of fear of failure are often perfectionists who strive to avoid making mistakes. They may also have a strong need for approval from others and a fear of rejection (Thompson et al., 2008). For instance,

a student may need to get good grades in fear of upsetting their parents or teachers or in fear of being rejected by their peers.

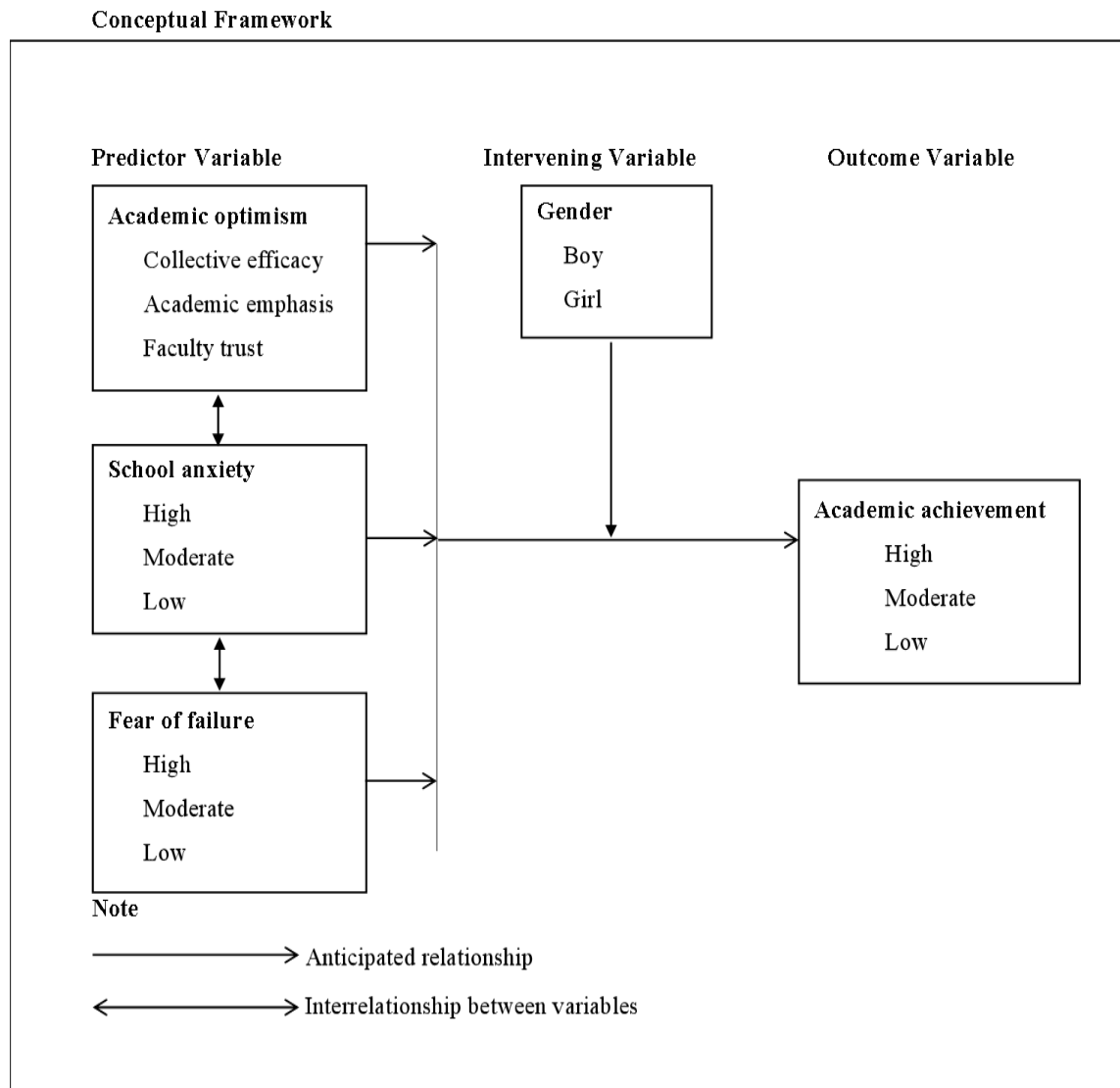
Moreover, a student who fears being embarrassed will feel that they are less valuable when they fail in school compared to when they succeed. Such a student who fears embarrassment is likely to do well academically. This theory also suggests that people with increased fear levels are likelier to engage in risk-taking behaviors. Such behaviors may yield positive outcomes such as good grades. Further, a student who is worried about failure affecting their future plans is more likely to work towards getting good grades. They are more likely to take on challenging tasks and persist in facing difficulties. This theory hypothesizes that fear of failure influences an individual's achievement. Studies involving university and secondary school students have shown that fear of failure consistently relates to academic achievement (Kayla et al., 2022; Lim, 2022). This theory was, therefore, suitable to investigate how fear of failure relates to academic achievement as per the study's hypothesis.

The three theories used in the study complement each other on the role the academic optimism, school anxiety and fear of failure play towards academic achievement. The certainty that the students, teachers, and parents work together to help students stretch to their full potential (academic optimism) influences students' anxiety and their likelihood of experiencing fear of failing.

1.10.2 Conceptual Framework

Figure 1.1

Conceptual Framework



Source: Researcher's conceptualization, 2022

Figure 1.1 illustrates the proposed correlation between the variables in the study. The predictor variables are academic optimism, school anxiety, and fear of failure. Academic optimism encompasses three distinct levels: The first level is characterized by collective efficacy, the second level involves academic emphasis, and finally faculty trust. School anxiety and fear of failure also have three levels each: High, moderate, and low. The outcome variable is academic achievement with three levels high,

moderate and low. Sex is the intervening variable. It is hypothesized that a correlation exists between academic optimism, school anxiety, FoF, and academic achievement. Moreover, it is anticipated that academic optimism, school anxiety and FoF will exert a significant influence on academic achievement.

1.11 Operational Definition of Terms

Academic achievement:	The student's standardized mean T-score at the end of second term, 2023.
Academic emphasis:	Total scores of responses obtained by students on student's perception of academic press subscale attained at interval level.
Academic optimism:	Scores by students on their belief that a school's faculty can work with them to help them succeed academically. It involves academic emphasis, collective efficacy and faculty trust.
Collective efficacy:	The total score at interval level attained by students in student's trust in teacher's subscale.
Faculty trust:	Sum of scores on student's identification with school subscale responses by students, obtained at interval level.
Fear of failure	the score at interval level the student obtains in a self-report fear of failure questionnaire on their feeling about achieving low grades in school.
School anxiety:	The total score at the interval level indicating the student's experience of tension, worries, and thoughts about school matters.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

The current chapter reviewed research on how academic optimism, school anxiety and fear of failure relate with academic achievement. Furthermore, it reviewed the predictive weight of academic optimism, school anxiety, and fear of failure from academic achievement. It finally presents literature reviewed and identifies the studies' gaps.

2.2 Relationship between Academic Optimism and Academic Achievement

Some studies have examined how academic optimism influences academic achievement among students. Moradi et al. (2014) conducted one such study among 375 boys in secondary school in Tehran city, Iran. Data for this correlational study were gathered using an academic optimism questionnaire. The study compared the academic optimism dimensions that involved students' academic press, students' identification with the school, and students' trust in the teacher. The results unveiled a strong positive correlation between academic optimism and the learner's academic achievement. Notably, students' academic press accounted for the highest academic achievement. Students with higher academic optimism recorded higher GPAs than those with low academic optimism. The current study is similar to the study done by Moradi and colleagues regarding the sampling, instruments and research design. However, since the study by Moradi and colleagues was done in Iran, where secondary school students may be from a different socioeconomic context from the students in Kitui County, the current study was intended to examine if, indeed, a correlation existed between academic optimism and academic achievement exists, given different socioeconomic and educational backgrounds.

In a recent study, Ruffin (2022) conducted related research on celebrating academic achievement through leadership and academic optimism. Among the study's objectives, one was to investigate if there existed a relationship between secondary school student's academic optimism and academic performance. The research was conducted in the United States with a sample of 460 public school teachers from seven districts who filled out the academic optimism questionnaire. The study's results demonstrated a strong positive correlation between academic optimism and students' academic achievement.

In a related study, Sanchez (2017) examined the equation model impacts of both the teachers and student's academic optimism on students' academic achievement. The research was conducted among 365 students and instructors in 12 different secondary schools in the U.S. According to the findings, the interaction between the student's academic optimism and that of the teacher showed a strong predictor of secondary school student academic achievement. Notably, these two studies by Ruffin (2022) and Sanchez (2017) were based on samples drawn from American students and teachers. The results obtained from the American sample could not be generalizable to African educational contexts. There was, therefore, a need to conduct further research and explore the results using entirely non-American students.

Snijder (2017) carried out a study at Dutch University in the Netherlands using undergraduate students. The study aimed to investigate academic optimism, peer social support, and self-efficacy and how they relate to academic engagement and performance. One of the objectives was to ascertain how academic optimism related to students' academic performance. The research involved a sample of 158 students. This study's results demonstrated that academic optimism and students' academic

performance correlated significantly. These results may not be generalizable to academic institutions globally due to differences in socioeconomic and educational backgrounds, therefore, conducting a comparable study was crucial especially using secondary school students from Kitui County.

2.3 Relationship between School Anxiety and Academic Achievement

Only a few research have explicitly explored how school anxiety relates with secondary school academic achievement. Martinez-Monteaquedo et al. (2012) carried out one such study in Spain to ascertain the correlation between school anxiety and academic outcomes among learners in junior and senior classes in secondary schools. This correlational study involved 520 Spanish students of ages 12 to 18. The results revealed that students who performed well in language had considerably higher ratings in anxiety than their counterparts who performed poorly in this subject. Similarly, students who performed well in mathematics had a considerably higher level of anxiety than their counterparts who performed poorly in this subject. Thus, this study reported that non-clinical anxiety at school generally increases academic achievement. The aforementioned research was done in Spain, a different setup from Kenya. The current study compared the results in Kenyan public schools.

In a related study, Khizar and Anwar (2020) presented results on the correlation between examination anxiety and university students' academic achievement. It used 230 students from the University of Gujrat, Pakistan. The results demonstrated a dearth of statistically significant correlation between examination anxiety and academic performance among university -level students. However, this study by Khizar and Anwar (2020) differs from the present research in that the study focused specifically on examination anxiety. In addition, the research sample was selected from university

students, and it is necessary to compare the findings when using high school pupils. Thus, it was interesting to carry out a general study on school anxiety and compare the findings.

In addition, D'Agostino et al. (2022) did a study examining the correlation between anxiety levels and academic achievement in schools. The study comprised of 15-year – old students, in Italy enrolled in upper –secondary schools. A Sample of 7142 students picked from 283 public schools participated in the study. It provided suggestion of a strong and statistically significant inverse correlation between anxiety levels and academic achievement. However, this study involved Italian students. Students in Italy may have different academic backgrounds and socio-economic and educational backgrounds from students in Kenya. Differences in locality, socio-economic status and educational system necessitated the need to conduct a study and examine whether indeed, a relationship existed between school anxiety and student's academic achievement in an African educational context.

PISA 2015 carried out a study across OECD countries to examine school-related anxiety and its influence on student's academic achievement and wellbeing. Using a sample of 15-year-old public school students drawn from the 38 OECD countries, PISA 2015, reported that anxiety was negatively related to academic performance. Evidence from this study reported that students from two countries; Costa Rica and Brazil, which reported the highest degree of school-related anxiety performed below average. In contrast, evidence shows that Singapore, which reported the lowest degree of school-related anxiety, was the top –performing country in PISA 2015 (OECD 2017). This study aims to determine if and how students' levels of school anxiety correlate with

their performance in Kitui County, Kenya. The two studies are comparable on the basis of location, educational backgrounds, culture diversity and age of the participants.

2.4 Relationship between Fear of Failure and Academic Achievement

In a related study, Anaita Tiatri and Sari (2020) presented the findings on the relationship between student's FoF and academic achievement. This research involved 52 undergraduates at Tarumanagara University, Indonesia. The findings suggested that procrastination was not a mediator of the correlation between FoF and a student's GPA among university students. It also conveyed a significant, negative relationship between FoF and student's GPAs. Results from this study contradict earlier findings by Stuart (2013), who conducted a study among college students in American colleges. The study pursued to ascertain the correlation between FoF, procrastination, and self-efficacy with academic success. More specifically, one of the objectives was to determine the relationship between a student's FoF and academic achievement. The study also examined gender differences between FoF and academic success. This study's results revealed that females with higher degrees of FoF levels had higher self-efficacy and recorded higher GPAs compared to male students with lower fear of failure levels who recorded lower GPAs.

In another study, Alkhazaleh and Mahasneh (2016) examined fear of failure among 548 undergraduate students at Hashemite University, Jordan. The study examined differences in FoF regarding Grade Point Average (GPA) and students' academic level. The study reported that most students who experienced high levels of FoF recorded lower GPAs. Compared to students with lower failure anxiety and higher academic confidence. Considering that the study by Alkhazaleh and Mahsneh was based on a university student sample, it was important to carry out related research using secondary

school students and compare the results. Furthermore, conducting a similar study in Kenya was important as it may add to the literature about the variables in African contexts.

