

Correlation between destructive anger and academic achievement of secondary school students: case of selected public secondary schools in Ruiru Sub County, Kiambu County, Kenya

by

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APPROVAL

CORRELATION BETWEEN DESTRUCTIVE ANGER AND ACADEMIC
ACHIEVEMENT OF SECONDARY SCHOOL STUDENTS: CASE OF SELECTED
PUBLIC SECONDARY SCHOOLS IN RUIRU SUBCOUNTY,
KIAMBU COUNTY, KENYA

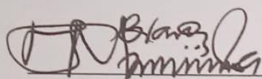
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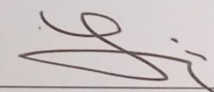
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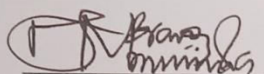
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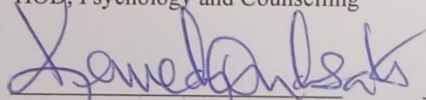
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DECLARATION

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I declare that this thesis is my original work and has not been submitted to any other college or university for academic credit.

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TABLE OF CONTENTS

| | |
|--|------|
| APPROVAL..... | i |
| DECLARATION..... | iii |
| ACKNOWLEDGEMENTS | iv |
| TABLE OF CONTENTS | v |
| LIST OF TABLES | vii |
| LIST OF FIGURES..... | viii |
| LIST OF ABBREVIATIONS AND ACRONYMS | ix |
| ABSTRACT | x |
| CHAPTER ONE..... | 1 |
| INTRODUCTION AND BACKGROUND TO THE STUDY..... | 1 |
| Introduction..... | 1 |
| Background of the Study | 3 |
| Statement of the Problem..... | 6 |
| Purpose of the Study | 8 |
| Objectives of the Study..... | 8 |
| Broad Objective | 8 |
| Specific Objectives | 8 |
| Research Questions..... | 8 |
| Justification of the Study | 9 |
| Significance of the Study..... | 9 |
| Assumptions of the Study | 10 |
| Scope of the Study | 10 |
| Limitations and Delimitation of the Study..... | 11 |
| Definitions of Significant Terms | 11 |
| Summary..... | 12 |
| CHAPTER TWO..... | 13 |
| LITERATURE REVIEW..... | 13 |
| Introduction..... | 13 |
| Theoretical Framework..... | 13 |
| General Literature Review..... | 16 |
| Empirical Studies..... | 28 |
| Conceptual Framework..... | 32 |
| Discussion..... | 32 |
| Summary..... | 33 |
| CHAPTER THREE..... | 34 |
| RESEARCH METHODOLOGY | 34 |
| Introduction..... | 34 |
| Research Design..... | 34 |
| Target Population..... | 34 |
| Study Site..... | 36 |
| The Inclusion and Exclusion Criteria | 37 |
| Sample Size..... | 38 |
| Sampling Technique | 39 |
| Validity and Reliability..... | 41 |
| Reliability..... | 41 |
| Validity | 42 |
| Data Analysis..... | 43 |
| Ethical Considerations | 43 |

| | |
|--|-----|
| Summary | 44 |
| CHAPTER FOUR | 45 |
| DATA PRESENTATION, ANALYSIS, AND INTERPRETATION | 45 |
| Introduction | 45 |
| Response Rate | 45 |
| Social-Demographic Characteristics | 46 |
| Key Findings of the Study | 66 |
| Summary | 68 |
| CHAPTER FIVE | 69 |
| SUMMARY OF FINDINGS, RECOMMENDATIONS, AND CONCLUSIONS | 69 |
| Introduction | 69 |
| Summary of Findings | 69 |
| Discussion of Key Findings | 69 |
| Social-Demographic Characteristics | 69 |
| Prevalence of Destructive Anger | 71 |
| Correlation Between Destructive Anger and Academic Achievement | 72 |
| Difference in Expressing Anger Between Boys and Girls | 75 |
| Conclusions | 79 |
| Recommendations | 80 |
| Recommendations For Further Research | 82 |
| Summary | 83 |
| REFERENCES | 84 |
| APPENDICES | 105 |
| Appendix I: Letter of Introduction | 105 |
| Appendix II: Questionnaire for Students | 106 |
| Appendix III: ERB Approval | 109 |
| Appendix IV: NACOSTI Permit | 110 |
| Appendix V: Authorization from the County Commissioner | 111 |
| Appendix VI: Authorization from the County Director of Education | 112 |
| Appendix VII: Similarity Index | 113 |

LIST OF TABLES

| | |
|--|----|
| <i>Table 3.1: Target Population of the Study</i> | 36 |
| <i>Table 3. 2: Sample Frame for the Sample Schools</i> | 40 |
| <i>Table 4.1: The Response Rate</i> | 45 |
| <i>Table 4.2: Respondents' Social-Demographic Characteristics</i> | 46 |
| <i>Table 4.3: Cross Tabulation Between When the Respondents Get Annoyed the Most and If Their Current School Was Their Choice.</i> | 48 |
| <i>Table 4.4: Cross Tabulation Between if there are Some Extra-Curricular Activities that Upset the Respondents and When the Respondents Get Annoyed the Most...</i> | 49 |
| <i>Table 4.5: Are You Satisfied with The Way Grievances Are Handled?</i> | 50 |
| <i>Table 4.6: Prevalence of Destructive Anger Among Students</i> | 51 |
| <i>Table 4.7: A cross-tabulation of School and Prevalence of Anger</i> | 52 |
| <i>Table 4.8: Correlation between Destructive Anger by School</i> | 53 |
| <i>Table 4.9: A Cross-tabulation of Form of Student and Prevalence of Anger</i> | 54 |
| <i>Table 4.10: Correlation between Destructive Anger by Form</i> | 55 |
| <i>Table 4.11: A Cross-tabulation of Gender and Prevalence of anger</i> | 56 |
| <i>Table 4.12: Correlation between Destructive Anger by Gender</i> | 58 |
| <i>Table 4.13: Mean Difference in Academic Performance</i> | 59 |
| <i>Table 4.14: Regression Analysis for Destructive Anger and Academic Performance</i> | 60 |
| <i>Table 4.15(a): The Correlation between Gender and Anger Expression</i> | 61 |
| <i>Table 4.15(b): The Correlation between Gender and Anger Expression</i> | 63 |
| <i>Table 4.15(c): The Correlation between Gender and Anger Expression</i> | 64 |

LIST OF FIGURES

Figure 2. 1: Conceptual Framework.....32

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LIST OF ABBREVIATIONS AND ACRONYMS

| | |
|--------|---|
| BAQ | The Buss-Perry Aggression Questionnaire |
| CBT | Cognitive Behavioral Therapy |
| GAD | Generalized Anxiety Disorder |
| GPA | Graded Point Average |
| IA | Instrumental Anger |
| MOE | Ministry of Education |
| RA | Reactive Anger |
| SPSS | Statistical Package for Social Sciences |
| UNESCO | United Nations Educational Scientific and Cultural Organisation |
| USA | United States of America |
| WHO | World Health Organization |

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ABSTRACT

The main aim of this study was to investigate the correlation between destructive anger and academic achievement of students from selected public secondary schools in Ruiru sub-County, Kiambu County, Kenya. The objectives of the study were to analyze the socio-demographic characteristics of students, to find out the prevalence of destructive anger among students, to investigate the correlation between destructive anger and academic achievement of students, and to examine the differences in expressing anger between boys and girls in selected public secondary schools in Ruiru sub-County. Two secondary schools were purposively selected to take part in this study. A sample of 201 respondents were recruited. Descriptive survey research design was used. The study found out that hostility had the strongest prevalence levels among students with a mean of 3.83 followed by Anger with a mean of 3.66, and then Verbal Aggression with a mean of 3.57. The study also found out that the mean academic performance of the respondents had been on a decline for the last 3 terms. Both verbal aggression and hostility were statistical predictors of academic performance ($p=0.029$ and $p=0.006$) respectively. There was a statistically significant positive relationship between gender and punching someone ($r=0.142$; $p=0.044$); gender and crying as an expression of anger ($r=-0.431$; $p=0.000$); gender and walking off ($r=0.147$; $p=0.037$); while gender and eating a lot as an expression of anger ($r=0.228$; $p=0.001$). Among the study's recommendations were that schools have the responsibility of detecting and regulating the emotions created by the adolescents, and that there is need for family and academic institutions to implement policies that will mitigate the prevalence of destructive anger among high school students. The study concluded that destructive anger is prevalent among secondary school students in Ruiru sub-County, Kiambu County, Kenya.

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CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

Introduction

This chapter contains the introduction, background information, statement of the problem objectives of the study, research questions, justification of the study, significance of the study, limitations and delimitations, basic assumptions of the study, definition of the significant terms and the summary.

Secondary school students experience a variety of difficulties both at home and in school that have a negative impact on their lives. Managing destructive anger is one of these difficulties. According to Novaco (2010), adolescent's destructive anger is correlated to major issues such as depressive symptoms, suicide, and substance addiction, among other things. Novaco further notes that although anger may not always lead to aggressiveness, it is an antecedent to aggression. When a student is confronted with destructive anger, he or she loses control of their actions. This is likely to escalate to school violence which in turn disrupts learning in secondary schools hence need for early intervention.

Despite the fact that school violence is a complicated occurrence with various causation pathways, destructive anger is one such crucial component that contributes to arson actions, according to Pfeifer and Ganzevoort (2016). Anger is one of the most difficult emotions to work with in psychotherapy since it is "a significant feeling of distress in reaction to a specific trigger" (Novaco, 2010). It is defined as a set of sentiments that range in intensity from slight annoyance to great fury and rage, all of which cause the nervous system to be stimulated (Brunner, 2009).

Anger has negative effects on students' social health as well as society's overall health (Hubbard et al., 2010). Anger is further divided into three categories: feelings, circumstances, and behaviors (Smith et al., 2012). The management of anger therefore becomes complicated because of the foregoing components since one must control all of them at the same time. This may be difficult in the case of a secondary school student hence impacting on the academic achievement of the students.

Although anger is not all the time a negative feeling, students who are ill-fortified to deal with it exhibit it in unhealthy ways, such as physical fighting and impulsive violence (Brent & Mann, 2006). The aforesaid outburst of anger could result in the destruction of property. Despite school efforts to assist students in settling down for studies, there have been numerous recorded incidents in Kenyan schools indicating that anger is a problem that requires clinical investigation due to its scope, incidence, and negative consequences, which include low academic achievement. Destructive anger among secondary school students therefore still seems to be a critical variable that most likely leads to violence and low academic achievement in the institutions of learning. Previous studies by Maleki et al. (2011) showed that destructive anger causes, physical, and mental health as well as educational challenges among students especially those in public schools. The study further reported that destructive anger is likely to lead to low adaptability in school and poor academic grades. It's concerning that anger-related issues among students have devolved into drug and substance abuse among adolescent populations all around the world (WHO, 2011).

In Kiambu county, Kenya, information available in the education office indicates that in the Kenya Certificate of Secondary Education (KCSE) results for the county from

2015 to date revealed that this county's schools generated fewer applicants who met the minimum University admittance standard of a C+ or higher in the KCSE. Specifically, in Ruiru subcounty, academic performance of students has been declining amidst the rising cases of school violence (Wairuri, Chemlali, & Ruteree, 2018). With several cases of violence meted by secondary school students on school property, peers, and even their own teachers, the situation needs urgent intervention to avert a possible future crisis in the county and boost student's academic achievement.

Background of the Study

Destructive anger among students has been evident where school violence in many parts of the world has occurred. This at times end up in serious catastrophic events that affect not only students but the community at large (Maleki et al., 2011). Most acts of violence are the outcome of destructive rage, which has long been thought to be a prelude to violence and has been linked to cognitive distortion (Simona, 2012). This is because anger affects the autonomic nervous system, preventing students from properly processing information. Due to a raised arousal level, the cognitive distortions have an impact on the secondary school students' behavior. When these students are unable to effectively manage their anger, they resort to physical and verbal aggression. This is particularly common when people are confronted with strong rage (Rubio-Garay, et al., 2016).

Anger among adolescents becomes a problem it frequently occurs and with a high intensity, leading to secondary issues such as aggressive conduct, risky behaviors, self-harm, health issues, high levels of stress, and psychological discomfort (DiGiuseppe & Tafrate, 2007). When secondary school students react impulsively to situations,

attributing their behavior to provocation, their sentiments are likely to be affected. According to DiGiuseppe and Tafrate, the intensity of destructive anger, as well as its frequency at various depths, can be considered a dimensional personality characteristic or attribute of that person. As a result, an individual's attribute anger can be classified as high or low depending on how they act in a variety of scenarios. As a result, students must be assisted in dealing with severe rage in a more adaptable manner. This will be critical in preventing a potentially dangerous scenario from developing, especially in a school setting. This does not imply destructive anger suppression, as excessive anger suppression might lead to other psychological issues (Aldao et al., 2010). Students who control their anger unhealthily are more prone to develop additional physical health problems (Liu et al., 2011).

Global statistics on cases of violence among students is alarming. According to Irwin et al., (2021), roughly 7% of students in grades 9–12 who were asked about incidents on school grounds the previous year reported being threatened or harmed with a weapon, and 22% reported being involved with an illegal drug. Ping (2012) found that 18.5 percent of 14537 Chinese adolescents who were confronted with intense anger had suicidal ideation in his research on adolescents.