2.5 Predictive Weight of Student's Academic Optimism, School Anxiety, and Fear of Failure on Academic Achievement

Most of the studies which have been done on students' predictive weight of academic optimism, school anxiety, and FoF have been done in developed countries like the U.S.A. Singh et al. (2013) conducted a study to investigate anxiety levels, their relationship with optimism, and academic achievement among engineering and medical students in Uttar Pradesh, India. Specifically, the research attempted to investigate the interaction between optimism and anxiety in predicting academic achievement. These results were drawn from a sample of 346 students involving 175 engineering and 171 medical students. The findings demonstrated a substantial inverse correlation between anxiety and optimism among college students and that optimism had a positive predictive ability on academic achievement. These results were based on a sample drawn from college students in India. These results may not be easily generalizable to secondary school institutions. Thus, there was a need to conduct a similar study using secondary school students.

In the U.S, Rand et al. (2020) undertook a study to examine how hope and optimism predicted college students' well-being and academic outcomes. A sample of 334 university students from a Midwestern University was used. One of the objectives was to ascertain the effects on a student's academic performance, given hope and optimism. The results revealed that optimism had the least effect on academic performance compared to other factors under study. From these results, it was therefore interesting

to conduct a study to examine academic optimism and other variables such as school anxiety and FoF.

Similarly, Nsiah (2017) examined the relationship between FoF, academic motivation, and academic performance of 230 undergraduate students from low-income families drawn from two universities in Ghana. One of the objectives was to examine the interaction between FoF and motivation in predicting academic achievement. Furthermore, the study examined how both FoF and academic motivation predicted academic achievement. The results revealed a significant predictive ability of FoF on academic achievement. Thus, it was necessary to study the influence of academic achievement given FoF and other psychological constructs such as academic optimism and school anxiety.

Carey et al. (2017) carried out research using primary and secondary school students from England. One thousand seven hundred twenty participants took part in the research. The study was designed to differentiate different anxiety forms and the role played by each in the academic outcomes of primary and secondary school learners. The research examined test anxiety, math anxiety, and general school anxiety in relation to math performance. Findings indicated that students with specific school anxiety recorded low grades compared to those with elevated general anxiety. The results showed that school anxiety was better in predicting students' academic achievement than other forms of anxiety. In light of these findings, it was interesting to study how school anxiety interacts with other constructs like Academic optimism and Fear of Failure to predict academic outcomes.

Of the studies reviewed, none have revealed the predictive weights of the three predictor variables. For instance, it was important to find out which of the three predictors had the most significant predictive weight toward academic achievement.

2.6 Summary of Literature Reviewed and Gap Identification

Most studies reviewed here indicated that academic optimism, school anxiety, and FoF predicted academic achievement. Additionally, the reviewed studies have indicated the influence of academic optimism, school anxiety, and FoF in predicting academic achievement. However, the majority of such research have been done in majorly developed countries and investigated students' academic optimism, school anxiety, and FoF with other variables. Additionally, most of this research focused on findings of samples drawn from a population from higher institutions of learning and elementary schools, with a few focusing on students in secondary schools. None of such studies investigated how academic optimism, school anxiety, and FoF predict academic achievement in an African context, specifically Kenya. Additionally, of the studies reviewed, none has revealed the predictive weights of the three predictor variables. For instance, it was important to find out which of the three predictors had the greatest predictive weight towards academic achievement. Therefore, this study investigated how academic optimism, school anxiety, and FoF predict academic achievement and the predictive weights of the three variables among government secondary school students in Kenya.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The chapter gave a brief overview of research design, as well as research variables that were used. It also discussed the locale of research. It also presents the target population and sample size. Sampling techniques used were also discussed. Additionally, research instruments and sample size determination were described. Moreover, it discussed data collection techniques, logical and ethical concerns, and finally it discussed data analysis.

3.2 Research Design

The research used an ex post facto design. The design suited this study as it aims at establishing the cause-effect between the predictor and the outcome variables without exerting any influence or manipulating them. There are two types of ex post facto design (Cohen et al., 2003). They involve correlational research design and criterion group study. This study adopted a correlational design. According to Frankael et al. (2015), correlational study elaborates the extent where additional constructs correlate without having to manipulate any of the variables. As a result, this study's design was appropriate given that it aimed to establish how academic optimism, school anxiety, and fear of failure relate to academic achievement and determine the predictive value of academic optimism, school anxiety, and fear of failure on academic achievement.

3.2.1 Research Variables

The predictor variables in this research included academic optimism, school anxiety, and fear of failure. The three predictor variables were subjected to measurement at interval levels. The outcome variable, academic achievement was as well measured at

interval level. Academic achievement of the students was determined by averaging Form three student's scores on the examinations at the end of the second term in 2023. These scores were converted to standard T-scores. The raw scores were translated into standard Z-scores and then equation $T = Z (10) + 50$ was used to transform the Z-scores to get a T-score value.

3.2.2 Location of the Study

This research was conducted in Kitui County. The region covers 30,430 sq. km. and has a population of 1,136,187 (Census, 2017). Kitui County has been consistently performing poorly compared to other counties yet, it received very little attention from researchers. According to 2017, 2018, 2019, 2020, and 2021 K.C.S.E. statistics, Kitui County had a mean of 4.5, equivalent to the C constant, nearly equal to the national mean of 4.3. Considering that the minimum university entry grade is C +, the county's overall performance is relatively good. However, of concern are discrepancies in pass rates among its sub-counties.

The declined performance and the immense failure call for the attention of the stakeholders, educationists, and researchers to find out some factors that may explain the consistent low pass rates. Over the five years, Mwingi North Sub County had a mean grade of at least 2.9, equivalent to the D constant. This is below both the national, and the county. This is why Mwingi North Sub County was purposively selected as the location for the research.

If the problem of academic underachievement is left unaddressed, the Sub County will continue to record low grades. The Sub- County may be affected by limited number of opportunities for students joining higher institutions, less career readiness, declining workforce quality, increased crime, and less social mobility. This may further

perpetuate the cycle of poverty and low achievement. Such negative outcomes may eventually lead to the county's unattainment of National Development Goals. Thus, investigating how academic optimism, school anxiety, and fear of failure relate to academic achievement may help the stakeholders to encourage the learners to adopt particular personal characteristics.

3.3 Target Population

This research targeted at all students in form three enrolled in public secondary schools in Kitui County in the year 2023. The study population comprised of 3333 students enrolled in public secondary schools in Mwingi North Sub County. The schools were selected because they had most students in form three which would fit the intended sample. Form three students being senior students, were able to answer questionnaires accordingly.

The targeted student population in Kenya are in their middle to late puberty (Ministry of education, Science and Technology, 2017). Thus, at their age (12-21), they are believed to have developed academic optimism, school anxiety, and fear of failure, a year away from entering form four which is the last grade, and from where they will sit for their final examination. Moreover, the study targeted a senior class that could answer questionnaire effectively and it settled on form three which had minimum gatekeepers compared to form four students. Furthermore, form three students are also believed to be more serious and focused with studies as they prepare to proceed to the next class. Knowledge gained in this study is to help form three students and guide them in developing the right levels of optimism, school anxiety, and the relevant fear of failure, which is anticipated with improved academic achievement as they sit for their final secondary examinations.

3.4 Sampling Techniques and Sample Size Determination

3.4.1 Sampling Techniques

The current research utilized three sampling methods. Mwingi North Sub-County, form three students, and public schools were selected using a purposive sampling technique. According to (Orodho, 2009), purposive sampling depends on the researcher's knowledge to pick a group representative of the whole population. Stratified sampling helped to select participants to provide a fair representation of participants on gender basis. This approach ensures the homogeneity of subjects with similar characteristics (Cohen et al., 2017). Using this method, schools were stratified into boy's boarding, girl's boarding and mixed school. Moreover, the study adopted simple random sampling. This ensures that participants stand an equal chance of being selected (Cohen et al., 2017).

3.4.2 Sample Size Determination

Gorard (2001) asserted that a sample size of 10% to 20% is exemplary for use. Thus, the research adopted this formula in determining sample size for this research.

Table 3.1*Sample Size Determination*

School Type	Target Population			Sample Size	
	Schools	Students		Schools	Students
		Boys	Girls		Boys
Girls					
Boys' boarding	4	375	-	1	45
Girls' boarding	3	-	417	1	-
50					
Co-educational boarding	13	1249	1292	3	150
155					
	20	1624	1709		195
205					
		3333(100)		5(Appr.12)	400(Appr 12)

3.5 Research Instruments

The researchers used self-administered questionnaires and a proforma summary table to collect data for students' examination results. These are.

3.5.1 Student Academic Optimism Questionnaire (S.A.O.Q, Hoy's & Tschannen-Moran, 1999)

This 28-self-report instrument was adapted from Hoy and Tschannen- Moran (1999). The instrument was available on open education resource thus no permission was required to use it. SAOQ aimed to measure the three facets of Student's academic optimism: academic emphasis (10 items), collective efficacy (10 items) and faculty trust (8 items). Collective efficacy is a self-report metric for measuring students' trust

in teachers. Sample items include 'Teachers at this school are always honest with me'. An academic emphasis scale was used to assess students' perception of the students concerning academic norms and the academic environment. Sample items include "This school is serious about learning". Moreover, the Faculty trust scale was used to assess degree with which learners feel like a part of the school and how they revere school-related goals. (e.g., I feel proud being part of the school). Some of the items from the original instrument were rephrased to suit the study. For instance, the original form of SAOQ had statements like 'This school is serious about learning' which was rephrased to 'Our school is serious about learning'. The statements were paraphrased to reflect the participant's sense of belongingness. All items were rated across a 5 Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). A score of 3 or higher indicated higher levels of students' trust in teachers, a higher academic oriented environment, and strong student identification with the school. S.A.O.Q. has been assessed and evaluated, and its reliability and validity were considered acceptable. The instrument has been used widely by several researchers, including Tschannen-Moran et al. (2013), to measure academic optimism among students in middle and high schools and was available for use in the public domain.

3.5.2 School Anxiety Inventory – Short Version Questionnaire (SAI-SVQ, Fernández et al 2014).

The study used a tool that was adapted to measure school anxiety. The S.A.I. –S.V.Q has a situation-response format. It has 15 school situations and 15 corresponding responses on school situations to measure cognitive anxiety and behavioral and physiological anxiety. Sample items include. 'If I talk in class, I am worried about what people will say about me.' The frequency with which students feel anxious is measured on a 5- point Likert Scale (with a range of 0 *never*- 4 *always*). A score of 2 or higher

shows a high anxiety level toward school-related activities. This scale has been applied to students in grades 7-12 in middle and high schools aged 12-18 years (García-Fernández et al., 2011). According to García-Fernández and colleagues, the S.A.I. – SVQ demonstrated adequate psychometric properties. SAI-SVQ was available in the public domain and the researcher needed not to seek consent to utilize it in this research.

3.5.3 Performance Failure Appraisal Inventory Questionnaire (P.F.A.I.Q, Conroy et al. 2002).

FoF was measured using a P.F.A.I.Q scale adapted from Conroy et al. (2002). The questionnaire has 25 items scored on a five-point scale ranging from -2 (*strongly disagree*) to +2 (*strongly agree*). A few modifications were done as the original instrument had responses ranging from ‘*do not believe at all*’ to ‘*believe 100% of the time.*’ The original responses were substituted with comments that ran from 'strongly agree' to 'strongly disagree'. The statements were replaced because students in Kenyan secondary schools may not be able to interpret the initial responses accordingly when percentages are involved as they might want to choose responses with the higher percentage. A score of 0 or higher indicated a higher level of fear of failing. According to Conroy and colleagues, the instrument has been assessed and has been found to be psychometrically sound. The instrument has been widely applied in psychology using secondary school students aged 13- 18 and has been made available in the public domain for researchers who may need to use it.

3.5.4 Pro forma Summary

The researcher collected information regarding academic achievement of the respondents from the school records at the end of term one, 2023 and recorded it in the proforma table (see appendix C). In order to ensure that the results were comparable

across different institutions, the researcher began by converting the scores to Z scores, then proceeded to translate them into T scores.

3.6 Pilot Study

Purposive sampling was used to select one co-educational school in Kitui County for the pre-test. The school will be purposively selected as it has both boys and girls. The participants in the pre-test study were selected through a random sample technique and there was a total of 40 students (20 boys and 20 girls). However, the actual collection of data did not include the school that had previously taken part in the pre-test research. The questionnaire items were reviewed as per the responses received from the participants to make them more appropriate for the study and ensure the adequacy of time allocated as well as clarity of instructions and items.

3.6.1 Validity of Instruments

The pilot data was utilized to assess validity. Content validity was ensured through consultation with experts in the area of psychology who evaluated the relevance of the instruments. Furthermore, comments from the class teacher and the respondents regarding the instrument were considered. The comments and suggestions from the experts, teachers, and participants were used to adjust the instrument to align with the objectives.

3.6.2 Reliability of Instruments

The researcher determined the instrument's reliability by looking at internal consistency through Cronbach's alpha. A correlation coefficient of 0.7 means that an instrument is reliable for use (Ranjit, 2019). If the correlation coefficient is 0.7, then the questionnaire is reliable. As reported by Hoy and Tschannen- Moran (1999) and Conroyet al. (2002) in their study, SAI-SVQ and PFAI had a reliability coefficient of 0.79 and 0.75

respectively making them suitable for use in this study. Pilot study was conducted and the results for reliability of questionnaires were summarized in Table 3.2.

Table 3.2

Reliability Analysis for Research Instruments

Scale	Original Scale		Pilot Study	
	Items	α	Items	α
Academic Optimism	25	.79	25	.87
School Anxiety	15	.70	15	.72
Fear of Failure	25	.75	25	.78

As indicated in Table 3.2, the academic optimism adapted questionnaire recorded a higher internal consistency (.87) than the original instrument. It had the highest reliability followed by fear of failure (.78) while the school anxiety instrument recorded the lowest reliability (.75).

The researcher conducted analysis for academic optimism scales separately and results were presented in Table 3.3.

Table 3.3*Reliability Analysis for Academic Optimism Sub Scales*

Scale	α	Items
Student Trust in Teachers	.79	10
Student Perception of Academic Press	.75	8
Student Identification with School	.70	7

Note, N=40

The Table shows that students' trust in teachers had a Cronbach's alpha of .79, students' perception of academic press .75 and students' identification with the school had .70. The internal consistency of the subscales and the questionnaire as whole was high enough making the questionnaire sufficiently reliable for use in this study.

3.7 Data Collection

The researcher conducted visits to the selected schools and obtained consent from the principal to gather data on the mutually agreed upon date and time. During the data collecting day, the researcher returned to the schools that were chosen for sampling and administered the study instruments to the students who were selected. The researcher sought the help of the class teacher in administering questionnaires which was done during class time. The researcher distributed the study instrument to the participants and read the instructions to them and showed them how to tick appropriately, after which they began responding. They were first issued with the academic optimism questionnaire filled in 12 mins, then the school anxiety questionnaire which took 8 mins. Finally, the students were issued with the fear of failure questionnaire which was filled in 15 mins. The questionnaires took on average 35 mins. Upon completion of data

collection, the researcher retrieved the completed questionnaires and enlisted the assistance of class teachers to obtain the academic accomplishment scores.

3.8 Data Analysis

The collected data was processed and analyzed statistically using the Statistical Package for Social Sciences (S.P.S.S.). The findings were presented using descriptive and inferential statistics. The null hypotheses, to test each at $\alpha = .05$, were as follows:

H₀₁: Academic optimism and academic achievement have no statistically significant relationship

H₀₂: School anxiety and academic achievement have no statistically significant relationship.

H₀₃: Fear of failure and academic achievement have no statistically significant relationship

H₀₄: The predictive value of academic optimism, school anxiety, and Fear of failure on academic achievement is not significant.

3.9 Logistical and Ethical Considerations

3.9.1 Logistical Consideration

Before beginning data collection, the researcher acquired authorization letter to do so from Kenyatta University's Graduate School after which a research permit was obtained from NACOSTI. The study was also approved by Ethic Review Board (ERB) at the county level. Moreover, the researcher scheduled a meeting with the principals of the schools that were sampled and briefed on the general purpose of conducting the current study.

3.9.2 Ethical Considerations

Several ethical considerations were made in this study. For instance, the researcher sought student's consent through an introduction letter that explained the main aim of conducting the research. The students willing to participate indicated in the consent form upon acceptance. The researcher explained the study's purpose to the participating students. They further assured the participants that the study will expose them to no harm, and at any time the participants got concerns, they were allowed to withdraw. Additionally, the researcher guaranteed the participant's anonymity and confidentiality and that the data they gave would be utilized exclusively in this particular study.

CHAPTER FOUR

FINDINGS, INTERPRETATION AND DISCUSSIONS

4.1 Introduction

This section presents the analysis and discussions of the study's findings and interpretation in connection to its objectives and hypotheses. It is organized into four parts: an introduction, secondly general as well as demographic information, thirdly, interpretation of results and discussions and finally the exploratory analysis. For the purpose of testing the null hypothesis, the researcher presents descriptive statistics and their relevant inferential statistics.

4.2 General and Demographic Information

The following section is a presentation of general data on the questionnaire return rate as well as demographic information.

4.2.1 Return Rate

The target sample was 400 participants involving 195 boys and 205 girls. However, after the actual data collection, twelve of the completed questionnaires were discarded by the researcher. The criteria used for discarding the questionnaires was based on cases of marking one answer throughout the questionnaire, incorrectly written code numbers and consistently giving more than one response on items. The actual return rate of this study's questionnaire was therefore 97% (388), representing 147 boys and 153 girls. Table 4.1 illustrates the targeted and actual return rates.

Table 4.1*Return Rate*

School Type	Target		Actual		Return rate (%)	
	Male	Female	Male	Female	Male	Female
Boys Boarding	45	-	42	-	93.33	-
Girls Boarding	-	50	-	46	-	92
Co-educational	150	155	147	153	98	98.71
Total(Overall)		400		388		97

Note. N= 388

4.2.2 Demographic Data on Age, Sex and School Type

The researcher cross-tabulated the participant's age and sex as summarized in Table 4.2.

Table 4.2*Age Category and Sex*

a	Boy		Girl		Total	
	F	%	F	%	F	%
(Years)						
15-16	50	12.9	93	24	143	36.9
17-18	102	26.3	80	20.6	182	46.9
19+	37	9.5	26	6.7	63	16.2
Total	189	48.7	199	51.3	388	100

Note. N = 388; F=Frequency; % = Percentage, a= the highest age was 23 while the lowest was 15.

According to Table 4.2's findings, roughly 13 % of the boys and 24% of the girls aged between 15-16 years. About 26.3 % of the boys and 20.6 % making a total of 46.9% of the participants were aged between 17- 18 years and 37 % and 26 % of boys and girls were above 19 years respectively. Majority of the students were aged 17-18 years. Furthermore, the participant's age and school type were cross-tabulated; the results are demonstrated in Table 4.3.

Table 4.3

Age Category and Type of School

		School Type			Total	
		BB	GB	Co-ed		
Age Category (Years)	15-16	F	21	14	108	143
		%	5.4	3.6	27.8	36.9
	17-18	F	20	22	140	182
		%	5.2	5.7	36.1	46.9
	19+	F	1	10	52	63
		%	0.3	2.6	13.4	16.2
Total	F	42	46	300	388	
	%	10.8	11.9	77.3	100.0	

Note. N= 388; F=Frequency; % = Percentage; BB=Boy's Boarding; GB= Girl's Boarding; Co-ed= Co-educational school.

According to Table 4.3's results, 36.9 % of the participants were aged 15-16 years. Nearly half of the participants (46.9%) fell between 17-18 years. The lowest percentage was found among participants aged 19 and above, representing 16.2%.

4.3 Results of the Study

The findings are presented in this subsection in accordance with the study's objectives. The inferential statistics performed to test the null hypothesis are presented after the descriptive statistics and finally the discussion of the findings.

4.3.1 Relationship between Academic Optimism and Academic Achievement

The first key objective was to determine whether academic achievement and students' academic optimism are statistically related. The Academic Optimism measure scores were evaluated using a 5-point Likert scale. The respondents' academic achievement was represented by their mean score at the end of term two, year 2023.

The analysis began by carrying out the descriptive analysis of the academic optimism scores and the results were summarized in Table 4.4.

Table 4.4

Descriptive Analysis of Academic Optimism Scores

	<i>N</i>	Range	Min	Max	Mean	<i>SD</i>	<i>Sk</i>	<i>Kur</i>
AOTS	388	75.00	50.00	125.00	101.46	14.28	-.63	.27

Note: *N* = 388, *SD* = Standard Deviation; Max = Maximum; Min = Minimum; *Sk* = Skewness; *Kur* = Kurtosis; AOTS = Academic Optimism Total Scores

According to Table 4.4, the range scores of AOTS was 75, with a minimum of 50 and a maximum of 125.00. The mean score was relatively high ($M= 101.46$, $SD=14.28$) and the coefficient of skewness was -0.63 which implied that the majority of the respondents scored highly on the scale.

Furthermore, the participant's analysis of scores on each level of the academic optimism scales was done. The findings were as summarized in Table 4.5, showing the

highest range of 38 among student's trust in teachers while student's identification with the school had the lowest range of 21.

Table 4.5

Descriptive Analysis of Scores of Academic Optimism Sub-Scales

	Range	Min	Max	Mean	SD	Sk	Kur
STT	38.00	12.00	50.00	40.59	6.88	-.80	.94
SPAP	24.00	16.00	40.00	32.28	4.93	-.76	.46
SIS	21.00	14.00	35.00	28.59	4.86	-.64	-.81

Note. $N= 388$; $SD=$ Standard Deviation; Max= Maximum; Min= Minimum; $Sk=$ Skewness; $Kur =$ Kurtosis; STT= Student's Trust in Teachers, SPAP= Student's perceptions of Academic Press, SIS= Student's Identification with School.

Furthermore, students' trust in teachers had the highest mean ($M= 40.59$, $SD = 6.89$) and students' identification with the school lowest mean ($M= 28.59$, $SD=4.86$).

Further analysis was done to show relevant descriptive statistics for academic optimism scores across age categories, school type and gender. Results are given in Table 4.6.

Table 4.6*Academic Optimism Scores across Age Categories, School Type and Gender*

	N	Range	Min	Max	Mean	SD	Sk	Kur
15-16	143	54.00	71.00	125.00	100.85	12.27	0.11	-.67
17-18	182	75.00	50.00	125.00	101.90	15.62	-0.89	.68
19+	63	61.00	64.00	125.00	101.57	14.64	-0.79	-.16
School Type								
Boys Boarding	42	50.00	72.00	122.00	108.52	10.40	-1.43	.67
Girls Boarding	46	52.00	73.00	125.00	105.54	13.47	-0.40	.76
Co-educational	300	75.00	50.00	125.00	99.84	14.48	-0.56	.25
Gender								
Male	189	75.00	50.00	125.00	101.99	14.96	-0.88	.64
Female	199	63.00	62.00	125.00	100.89	13.62	-0.29	-.39

Note: N= 388; SD= Standard Deviation; Max= Maximum; Min= Minimum Sk =Skewness; Kur =Kurtosis.

Results in Table 4.6 show that among the three categories, students aged between 15-16 years recorded a positive coefficient of skewness of 0.11 implying that they rated themselves low on academic optimism scale. This was different among participants in the other age categories which had a negative coefficient of skewness, thus rated themselves highly on the scale. The highest mean score ($M= 101.90$, $SD=15.62$) was found among the respondents aged between 17-18 years. While the lowest mean score ($M=101.57$, $SD=14.64$) was found amongst respondents aged between 19 and above.

In regard to school type, the highest mean score was found between respondents in Boy's Boarding ($M= 108.52, SD=10.20$) while the least mean score was found among co-educational schools ($M=99.84, SD=14.48$). Moreover, boys had slightly higher mean ($M=101.99, SD =14.96$) compared to girls ($M= 100.89, SD= 13.62$). The skewness was negative for all school categories, indicating that the participants rated themselves highly regardless of the school category.

The participants' scores in academic optimism were further used to classify them in three levels of low, moderate and high levels of academic optimism. The results are given in

Figure 4.1.