Both males and females have similar rage experiences in terms of strength and frequency, according to Fischer and Evers (2010), but there may be differences in the roots of their rage. Furthermore, the authors claim that females are less prone than men to express their anger directly because they are more concerned about the negative repercussions of their anger, particularly if it threatens social relationships. Burundi had

recorded incidences of violence among its teens, who were said to have erupted in violent outbursts in protest of the country's bad governance (Sommers, 2013).

Cases of students becoming involved in violence in Kenya are not uncommon. There have been other unpleasant episodes, in addition to the recent burning of over 100 dormitories. Seven petrol bombs were thrown at 116 pupils at Lelmokwo Secondary School in 2002, killing one student and wounding 53 others (Shibutse et al., 2014). Angry students from Chalbi High School in Marsabit attacked six non-local teachers in July 2018, gravely wounding them (Miriti, 2018). Over a long period of time, the Ruiru sub-county has also been subjected to heinous acts by students.

Anger has major consequences, particularly among students (Novaco, 2010), compromising a student's entire cognitive performance. Depression, anxiety, substance abuse, concentration deficits, high levels of stress, and most likely low academic success due to the secondary school students' weakened cognitive state are just a few of the negative effects of destructive anger (Pullen, 2015; Zimmer, 2015). In addition to these negative health outcomes, destructive rage among students leads to lower self-esteem coupled with lower academic accomplishment (Colleen, 2015), excessive risk-taking behavior (Jungmeen, 2015), and a vulnerability to shame among individual adolescents (Jennie, 2011).

There was no documentation of studies on destructive anger and academic performance among secondary school students in Kiambu County. A recent study by Kamaku (2021) sought to determine the negative impacts of television on children's mental, emotional, and physical well-being. Its other purpose was to develop approaches for parents and teachers to promote healthy media use in their communities. The study

noted that there were many shows for teenagers available nowadays, thanks to the rise of the television sector in our media. This study investigated the impact of television viewing on student unrest in secondary schools. The study's findings suggested that students' disturbance in Kenyan secondary schools was influenced by television consumption. Though this study focus was different, it was evident that there was a state of unrest among secondary school students. This state of unrest could be linked to the inability of these students not being able to manage their anger levels.

Even though destructive anger is a powerful prognosticator of aggression, crime, violence, and homicide among high school students, it has received little attention, and as a result, anger continues to be a serious threat to students' mental health and society at large. Psychotherapists regard anger as a common and normal emotion, but the problems and behaviors that result from inappropriate expression of anger continue to be a source of concern for parents, teachers, and the public (Feindler & Engel, 2011). Given that anger is a forerunner to bad adult physical, psychological, and social health outcomes, having a complete perspective of anger and its developmental trajectory among adolescents is critical (Bradshaw et al., 2010). This study therefore investigated the correlation between destructive anger and academic achievement of students in selected public secondary schools in Ruiru sub county, Kiambu County, Kenya.

Statement of the Problem

Anger-related issues have been on the rise among secondary school students in recent years. Homicide, suicide, and aggressiveness are among the anger-related difficulties that young people face, according to Puskar et al., (2009). Although some students express their displeasure in a nonviolent manner, others resort to excessive

violence as a means of expressing their dissatisfaction. This heinous violence in Kenyan schools continues to make news in the media (Shibtse et al., 2014). Concerns have been raised concerning our secondary school students' emotional and social health, particularly those in secondary schools, as a result of the situation.

School administrators and the public are increasingly concerned about the need to identify and address the behavioral, emotional, and social needs of secondary school students, following the burning of over 300 schools from 2016 to 2021, as well as other evils committed by students in educational institutions. It's probable that the majority of these incidents are the result of students' failure to control their rage. Though such incidents may not occur at every school, school administrators often must handle children who exhibit severe anger, disruptive behaviors, and aggression, which can make it difficult for them to achieve their objectives.

One of the factors influencing pupils' violence has been identified as anger (Maleki et al., 2011). Aggression among secondary school students has a negative impact on their academic performance. According to a study conducted by Novaco (2010), teenagers who demonstrate destructive anger are most likely to have depression, anxiety, and irritability, as well as other mood disorders that influence their general cognitive functioning. According to Csibi & Csibi (2011), secondary school students who are in stressful situations acquire emotional tension and become aggressive as a way of expressing their anger. These students grow worried when they are frustrated. The demands of the school curriculum, as well as expectations placed on these students by both parents and instructors, may overwhelm them. The students are caught in a state of

limbo and are in a gloomy mood as a result of the daunting situation. Students in this mood are most probable to perform poorly academically.

Purpose of the Study

The study investigated the correlation between destructive anger and academic achievement of secondary school students in selected public secondary schools in Ruiru subcounty, Kiambu county, Kenya.

Objectives of the Study

The study was guided by the following objectives:

Broad Objective

To establish the relationship between destructive anger and academic achievement of secondary school students in selected public secondary schools in Ruiru subcounty, Kiambu County, Kenya.

Specific Objectives

1. To analyze the socio-demographic characteristics of students in selected public secondary schools in Ruiru Sub County.
2. To find out the prevalence of destructive anger among students in in selected public secondary schools in Ruiru Sub County.
3. To investigate the correlation between destructive anger and academic achievement of students in selected public secondary schools in Ruiru Sub County.

4. To examine the differences in expressing anger between boys and girls in selected public secondary schools in Ruiru sub-County.

Research Questions

The study addressed the following research questions:

1. What are the socio-demographic characteristics of students in selected public secondary schools in Ruiru Sub County?
2. What the prevalence of destructive anger among students in in selected public secondary schools in Ruiru Sub County?
5. What is the correlation between destructive anger and academic achievement among students in selected public secondary schools in Ruiru Sub County?
3. Are there differences in expressing anger between boys and girls in selected public secondary schools in Ruiru sub-County?

Justification of the Study

In Kenya, cases of student rebellion are on the rise (Menecha et al., 2018). As a way of expressing their emotions, pupils have been observed engaging in violence and other disruptive activities. As a result, important property in educational institutions has been destroyed. Given the link between emotions and behaviors, it was critical to determine if students' property destruction is motivated by rage. Despite efforts by schools to intervene, these students' actions continue to be a source of concern for the general public.

Significance of the Study

This research brought to light information about rage as a detrimental emotion among secondary school students, allowing school administrators to be aware of its high frequency. In this regard, the study raised awareness among school officials, allowing them to take immediate interventional actions to prevent problems from arising because of severe destructive anger among students. The findings of the study were designed to assist counselors, educators, teachers, parents, and all other stakeholders in education in learning how to effectively deal with destructive anger and anger-related issues.

Assumptions of the Study

- i. Scores of students in public secondary schools experience destructive anger.
- ii. School counselors help students to manage their anger besides other behavioral issues.
- iii. The students in the selected schools in Ruiru sub-County would be willing to participate in the study for the entire period.
- iv. Due to the tough policy measures in time management put in place by the Teachers Service Commission in compensation of the time lost due to covid 19 pandemic, the school principals were to give permission to the researchers to collect data from the students during the school hours.

Scope of the Study

The research took place in Kenya's Kiambu County, in the Ruiru sub-county. The participants were students from two public secondary schools in forms two and three who had been recognized as having difficulty controlling their anger following an anger screening and evaluation by the researcher. To guarantee that only students with destructive anger engaged in the study, the participants were assessed for anger using the

Buss Perry Aggression Questionnaire (BPAQ). Only students from public secondary schools were included in the study. Within three months from July to September 2022, the data collection procedure was completed. The study was restricted to correlation between destructive anger and academic achievement of secondary school students in selected public secondary schools in Ruiru subcounty, Kiambu county, Kenya.

Limitations and Delimitation of the Study

The study encountered the following limitations:

People who have damaging anger outbursts have been characterized with derogatory and threatening names. As a result, students who are extremely enraged may not volunteer to participate in the study. By demystifying this categorization, students were able to see the value in participating in the study and receiving treatment.

Some people stereotype rage by labeling certain groups as "hot-tempered," unable to change because their anger is "genetic." There were people who did not see the value in participating in this study in this regard. Multicultural counseling was done, and this became extremely beneficial in this regard.

Definitions of Significant Terms

The following are the operational definitions of terms

Aggression: Aggression is defined as any behavior that is driven by the desire to do harm to another person (Bushman & Huesmann, 2010). Aggression is defined in this study as any violent behavior aimed at damaging another individual/property.

Anger: Anger is defined as a strong emotion of distress felt by a student in reaction

to a trigger that generates provocation and causes him or her to act aggressively in this study (Novaco, 2010). An individual can have both state and trait rage. The strength of an individual's furious feelings at the moment of testing is referred to as state anger. A person's inclination to become angry is known as trait anger.

Cognitive Behavioral Therapy (CBT): This is a type of psychotherapy based on the idea that an individual's emotional and behavioral issues are caused in part by maladaptive or erroneous thinking and skewed attitudes toward oneself and others (McKay, 2015).

Destructive anger: An inflated sense of self in relation to others is thought to result in Destructive -externalizing anger, or anger directed outwards (Meloy, 2014). In the study the term will be used to mean problematic levels of anger.

Violence: It is the purposeful, threatened, or real use of physical force or power against oneself, another person, or a group or community, which results in or has a high probability of resulting in damage, death, or psychological harm (Bushman & Huesmann, 2010). In this study, violence refers to the excessive use of force to cause harm to people or destruction of properties.

Summary

The first chapter covered the introduction, background information, a statement of the problem, objectives, research questions, the study's importance, the study's

limitations, assumptions, and an operational explanation of the study's key terminology. The literature review is discussed in the next chapter.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter contains a review of literature on the study area. The literature is organized into the following subtopics: Theoretical framework, anger and its indicators, anger and anxiety, anger and depression, anger expression and anger control, conceptual framework, summary of literature review and an overall chapter summary.

Theoretical Framework

The cognitive behavioural theory (CBT) and the Spielberger's state-trait anger theory by Spielberger, Jacobs, Russell, & Crane (1983) were used in this study.

Cognitive Behavioural Theory

CBT was founded by Aaron Beck early 1960s. Beck formulated CBT to help patients identify and evaluate their automated thoughts. By applying CBT, patients were able to think more realistically. This meant that they were able to handle their emotions besides behaving in a more functional manner. In addition, through application of CBT,

patients were able to change their underlying beliefs about themselves, other people, and the environment.

The foundation of cognitive behavioral theory is that cognitions influence feelings and behaviors, and that later behavior and emotions influence cognitions. Since behavior is learned, it can also be unlearned, according to CBT, maladaptive behavior can be unlearned. To reach its goals in anger management, CBT describes behavioral approaches such as exposure, activity scheduling, relaxation, and behavior modification.

Poor cognitive processes, according to CBT, lead to maladaptive behaviors and undesirable feelings. As a result, correcting this faulty thinking pattern is crucial. Replacement of dysfunctional thoughts with more productive ones is aided by cognitive reorganization and self-instructional training. This is anticipated to increase overall cognitive skills, beliefs, emotions, and actions (Fives et al., 2011). Skills training, such as stress management, social skills training, parent training, and anger control, are also emphasized in CBT.

The CBT explains why everyone feels and behaves the way they do. It goes on to say that how people feel about the conditions they are in is crucial. Adolescents are very sensitive to the conditions they encounter and, as a result, react quickly. Adolescents may experience high levels of anxious and depressive states if they are unable to fulfill their goals. They may, on the other hand, display wrath, aggressiveness, and aggression, all of which are signs of depression (Genuchi & Valdez, 2014). When a student's mental health is unstable, they are unable to concentrate. It is critical to assist such students in identifying problematic thoughts, feelings, and behaviors.

Although CBT is a widely utilized theory, it does not address why students choose to focus on their negative characteristics when a more realistic assessment of the self is available. However, secondary school students' perceptions of a scenario may be skewed. Even if it is at the price of their institution, students will always want things to work in their favor.

The Spielberger's State-Trait Anger Theory

The Spielberger state-trait anger theory (Spielberger et al., 1983) proposes that an individual's angry state is a universal fleeting condition that consists of biased feelings of anger that vary in magnitude and duration, resulting in physiological reactivity that tends to increase as subjective feelings of anger intensify. Feature anger, according to this hypothesis, is a long-term personality trait that exposes an individual to more frequent episodes of rage than people with low trait anger. Furthermore, the theory claims that those with elevated trait anger scores experience similar acute environmental triggers of anger as people with high state anger scores, with the same prolonged aroused state.

The theory is made up of five main predictions that assist to explain a lot about trait anger as an emotion that is ingrained in a person's nature. The elicitation hypothesis states that persons with elevated trait anger may contend with state anger most frequently and for a longer period before returning to calm. As a result, this hypothesis suggests that secondary school children with a high trait anger score high in state anger. In some ways, there appears to be a link between trait and state anger.

The second hypothesis of Spielberger's state-trait anger theory is that those who have a high trait anger have more powerful rage episodes than people who have a low

trait anger. This indicates that secondary school kids who have a high level of characteristic anger will always be problematic since they are more quickly provoked.

According to the discrimination hypothesis, trait anger is associated with a higher proclivity for state anger. This helps to explain why students react differently to anger but similarly to other emotions. As a result of the negative implications of trait rage on a pupil, it is perceived as discriminatory.