Figure 4.1

Respondents Level of Academic Optimism

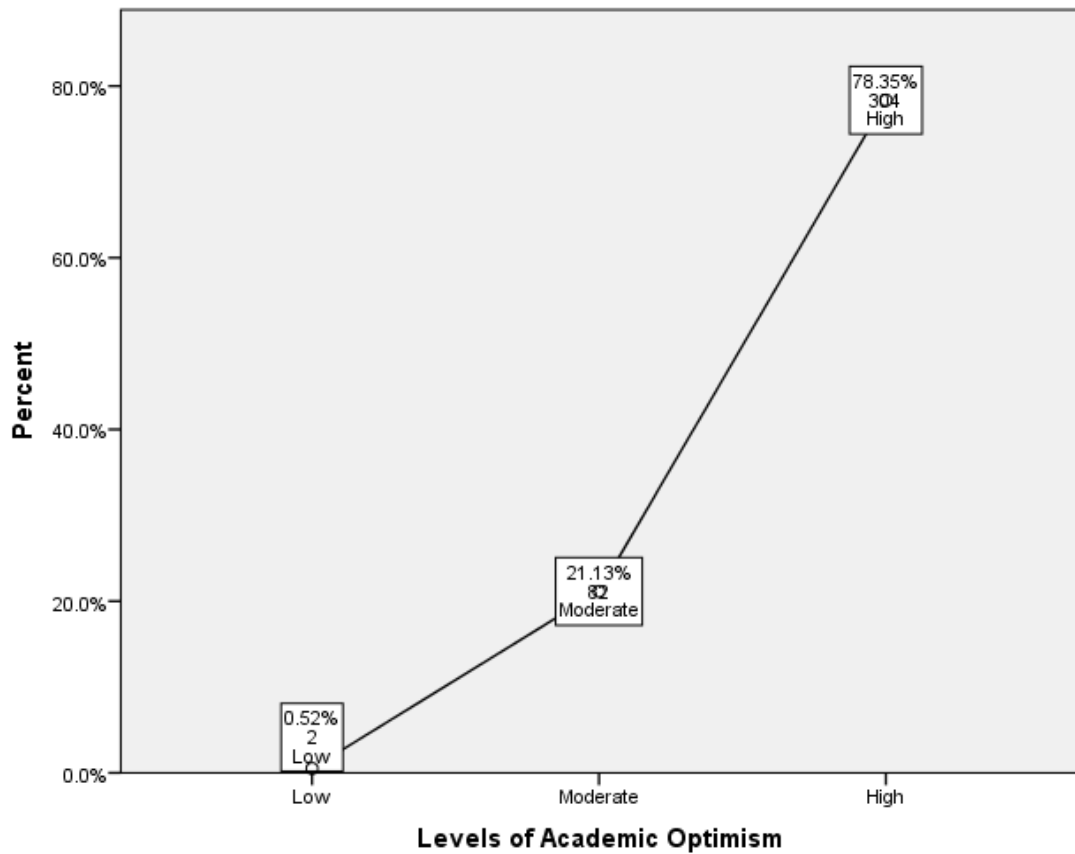


Figure 4.1 posits that 0.52 % of the participants were found to have low levels of academic optimism. Less than half of the participants (21.13%) were reported to exhibit moderate levels of academic optimism while the majority of participants representing 78.35% were identified to exhibit a high degree of academic optimism.

Given that the first objective was to determine the relationship between academic optimism and academic achievement and having analyzed the descriptive statistics for academic optimism scores, the next step was to analyze the academic achievement scores with a view of getting the relevant descriptive statistics which include the range, mean score, standard deviation and coefficient of skewness. To begin with, participants' mean scores were transformed from raw scores to Z scores and finally to T scores in order to facilitate comparison across the schools. The computation is shown in Table 4.7.

Table 4.7

Descriptive Analysis of Scores of Academic Achievement

	<i>N</i>	Range	Min	Max	Mean	<i>SD</i>	<i>Sk</i>	<i>kur</i>
T Score	388	40.75	30.16	70.91	50.00	10.00	-0.07	-.03

Note : *N*= 388 ; *SD*= Standard Deviation; Max= Maximum; Min= Minimum; *Sk* =Skewness; *Kur* =Kurtosis.

Results from Table 4.7 shows that the range was 40.75, with the minimum and maximum T scores being 30.16 and 70.91 respectively ($M= 50, SD = 10$).

Further, the researcher performed analysis on academic achievement T scores across gender, age categories and school type and the computation were presented in Table 4.8.

Table 4.8*Academic Achievement T Scores across Gender, Age Categories and School Type*

Gender of the Respondent	N	Min	Max	Mean	SD	Sk	Kur
Male	189	30	71	50.11	10.34	-.06	.03
Female	199	30	71	49.89	9.70	-.09	.05
Age Category (Years)							
15-16	143	30	71	52.99	9.90	-.35	.20
17-18	182	30	71	48.60	9.74	.04	.18
19+	63	30	67	47.27	9.43	.12	.30
School Type							
Boys Boarding	42	48.27	70.91	60.24	5.73	-.72	.36
Girls Boarding	46	30.16	61.86	51.91	9.53	-.79	.35
Co-educational	300	30.16	70.91	48.27	9.64	0.17	.14

Note: $N= 388$; $SD=$ Standard Deviation; Max= Maximum; Min= Minimum ; Sk =Skewness; Kur =Kurtosis.

Data from table 4.8 shows that in terms of gender, male students recorded a slightly higher mean ($M=50.11$, $SD= 10.33$) than female students ($M=49.89$, $SD=9.70$). Furthermore, as observed, 15-16 years old reported the highest mean score ($M=52.99$, $SD=9.90$) followed by 17–18-year-olds with a mean score ($M=48.60$, $SD=9.74$) while 19+ year olds had the lowest mean score ($M=47.27$, $SD=9.43$). In regard to school type, Boys boarding had a particularly high mean score ($M=60.24$, $SD=5.73$) girls boarding followed ($M=51.91$, $SD=9.53$) then co-educational students with the lowest mean ($M=48.26$, $SD =9.64$).

The researcher further conducted analysis on the means of academic achievement scores across different levels of Academic Optimism. The results were as presented in Table 4.9.

Table 4.9

Mean Academic Achievement Scores across Different Levels of Academic Optimism

Levels of Academic Optimism	<i>N</i>	Min	Max	<i>M</i>	<i>SD</i>	<i>Sk</i>	<i>Kur</i>
Low	2	48.27	48.27	48.27	.00	.00	.00
Moderate	82	30.16	70.91	49.54	9.50	.02	-.77
High	304	30.16	70.91	50.13	10.17	-.10	-.96

Note: *N*= 388; *SD*= Standard Deviation; Max= Maximum; Min= Minimum ; *Sk* =Skewness; *Kur* =Kurtosis.

As indicated in Table 4.9, the mean of academic achievement scores was calculated across different levels of academic optimism and the computation results indicated that students who had low levels of academic optimism recorded the lowest mean ($M=48.27$). Students with moderate levels of academic optimism had a mean score ($M=49.54$, $SD=9.50$). Furthermore, the students who rated themselves as having the highest levels of academic optimism recorded the highest mean ($M=50.13$, $SD=10.17$) compared to those with moderate and low levels.

Having completed the preliminary descriptive analysis for both academic optimism and academic achievement scores, and in tandem with the first objective of the study, the following null hypothesis was tested:

H_{01} : There is no significant relationship between academic optimism and academic achievement.

To test the hypothesis, a bivariate analysis using the Pearson product moment correlation coefficient was done and the findings presented in Table 4.10.

Table 4.10

Correlation between Academic Optimism and Academic Achievement

	AOTS	Academic Achievement
AOTS	1	.12*
N	388	388

* $p < .05$

Note: AOTS= Academic optimism Total scores

The data in Table 4.10 show that there is a weak positive and significant relationship between students' academic optimism and academic achievement T scores ($r(386) = 0.12, p < .05$). The null hypothesis was rejected. It was observed that participants who obtained high scores on the academic optimism scores also reported high scores on the academic achievement T scores.

4.3.1.1 Discussion of the Results

Findings from this study suggested that among the levels of academic optimism, students' trust in teachers had the highest academic score mean while student's identification with the school recorded the lowest mean. The means of academic achievement scores were relatively close to each other. The study also suggested that male students recorded a slightly higher mean compared to girls. Results from this study reported that participants who had low levels of academic optimism recorded the lowest means and that participants who reported to have high scores in academic optimism recorded the highest academic achievement scores.

This study's findings complimented results of study done by Moradi et al. (2014) involving secondary school students in Tehran city. This research demonstrated a

significant and positive relationship between student's academic optimism and academic achievement. The results also corresponded with those of Sanchez (2017) among secondary school students in the U.S wherein it was observed that academic optimism significantly influenced students' academic performance. This study used samples similar to those by Moradi et al. (2014) and Sanchez (2017) in regard to the level of schooling.

Moreover, results from this study supported earlier findings reported by Ruffin (2022) among 460 United States secondary school students. In their objective to examine the relationship between secondary school student's academic optimism and academic performance, they found a positive and significant correlation between the two. These findings were also in line with a study by Snijder (2017), among undergraduate students at Dutch university, Netherlands. The study reported that academic optimism and student's academic performance related positively and significantly. Therefore, regardless of the cross-cultural differences in these studies, student's academic achievement and academic optimism have been revealed to be positively and significantly correlated. The results from these studies imply that academic optimism is not only relevant to students in the American setting but also in African settings and developing countries like Kenya. These findings indicated that academically optimistic students are more destined to achieve more academically.

To ascertain the relationship between the three domains of academic optimism and academic achievement, a further analysis was carried out. The results are shown in Table 4.11.

Table 4.11*Correlation between Domains of Academic Optimism and Academic Achievement*

	STTTS	SPAPTS	SISTS	T Score
STTTS	1			
SPAPTS	.58**	1		
SISTS	.59**	.62**	1	
T Score	.10	.04	.18**	1

** $p < .05$

Note: $N=388$, STTTS - Students Trust in Teachers Total Score, SPAPTS - Students Perceptions of Academic Press Total Score, SISTS-Students Identification with School Total Score.

As shown in Table 4.11, there was a positive correlation between the three domains of academic optimism and academic achievement. However, student identification with the school was the only domain which was found to have a positive and significant relationship ($r(386) = 0.18$, $p < 0.05$). However, this correlation was weak. Consequently, the findings suggest that students who identify themselves with the school and consider that schooling is more crucial than most people believe and that many of the things they study in school are worthy; are likely to perform better than those who trust in teachers. For instance, a student who believes that students can rely on teachers for help but will not reach out to the teachers for help may not benefit from them despite the trust the student has in the teachers. Thus, a student who identifies themselves with the school may be interested in learning these valuable things in school which is most likely to translate into good grades.

4.3.2 Relationship between School Anxiety and Academic Achievement

In this section, results on the second objective will be presented. First will be a presentation of demographic information and lastly the inferential statistics.

4.3.2.1 Descriptive Analysis of School Anxiety

The respondent's school anxiety scores were analyzed with an aim to determine the range, mean and the standard deviation. The results of this analysis are given in Table 4.12.

Table 4.12

Descriptive Analysis of School Anxiety Total Scores

	Min	Max	Mean	SD	Sk	Kur
TSAS	15.00	68.00	36.83	9.49	0.09	-.180

Note: $N= 388$; $SD=$ Standard Deviation; Max= Maximum; Min= Minimum ; Sk =Skewness; Kur =Kurtosis ; TSAS=Total School Anxiety Scores.

Data from Table 4.12 implies that the minimum score was 15 while the maximum score was 68. A mean ($M=36.83$, $SD = 9.49$) was reported. The distribution of school anxiety scores was positively skewed (.09) indicating that most participants scored low ratings on the school anxiety measure.

Further, students' school anxiety scores were cross tabulated across gender, age categories and school type and the results summarized in Table 4.13.

Table 4.13*School Anxiety Scores across Gender, Age Categories and School Type*

Gender of the Respondent	<i>N</i>	Min	Max	Mean	<i>SD</i>	<i>Sk</i>	<i>kur</i>
Male	189	15.00	64.00	35.30	10.10	0.24	-.18
Female	199	15.00	68.00	38.29	8.64	0.08	-.25
Age Category (Years)							
15-16	143	15.00	68.00	38.13	9.61	-0.04	.03
17-18	182	15.00	62.00	35.95	9.32	0.14	-.20
19+	63	17.00	64.00	36.43	9.49	0.26	.67
School Type							
BB	42	15.00	61.00	35.86	12.16	-0.02	.39
GB	46	26.00	68.00	41.83	8.54	0.36	.35
Co-ed	300	15.00	64.00	36.20	8.99	0.15	.14

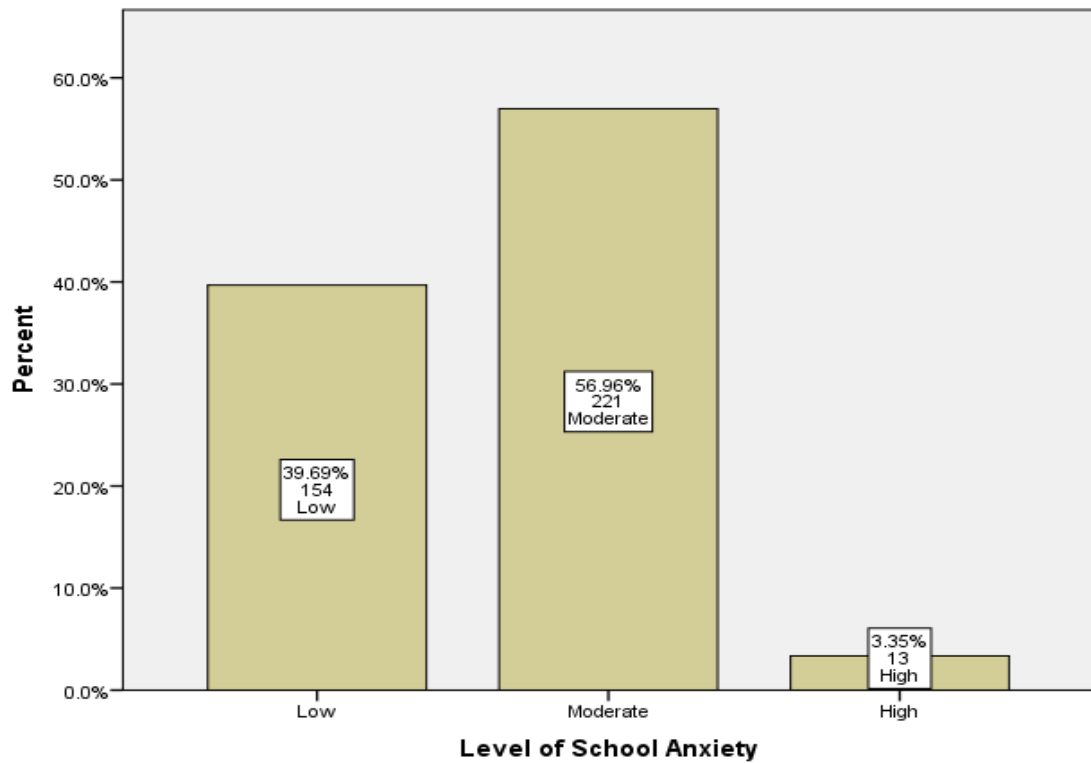
Note: *N*= 388; *SD*= Standard Deviation; Max= Maximum; Min= Minimum ; *Sk* =Skewness; *Kur* =Kurtosis ; BB =Boy's boarding; GB= Girl's Boarding; Co-ed- Co-educational school.