The fourth theory is negative expression hypothesis, which states that people with high trait anger express their anger in maladaptive ways such as suppression and outburst. Students with high trait anger are accused of being unable to control themselves when they are irritated in high school. They are likely to seek vengeance than students with low trait anger.

The consequence hypothesis suggests that people with a high trait anger have more frequent and chronic anger-related results and negative consequences than people with a low trait of anger. Some secondary school students have been accused of committing a variety of illegal acts both within and outside of the classroom, including killing or maiming others and even setting fire to dorms.

The two theories that were used in this investigation appear to be complementary. For example, while CBT will target students' behaviors and thinking processes, it considers that a student's social environment has a high potential for causing a student to learn even certain hostile conduct. The relationship between trait and state anger as an emotion created in an individual's personality will be explored in Spielberger's state-trait anger. According to this view, a person's personality is to blame for their various emotions.

General Literature Review

Anger and its Effects on Students

Anger is defined as “an emotional, cognitive, and physiological state in which emotional, cognitive, and physiological components co-occur, swiftly interacting with and influencing one another in such a way that they are perceived as a single reality” (Deffenbacher, 2009). It's a tumultuous emotion with worrisome outbursts (Novaco, 2010). Anger can range from minor dissatisfaction and irritation to impatience, rage, and fury. Despite the fact that some anger can be perceived as normal, higher amounts of anger can be harmful, as they are connected to problems including suicide, depression, and violence (Daniel et al., 2009).

Anger can be defined emotionally in terms of the adaptive function it serves, as it is likely to act as an emotional defense mechanism in the face of actual or perceived threats on oneself, a close family member, or a friend (Deffenbacher, 2009). Problem resolution, setting limits, assertiveness, and appropriate disengagement from others are all adaptive characteristics that an angry person can learn.

Destructive anger causes hormonal imbalances in an individual, whereas anger has a high association with biased processing of information, images, ideas, and attributions of feeling excessively violated, wronged, blamed, or attacked on a cognitive level (Novaco, 2010). Even though most people's physiological processes during a state of rage arousal are similar, the patterns of expression differ from person to person (Potegal, 2010). This explains why not all secondary school students indulge in acts such as burning down schools or murdering others.

Because they lack adequate coping expertise, most secondary school learners are teenagers who are unable to manage emotions and behaviors effectively (Blakemore &

Mills, 2014). As a result, schools have the responsibility of detecting and regulating the emotions created by the teenagers (Kidwell et al., 2016). Although anger is a natural, life-enhancing, and healthy, emotion that affects everyone, it has negative implications for secondary school learners when it is not properly managed (Ayebami & Janet, 2017). It is disturbing that students with destructive anger may have feelings of low self-esteem and feeling of guilt (Edwards, 2013).

Anger has been connected by several academics to the development of violence (Chereji et al., 2012; Kimonis et al., 2011; Robertson et al., 2014). Anger has been linked to the generation of both direct and indirect aggressiveness (Fives, Kong, Fuller, & DiGiuseppe, 2011). Anger promotes violent conduct by causing individuals to misread social or environmental cues (Fives et al., 2010). Because anger raises arousal, cognitive processes such as focus, attention, and concentration might suffer (Fives et al., 2010). Moon and Jang (2014) discovered a link between stress and negative emotions including rage and verbal violence and bullying.

Higher levels of trait anger were also associated with lower levels of anger management and, more importantly, higher levels of aggression in both males and females (Robertson et al., 2014). A comparable study on 413 high school students found that people with lower levels of emotional regulation had poorer anger management and, as a result, higher levels of violence (Kuzucu, 2016). According to these studies, rage and anger control are key concepts to comprehend when discussing violent conduct. The impact of anger on various cognitive processes linked to aggressive conduct has also been studied. Anger ruminations, or unintentionally dwelling and mentally ruminating on

provoking situations, were found to be positively connected with reactive aggressiveness and proactive aggression by White and Turner (2013).

According to White and Turner (2013), males with anger rumination use proactive aggression more than females, but no difference was identified in reactive aggression. A similar study found that for males, angry rumination interacts with contingent self-esteem (self-esteem that is dependent on external events) to predict reactive violence.

Anger has been correlated to anxiety, sadness, stress, aggression, violence, and low self-esteem in previous studies (Mahon et al., 2010). This explains why, once students' rights are violated, they are threatened, or they are unfairly accused, they become enraged and unable to cope with the situation. As a result, individuals turn to expressing their anger in various ways to retain their self-esteem (Arslan, 2009).

According to a study conducted in India by Suchday (2015), rage stems from people's unmet aspirations and needs. According to this viewpoint, inequitable resource distribution is a source of distress among teenagers. This study claims that because India is typically a collectivist country, it supports the concealment of anger, meaning that anger management abilities are culturally determined.

Didem (2018) conducted another study in Turkey to look at the effects of perceived social support from teachers, school control, academic achievement expectations, and gender on anger dimensions among secondary school students, and found that academic achievement expectations significantly predicted cognitive, affective, and behavioral anger dimensions. Furthermore, teachers' perceived social support predicted both cognitive and behavioral dimensions of anger, whereas school

control strongly predicted the behavioral dimension of anger. Gender also had a substantial impact on the cognitive dimension of rage. Menecha, Munene, and Ongaro (2018) found that there was a positive correlation between anxiety and state anger ($r=0.116$, $p=0.423$) in a study investigating the correlation between anger and anxiety among secondary school students in some selected public schools in Nakuru county.

Anger as a Precursor to Depression

There is a substantial correlation between depression and anger among adolescents (Koh et al., 2005). This is feasible because emotions have a strong influence on adolescent behavior (Llorca et al., 2016). Students who are violent are most likely prone to be depressed. Anger that is expressed outwardly is linked to a higher risk of depression among students (Goodwin, 2006). Some other studies have pointed out that the presence of irritability in students is a strong pointer to a likelihood of the student having depression (American Psychiatric Association, 2013).

Even though previous studies have found a link between destructive anger and depression, other studies appear to contradict one another. Some findings on the feeling of destructive anger in depressed and non-depressed people have proven contradictory, with depression being linked to higher and lower average levels of anger, as well as higher and lower reaction to anger-inducing events (Harmon- Jones et al., 2002; Luutonen, 2007; Painuly et al., 2007). Later research found continuous correlations between ruminative tendencies, depression, and rage (Wade et al., 2008). Anger levels rise when students ruminate and this is linked to the length of depressive symptoms and the severity of depression (Anestis et al., 2009).

In comparison to western countries, studies conducted in the east have showed greater rates of depression among high school pupils (Phanthavong et al., 2013). Anxiety and depression were found to be prevalent in 22.8 percent and 41.1 percent of Vietnamese high school students, respectively, in a study (Nguyen et al., 2013). According to this summary, depression among teenagers is on the rise in today's culture.

The Prevalence of Destructive Anger among Students

Destructive anger has been widespread among secondary school students, according to earlier studies. The prevalence of violent behavior in schools is still acknowledged as an issue by both students and school staff. According to the Centers for Disease Control (2010), roughly 22% of students in grades 9 through 12 reported being involved in a fight on school grounds in 2009, while 20% of students in the same grades reported experiencing verbal or physical hostility or bullying. Many schools have implemented anger management and other impulse control-based programs for at-risk pupils to stop these violent actions as a result of the worry raised by these aggressive behaviors.

Out of the 236.5 million teenagers in India, 10- to 19-year-olds make up the majority, according to a study by Gunaselvi (2019) titled "Assessing the Effectiveness of Psycho Education Module on Managing Anger among Adolescent Students in Selected Schools at Chennai." Anger that was destructive affected about 12% of people.

Hamarta et al. (2015) conducted a study to examine whether there is a significant association between high school students' destructive rage expression and their self-control skills for managing with anger. This study included 502 individuals (201 males and 301 females) ranging in age from 14 to 18 and attending several high schools in

Ereli, Zonguldak, Turkey. The Self-Control Scale and Multidimensional School Anger Inventory's positive coping abilities and subscales of expressing anger destructively were utilized to collect research data. The findings of this study demonstrated a negative significant link between high-school students' self-control skills and experiential self-control ($r = -.232, p < .01$) and destructive display of rage. Furthermore, self-control abilities in high school students were found to be an important predictor of expressing anger destructively and coping with anger through self-control skills. As a result, the study indicated that teenagers with self-control abilities could express their anger more positively and had less bad experiences because of controlling their anger. They could think consciously, examine their experiences, and were aware that their actions had specific effects that they could easily manage.

Another study conducted in Nakuru County by Menecha et al. (2018) indicated that destructive anger is a frequent disruptive emotion among secondary school students. 135 of the 570 students in forms three and four who volunteered for screening had a diagnosis of destructive anger. The high prevalence of destructive anger in this group of students was 23.7%.

Destructive Anger and Academic Achievement

Aggressive behavior has been shown to have a negative impact on academic performance and total academic achievement, according to a study by Barriga et al. (2002). Uludag and Yaratana (2012) showed a negative but minor relationship between verbal aggression and academic achievement. Additionally, a prior study by Caprara et al. (2000) discovered a negative correlation between academic achievement, pro-social behavior, and violence.

In a 2013 study, Uludag evaluated how students' GPA scores and cumulative academic accomplishment score were affected by the uni-dimensional aggressiveness scale, which measures verbal aggression, anger with resentment, physical aggression, and suspicion. According to this study's findings, verbal abuse was inversely correlated with current academic success (GPA). This link was shown to be significant by the regression analysis results ($p = .055$, $t = -2.15$). Second, it was proposed that verbal hostility was unfavorably related to overall academic success.

According to Cornell (2014), school-related violence can have a major influence on student academic functioning, student and teacher emotional well-being, and the school community. According to a study conducted on Israeli kids by Raz and Astor (2015), higher levels of violence reported by fifth and eighth grade students were inversely connected with academic achievement. Lacey and Cornell (2016); Espelage et al., (2013); and McCoy, Roy, and Sirkman (2013) discovered that academic performance suffers when kids have been victimized or have perceptions that schools are not safe environments that cultivate respect.

According to research, when children feel safe at school, their learning and healthy development improve (Grover, 2015). Many children do not feel safe at school, according to evidence (Rajan et al., 2015; Zhang et al., 2016). According to student data from 2013, around 5% of youngsters (approximately 2.5 million) missed at least one school activity or class due to fear of being attacked or harmed (Zhang et al., 2016). According to the Youth Risk Behavior Surveillance Survey, 6.7% of students polled had missed at least one day of school in the 30 days preceding the survey due to safety concerns.

A study conducted by Fareo and Ballah (2018) among secondary school students found out that student indiscipline has a negative impact on the quality of teaching and learning, resulting in bad marks, increased drop-out rates, and a general waste of resources. According to this study, high levels of anger was attributed to causes of indiscipline among the students. Furthermore, student indiscipline has negative implications on the academic achievement of the students because it is most likely to result to school closure, malicious property damage, moral depravation, and increased mortality rates.

Linking anger to indiscipline among students, Ehiaine (2014) conducted a comparable study on the impact of discipline on pupils' academic achievement. Participants in the study were drawn from secondary schools in Lagos, Nigeria. The study sought to determine whether there was a link between students' discipline levels and academic performance. Structured questionnaires were utilized as the primary research technique, combined with an interview guide and document review. The researcher gave 400 questionnaires to the sample, with 380 completed and returned. The cross-sectional research survey design was used in the study. Simple percentages and the Chi-square statistical approach were employed for analysis. The study discovered a significant positive association between discipline and academic performance. The data also demonstrated that resolving students' issues, such as high levels of anger, had a positive impact on the students' overall academic achievement.

Achiaa, Asamoah, Ofori, and Tordzro (2018) evaluated the effect of indiscipline on academic performance among junior high school pupils in Ghana's Fantekwa District. Uncontrolled externalizing behaviors, such as angry outbursts, were cited as one

of the causes of indiscipline in this study. The study sample includes 360 people, including students, principals, and teachers. The pupils were chosen using a simple random sample technique, whereas the head teachers and teachers were chosen using a purposive sampling procedure. The researcher employed questionnaires to gather the necessary information. The study discovered that indiscipline hampered academic development in a variety of ways, including decreased student attentiveness in class, loss of information given in class owing to absenteeism, and an increase in the school drop-out rate.

Karanja and Bowen (2012) did a similar study to determine the impact of students' indiscipline on academic achievement in Kenyan public schools. Similarly in this study, violence because of unmanageable anger levels was a key contributor to cases of indiscipline among secondary school students. The purpose of the study was to determine the influence of student unrest on academic achievement in public schools. The target group included students from public secondary schools who had engaged in strikes as well as those who had not. The sample was collected from both urban and rural locations, with 10 schools drawn from each. The survey research method was used in the study, and the researcher used questionnaires and interviews to collect data. Correlation research revealed that students' disturbance has a negative impact on their academic achievement.

Anger Expression Across Gender

Even though anger is gender-neutral, a study by Csibi and Csibi (2011) found that, when compared to boys, girls often avoid stressful situations that cause emotional tension and, at times, resort to aggression as a way of releasing their tension. Females are more

emotionally expressive than males, according to Brandts and Garofalo (2012). This implies that males are more exposed to rage than their female counterparts. Females experience rage as well, according to Sadeh et al., (2011), although it does not always manifest as physical aggressiveness. Due to social expectations and limitations, they have difficulty identifying and admitting that they are upset (Karreman & Bekker, 2012).