According to Table 4.13, the minimum score for both boys and girls was 15, while the maximum score was 64 and 68 for boys and girls respectively. The results show that girls exhibited a greater mean ($M=38.29$, $SD= 8.64$) compared to boys ($M=35.30$, $SD=10.10$). Regarding age, 15–16-year-olds had the highest mean ($M=38.13$, $SD=9.61$) with 17-18-year-olds reporting the lowest mean score ($M=35.95$, $SD=9.32$). Besides, with reference to school type, Girl's boarding had the highest mean score ($M=41.83$, $SD=8.54$) whereas Boy's boarding reported the lowest mean score ($M =35.86$, $SD=12.16$).

Data on student's school anxiety was used to further group the scores into three categories ranging from low, moderate to high. The results of this categorization are presented in Figure 4.2.

Figure 4.2

Respondents Level of School Anxiety



As shown in Figure 4.2, almost half (39.69%) of the participants had low levels of school anxiety. Nearly 59.96% of participants rated themselves as having moderate levels of school anxiety. Besides, 3.35% of the participants were found to have high levels of school anxiety.

Having analyzed the levels of student's school anxiety, the researcher conducted a more in-depth analysis on academic achievement scores across different levels of school anxiety. The outcomes were reported in Table 4.14.

Table 4.14*Academic Achievement Scores across Different Levels of School Anxiety*

Level of School Anxiety	<i>N</i>	Min	Max	Mean	<i>SD</i>	<i>Sk</i>	<i>Kur</i>
Low	154	30.16	70.91	50.71	9.83	.01	-.665
Moderate	221	30.16	70.91	50.10	11.63	-.14	-1.12
High	13	39.22	66.38	49.89	10.06	.12	-.60

Note: *N*= 388; *SD*= Standard Deviation; Max= Maximum; Min= Minimum ; *Sk* =Skewness; *Kur* =Kurtosis.

As reported in Table 4.14, the computation results indicated that students with highest levels of school anxiety had the lowest mean ($M = 49.89$, $SD= 10.06$), followed by students with moderate school anxiety levels ($M= 50.10$, $SD= 11.63$). Moreover, the students who rated themselves as having the lowest levels of school anxiety recorded the highest mean ($M= 50.71$, $SD= 9.83$).

4.3.2.2 Hypothesis Testing

The following null hypothesis was advanced in line with the second objective.

H_0 : There is no significant relationship between school anxiety and academic achievement.

The researcher conducted a bivariate analysis to test the hypothesis. Table 4.15 outlined findings of the analysis.

Table 4.15*Correlation between School Anxiety and Academic Achievement*

	T Score	SATS
Pearson	1	-.24**
Correlation		
T Score		.00
N	388	388

**. $p < .01$

Note: SATS= School Anxiety Total Score

The results from Table 4.15 indicated that a weak negative and significant relationship was found between students' school anxiety score and academic achievement ($r(386) = -0.24, p < .05$). Thus, the null hypothesis was rejected.

4.3.2.3 Discussion of the Results

This study hypothesized that school anxiety was not significantly related to academic achievement. From the results of bivariate correlation analysis, student's school anxiety had a negative significant relationship with academic achievement. The academic achievement of students with a high degree of school anxiety was reported to be poor compared to those who had low anxiety levels.

Further, this study's results supported findings from D'Agostino et al. (2022) among secondary school students in Italy. Results of the study reported that there was a negative relationship between student's school anxiety and their academic performance. The findings that a negative relationship existed between school anxiety and student's academic achievement corroborated a study done by OECD (2017)

among elementary school students across OECD countries that school anxiety had a negative relationship towards secondary school student's academic achievements.

However, findings from this study contradicted a study by Martinez-Montegudo et al. (2012) who studied 520 secondary school students in Spain which stated that students with high levels of school anxiety did well in both languages and mathematics than their counterparts who had low anxiety levels. The sample used by Martinez-Montegudo et al. (2012), were comparable to the current study's sample in terms of their level of education. The current study's participants were Form three students from Kitui County in Kenya, and the study reported contradicting results. Inconsistencies in these studies may be attributed to the sample's socio-cultural and academic experiences.

4.3.3 Relationship between Fear of Failure and Academic Achievement

The third objective aimed at finding out the relationship between fear of failure and academic achievement. The descriptive and inferential statistics of student's fear of failure scores were done and finally, the discussion of the results was made.

4.3.3.1 Descriptive Analysis of Fear of Failure

The researcher conducted a descriptive analysis of fear of failure total scores and outcomes reported in Table 4.16.

Table 4.16*Descriptive Analysis of Fear of Failure Total Scores*

	<i>N</i>	Min	Max	Mean	<i>SD</i>	<i>Sk</i>	<i>Kur</i>
FFTS	388	50.00	121.00	83.00	13.55	.15	-.38
N	388						

Note: *N*= 388; *Note*: *N*= 388; *SD*= Standard Deviation; Max= Maximum; Min= Minimum ; *Sk* =Skewness; *Kur* =Kurtosis.

FFTS- Fear of Failure Total Scores

As observed in Table 4.16, the minimum score of fear of failure was 50 and the maximum score was 121, ($M=83$, $SD=13.55$). The scores were positively skewed. It was therefore concluded that most students scored low on FoF. The participant's fear of failure total scores were further cross-tabulated across gender, age categories and school type. The results of the cross-tabulation are shown in Table 4.17.

Table 4.17*Fear of Failure Total Scores across Gender, Age Categories and School Type*

Gender of the Respondent		N	Min	Max	Mean	SD	Sk	Kur
Male	FFTS	189	50.00	117.00	81.77	13.53	.24	-.38
Female	FFTS	199	51.00	121.00	84.16	13.51	.07	-.31
Age Category (Years)								
15-16	FFTS	143	50.00	121.00	81.98	13.97	.12	-.38
17-18	FFTS	182	55.00	119.00	81.83	13.11	.35	-.19
19+	FFTS	63	56.00	117.00	88.70	12.58	-.21	-.13
School Type								
Boys Boarding	FFTS	42	50.00	116.00	75.09	13.37	1.02	.97
Girls Boarding	FFTS	46	54.00	119.00	84.67	16.38	.27	-.55
Co-educational	FFTS	300	51.00	121.00	83.85	12.77	.01	-.48

Note: N= 388; SD= Standard Deviation; Max= Maximum; Min= Minimum; Sk = Skewness; Kur =Kurtosis; FFTS = Fear of Failure Total Score.

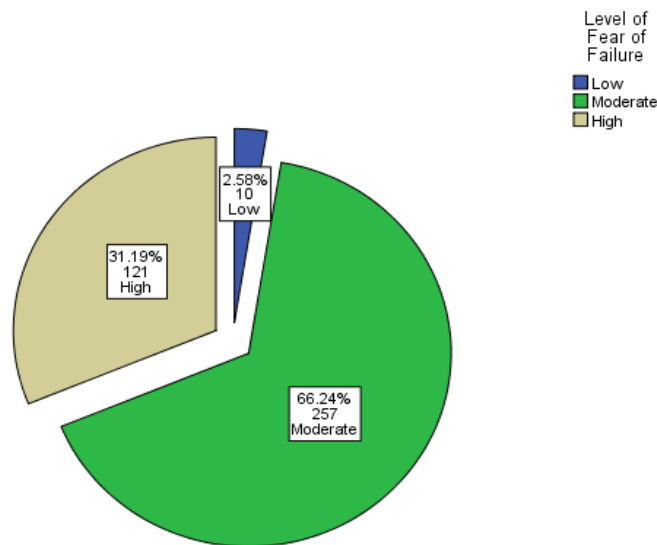
As presented in Table 4.17, the girls were found to have the highest mean score ($M=84.16$, $SD=13.51$). On the other hand, the boys reported to have a mean score ($M=81.77$, $SD=13.53$). From the three age categories it is observed that students with 19 and above years were found to have a slightly higher mean ($M=88.70$, $SD=12.58$) followed by students aged 15-16 ($M=81.98$, $SD=13.97$). Lastly, students with 17-18 years indicated the lowest mean score ($M=81.83$, $SD=13.11$). Results from Table 4.17

shows fear of failure's score was higher in girls boarding ($M= 84.67$, $SD = 16.38$) and lowest in boys boarding ($M= 75.09$, $SD = 13.37$).

Further, using the data obtained, the researcher classified the fear of failure scores into three levels. Low, moderate and high. The data is presented in Figure 4.3.

Figure 4.3

Levels of Fear of Failure



Results from Figure 4.3 indicates that while closely half (31.19%) of the respondents were classified as being high in fear of failure, majority (66.24%) were classified as having moderate fear of failure only a paltry 2.58% of the participants, rated themselves as having low levels of FoF.

The participants' academic achievement means were cross tabulated across different levels of fear of failure. The results of the computation were as displayed in Table 4.18.

Table 4.18

Mean Academic Achievement Scores across Different Levels of Fear of Failure

Level of Fear of Failure	<i>N</i>	Range	Min	Max	Mean	<i>SD</i>	<i>Sk</i>	<i>Kur</i>
Low	10	36.22	30.16	66.38	51.56	11.53	.80	-.32
Moderate	257	40.75	30.16	70.91	48.02	10.32	-.13	-.90
High	121	36.22	30.16	66.38	45.20	8.85	-.19	-.89

Note: *N*= 388; *SD*= Standard Deviation; Max= Maximum; Min= Minimum ; *Sk* =Skewness; *Kur* =Kurtosis.

Based on the results in Table 4.18, students who scored low in fear of failure, reported the highest mean ($M=51.56$, $SD= 11.53$). On the other hand, students showing the lowest means score ($M = 45.20$, $SD =8.85$) are those who had a higher degree of fear of failure.

4.3.3.2 Hypothesis Testing

The third objective aimed at investigating the relationship between FoF and academic achievement. The third null hypothesis was as stated:

H_{02} : There is no significant relationship between fear of failure and academic achievement.

The researcher conducted bivariate correlation analysis through Pearson product moment correlation coefficient to test for the relationship between fear of failure and academic achievement. The results of the analysis were as indicated in Table 4.19.

Table 4.19*Correlation between Fear of Failure and Academic Achievement*

	FFTS	TScore
Pearson Correlation	1	-.15**
FFTS		.00
N	388	388

** . $P < 0.05$

Note. FFTS- Fear of Failure Total Scores

Results on Table 4.19 revealed a negative and significant relationship between students' fear of failure scores and academic achievement ($r(386) = -0.15, P < 0.05$). Thus, the null hypothesis was rejected.

4.3.3.3. Discussion of the Results

Findings from the current study on the relationship between fear of failure and academic achievement reported a significant negative relationship. These results supported earlier findings by Alkhazaleh and Mahasneh (2016), who examined the relationship between student's fear of failure and GPA using undergraduate students from Jordan's Hashemite University. Results from this study indicated that students with high degrees of FoF reported low GPAs.

Tiatri and Sari (2020), investigating the correlation between FoF and academic performance among students enrolled at the University of Tarumanagara in Indonesia, arrived at similar conclusions. According to their findings, there is a negative and a significant relationship between university student's fear of failure and academic achievement. Thus, despite variations in research locations and cross-cultural

disparities, it was discovered that FoF exhibited a strong negative correlation with academic achievement. These study's findings indicated that students who rated themselves to have higher degrees of FoF are more likely to achieve less academically compared to their counterparts with low fear of failure levels who are likely to do well academically.