Males, on the other hand, have no qualms about expressing their anger in any situation (Fischer & Evers, 2011). Boys find it easy to show their anger in many situations because it is socially acceptable (Burt, 2014). This is backed up by a study by Borroni et al. (2014), which found that male students were much more physically and verbally hostile than female students.

Male and female students react to anger in different ways (Karreman et al., 2004). (2012). Males are more sensitive than females, according to Karreman et al. This research finding shows that males are likely to engage in aggressiveness or impulsivity than females. Women cause more self-anger than men, according to Sadeh, Javdani, Finy, and Verona (2011).

Female students exhibited their anger by demonstrating apprehensive behaviors more than male students, according to a study conducted by Bilgel and Bayram (2014) among Turkish high school students. Boys, on the other hand, physically displayed their angry feelings when contrasted to girls. Female students employed more internalized methods of coping with anger, such as repression and control, than male students, according to this study.

Suman (2016) conducted a study in India to see if both genders show anger in the same way and discovered that females scored higher in state anger while males scored

higher in trait anger among 50 university graduates (25 males and 25 females) aged 20-30 years. The males scored a mean of 24.2 on anger expression, while females scored a mean of 20.64 on the same variable, according to the study. This study also discovered that, although anger expression is gender specific, variations in trait and state anger are not statistically significant across gender. Even in various cultural circumstances, females display rage less than males, according to the findings of this study.

Burt (2014) conducted a pilot study to investigate differences in the degrees of anger expression and anger control among teenage males and females. A strength-based anger management group promoting wellness was completed by eighteen participants (9 males and 9 females). Anger management group therapy was a 10-week continuous intervention that focused on anger reduction, anger control, and acceptable anger expression. The findings revealed gender disparities, with females displaying more anger expression and less anger control. Females, on the other hand, improved more overall. Burt's study is a further demonstration that there are differences in anger expression between boys and girls.

Ahmad et al. (2021) investigated whether people with choleric temperaments become irritated easily and can be harmful if not communicated appropriately. The goal of this study was to find out if there were any gender differences in anger expressions among high school students. Respondents were secondary school students from four Malaysian states in the country's northern area. A total of 3348 students participated, with 1,800 males and 1,548 girls. Twenty secondary schools were chosen at random to provide respondents aged 13 to 16. To identify angry emotions among secondary school pupils, descriptive analysis and the t-test were performed. According to the findings, 780

individuals agreed that they are hot-tempered, whereas 2568 others did not. There were 370 men and 410 women among the 780 hot-tempered respondents. When they had anger issues, 3160 of the 3348 respondents did not meet with their school counsellors for counselling sessions. The data also demonstrated a substantial difference between male and female pupils in four categories of rage expressions. They were aggressive, vocal, expressing intrinsic anger, and controlling intrinsic anger. The findings revealed that school counselors must provide students with specialized, creative, and novel interventions to help them cope with various forms of rage expression.

In Kenya, according to a study by Menecha et al., (2018) to investigate differences in anger expression between boys and girls in two public secondary schools from Nakuru County, boys often scored higher than girls in terms of expressing and controlling their anger. The study further asserted that average, girls are better at controlling their anger than boys.

Empirical Studies

Hamarta et al., (2015) conducted a study in Turkey to see if there is a link between high school students' destructive anger expression and their skills to and cope with anger. The participants were 502 students (201 males and 301 females) ranging in age from 14 to 18 years old and attending various high schools in Ereli, Zonguldak. The participants' mean and standard deviation were 15.243.67. The Self-Control Scale and the Multidimensional School Anger Inventory's positive coping skills and subscales of expressing anger destructively were utilized to collect research data.

Taroor (2011) conducted a study to determine the prevalence of Stress, Anxiety, and Anger in schoolchildren and its impact on academic progress. A higher secondary school in India collected data from 450 selected 450 students aged 11 to 17 years old using the Personal Stress Assessment Inventory, State-Trait Anxiety Inventory, and Spielberger State Anger Scale. Out of 450 students chosen, 50 were chosen at random for a Pre-Post test intervention. Scholastic achievements were determined through school examinations. This study covered and compared girls and boys. For four weeks, interventions such as Relaxation for Body and Mind, Breathing Exercise, and Anger Reversal Technique were given one hour every day. SPSS was used to collect and analyze the data. Prior to intervention, the prevalence of Stress was (Boys: 108.5, Girls: 105.34), the level of Anxiety was (Boys: 96.33, Girls: 99.85), the score on Anger was (Boys: 21.04, Girls: 20.88). Because there was a considerable difference in the ratings, the Intervention program was deemed to be very rewarding. Taroor's study is a clear indication that anger among secondary school students is common and interventions must be put in place. The difference between Taroor's study and the current study is that the current study did not assess the levels of anxiety and depression were not assessed. Similarly, no intervention was given to the students at the time of the study.

The causes of aggressive behavior among secondary school students in Ilorin East, Kwara State, in Nigeria were investigated in a study by Akunna et al., (2022). Secondary school teachers provided data for the study through structured interviews. As a result, 12 research questions were asked, and a survey was conducted in ten (10) secondary schools, including both single-sex and other co-educational schools. Teachers' replies were examined in percentages after data was collected using judicious use of

questionnaires. The findings show that a student's family background and upbringing have the greatest influence on their character. Students act violently when their wants are not met hence influenced by School cliques-groups with different ideals and values produce indiscipline among students, in which students do what is expected of them as per their settings. The child's behavior is influenced by the parents' continual indiscipline and quarreling at home (85 percent).

Students use rude and vulgar language and engage in disruptive activities (90 percent) or physical fights, according to the findings. The major causes of aggressive behavior in secondary students are a negative home and family environment, poor teacher-student interaction, authoritative and dishonest behavior of teachers (78 percent), unfriendly relationships with peers (70 percent), and injustice in society (86 percent).

In Kenyan secondary school students, aggression is a serious issue. Wakoli and Bundotich (2020), for example, looked on the prevalence of aggressive behavior among secondary school pupils in Bungoma County, Kenya. They discovered that bullying and fighting among students were prevalent, and they called for action to be made to stop it. Manyibe (2018) observed that bullying was pervasive in girls' schools in Kajiado County, with verbal abuse, sexual and physical bullying being the most common bullying practices.

Itegi (2017) conducted a study of students' experiences with bullying in Nairobi County secondary schools. Physical aggressiveness, such as being struck, kicked, beaten, as well as verbal aggression, such as students criticizing or spreading negative information about one another, were common occurrences among students. Secondary school students' experiences of violence and other aggressive conduct in Nairobi County

were investigated by Opere et al., (2019). They recruited 341 children from 22 schools across the county as a representative sample. In total, 69.2 percent of the students had been the victims or witnesses of violence, demonstrating the high frequency of violence in public schools. Physical violence was stated by 38 percent of pupils as the most common form of violence, followed by verbal abuse (25.9%) and bullying (15 percent).

The study also indicated that male students were the ones who were most likely to inflict violence on their peers. Estévez, Jiménez, and Moreno (2018) explored how aggressive conduct contributed to maladjustment in twelve–seventeen-year-old adolescents with a history of peer aggressiveness. Aggressive conduct was linked to less empathy, poorer life satisfaction, low self-esteem, and greater depressive symptoms in both boys and girls, according to logistic regression analysis. Aggression was linked to a negative attitude regarding school, trouble making friends, and learning disengagement.

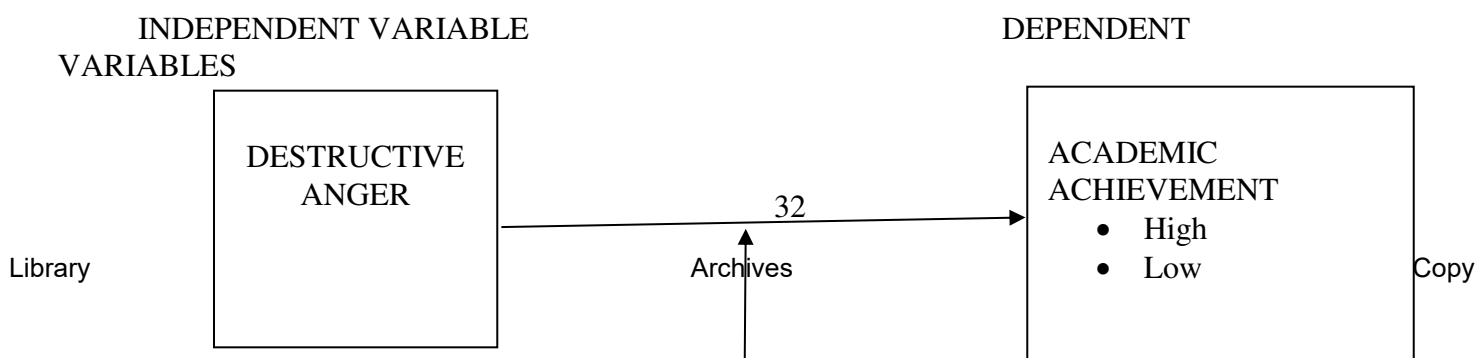
Students squander a quality time owing to interruptions in learning caused by school violence, according to Opere and colleagues (2019), and perpetrators of violence integrate into society badly once they leave school. Furthermore, adolescents who engage in aggressive behavior as teens are more likely to do so as adults (Wahl & Metzner, 2012). Bullying, violence in and out of school, violence against love partners, violence aimed at one's parents or children, and other externalizing behaviors are all predicted by high levels of aggression in teenagers (Racz et al., 2017; Perez-gramaje et al., 2020).

Mauki et al. (2018) investigated the impact of inter-parental conflict on form three students in Kenya's Ruiru Sub-County. Four ideas led it: Abraham Maslow's Hierarchy of Needs theory, Martin Selgman's Learned Helplessness Theory, Grych and Fincham's Cognitive Contextual Framework Theory, and Urie Bronfenbrenner's Ecological Systems

Theory. The study used a mixed method research design. The study's population included 281 Form three students from 31 public and private secondary schools in Ruiru sub-county. Questionnaire on Children's Perceptions of Inter-Parental Conflict (CPIC) Data was collected using an Academic Motivation Survey (AMS) for Students, an Interview Schedule for the Guidance and Counselling Master/Mistress, and a Focus Group Discussion Protocol for the students' parents. The information gathered was analyzed using both descriptive and inferential statistics. In qualitative data, the findings revealed a substantial association between inter-parental conflict and students' academic accomplishment motivation. This study didn't focus on anger but on parental conflict on the academic performance of the form three students. The similar aspect with this study with the current one is the fact that both touches on academic performance.

Over the years, researchers have delved into causes of aggression in adolescence. Huang and colleagues (2017) examined the available literature and grouped the reported factors associated with aggression into five broad categories namely: environmental, social, genetic/biological, substance use and psychopathology. Aggressive behavior throughout the lifespan has been examined through attachment theory and there is evidence that attachment security is associated with aggression in adolescents. Such a study has not been done among secondary school students in Ruiru sub-County, so this study sought to fill this gap.

Conceptual Framework



INTERVENING VARIABLES

Figure 2. 1: Conceptual Framework

Source: Researcher (2022)

Discussion

Figure 2.1 presents the conceptual framework. It describes the relationship between independent and dependent variables. The figure conceptualizes that destructive anger results to low academic achievement. Gender is an intervening variable since anger expression and control varies across gender. Religiosity, school policy, family background and medication are the confounding factors. These factors influence the outcome.

Another major issue in the discussion concerning student anger is school policies. When students' difficulties occur, a school with an open climate that allows them to voice their opinions gives a platform to settle them amicably. Students may revolt and become aggressive if school rules and regulations are too strict. The school administration is critical in fostering an enabling climate that allows students to feel accepted in their educational setting. It's probable that students from dysfunctional families have trouble managing their rage.

Summary

Literature on anger and its management was mainly reviewed in this chapter. The chapter outlined the different types of anger and highlighted its psychopathology. The chapter also explained the different variables that affect anger. Detailed explanation of the relationship between anger and some sociodemographic characteristics, anger expression was done. The theoretical and conceptual frameworks were dealt with in this chapter. The chapter also identified the knowledge gap that needs to be filled by this study. The next chapter discusses research methodology.

CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

This chapter explains the data gathering and analysis methods and procedures that will be employed. The following topics will be covered throughout the discussion: research design, study location, target population, data collection instruments, sample size, data collection processes, data management, data analysis, and ethical considerations.

Research Design

A research design, as opined by Kombo and Tromp (2006), is an arrangement of settings for data collecting that tries to combine relevance with the study purpose. It's a well-thought-out data collection and analysis strategy (Mugenda & Mugenda, 2003). The descriptive survey research design was used. A descriptive survey entails gathering information using interviews or questionnaires to assess and analyze the connection between variables (Kimalu & Marimba, 2014). This design is appropriate for categorizing, analyzing, comparing, and interpreting data (Kombo & Tromp, 2014). As a result, it is the most appropriate since it factors in both qualitative and quantitative approaches for exploring the relationship between destructive rage and academic achievement among secondary school students in Ruiru Sub County, Kiambu County, Kenya.

Target Population

The study's target population was all students in forms two and three from the designated public secondary schools in Ruiru sub-County. Those in Forms one and four were excluded from the study because form one students had spent less time in school since enrolment hence had academic performance for two terms only, while form four students were preparing for their final examination. Furthermore, because the social context might promote an aspect of state anger, students enrolled in forms two and three are more likely to be exposed to the specific school setting than students in form one. It is also important to note that because destructive anger has such negative consequences, it is critical to examine destructive anger of such students. The four schools picked were demographically, geographically, and situationally similar. This implies that they must

primarily draw their catchment from Ruiru sub-county. There are 32 secondary schools in the sub-county, 13 of which are public schools and 19 of which are private schools. The total population of students is 8096 (5370 are from the public secondary schools while 2756 are from the private secondary schools). The following is the list of the public secondary schools and their respective population in forms two and three. The target population of this study is therefore the 2777 forms two and three students from the 13 public secondary schools within the county.

Table 3.1: Target Population of the Study

| Sr. No. | Name of School | Form 2 Population | Form 3 Population | Total |
|---------|----------------------|-------------------|-------------------|-------|
| 1 | Githunguri Mixed | 115 | 94 | 209 |
| 2 | Githurai Mixed | 234 | 126 | 360 |
| 3 | Githothua | 146 | 106 | 252 |
| 4 | Kwihota | 80 | 88 | 168 |
| 5 | Spinners | 87 | 88 | 175 |
| 6 | Ruiru Girls | 183 | 110 | 293 |
| 7 | Ruiru Secondary | 141 | 155 | 296 |
| 8. | Uhuru Kenyatta Sec. | 63 | 68 | 128 |
| 9. | Ruiru Kihunguro | 56 | 53 | 109 |
| 10. | Kwang'ethe Sec. | 128 | 124 | 252 |
| 11. | Mwihoko | 73 | 106 | 179 |
| 12. | Devki Ruiru Township | 139 | 146 | 285 |

| | | | |
|----------------------|------|------|------|
| 13. Gikumari Springs | 32 | 39 | 71 |
| TOTAL | 1477 | 1300 | 2777 |

Study Site

The study was done in Ruiru sub-County. Ruiru is a town in Kiambu County, roughly 3 kilometers outside of Nairobi's city limits and 0.5 kilometers from Kenyatta University's main campus. Ruiru is a dormitory town for the nation's capital, with rail and road connections. Ruiru constituency includes Kahawa Wendani, Kahawa Sukari, and Mwihoko, with a total area of 292 km². Ruiru has a population of 238,858, with the rapid population expansion owing to a lack of affordable housing in Nairobi. The community has had a difficult time adjusting to the inflow of people.

Ruiru is also an industrial town, with Deyki Steel Mills, Super Foam, Spinners & Spinners Garment Factory, and Ruiru Feeds among its significant employers. It is well-served by banks and shopping malls, and it is also experiencing a housing boom, with several coffee plantations being turned into residential neighborhoods, including the multi-billion-dollar Tatu Estate. It is well connected to nearby towns by road and rail. Ruiru sub-county includes a mix of urban and rural areas (Kinyua, 2014). There are 36 secondary schools in the sub-county, 19 of which are boarding schools and 17 of which are day schools. 15 of the 17-day schools are day mixed schools, while the other two are not.

The Inclusion and Exclusion Criteria

The inclusion criteria, according to Salkind (2010), are a set of established features that can be used to identify people who will be included in research. Salkind further opined that the inclusion and exclusion criteria are a framework for eligibility criteria that can be used to rule in or out a research study's target group. Proper respondent selection

was observed in order to increase the feasibility, internal and external validity of this study. That was also crucial in order to ensure sample size homogeneity and reduce research confounding the study.

While it was crucial to include all students in this study, only forms two and three from the two public secondary schools that were chosen were invited to participate. Furthermore, due to the seniority standing of form four students in the school context, this group of students was more prone to engage in violence related issues protesting what they perceive to be working against them, even though it was not possible to include them in this study. According to several studies (Cornelius, Lynch, & Gore, 2017), criminal activity rises throughout youth, peaks at 17 years old, and then gradually declines throughout adulthood. The respondents were chosen in such a way that only those in form two and three took part in the study. Only secondary school students who had been enrolled in the school for more than one year were considered for recruitment, because it was critical to gain a comprehensive grasp of their behavioral patterns and academic performance for three terms.

Sample Size

The sample size (n) refers to the number of people in a group being studied. “The greater the precision and, consequently, power for a given study design to detect an effect of a given size, the larger the sample size” (Kadam & Bhalerao, 2010). In most cases, a sample size of $n > 30$ is sufficient. A total of 249 forms two and three students were enrolled in the study. Using Fisher's formula for sample calculation, the sample size will be calculated as follows:

$$\text{Sample Size} = \frac{z^2 p (1-p)}{e^2}$$

c^2

Where:

Z=95% confidence level (Which is 1.96 standard deviations of either side of the mean)

P=Proportion of the total population under study which is estimated to be 40% of the population

C=Confidence interval of 5% (2.5%+2.5% on both sides)

$$\begin{aligned} n &= \frac{1.96^2 * 0.4(0.6)}{0.05^2} \\ &= \frac{3.8416 * 0.4(0.6)}{0.0025} \\ &= 369 \end{aligned}$$

According to an earlier study done by Menecha, et al., (2018), 61% of students in public secondary schools are challenged by extreme levels of anger. Applying this to your study, this reduces the sample size to:

$$61\% \text{ of } 369 = 226$$

Taking an anticipated dropout rate of 10%, the sample size increased by 23 participants to give a total of 249 participants. Therefore, the working sample size was 249 students.

Sampling Technique

Two schools (Githunguri Mixed, and Devki Secondary School) were chosen at random among the sub county's thirteen public secondary schools. The schools were sampled purposively since they meet the required characteristics and have learners who are struggling with anger. The two schools were among those whose KCSE scores have

been decreasing and whose mean points are below the national average. Besides these, the two schools had reported cases of indiscipline which may have been attributed to inability to control their anger.

Before the study begun, it was necessary to report to the schools sampled for an introduction to the school principals and an explanation of the study's intended objective. During the school assembly, the principals were asked to allow the students to be introduced and informed about the research. The researcher explained the notion of anger, its disruptive nature, the problems associated with anger, and the benefits of participating in the study if the student met the inclusion requirements after meeting all of the students. Those who wished to participate in the study were asked to register with either the class representative, the class teacher, the guidance and counseling head of department, or the researcher herself after everything had been completed. They were notified to make sure they had enrolled by the end of that week.

The researcher begun the study procedures after discussing the proposed study and its benefits to the students in the two schools on various days. An assessment of the state of anger among the forms two and one were part of the research processes. Participants were eligible to participate in the study if they met the criteria for destructive rage. In order to obtain the requisite sample size, the researcher screened all form two and one students who had volunteered for assessment. After screening and obtaining the specific students that qualified to participate in the study, simple random sampling was used to get the sample size required for the study. Students who volunteered for screening but did not meet the inclusion criteria after assessment despite having high trait anger

levels were informed that though the school Guidance & Counseling Department they were to be provided with free counseling.

Table 3. 2: Sample Frame for the Sample Schools

| Population characteristics | Target population | Sample size | Sampling technique |
|----------------------------|-------------------|-------------|--------------------|
| Githunguri Mixed | 430 | 129 (30%) | Purposive sampling |
| Devki secondary School | 400 | 120 (30%) | |
| Total | 830 | 249 | |

Data Collection Instruments

A researcher's developed questionnaire was used to collect information from the participants. The questionnaire was divided into four sections. Section I was on the socio-demographic characteristics, section II be on the prevalence of destructive anger (the Buss-Perry Aggression Questionnaire was adopted); and section III was on differences in expressing anger between boys and girls.

Socio-demographic Questionnaire

According to Kothari (2004), a questionnaire is a series of questions put in a certain order on a form or forms, with each item or question structured to answer the study objectives and questions. The respondent is expected to read the questions, comprehend them, and react accordingly. The current study took into account both closed-ended and open-ended questions. The open-ended questions allowed for descriptions and detail. The questionnaire ensured subject centeredness. The questionnaire was free from bias and respondents had an ample time to submit well-thought-out replies, and it was less expensive approach.

Buss-Perry Aggression Questionnaire

This is a 29-item questionnaire which are subdivided in four factors: Physical aggression (9 items); Anger (8 items); Verbal aggression (5 items); and Hostility (8 items). The Buss-Perry Aggression Questionnaire (AQ) assesses a person's aggressive reactions as well as his or her ability to channel such reactions in healthy, constructive manner. It takes about 10 minutes to score. In terms of items, physical aggression is measured by items 1-9, verbal aggression is measured by items 10-14, anger scale by items 15-21, and Hostility scale is by items 22-29. The sum of the individual components is used to determine scale scores. The scores for items 7 and 18 are reversed. They are normalized on a scale of 0 to 1, with 1 being the highest level of aggression and 0 being the lowest level of aggression. The cut off points are: Physical aggression (9-45), Verbal aggression (5-25), Anger (7-35), and Hostility (8-40). The total score s between (29-145).

Validity and Reliability

Reliability

The degree to which a specific measuring process produces consistent results across a series of trials is referred to as reliability (Orodho, 2004). The test-retest or coefficient of stability approach is used to acquire it. Mugenda (2003) emphasizes the need of using the test-retest procedure to determine instrument dependability.

Regarding the reliability of BPAQ, a study by Abd & Rozubi (2020) was conducted to test the content validity and reliability of BPAQ. The questionnaire was validly translated into Bahasa Melayu. The validity of the material was assessed by three specialists in the field of counseling for the elementary school sample. The dependability of BPAQ instruments was tested on 60 primary school kids. The results also reveal that

the obtained reliability coefficient is 0.93 The BPAQ measuring instrument has the potential to be employed in measuring pupils' aggressive behavior, according to the study's findings.

Validity

Validity, according to Orodho (2004), is the degree to which an empirical measure or a set of measurements accurately measures the notion. The success of an instrument or scale in measuring what it sets out to measure is referred to as its validity. Respondents only engaged with the instruments when data was being gathered, in order to safeguard the validity of the research instruments from contextual variables. To stop learners talking and plotting how to answer the various items in the instruments, measures were made to guarantee that copies of the instruments are not left with the respondents. Furthermore, respondents were encouraged to provide independent responses in addition to being truthful with their self-reporting.

The instruments' content validity was assessed to ensure that they accurately measured the content of the concepts. The researcher went over all of the instruments and compared them to the established objectives to ensure that they contained all of the necessary information, answer the questions, and meet the goals.

Data Analysis

After collecting data, analysis of the objectives was done. SPSS version 27 was used in analyzing the data. Spearman's Rank correlation coefficient was used to test significant relationship between dependent and independent variables. The major impacts of gender on all subscale scores of anger was determined using general linear modeling with two-way multivariate analyses of covariance (MANCOVA) and analysis of variance

(ANOVA). Statistical significance was determined if the P value was less than 0.05. For relevant samples, descriptive statistics was used to determine gender differences in anger expression. Finally, nonparametric testing was used to reveal disparities between the various student groups.

Ethical Considerations

Before beginning the study, ethical clearance was requested from the Daystar University Ethics & Research Board and a research authorization from NACOSTI. The participants were informed about the study by the researcher. The screening process and the expected conclusion were explained to them. They were also given the opportunity to clarify any questions they had. The respondents were informed that the research was to be kept private, and that their identity and any other information they provide was to be used only for the study's intended purpose. The participants were also informed that she was to be the only one who looked through their personal information. The participants were also informed that participation in the study was entirely optional. The participants had the option to drop out at any time during the study.

Summary

The research approach employed in the study was detailed in this chapter. The data collection processes, research instruments, data analysis, and ethical considerations are also covered in this chapter. The next chapter discusses the data presentation, analysis, and interpretation.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

Introduction

This chapter provides data analysis, presentation and interpretation of the findings of the study. The results capture the response rate, social-demographic characteristics of the respondents and findings as per the objectives of the study. Data was collected using self-administered questionnaires and analyzed using SPSS version 27.0. Study results were presented in figures, tables and descriptive statistics.

Response Rate

The target population for this study was the 1777 forms two and three students from the two purposively selected public secondary schools within Ruiru sub-county. The sample size was 249 students to whom the questionnaires were administered. The response rate was as shown in the in table 4.1.

Table 4.1: The Response Rate

| Questionnaires | Frequency (%) |
|-----------------------------|---------------|
| Administered questionnaires | 249 (100%) |
| Filled and returned | 201 (80.7%) |
| Missing questionnaires | 48 (19.3%) |
| Response Rate | 80.7% |

From the table 4.1 above, 249 questionnaires were administered to forms two and three in Githunguri and Devki public secondary school. 201 respondents (80.7%) completed and returned the questionnaires which were used for this analysis. 48 (19.3%) respondents did not meet the inclusion criteria as they had not completed all the sections of the questionnaires which meant that their questionnaires were not analyzed.

Social-Demographic Characteristics

The first objective of this study was to analyze the socio-demographic characteristics of students in selected public secondary schools in Ruiru Sub County. The findings were presented in table 4.2.