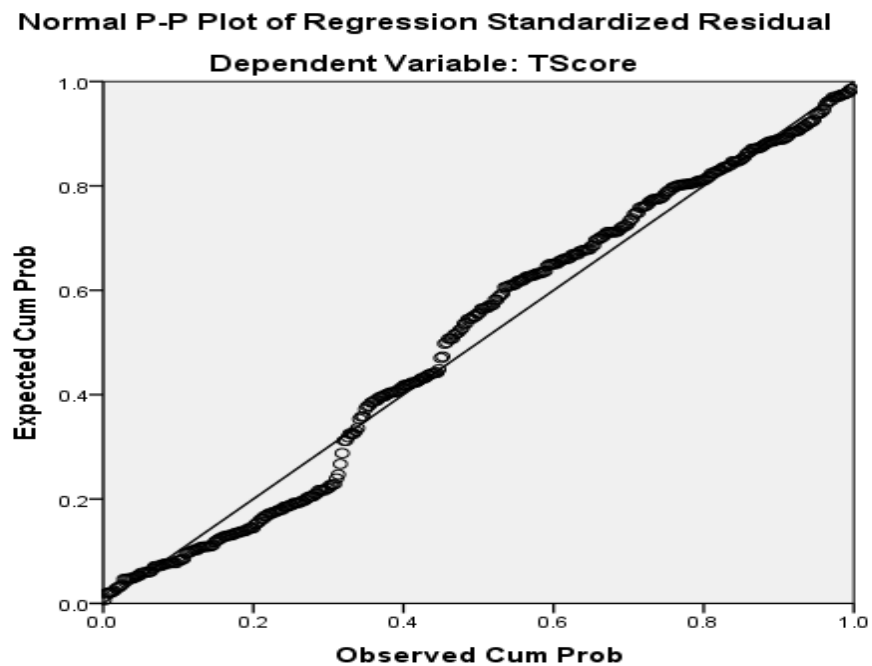
Contrary to the current study's finding, Stuart (2013), documented a strong and positive statistically significant correlation between American college students' academic performance. In their study, they aimed to study the relationship between fear of failure, self-efficacy procrastination and Students GPAs. The study also reported that girls had higher FoF and achieved better GPA compared to boys who had lower FoF levels. The inconsistencies in these different studies may be translated to mean that FoF may rely on a student's grade level, age and school context. The results may also imply that cultural differences may be a factor in shaping fear of failure.

4.3.4 Predicting Academic Achievement from Academic Optimism, School Anxiety and Fear of Failure

The fourth objective of the study sought to establish the predictive model of academic achievement from academic optimism, school anxiety and fear of failure. To achieve this objective the researcher conducted multiple regression analysis with the aim of establishing the predictive model. However, before carrying out the analysis, there was a need to begin by testing the assumptions of normality, homoscedasticity, and absence of multicollinearity. A normal predicted probability (P-P) plot was drawn, and the outcome was displayed in Figure 4.4.

Figure 4.4

Normal P-P Plot



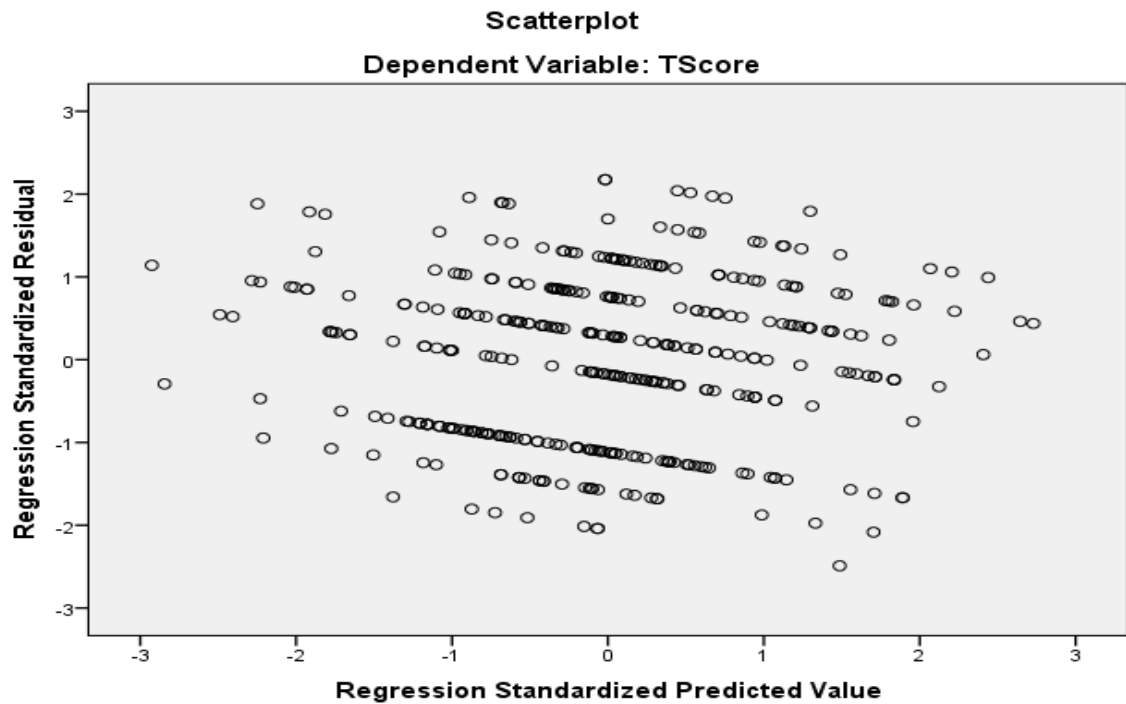
According to Matsaany et al. (2016), data is normally distributed if it conforms to the diagonal line of normality in the P-P Plot of Regression Standardized Residual. Consequently, the normality results given in Figure 4.4 provided evidence that the scores for the independent variables (academic optimism, school anxiety, and fear of failure) and dependent variable (academic achievement) were conforming to the diagonal normality line indicated in the plot. The assumption of normality had therefore been met.

The second assumption to be tested was the assumption of homoscedasticity. Testing this assumption was necessary to evaluate the distribution of the residuals in the regression analysis to find out if they were evenly distributed or if they appeared to clump up at some values and spread out at other values. If the residuals are randomly scattered and concentrated together at some point usually in the center, the assumption

is considered to have been met. A scatter plot based on normal predicted probability (P-P) plot of the regression residuals were drawn and the results given in Figure 4.5.

Figure 4.5

Scatterplot Dependent Variable



The scatter plot in Figure 4.5 provided evidence that was homoscedastic since the values on the graph show a randomly distributed data.

The third assumption to be tested was the assumption of absence of multicollinearity. This test was necessary to determine whether the predictor variables had a strong relationship with one another. If the variables were determined to be highly correlated, no regression model could have effectively associated variance in the outcome variable with the relevant predictor variable, hence the results would be inaccurate (Giacalone et al., 2018). The Variance Inflation Factor (VIF) values were computed, and the findings given in Table 4.20.

Table 4.20*Variance Inflation Factor Values*

Model	Collinearity Statistics		
	B	Tolerance	VIF
(Constant)	52.47		
AOTS	.09	.99	1.01
SATS	-.23	.77	1.30
FFTS	-.04	.77	1.30

Note. $N = 388$; AOTS=Academic Optimism Total Score; SATS=School Anxiety

Total Score; FFTS=Fear of Failure Total Score.

The data in Table 4.20 show that each value of the VIF is below 10, this suggested that the assumption of absence of multicollinearity was realized.

Having established that the four assumptions of multiple regression analysis had been met, the researcher sought to test the fourth hypothesis of the study which was stated as follows:

H₀₄: The predictive value of academic optimism, school anxiety and fear of failure on academic achievement is not significant.

To test this hypothesis, the researcher started by doing simple regression analysis for each of the three independent variables in order to determine their individual predictive regression weight as well as explained variance. Academic optimism was the first predictor variable to be considered for this analysis. The findings are reported in Table 4.21.

Table 4.21*Beta Coefficients for Academic Optimism*

Coefficients				ANOVA				R ²		
Model	<i>B</i>	<i>t</i>	<i>p</i>	Model	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>	<i>R</i>
	<i>β</i>			Regression	584.89	1	584.89	5.9	.01	0.02
Constant	41.27	11.39	.00							
AOTS	.12	2.43	.02	Residual	38115.11	386	98.74			
				Total	38700	387				

Note: *N*= 388; AOTS =Academic Optimism Total Score.

According to Table 4.21, academic optimism scores significantly and positively predicted academic achievement scores, $\beta = 0.12$, $t(386) = 11.39$, $p < .05$. Further, the scores of academic optimism accounted for a substantial amount of variation in academic achievement T scores, $R^2 = 0.02$, $F(1, 386) = 5.92$, $p < .05$. These findings were summarized in equation i.

$$\hat{y} = 41.27 + 0.12AOTS \quad p < .05 \quad R^2 = 0.02 \dots (i)$$

Where: \hat{y} = Predicted academic achievement score; AO- Academic Optimism; R²- R Square

School anxiety total score was the second variable to be considered for the simple regression analysis. The findings are reported in Table 4.22.

Table 4.22

Beta Coefficients for School Anxiety

Coefficients				ANOVA				R ²	
Model	<i>B</i>	<i>t</i>	<i>p</i>	Model	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Constant	59.45	30.04	.00	Regression	2291.53	1	2291.53	24.3	.00
SATS	-.24	-4.93	.00	Residual	36408.46	386	94.32		
				Total	38700	387			

Note. *N*=388; SATS- School Anxiety Total Score

Table 4.22's findings demonstrate that school anxiety significantly and negatively predicted academic achievement T scores, $\beta = -0.24$, $t(386) = -4.93$, $p < .05$, and that 6% of total variance in academic achievement T scores was explained, $R^2 = 0.06$, $F(1, 386) = 24.3$, $p < .05$. These results were summarized in equation ii.

$$\hat{y} = 59.45 - 0.24\text{SATS} \quad p < .05 \quad R^2 = 0.06 \dots \dots \dots \text{(ii)}$$

Where: \hat{y} = Predicted academic achievement Tscore R^2 - R Square

The third variable to be analyzed to determine the individual predictive regression weight and explained variance was fear of failure. The results of this analysis are given in Table 4.23.

Table 4.23

Beta Coefficients for Fear of Failure

Coefficients				ANOVA					R ²	
Model		<i>t</i>	<i>p</i>	Model	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	
	B	β								
Constant	59.14	18.94	.00	Regression	861.20	1	2291.53	8.79	.00	0.02
FoFS	-.15	-2.96	.00	Residual	37838.80	386	98.03			
				Total	38700.00	387				

Dependent Variable: TScore Predictors: (Constant), Fear of Failure Total Score

FoFSTS- Fear of Failure Total Score

From Table 4.23 it is evident that fear of failure total scores significantly and negatively predicted academic achievement T-scores, $\beta = -0.15$, $t(386) = -2.96$, $p < .05$, and accounted for 2% of the changes in academic achievement scores, $R^2 = 0.02$, $F(1, 386) = 8.79$, $p < .05$. These findings were summarized in equation iii.

$$\hat{y} = 59.14 - 0.15\text{FoFSTS} \quad p < .05 \quad R^2 = 0.02 \dots \dots \dots \text{(iii)}$$

Where: \hat{y} = Predicted academic achievement Tscore R^2 - R Square

Having determined the regression weights of the individual predictor variables the researcher aimed to ascertain the predictive equation of the three predictor variables which would give the hypothesized model and the combined explained variance. Table 4.24 displays the output of the analysis.

Table 4.24

Beta Coefficients for Academic Optimism, School Anxiety, Fear of Failure

Model	B		T	p	Model	SS	df	MS	F	p	R ²
(Constant)	52.44		11.69	.00	Regression	3031.92	3	1010.64	10.88	0.00	0.07
AOTS	.13		2.72	.01	Residual	35668.08	384	92.89			
SATS	-.22		-3.96	.00							
FoFTS	-.06		-.98	.34	Total	38700	387				

Note. N=388; AOTS= Academic Optimism Total Score; FoFTS= Fear of Failure Total Score; SATS= School Anxiety Total Score

The findings displayed in Table 4.24 demonstrate that both AOTS and SATS were strong predictors of academic achievement.

Equation iv, summarized the findings in Table 4.24.

$$\hat{y} = 52.44 + 0.13AOTS - 0.22SATS \quad p < .05 \quad R^2 = 0.07 \dots \dots \dots (iv)$$

\hat{y} = Predicted academic achievement Tscore AOTS- Academic Optimism Total Score

SATS- School Anxiety Total Score, R²- R Square

From Table 4.24, it was observed that academic optimism and school anxiety total scores significantly predicted academic achievement T scores, $\beta = 0.13$, $t(386) = 2.72$, $p < .05$ and $\beta = -0.22$, $t(386) = -3.96$, $p < .05$. Academic optimism and School anxiety together explained a significant proportion of variance in academic achievement T scores, $R^2 = 0.07$, $F(3, 384) = 10.88$, $p < .05$. The fourth null hypothesis was therefore rejected. Though negative, school anxiety was discovered to be the best predictor of academic achievement scores followed by academic optimism which had a significant and positive predictive value. The combined model for the three predictors revealed that FoF had a negative and non-significant prediction value.