Table 4.2: Respondents' Social-Demographic Characteristics

| Social Demographic Factors | | Frequency | Percent |
|----------------------------|--------|-----------|---------|
| Gender | Male | 77 | 38.3% |
| | Female | 124 | 61.7% |
| Age | 14 | 1 | 0.5% |
| | 15 | 22 | 10.9% |
| | 16 | 66 | 32.8% |

| | | | |
|-----------------------|--------------------|-----|-------|
| | 17 | 76 | 37.8% |
| | 18 | 31 | 15.4% |
| | 19 | 3 | 1.5% |
| | 21 | 2 | 1.0% |
| Form | Form 2 | 97 | 48.3% |
| | Form 3 | 104 | 51.7% |
| Nationality | Kenyan | 194 | 96.5% |
| | Non-Kenyan | 7 | 3.5% |
| Parents alive | Yes | 193 | 96.0% |
| | No | 8 | 4.0% |
| Currently living with | Biological parents | 131 | 65.2% |
| | Adopted parents | 8 | 4.0% |
| | Single parent | 49 | 24.4% |
| | Foster parents | 7 | 3.5% |
| | Grandparents | 6 | 3.0% |

The table 4.2 shows the distribution of respondents who were used for analysis of this study. The findings show that 61.7% (124) of the respondents were girls while 38.3% (77) were boys. These findings show that both genders were well represented in this study though the number of girls were more than the number of boys. This is a further indication that there is a possibility of having more girls learning in day schools in Ruiru subcounty, Kiambu County, Kenya.

The age distribution for the respondents was between 14 and 21 years old and majority of the respondents 173 (86.1%) were between 16 and 18 years old. The findings show that students in forms two and three used in this study were from different ages. It further shows that majority of the learners in the subcounty are within the age-appropriate class.

The table also shows that 104 (51.7%) of the respondents were in form three while 97 (48.3%) were in form two. These findings depict that both levels were fairly

represented in this study. The class sizes were almost the same in this study. It also shows that most schools abide by the government policy of ensuring that learners do not repeat in classes.

This study sought to understand the nationality of the respondents. From the findings in the table, 194 (96.5%) of the respondents were of Kenyan nationality while only seven (3.5%) were non-Kenyans. This study further sought to determine whether respondents' parents were alive or not. 193 (96.0%) of the respondents indicated that their parents were alive while 8 (4.0%) indicated that their parents are deceased. This finding was important because, the presence or absence of parents in the life of a student is likely to influence the externalizing behaviours and further influence the academic achievement of the student.

The findings further revealed that majority of the respondents 131 (65.2%) lived with their biological parents, 49 (24.4%) lived with single parents, 8 (4.0%) lived with adopted parents, 7 (3.5%) with foster parents and 6 (3.0%) indicated that they lived with their grandparents. These findings revealed that the majority 180 (89.6%) of the respondents lived with their biological parents, whether both parents and single parents.

Table 4.3: Cross Tabulation Between When the Respondents Get Annoyed the Most and If Their Current School Was Their Choice.

| | | Was your school among the choices you selected in Std 8? | | |
|-----------------------------------|-----------------------|--|-------------|------------|
| | | Yes | No | Total |
| When do you get annoyed the most? | At school | 4 (2.0%) | 46 (22.9%) | 50 (24.9%) |
| | At home | 12 (6.0%) | 45 (22.4%) | 57 (28.4%) |
| | Both at home & school | 18 (9.0%) | 76 (37.8%) | 94 (46.8%) |
| Total | | 34 (16.9%) | 167 (83.1%) | 201 (100%) |
| Pearson chi-square | | $\chi^2=.165$; p=.155 | | |

The study sought to determine when the respondents get annoyed the most and if their current school was their choice. The findings in table 4.3 reveal that most of the respondents 94 (46.8%) got annoyed the most when both at home and in school, 57 (28.4%) at home and 50 (24.9%) indicated at school. This can be interpreted to mean that both environments are likely to subject a student to anger. Further, students' school environment has an equal chance of influencing the behavior of the student.

On whether the current school was their choice in Std 8, majority of the respondents 167 (83.1%) indicated no and while only 34 (16.9%) indicated yes. There was no statistically significant difference between where the respondents get annoyed the most and whether their current school was their choice ($p=0.155$). These findings depict that the prevalence of students getting annoyed both at home and at school is high regardless of whether their current school was their choice or not.

Table 4.4: Cross Tabulation Between if there are Some Extra-Curricular Activities that Upset the Respondents and When the Respondents Get Annoyed the Most

| | | Are there some extra-curricular activities that upset you? | | |
|--|-----------------------|--|-------------|--------------|
| | | Yes | No | Total |
| if there are Some Extra-Curricular Activities That Upset the Respondents | At school | 23 (46.0%) | 27 (54.0%) | 50 (24.9%) |
| | At home | 23 (40.4%) | 34 (59.6%) | 57 (28.4%) |
| | Both at home & school | 35 (37.2%) | 59 (62.8%) | 94 (46.8%) |
| Total | | 81 (40.3%) | 120 (59.7%) | 201 (100.0%) |
| Pearson chi-square | | $\chi^2=.594$; $p=.316$ | | |

The respondents were further requested to indicate whether there were any extra-curricular activities that upset them. Both school and home environments were also taken into consideration owing to the fact that some extra curricula activities extend from school environments. The findings in table 4.4 depicts that there are some extra-curricular activities that annoy the students as shown by 81 (40.3%) of the respondents. However, majority of the respondents 120 (59.7%) indicated that there are no extra-curricular activities that upset them. The results also reveal that there is no statistical relationship ($p=0.361$) between when the respondents get annoyed the most and the extra-curricular activities they are involved with at school. This implies that anger prevalence is still high among students both at home and in school, regardless of the extra-curriculum activities they are involved with while at school. Some schools may present learners with extra curricula activities that are not common hence pausing a real threat to their happiness.

The study sought to understand how the students channeled their grievances. Some of the ways that the respondents channel their grievances include directly talking to the school administration, through their class teachers, their class representatives, or even keeping quiet despite the grievances. Further, the respondents were asked to indicate whether they were satisfied with the way their grievances are handled. The results are as shown in table 4.5 below.

Table 4.5: Whether Respondent is Satisfied with The Way Grievances were Handled

| Are you satisfied with the way grievances are handled? | Frequency (%) |
|--|---------------|
| Yes | 119 (59.2%) |
| No | 82 (40.8%) |
| Total | 201 (100.0%) |

From the results in table 4.5, majority of the respondents 119 (59.2%) indicated that they were satisfied with the way their grievances are handled, while 40.8% indicated that they are not satisfied. The 40.8% is a significant proportion of the student population hence indicating a possibility of a source of conflict in the school. Such students are most likely angry.

Prevalence of Destructive Anger

The second objective of this study was to find out the prevalence of destructive anger among students in selected public secondary schools in Ruiru Sub County. This objective was important because it would create a good understanding on the state of anger among the students. Data on the prevalence the four components of anger (physical aggression, verbal aggression, anger, and hostility) was analyzed. The findings were presented in table 4.6.

Table 4.6: Prevalence of Destructive Anger Among Students

| | Physical Aggression | | Verbal Aggression | | Anger | | Hostility | |
|---|---------------------|-----|-------------------|-----|-----------|-----|-----------|-----|
| | Frequency | % | Frequency | % | Frequency | % | Frequency | % |
| Extremely uncharacteristic of me | 10 | 5% | 7 | 3% | 8 | 4% | 1 | 0% |
| Somewhat uncharacteristic of me | 44 | 22% | 30 | 15% | 33 | 16% | 25 | 12% |
| Neither uncharacteristic nor characteristic of me | 61 | 30% | 59 | 29% | 51 | 25% | 52 | 26% |
| Somewhat | 41 | 20% | 51 | 25% | 37 | 18% | 52 | 26% |

| | | | | | | | | | |
|----------------------|------|------|------|------|------|------|------|-----|---|
| characteristic of me | | | | | | | | | % |
| Extremely | 45 | 22% | 54 | 27% | 72 | 36% | 71 | 35 | % |
| characteristic of me | | | | | | | | | % |
| Total | 201 | 100% | 201 | 100% | 201 | 100% | 201 | 100 | % |
| Mean | 3.33 | | 3.57 | | 3.66 | | 3.83 | | |

This study also sought to understand the prevalence of destructive anger among the respondents. The findings in table 4.6 above show that Hostility has the strongest prevalence levels among students with a mean of 3.83 (somewhat characteristic of me); followed by Anger with a mean of 3.66, and then Verbal Aggression with a mean of 3.57 (somewhat characteristic of me). The findings further reveal that Physical Aggression has the lowest prevalence level among the students with a mean of 3.33 (neither characteristic nor uncharacteristic of me). On overall, destructive anger was seen to be strongly prevalent among students with a mean of 3.545 (somewhat characteristic of me).

Further, a cross-tabulation of the type of school and prevalence of anger was done. This was due to the fact that the researcher wanted to find out whether there was a variation in the prevalence of anger across the two schools. Table 4.7 presents the results.

Table 4.7: A cross-tabulation of School and Prevalence of Anger

| School | Mean Scores | | | |
|------------|---------------------|-------------------|-------|-----------|
| | Physical Aggression | Verbal Aggression | Anger | Hostility |
| Githunguri | 2.738 | 3.078 | 2.707 | 3.295 |
| Devki | 2.726 | 3.135 | 2.765 | 3.254 |

Table 4.7 presents the prevalence of anger across the two schools that were recruited in this study. The table shows that Githunguri Secondary School students scored as follows: Physical aggression (2.738), verbal aggression (3.078), anger (2.707), and hostility (3.295). On the other hand, Devki Secondary School scored as follows: Physical aggression (2.726), verbal aggression (3.135), anger (2.765), and hostility (3.254). These results imply that Githunguri Secondary School had higher levels of physical aggression (2.738), and hostility (3.295). Conversely, Devki Secondary School had scored higher in verbal aggression (3.135), and anger (2.765). The results indicate that the strain of anger has an important bearing on the way the students are likely to express themselves when they have been provoked.

This study also sought to find the correlation between destructive anger by school. This was necessary because the different school environments have different situational, human, geographical, and social factors most likely to influence the anger states, and how students express their anger. The findings were presented in table 4.8.

Table 4.8: Correlation between Destructive Anger by School

| School | | Physical Aggression | Verbal Aggression | Anger | Hostility |
|------------|-------------------------------------|---------------------|-------------------|--------|-----------|
| Githunguri | Pearson Correlation | 1 | .453** | .513** | .225* |
| | Physical Aggression Sig. (2-tailed) | | .000 | .000 | .022 |
| | N | 103 | 103 | 103 | 103 |
| | Pearson Correlation | .453** | 1 | .511** | .456** |
| | Verbal Aggression Sig. (2-tailed) | .000 | | .000 | .000 |
| | N | 103 | 103 | 103 | 103 |

| | | | | | |
|---------------------|---------------------|--------|--------|--------|--------|
| Anger | Pearson Correlation | .513** | .511** | 1 | .508** |
| | Sig. (2-tailed) | .000 | .000 | | .000 |
| | N | 103 | 103 | 103 | 103 |
| Hostility | Pearson Correlation | .225* | .456** | .508** | 1 |
| | Sig. (2-tailed) | .022 | .000 | .000 | |
| | N | 103 | 103 | 103 | 103 |
| Physical Aggression | Pearson Correlation | 1 | .161 | .376** | .131 |
| | Sig. (2-tailed) | | .113 | .000 | .197 |
| | N | 98 | 98 | 98 | 98 |
| Verbal Aggression | Pearson Correlation | .161 | 1 | .194 | .202* |
| | Sig. (2-tailed) | .113 | | .056 | .046 |
| | N | 98 | 98 | 98 | 98 |
| Anger | Pearson Correlation | .376** | .194 | 1 | .425** |
| | Sig. (2-tailed) | .000 | .056 | | .000 |
| | N | 98 | 98 | 98 | 98 |
| Hostility | Pearson Correlation | .131 | .202* | .425** | 1 |
| | Sig. (2-tailed) | .197 | .046 | .000 | |
| | N | 98 | 98 | 98 | 98 |

Table 4.8 presents the correlation of anger by type of school. These results show that in Githunguri Secondary School the following had a positive correlation which were statistically significant: physical aggression and verbal aggression ($r=0.453$, $p=0.000$), physical aggression and anger ($r=0.513$, $p=0.000$), and physical aggression and hostility ($r=0.225$, $r=0.022$). In Devki Secondary school, the results showed that there was a positive statistically significant between physical aggression and verbal aggression ($r=0.453$, $p=0.000$), physical aggression and anger ($r=0.376$, $p=0.000$), and anger and

hostility ($r=0.425$, $r=0.000$). These findings can be interpreted to mean that the different types of anger are correlated regardless of the school attended by the student.

To investigate on how the prevalence of anger was distributed across the forms, the mean scores of the type of anger for each form was analyzed and results presented in table 4.9.

Table 4.9: A Cross-tabulation of Form of Student and Prevalence of Anger

| School | Mean Scores | | | |
|--------|---------------------|-------------------|-------|-----------|
| | Physical Aggression | Verbal Aggression | Anger | Hostility |
| Form 2 | 2.813 | 3.142 | 2.836 | 3.341 |
| Form 3 | 2.658 | 3.072 | 2.644 | 3.214 |

Table 4.9 presents the mean scores of each type of anger per form of the student. The results indicate that form two students had a higher mean in the four types of anger: Physical aggression (2.813), verbal aggression (3.142), anger (2.836), and hostility (3.341). This could possibly be attributed to several factors including frustrations accumulated because of bullying in form one, a feeling of being above others due to a developmental shift, challenges of choosing subjects to be examined in the Kenya Certificate of Secondary Education, among other factors.