4.3.4.1 Discussion of Results

The outcomes of this research supported the previous study by Singh et al. (2013), in their study on school anxiety levels, and their relationship with academic optimism and engineering undergraduate's academic achievement in the U.S.A. Results from this study indicated that school anxiety had a negative and significant relationship with academic achievement. These results were in line with a study in England by Carey et al. (2017), involving primary and secondary schools that among other forms of anxiety, school-work related anxiety predicted academic achievement better.

However, these findings contradicted a study done in the U.S by Rand et al. (2020) which sought to determine how hope and optimism predicted a student's academic performance and well-being. This study suggested that academic optimism had the least effect on college students' academic performance.

Furthermore, these findings contradict with findings of Nsiah (2017) using undergraduate students in Ghana. In their research they intended to examine fear of failure and motivation and its prediction value on academic achievement. Study done by Nsiah (2017) found a negative predictive value of FoF on academic achievement.

The inconsistencies in finding may be attributed to students' age and socio-cultural factors.

4.3.4.2 Exploratory analysis

The researcher further explored differently in the means for academic achievement across different school types and the outcome of the analysis displayed in Table 4.25.

Table 4.25

Differences in Mean T Scores across School Types

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5467.37	2	2733.68	31.67	.000
Within Groups	33232.63	385	86.32		
Total	38700.00	387			

A one-way ANOVA results in Table 4.26 demonstrated that the effect of school type was significant for students' academic achievement, $F(2, 385) = 31.67, p < .05$.

Further, a computation was done across school types in relation to academic optimism and results summarized in Table 4.26.

Table 4.26*Differences in Mean for Academic Optimism Scores across School Types*

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	3650.05	2	1825.02	9.34	.000
Within Groups	75272.21	385	195.51		
Total	78922.26	387			

A one-way ANOVA results in Table 4.26 demonstrated that the influence of school type was significant for students' academic optimism scores, $F(2, 385) = 9.34, p < .05$. Further, the researcher did an analysis to establish exactly where the differences were across different school types in relation to academic optimism. The findings were reported in Table 4.27.

Table 4.27

Multiple Comparisons for Difference in Academic Optimism Mean Scores across School Types

(I) School Type	(J) School Type	M (I-J)	SE	Sig.	95% CI	
					LB	UB
BB	GB	2.98	2.98	.58	-4.04	10.00
	Co-ed	8.68*	2.30	.00	3.26	14.10
GB	BB	-2.98	2.98	.58	-10.00	4.04
	Co-ed	5.70*	2.21	.03	.49	10.91
Co-ed	BB	-8.68*	2.30	.00	-14.10	-3.26
	GB	-5.70*	2.21	.023	-10.91	-.49

Note. N= 388. * $p < .05$; GB = Girls Boarding; BB= Boys Boarding; Co-ed= educational; M=Mean; SE= Standard Error; LB= Lower Bound; UP=Upper Bound.

Results from Table 4.27 shows that when compared with co-educational school and girl's boarding boys' boarding had the highest. This is indicated by a positive figure. More specifically, the mean difference between boys' boarding and girls' boarding was (2.98). Comparing boys' boarding and coeducational school the mean difference was (8.68). Moreover, the mean difference between girl's boarding and co-educational school was (5.70). These computations can be interpreted to mean that when it comes to academic optimism, boys' boarding had the highest mean followed by girls' boarding and finally co-educational school.

A one-way ANOVA was performed to compare the differences of school type on school anxiety mean scores. A one-way ANOVA revealed that school type and school anxiety mean scores significantly differed across school types $F(2, 385) = 32.73, p < .05$. The data is as displayed in Table 4.28.

Table 4.28

Differences in Mean for School Anxiety Scores across School Types

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5060.27	2	2530.14	32.73	.000
Within Groups	29762.50	385	77.31		
Total	34822.77	387			

Further multiple comparisons were performed to investigate where specifically the difference was. The outcome was reported in Table 4.29.

Table 4.29

Multiple Comparisons for Difference in School Anxiety Mean Scores across School Types

(I) School Type	(J) School Type	M(I-J)	SE	Sig.	95% CI	
					LB	UB
BB	GB	-4.85*	1.88	.03	-9.26	-.43
	Co-ed	-10.70*	1.45	.00	-14.12	-7.30
GB	BB	4.85*	1.88	.03	.43	9.26
	Co-ed	-5.86*	1.39	.00	-9.13	-2.58
Co-ed	BB	10.71*	1.45	.00	7.30	14.11
	GB	5.86*	1.39	.00	2.58	9.13

Note. N=388; * $p < .05$; BB=Boys Boarding; GB= Girls Boarding; Co-ed= Co-educational; M=Mean; SE= Standard Error; LB= Lower Bound; UP=Upper Bound

From Table 4.29, it is evident that whilst comparing boys boarding and girls boarding the results were negative (-4.84). This can be interpreted to mean that girls boarding had higher anxiety levels compared to boys as when girls' mean is deducted from boys' mean the results are negative.

Additionally, it is evident while comparing boys boarding and coeducational school, the results were also negative (-10.71). This was the highest figure. Finally, the mean difference between girl boarding and co-educational was (-5.85).

The researcher proceeded to conduct ANOVA to investigate the influence school type had on fear of failure mean scores. The analysis was summarized in Table 4.30.

Table 4.30*Differences in Mean for Fear of Failure Scores across School Types*

	Sum of Squares	df	Mean Square	<i>F</i>	<i>P</i>
Between Groups	2970.02	2	1485.01	8.39	.00
Within Groups	68117.98	385	176.93		
Total	71088.00	387			

Note. $N=388$.

A one-way ANOVA results in Table 4.30 demonstrated that the differences in school type was significant for students' fear of failure $F(2, 385) = 8.39, p < .05$.

Having conducted a one-way ANOVA to investigate the influence of school type on the fear of failure scores, the researcher went further to perform multiple comparisons to investigate where exactly the differences were. The multiple comparisons analysis report is presented in Table 4.31.

Table 4.31

Multiple Comparisons for Difference in Fear of Failure Mean Scores across School Types

(I) School Type	(J) School Type	M (I-J)	SE	Sig.	95% CI	
					LB	UB
BB	GB	-9.58*	2.83	.00	-16.26	-2.90
	Co-Ed	-8.75*	2.19	.00	-13.91	-3.60
GB	BB	9.59*	2.84	.00	2.90	16.26
	Co-ed	.82	2.10	.92	-4.13	5.78
Co-ed	BB	8.75*	2.19	.00	3.60	13.91
	GB	-.824	2.11	.92	-5.78	4.13

Note. N=388; * $p < .05$; BB=Boys Boarding; GB= Girls Boarding; Co-ed= Co-educational; M=Mean; SE= Standard Error; LB= Lower Bound; UP=Upper Bound

Results from Table 4.31 reveals that the highest mean difference (-9.57) was found between boys' boarding and girls boarding in regard to fear of failure. The lowest mean difference was found between co-educational and girls boarding (-8.75).

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

There are four sections in this chapter. It starts off by summarizing the studies. The implications of the findings are discussed in the second part. Additionally, it discusses the study's conclusions in light of the results. The final portion concludes with recommendations for future research and policy.

5.2 Summary

This study investigated the association between academic optimism, school anxiety, fear of failure, and academic achievement. The study also investigated the predictive weight of academic optimism, school anxiety, and fear of failure on academic achievement. This study targeted Form three learners in Kitui County.

In summary, the current study's primary aim was to examine the link between academic optimism and achievement. Evidence from the current study was provided. The findings were a positive and significant association between optimism and increased achievement. Only the student's identification with the institution was found to have a positive and significant correlate with academic achievement among the three domains of academic optimism. Academic achievement was positively and modestly related to students' perceptions of the academic press and their level of trust in their teachers. The researcher also investigated gender differences in regard to academic optimism. The study reported that boys recorded more academic optimism compared to girls who had relatively lower academic optimism. Consequently, boys were found to achieve higher academically compared to girls.

The second objective was to determine the relationship between school anxiety and academic achievement. Results from this study supported the hypothesized

relationship. The study found out that school anxiety had a negative and significant relationship with student's academic achievement.

The third aim examined the potential relationship between students' academic achievement and their fear of failure, where a negative and significant relationship was established.

The fourth and last objective aimed at examining the predictive value of academic optimism, school anxiety, and fear of failure on academic achievement. Given the three predictor variables—academic optimism, school anxiety, and FoF—a significant predictive value was discovered between academic optimism and school anxiety. It emerged that, although negative, school anxiety was a stronger predictor of students' academic achievement.

In regard to exploratory analysis, significant mean differences were found between students' academic optimism, school anxiety and fear of failure in relation to school type. Boys boarding were established to outperform girls' boarding and co-educational schools. More specifically, they were found to have the highest academic optimism, lowest school anxiety and lowest fear of failure levels.

5.3 Conclusions

The outcome of this study provided evidence that, to improve academic achievement, the school environment should be set up in such a way that students feel they are part of the school. The students who were rated high in identification with the school were also found to be high academic achievers. Furthermore, schools should strive to achieve a trusting relationship between teachers and students. When students trust their teachers, have a good perception of academic press, and identify well with their school, they will stretch to their full potential, resulting in higher academic achievement. School anxiety has a relationship with students' academic success. Students who

experience higher anxiety levels may be poor academic achievers. This is because, they may lack confidence while answering questions and would be more unlikely to participate in learning activities. Parental engagement in school activities and teachers support should be geared towards adopting modeling and instruction strategies that reduce student's school anxiety levels and order to enhance students' academic achievement.

Students with high scores in FoF scale were found to have low scores in academic achievement. This may imply that for students to post good grades in school, teachers and parents may need to encourage students to adopt positive mindsets as well as come up with practices that help them overcome fear of failure. More specifically, those closest to the learners, such as parents, peers and teachers ought to encourage the learners to work towards achieving their goals; however, the students should not set unrealistic expectations as their fear of failing may affect their academic achievement negatively. Setting small and realistic goals would lead students to a larger academic goal and give them confidence along the way as they celebrate each step of their accomplishment. Students should be encouraged to practice self-compassion and furthermore, be reminded that trying their best to achieve is enough and that they should try to acknowledge the feeling of fearing failure instead of letting the feeling distract them. Students who adopts a resilient mindset are more likely to keep working towards achieving their academic goals. These efforts may help them to manage FoF and eventually improve academic achievement.

5.4 Recommendations

The current study's findings prompted the development of the following recommendations pertaining to policy and future research.

5.4.1 Policy Recommendations

Findings from this study have several implications for both secondary school students and educators in Kenya on the role of academic optimism, school anxiety and fear of failure in influencing students' academic achievement.

- i. To promote academic optimism in the classroom, teachers should incorporate practices that nurture a positive outlook towards learning, such as providing constructive feedback, celebrating student achievements, and fostering a growth mindset.
- ii. This study's findings have indicated that school anxiety has the greatest predictive value on academic achievement. School anxiety can be addressed through supportive pedagogy. Thus, teachers should implement student-centered teaching approaches that accommodate diverse learning styles and preferences, reducing the pressure and anxiety associated with academic performance.
- iii. Students should actively engage in activities that enhance their resilience, such as setting realistic goals, seeking support from peers and teachers, and practicing self-care strategies to manage stress and anxiety.
- iv. Students should foster a culture of collaboration and peer support among students, where they can share experiences, seek advice, and provide encouragement to one another.

- v. School managers should encourage channels for open communication and collaboration among teachers, students, parents and school administrators to address concerns related to school anxiety and fear of failure.
- vi. Schools to pay more attention to the development of academic optimism among students and consider it as a key variable in determining students' academic achievement.
- vii. MOE should come up with a set up aimed at ensuring that secondary school students have access to equal learning experiences despite whether they are in a co-educational school, boys' boarding or girls' boarding.

5.4.2 Recommendations for Further Research

The study proposed the following areas that require further research.

- i.** Since this study only employed a sample taken from Kitui County, its findings might not apply to other Kenyan schools. Further research may be conducted in other counties using secondary school students at different levels to accommodate geographical, socio-cultural and class differences.
- ii.** This study used a questionnaire to measure academic optimism, school anxiety and fear of failure. To mitigate the limitations associated with relying solely on self-reported data, future studies could employ a mixed-methods approach combining quantitative surveys with qualitative methods such as interviews or focus groups. This would investigate representativeness of the current study's results as students may have overrated themselves in these scales. Interviews may be conducted to confirm the consistency of the students' responses.

- iii.** This study utilized correlational study design. This design does not examine causation. Thus, further research may be done using experimental research design which could explain causation among the variables in study.
- iv.** Future research endeavors should expand the scope of predictors examined beyond academic optimism, school anxiety, and fear of failure. Incorporating additional variables such as parental involvement, teacher support, socio-economic status, and individual differences in learning styles and abilities would offer a more nuanced understanding of the multifaceted nature of academic achievement.
- v.** The findings are rooted in a secondary school student's sample. A further study should be conducted to determine how academic optimism, school anxiety and fear of failure can influence academic achievement among primary, college and university school students. A similar study, using primary, college and university students would study these psychological constructs given different age and sociocultural factors.

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APPENDICES

Appendix A: Informed Consent Letter

Dorcas Mutanu Muimi

Department of Educational Psychology

Kenyatta University

P.O Box 43844,

Nairobi.