A correlation between type of anger and form was also run and findings presented in table 10.

Table 4.10: Correlation between Destructive Anger by Form

| Form | Correlations | | | |
|------|---------------------|-------------------|-------|-----------|
| | Physical Aggression | Verbal Aggression | Anger | Hostility |

| | | | | | | |
|--------|---------------------|---------------------|--------|--------|--------|--------|
| Form 2 | Physical Aggression | Pearson Correlation | 1 | .285** | .332** | .133 |
| | | Sig. (2-tailed) | | .005 | .001 | .195 |
| | | N | 96 | 96 | 96 | 96 |
| | Verbal Aggression | Pearson Correlation | .285** | 1 | .354** | .292** |
| | | Sig. (2-tailed) | .005 | | .000 | .004 |
| | | N | 96 | 96 | 96 | 96 |
| | Anger | Pearson Correlation | .332** | .354** | 1 | .528** |
| | | Sig. (2-tailed) | .001 | .000 | | .000 |
| | | N | 96 | 96 | 96 | 96 |
| | Hostility | Pearson Correlation | .133 | .292** | .528** | 1 |
| | | Sig. (2-tailed) | .195 | .004 | .000 | |
| | | N | 96 | 96 | 96 | 96 |
| Form 3 | Physical Aggression | Pearson Correlation | 1 | .316** | .564** | .221* |
| | | Sig. (2-tailed) | | .001 | .000 | .023 |
| | | N | 105 | 105 | 105 | 105 |
| | Verbal Aggression | Pearson Correlation | .316** | 1 | .342** | .339** |
| | | Sig. (2-tailed) | .001 | | .000 | .000 |
| | | N | 105 | 105 | 105 | 105 |
| | Anger | Pearson Correlation | .564** | .342** | 1 | .403** |
| | | Sig. (2-tailed) | .000 | .000 | | .000 |
| | | N | 105 | 105 | 105 | 105 |
| | Hostility | Pearson Correlation | .221* | .339** | .403** | 1 |
| | | Sig. (2-tailed) | .023 | .000 | .000 | |
| | | N | 105 | 105 | 105 | 105 |

Table 4.10 presents the correlation between form and prevalence of anger. The findings showed that among the form two students, there was a statistically significant difference between: physical aggression and verbal aggression ($r=0.285$, $p=0.005$), physical aggression and anger ($r=0.332$, $p=0.001$), verbal aggression and anger ($r=0.354$, $p=0.000$) and physical aggression and hostility ($r=0.292$, $p=0.004$). Among the form three students, there was a positive correlation between all types of anger. Generally, these

results can be interpreted to mean that all types of anger are correlated and a student with one type of anger is most likely to possess all the other levels but at different levels.

Gender was one of the variables of interest in this study. A cross tabulation between gender and prevalence of anger was done. The results were presented in table 4.11.

Table 4.11: A Cross-tabulation of Gender and Prevalence of anger

| School | Mean Scores | | | |
|--------|---------------------|-------------------|--------|-----------|
| | Physical Aggression | Verbal Aggression | Anger | Hostility |
| Male | 2.8427 | 2.9584 | 2.6289 | 3.0877 |
| Female | 2.6631 | 3.1968 | 2.8018 | 3.3911 |

Table 4.11 presents a cross-tabulation of gender and prevalence of anger. The results show that male students scored higher in physical aggression (2.8427) than female students. On the other hand, the female students scored higher in verbal aggression (3.1968), anger (2.8018), and hostility (3.3911). Overall, it is depicted that female students score higher in the different types of anger than the male students. This is mostly attributed to the emotional differences between men and women.

Finally, a correlation between destructive anger and gender was done. This was done because the study was keen to find out whether boys and girls expressed anger differently. Anger expression was a key component in this study because there was an anticipated link between anger and violence among secondary school students. It was also anticipated that different types of anger impacted on a student's overall cognitive

functioning differently. Besides this, the emotional state of a student could generally be influenced by the different states of anger. Results were presented in table 4.12.

Table 4.12: Correlation between Destructive Anger by Gender

| | | | Correlations | | | |
|--------|---------------------|---------------------|---------------------|-------------------|--------|-----------|
| Gender | | | Physical Aggression | Verbal Aggression | Anger | Hostility |
| Male | Physical Aggression | Pearson Correlation | 1 | .218 | .513** | .226* |
| | | Sig. (2-tailed) | | .057 | .000 | .048 |
| | | N | 77 | 77 | 77 | 77 |
| | Verbal Aggression | Pearson Correlation | .218 | 1 | .122 | .125 |

| | | | | | |
|---------------------|---------------------|--------|--------|--------|--------|
| Aggression | Correlation | | | | |
| | Sig. (2-tailed) | .057 | | .289 | .279 |
| | N | 77 | 77 | 77 | 77 |
| Anger | Pearson Correlation | .513** | .122 | 1 | .469** |
| | Sig. (2-tailed) | .000 | .289 | | .000 |
| | N | 77 | 77 | 77 | 77 |
| Hostility | Pearson Correlation | .226* | .125 | .469** | 1 |
| | Sig. (2-tailed) | .048 | .279 | .000 | |
| | N | 77 | 77 | 77 | 77 |
| Physical Aggression | Pearson Correlation | 1 | .385** | .448** | .198* |
| | Sig. (2-tailed) | | .000 | .000 | .027 |
| | N | 124 | 124 | 124 | 124 |
| Verbal Aggression | Pearson Correlation | .385** | 1 | .468** | .395** |
| | Sig. (2-tailed) | .000 | | .000 | .000 |
| | N | 124 | 124 | 124 | 124 |
| Female Anger | Pearson Correlation | .448** | .468** | 1 | .455** |
| | Sig. (2-tailed) | .000 | .000 | | .000 |
| | N | 124 | 124 | 124 | 124 |
| Hostility | Pearson Correlation | .198* | .395** | .455** | 1 |
| | Sig. (2-tailed) | .027 | .000 | .000 | |
| | N | 124 | 124 | 124 | 124 |

Table 4.12 presents information on the correlation between destructive anger and gender. The findings show that there were statistically significant positive correlations between all types of anger and gender. These results can be interpreted to mean that both male and female students express the different types of anger. These results also seem to be contrary to the hypothesis that on average boys are more hostile towards school environment than girls. This perhaps explains why of late both boys' schools and girls' schools have participated in arson activities such as burning and

destroying of school property. Further, these results show that boys and girls do not actually differ in the affective experience of anger.

Correlation Between Destructive Anger and Academic Achievement

Objective three was to investigate the correlation between destructive anger and academic achievement of students in selected public secondary schools in Ruiru Sub County. For this objective, the academic performance of the students in three consecutive terms was obtained from the school termly reports given to the researcher by the school administration.

Table 4.13: Mean Difference in Academic Performance

| | Previous Term | Last Term | Current Term |
|----------------|---------------|-----------|--------------|
| Mean | 9.07 | 8.23 | 6.92 |
| N | 201 | 201 | 201 |
| Std. Deviation | 3.846 | 2.309 | 2.922 |

The findings in table 4.13 show that the mean academic performance of the respondents has been on a decline for the last 3 terms. The academic mean score in the current term is 6.92, the academic mean for last term was 8.23 while the mean for the other previous term was at 9.07. Given the challenges reported in the school, it was evident from this study that the performance of the students had been declining. This was alarming and was a clear indication of students who were facing challenges with their studies. Though there are multiple factors that contribute to a students' declining academic performance, students who are experiencing difficulties in managing their anger tend to be unproductive in their studies.

Further, a regression analysis for destructive anger and academic performance was run to find out whether there was a correlation between anger and academic achievement. The findings were presented in table 4.14.

Table 4.14: Regression Analysis for Destructive Anger and Academic Performance

| | Unstandardized | | Standardized | t | Sig. |
|---------------------|----------------|------------|--------------|--------|------|
| | Coefficients | Std. Error | | | |
| | B | | Beta | | |
| (Constant) | 8.216 | .862 | | 9.535 | .000 |
| Physical Aggression | .228 | .136 | .120 | 1.670 | .096 |
| Verbal Aggression | -.177 | .147 | -.089 | -1.206 | .029 |
| Anger | .206 | .131 | .113 | 1.571 | .118 |
| Hostility | -.268 | .157 | -.126 | -1.706 | .006 |

Dependent Variable: Overall Performance Score

The findings in table 4.14 show that both verbal aggression and hostility are statistical predictors of academic performance; $p=0.029$ and $p=0.006$ for verbal aggression and hostility respectively. The findings show that decreased levels of both verbal aggression and hostility results in better or improved academic performance. This is a further illustration that aggressive behaviors are most likely to have negative influence on the academic performance hence overall academic achievement of a student. The findings too support the fact that the most significant psychopathological risk factor is aggression. It is a complicated concept that can have an impact on students' social, emotional, and physical health. While instrumental aggression is used to attain an external purpose, hostile aggression is used to do harm to others

Difference in Expressing Anger Between Boys and Girls

The fourth objective of this study was to examine the differences in expressing anger between boys and girls in selected public secondary schools in Ruiru sub-County. This objective was of significance to this study because the public generally perceive that boys are more physically aggressive than girls hence expectation that they will participate more in physical violence than girls. To achieve this objective, a Spearman's Rank correlation between gender and anger expression was run. The findings were presented in table 4.15(a), 4.15(b), and 4.15(c).

Table 4.15(a): The Correlation between Gender and Anger Expression

| | | Gender. | Hurling insulting comments & hurtful criticism |
|--|-----------------|---------|--|
| Gender. | Pearson | 1 | .038 |
| | Correlation | | |
| | Sig. (2-tailed) | | .595 |
| | N | 201 | 201 |
| Hurling insulting comments & hurtful criticism | Pearson | .038 | 1 |
| | Correlation | | |
| | Sig. (2-tailed) | .595 | |
| | N | 201 | 201 |
| | | Gender. | Swearing or yelling profanity at someone |
| Gender. | Pearson | 1 | -.108 |
| | Correlation | | |
| | Sig. (2-tailed) | | .126 |
| | N | 201 | 201 |
| Swearing or yelling profanity at someone | Pearson | -.108 | 1 |
| | Correlation | | |
| | Sig. (2-tailed) | .126 | |
| | N | 201 | 201 |
| | | Gender. | Putting them down or belittling |
| Gender. | Pearson | 1 | -.005 |
| | Correlation | | |
| | Sig. (2-tailed) | | .948 |
| | N | 201 | 201 |

Table 4.15(a) presents the correlation between gender and anger expression. The table shows that there was a strong negative correlation between gender and “putting them down or belittling” ($r=0.948$, $p=-.005$), and a positive correlation between gender and “swearing or yelling profanity at someone” ($r=0.126$, $p=-1.08$). There was also a statistically significant relationship between gender and “Hurling insulting comments & hurtful criticism”. These results can be interpreted to mean that there is a likelihood of a variation in emotional responses towards an anger provoking situation.

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Table 4.15(b): The Correlation between Gender and Anger Expression

| | | | |
|---------------------------------|---------------------|---------|------------------|
| Putting them down or belittling | Pearson Correlation | -.005 | 1 |
| | Sig. (2-tailed) | .948 | |
| | N | 201 | 201 |
| Gender. | | Gender. | Punching someone |
| | Pearson Correlation | 1 | .142* |
| | Sig. (2-tailed) | | .044 |
| | N | 201 | 201 |
| Punching someone | Pearson Correlation | .142* | 1 |
| | Sig. (2-tailed) | .044 | |
| | N | 201 | 201 |
| Gender. | | Gender. | Kicking someone |
| | Pearson Correlation | 1 | .080 |
| | Sig. (2-tailed) | | .261 |
| | N | 201 | 201 |
| Kicking someone | Pearson Correlation | .080 | 1 |
| | Sig. (2-tailed) | .261 | |
| | N | 201 | 201 |
| Gender. | | Gender. | Breaking things |
| | Pearson Correlation | 1 | -.063 |
| | Sig. (2-tailed) | | .373 |
| | N | 201 | 201 |
| Breaking things | Pearson Correlation | -.063 | 1 |
| | Sig. (2-tailed) | .373 | |
| | N | 201 | 201 |
| Gender. | | Gender. | Numbing feelings |
| | Pearson Correlation | 1 | -.044 |
| | Sig. (2-tailed) | | .532 |
| | N | 201 | 201 |
| Numbing feelings | Pearson Correlation | -.044 | 1 |
| | Sig. (2-tailed) | .532 | |
| | N | 201 | 201 |