Dear Student,

I am a student at Kenyatta University taking a degree In Master of Education in Educational psychology. Your participation in this study is very crucial to complete this noble task. Therefore, I kindly request you to help by providing information through filling the questionnaires and your responses will be used only for the purpose of this study.

Kindly append signature in the space provided if you agree to participate in this study.

Student's Signature:..... Date:.....

Thank you for your participation.

Student's Signature:..... Date:.....

Dorcas Mutanu Muimi

Student, Masters (Educational Psychology), Kenyatta University

Appendix B: Questionnaire for Students

Part I: Background Information

Please fill in the blank spaces and put a tick (✓) where appropriate.

1. Code no. _____

2. Gender: Male () Female ()

3. Age in years _____

4. Name of school _____

5. School type

Boys'' boarding () Boys'' day ()

Girls'' boarding () Girls'' day ()

Co-educational day/Mixed day ()

PART II

Academic Optimism Questionnaire

The following questions ask about how you trust the teachers, your perception on academic environment, and the extent to which you feel as part of the school. Please tick to indicate the extent to which you agree with the given statement using the following guide. **SD**= strongly disagree, **D**=Disagree, **N**=Neutral/neither agree nor disagree, **A**= Agree, **SA**= Strongly Agree. There is no right or wrong answer, kindly answer faithfully.

Item	Student trust in teachers	SD	D	N	A	SA
1	Teachers are always ready to help					
2	Teachers are easy to talk to at this school					
3	Students are well cared for at this school					
4	Teachers always do what they are supposed to do					
5	Teachers at this school really listen to students					
6	Teachers at this school are always honest with me					
7	Teachers at this school do a terrific job					
8	Teachers at this school are good at teaching					
9	Students learn a lot from teachers in this school					
10	Students at this school can depend on teachers for help					
Item	Student perceptions of academic Press	SD	D	N	A	SA
11	Students respect others who get good grades					
12	Students try hard to improve					
13	This school is serious about learning					
14	Students work hard to get good grades					
15	The content of my courses are challenging					
16	My teachers believe that I can learn					
17	Good grades are recognized					
18	I can get extra help at school if needed					
Item	Student identification with school	SD	D	N	A	SA
19	I feel proud of being part of my school					
20	School is one of my favorite places to be					
21	School is more important than most people think					

22	There are adults at school who are interested in me					
23	Most of the things we learn in school are worthless					
24	Going to school is a waste of time					
25	I feel like I am a part of my school					
26	My teachers care about me					
27	I fit in with students at this school					
28	Teachers respect me					

PART II

SCHOOL ANXIETY

The following questions ask about the frequency with which you feel anxious about school. There is no right or wrong answer for the questions. Please answer faithfully. by use of the scale below, please read and indicate the extent to which you agree or disagree with the statements below by using this guide. **N= Never, R= Rarely, S=Sometimes, O=Often, A=Always**

Item	Anxiety	N	R	S	O	A
1	If people criticize me at school my breathing is rapid					
2	If people laugh or make fun of me my heart beats quickly					
3	If people treat me with contempt or with an air of superiority my stomach begins to hurt					
4	If I am insulted or threatened, I blush					
5	If I am ignored by classmates, my head begins to hurt					

	Anxiety about social evaluation	N	R	S	O	A
6	If I go up to the blackboard it frightens me and it makes me nervous					
7	If I talk to the class, I'm worried about what people will say about me					
8	If the teacher asks me a question, I repeat it in my head. I think of nothing else.					
9	If I ask the teacher in class, I'm frightened of making a mistake					
10	If I read aloud in front of the class, I think that I should have worked more					
	Anxiety about Academic Failure					
11	If I get bad marks, I cannot find words to say what I want					
12	If I fail an exam my voice trembles					
13	If I show my school report to my parents and it is not good my legs shake					
14	If I repeat the year, I cry without meaning to					
15	If I take a written exam, it's easy for me to put on a false smile					

Part III

The statements below are representations of what you feel when you are failing in school. By putting a tick, please answer about how you feel. Please be as accurate as

possible. The responses will be 5 = *Do not believe at all*. 4 = *Believe 25% of the time*,
 3 = *Believe 50%*, 2 = *believe 75% of time* 1 = *Believe 100% of the time*

Item	Fear of failure questionnaire	5	4	3	2	1
1	When I am failing, it is often because I am not smart enough to perform successfully.					
2	When I am failing, my future seems uncertain.					
3	When I am failing, it upsets important others.					
4	When I am failing, I blame my lack of talent.					
5	When I am failing, I believe that my future plans will change.					
6	When I am failing, I expect to be criticized by important others.					
7	When I am failing, I am afraid that I might not have enough talent.					
8	When I am failing, it upsets my “plan” for the future.					
9	When I am failing, I lose the trust of people who are important to me.					
10	When I am not succeeding, I am less valuable than when I succeed.					
11	When I am not succeeding, people are less interested in me.					
12	When I am failing, I am not worried about it affecting my future plans. (Reverse)					
13	When I am not succeeding, people seem to want to help me less.					
14	When I am failing, important others are not happy.					
15	When I am not succeeding, I get down on myself easily.					
16	When I am failing, I hate the fact that I am not in control of the outcome.					
17	When I am not succeeding, people tend to leave me alone.					
18	When I am failing, it is embarrassing if others are there to see it.					

19	When I am failing, important others are disappointed.					
20	When I am failing, I believe that everybody knows I am failing.					
21	When I am not succeeding, some people are not interested in me anymore.					
22	When I am failing, I believe that my doubters feel that they were right about me.					
23	When I am not succeeding, my value decreases for some people.					
24	When I am failing, I worry about what others think about me.					
25	When I am failing, I worry that others may think I am not trying.					

Appendix C: Academic Achievement Proforma Table

School

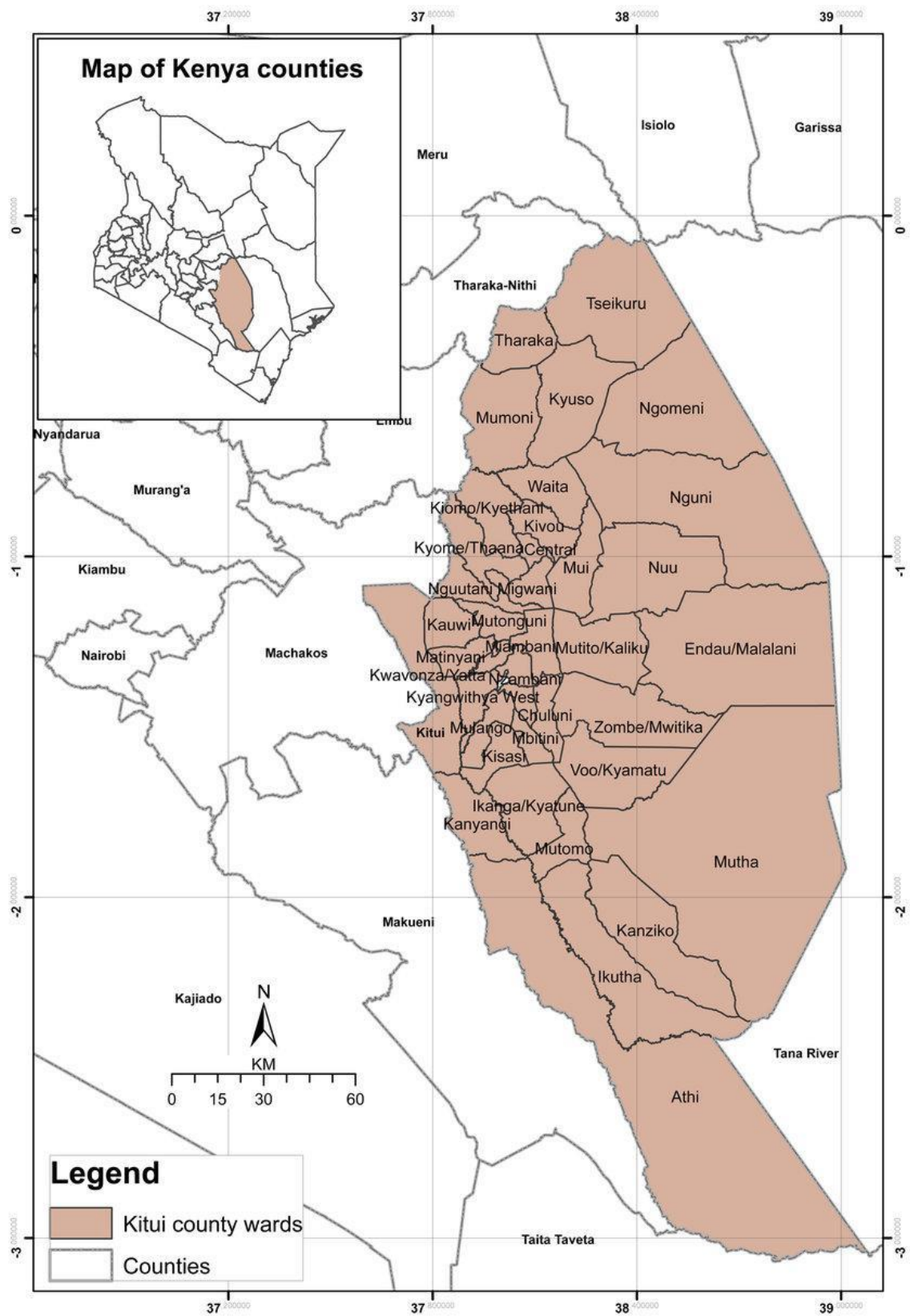
Gender

Boy ()

Girl ()

CODE NO.	TOTAL SCORE	MEAN MARK

Appendix D: Map of Kitui County



Appendix E: Approval of Research Proposal



KENYATTA UNIVERSITY
OFFICE OF THE EXECUTIVE DEAN GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke

P.O. Box 43844, 00100

NAIROBI, KENYA

Tel. 020-8704150

Website: www.ku.ac.ke

Internal Memo

FROM: Executive Dean, Graduate School

DATE: 13th April 2023

TO: Ms. Dorcas Mutaru Muimi
C/o Department of Educational Psychology

REF: E55/21211/2021

SUBJECT: APPROVAL OF RESEARCH PROPOSAL

=====

This is to inform you that Graduate School Board, at its meeting on 5th April 2023, approved your Research Proposal for the M.Ed. Degree entitled, *“Academic Optimism, School Anxiety, and Fear of Failure as Antecedents of Academic Achievement Among Form Three Students in Kitui County, Kenya”*.

You may now proceed with your Data collection, subject to clearance with the Director General, National Commission for Science, Technology & Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking and Progress Report Forms per semester. The Forms are available at the University's Website under Graduate School webpage downloads.

Also, please ensure that you publish article(s) from your thesis before submitting it to Graduate School for examination as per the Commission for University Education and Kenyatta University guidelines.

Thank you.


JOHN OMONGI
FOR: EXECUTIVE DEAN, GRADUATE SCHOOL

CC: Chairman, Department of Educational Psychology

Supervisors:

1. Dr. Samuel Mutweleli
C/O Educational Psychology Department
Kenyatta University
2. Dr. Anthony Ireri
C/O Educational Psychology Department
Kenyatta University

Appendix F: Research Authorization



KENYATTA UNIVERSITY
OFFICE OF THE EXECUTIVE DEAN GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke

Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 020-8704150

Our Ref: E55/21211/2021

DATE: 13th April 2023

Director General,
National Commission for Science, Technology and Innovation
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION FOR MS. DORCAS MUTANU MUIMI – REG. NO. E55/21211/2021

I write to introduce Ms. Dorcas Mutanu Muimi who is a Postgraduate Student of this University. She is registered for M.Ed. degree programme in the **Department of Educational Psychology**.

Ms. Dorcas Mutanu Muimi intends to conduct research for a M.Ed. Thesis Proposal entitled, "*Academic Optimism, School Anxiety, and Fear of Failure as Antecedents of Academic Achievement Among Form Three Students in Kitui County, Kenya*".

Any assistance given will be highly appreciated.

Yours faithfully,

A handwritten signature in blue ink, appearing to be 'Prof. Etishiba Kimani', written over a circular stamp or seal.

PROF. ETISHIBA KIMANI
EXECUTIVE DEAN, GRADUATE SCHOOL

Appendix G: Research Permit



REPUBLIC OF KENYA

 National Commission for Science, Technology and Innovation

Ref No: 556694
Date of Issue: 30/June/2023

RESEARCH LICENSE



This is to Certify that Miss. DORCAS MUTAND MUTHI of Kenyatta University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev. 2014) in Kitui on the topic: **ACADEMIC OPTIMISM, SCHOOL ANXIETY, AND FEAR OF FAILURE AS ANTECEDENTS OF ACADEMIC ACHIEVEMENT AMONG FORM THREE STUDENTS IN KITUI COUNTY, KENYA for the period ending: 30/June/2024.**

License No: NACOLIF/23/27404


Director General
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Verification (J. Cook)


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