Table 4.15(c): The Correlation between Gender and Anger Expression

| | | | |
|---------|---------|---|---------|
| Gender. | Pearson | 1 | -.431** |
|---------|---------|---|---------|

| | | | |
|----------------|-----------------|---------|----------------|
| | Correlation | | |
| | Sig. (2-tailed) | | .000 |
| | N | 201 | 201 |
| Crying | Pearson | -.431** | 1 |
| | Correlation | | |
| | Sig. (2-tailed) | .000 | |
| | N | 201 | 201 |
| Gender. | | Gender. | Walking off |
| | Pearson | 1 | .147* |
| | Correlation | | |
| | Sig. (2-tailed) | | .037 |
| | N | 201 | 201 |
| Singing | Pearson | -.071 | 1 |
| | Correlation | | |
| | Sig. (2-tailed) | .315 | |
| | N | 201 | 201 |
| Gender. | | Gender. | Drinking water |
| | Pearson | 1 | .137 |
| | Correlation | | |
| | Sig. (2-tailed) | | .053 |
| | N | 201 | 201 |
| Drinking water | Pearson | .137 | 1 |
| | Correlation | | |
| | Sig. (2-tailed) | .053 | |
| | N | 201 | 201 |
| Gender. | | Gender. | Eating a lot |
| | Pearson | 1 | .228** |
| | Correlation | | |
| | Sig. (2-tailed) | | .001 |
| | N | 201 | 201 |
| Eating a lot | Pearson | .228** | 1 |
| | Correlation | | |
| | Sig. (2-tailed) | .001 | |
| | N | 201 | 201 |

Table 4.15(a), 4.15(b), and 4.15(c) shows a statistically significant positive relationship between gender and punching someone ($r=0.142$; $p=0.044$). This means that boys and girls are different when it comes to punching someone when angry. The table also shows a statistically significant strong negative relationship between gender and crying as an expression of anger ($r=-0.431$; $p=0.000$). The findings depict that the more

students are angered, the more they tend to cry. This further ascertains that there is a significant difference in terms of crying between girls and boys when angry. When angry, the girls tend to cry more to express the feeling as opposed to their counterpart boys. Additionally, the table shows a positive relationship, that is statistically significant between gender and walking off ($r=0.147$; $p=0.037$). This can be explained to mean that walking away as an anger expression is significantly different between boys and girls; girls walk away when angry as opposed to their counterpart males. There is also a positive significant relationship between gender and eating a lot as an expression of anger ($r=0.228$; $p=0.001$). This proves that over-eating can be attributed to anger issues among students.

Additionally, the table shows a positive relationship, that is not statistically significant between gender and hurling insults when angry ($r= 0.038$; $p=0.259$). This can be explained to mean that when angry, children might tend to hurl insulting comments and hateful criticism to their offenders. There is a negative relationship that is not statistically significant between gender and swearing or yelling profanity at someone ($r=-0.108$; $p=0.126$). This implies that there are minimal chances the students will yelling at someone when angry. Also, the findings show that there is a negative relationship between gender and putting people down or belittling as an expression of anger ($r= -0.005$; $p=0.948$). This depicts that when angered, students will not express their anger by belittling someone.

There is a positive relationship that is statistically insignificant between gender and kicking someone as an expression of anger ($r= 0.080$; $p=0.261$), implying that students will not choose to kick someone when angry. There is a negative relationship

that is not statistically significant between gender and breaking things ($r=-0.063$; $p=0.373$). This shows that breaking things is not prevalent among students who are angry. Further, there is no statistical significance between gender and numbing feeling when angry as shown by $r=-0.04$ and $p=0.532$. This explains that students will not numb their anger feelings but rather will prefer to express these feelings in one way or the other. There is a negative relationship that is not statistically significant between gender and singing ($r=-0.071$ $p=0.315$). This shows that it is highly unlikely that students will express anger by singing. The table also shows that there is a positive relationship that is not statistically significant between gender and drinking water ($r=-0.137$; $p=0.053$), implying that drinking water is not an expression of anger among high school students.

Key Findings of the Study

The following were the key findings of the study:

1. Majority of the respondents 131 (65.2%) live with their biological parents, 49 (24.4%) live with single parents, 8 (4.0%) live with adopted parents, 7 (3.5%) with foster parents and 6 (3.0%) indicated that they live with their grandparents.
2. Most of the respondents 94 (46.8%) get annoyed the most when both at home and in school, 57 (28.4%) at home and 50 (24.9%) indicated at school.
3. There are some extra-curricular activities that annoy the students as shown by 81 (40.3%) of the respondents. However, majority of the respondents 120 (59.7%) indicated that there are no extra-curricular activities that upset them.
4. Majority of the respondents 119 (59.2%) indicated that they were satisfied with the way their grievances are handled, while 40.8% indicated that they are not satisfied.

5. Hostility has the strongest prevalence levels among students with a mean of 3.83 followed by Anger with a mean of 3.66, and then Verbal Aggression with a mean of 3.57.
6. Physical Aggression had the lowest prevalence level among the students with a mean of 3.33 (neither characteristic nor uncharacteristic of me).
7. On overall, destructive anger was seen to be strongly prevalent among students with a mean of 3.545 (somewhat characteristic of me).
8. The prevalence of anger varies from one school to another.
9. form two students had a higher prevalence in the four types of anger: Physical aggression (2.813), verbal aggression (3.142), anger (2.836), and hostility (3.341).
10. Githunguri Secondary School students had higher levels of physical aggression (2.738), and hostility (3.295) while Devki Secondary School students had scored higher in verbal aggression (3.135), and anger (2.765).
11. There was a were statistically significant positive correlation between all types of anger and gender.
12. The mean academic performance of the respondents has been on a decline for the last 3 terms.
13. Both verbal aggression and hostility are statistical predictors of academic performance; $p=0.029$ and $p=0.006$ for verbal aggression and hostility respectively. The findings show that decreased levels of both verbal aggression and hostility results in better or improved academic performance.
14. There was a statistically significant positive relationship between gender and punching someone ($r=0.142$; $p=0.044$); gender and crying as an expression of

anger ($r=-0.431$; $p=0.000$); gender and walking off ($r=0.147$; $p=0.037$); and gender and eating a lot as an expression of anger ($r=0.228$; $p=0.001$).

15. Male students scored higher in physical aggression (2.8427) than female students.

On the other hand, the female students scored higher in verbal aggression (3.1968), anger (2.8018), and hostility (3.3911). Overall, it is depicted that female students score higher in the different types of anger than the male students.

16. There was a strong negative correlation between gender and “putting them down or belittling” ($r=0.948$, $p=-.005$), and a positive correlation between gender and “swearing or yelling profanity at someone” ($r=0.126$, $p=-1.08$).

17. There was also a statistically significant relationship between gender and “Hurling insulting comments & hurtful criticism”.

Summary

In chapter four, the presentation analysis and interpretation of data was done. The data was analyzed in line with the study’s objectives. Presentation, analysis was also done for all data that was analyzed. The key findings of the study were also presented. The next chapter discusses the study’s findings, conclusion, and recommendations.

CHAPTER FIVE

SUMMARY OF FINDINGS, RECOMMENDATIONS, AND CONCLUSIONS

Introduction

In this chapter, the researcher discussed the results of the study according to the summary of major findings obtained from chapter 4. Further conclusions were derived, and recommendations underscored for further studies. The recommendations and conclusions were developed from the study objectives, the study results as obtainable from chapter four and compared with results of other similar studies.

Summary of Findings

The target population for the study was the 1777 forms two and three students from the two randomly selected public secondary schools within Ruiru sub-county. 249 questionnaires were administered to forms two and three in Githunguri and Devki public secondary school. 201 respondents (80.7%) completed and returned the questionnaires which were used for this analysis. 48 (19.3%) respondents did not meet the inclusion criteria as they had not completed all the sections of the questionnaires which meant that their questionnaires were not analyzed.

Discussion of Key Findings

Social-Demographic Characteristics

The study sought to analyze the socio-demographic characteristics of students in selected public secondary schools in Ruiru Sub County. The findings showed that 61.7% (124) of the respondents were girls while 38.3% (77) were boys. These findings depict that both genders were well represented in this study. The age distribution for the respondents was between 14 and 21 years old and majority of the respondents 173

(86.1%) were between 16 and 18 years old. The findings show that students in form 2 and 3 used in this study were from different ages. The results also show that 104 (51.7%) of the respondents were in form 3 while 97 (48.3%) were in form 2. These findings depict that both levels were fairly represented in this study. This study sought to understand the nationality of the respondents. From the findings, 194 (96.5%) of the respondents were of Kenyan nationality while only 7 (3.5%) were non-Kenyans. This study further sought to determine whether respondents' parents were alive or not. 193 (96.0%) of the respondents indicated that their parents were alive while 8 (4.0%) indicated that their parents are deceased. The findings further reveal that majority of the respondents 131 (65.2%) live with their biological parents, 49 (24.4%) live with single parents, 8 (4.0%) live with adopted parents, 7 (3.5%) with foster parents and 6 (3.0%) indicated that they live with their grandparents. These findings show that the majority 180 (89.6%) of the respondents live with their biological parents, whether both parents or single parents.

The study further sought to determine when the respondents get annoyed the most and if their current school was their choice. The findings reveal that most of the respondents 94 (46.8%) get annoyed the most when both at home and in school, 57 (28.4%) at home and 50 (24.9%) indicated at school. On whether the current school was their choice in Std 8, majority of the respondents 167 (83.1%) indicated no and while only 34 (16.9%) indicated yes. There was no statistically significant difference between where the respondents get annoyed the most and whether their current school was their choice ($p=0.155$). These findings depict that the prevalence of students getting annoyed both at home and at school is high regardless of whether their current school was their choice or not. This is in line with Genuchi & Valdez, 2014 that all adolescents may

experience high levels of anxious and depressive states if they are unable to fulfill their goals. They may, on the other hand, display wrath, aggressiveness, and aggression, all of which are signs of depression.

The respondents were further requested to indicate whether there were any extra-curricular activities that upset them. The findings depict that there are some extra-curricular activities that annoy the students as shown by 81 (40.3%) of the respondents. However, majority of the respondents 120 (59.7%) indicated that there are no extra-curricular activities that upset them. The results also reveal that there is no statistical relationship ($p=0.361$) between when the respondents get annoyed the most and the extra-curricular activities they are involved with at school. This implies that anger prevalence is still high among students both at home and in school, regardless of the extra-curriculum activities they are involved with while at school.

Further, the respondents were asked to indicate whether they were satisfied with the way their grievances are handled. majority of the respondents 119 (59.2%) indicated that they were satisfied with the way their grievances are handled, while 82 (40.8%) indicated that they are not satisfied.

Prevalence of Destructive Anger

The study sought to understand the prevalence of destructive anger among the respondents. The findings show that Hostility had the strongest prevalence levels among students with a mean of 3.83 (somewhat characteristic of me); followed by Anger with a mean of 3.66, and then Verbal Aggression with a mean of 3.57 (somewhat characteristic of me). The findings further reveal that Physical Aggression has the lowest prevalence level among the students with a mean of 3.33 (neither characteristic nor uncharacteristic

of me). On overall, destructive anger was seen to be strongly prevalent among students with a mean of 3.545 (somewhat characteristic of me). These findings concur with Itegi (2017), who conducted a study of students' experiences with bullying in Nairobi County secondary schools. Physical aggressiveness, such as being struck, kicked, beaten, as well as verbal aggression, such as students criticizing or spreading negative information about one another, were common occurrences among students. Also, according to Daniel, Goldston, Erkanli, Franklin, & Mayfield (2009), anger can range from minor dissatisfaction and irritation to impatience, rage, and fury.

The findings also are in line with studies conducted in Kenya that show that among secondary school students, aggression is a serious issue. The study's findings agree with those of Wakoli and Bundotich (2020), that looked at the prevalence of aggressive behavior among secondary school pupils in Bungoma County, Kenya. They discovered that bullying and fighting among students were prevalent, and they called for action to be made to stop it. Manyibe (2018) observed that bullying was pervasive in girls' schools in Kajiado County, with verbal abuse, sexual and physical bullying being the most common bullying practices. These acts can be attributed to inability of such students not being able to control anger. The findings of this study found out that there were high levels of anger among the secondary school students in Ruiru sub-County hence a possibility that the increasing acts of violence among the students in secondary schools can be attributed to these levels of anger.

Correlation Between Destructive Anger and Academic Achievement

The study further sought to determine the correlation between destructive anger and academic achievement. The findings show that the mean academic performance of

the respondents has been on a decline for the last three terms. The academic mean score in the current term is 6.92, the academic mean for last term was 8.23 while the mean for the other previous term was at 9.07. The results further revealed that both verbal aggression and hostility are statistical predictors of academic performance; $p=0.029$ and $p=0.006$ for verbal aggression and hostility respectively. In addition, the findings show that decreased levels of both verbal aggression and hostility results in significantly better or improved academic performance.

These results are concurred with Didem (2018) who conducted a study in Turkey to look at the effects of perceived social support from teachers, school control, academic achievement expectations, and gender on anger dimensions among secondary school students. The results from this study showed that academic achievement expectations significantly predicted cognitive, affective, and behavioral anger dimensions.

This study's findings were also in line with those of a study by Uludag (2013) that found out that evaluated how students' GPA scores and cumulative academic accomplishment score were affected by verbal aggression, anger with resentment, physical aggression, and suspicion all measured by an anger assessment scale. According to this study's findings, verbal abuse was inversely correlated with current academic success (GPA).

In addition, destructive anger negatively impacts students' performance due to time wastage. According to Opere and colleagues (2019), students squander a quality time owing to interruptions in learning caused by school violence, and perpetrators of violence integrate into society badly once they leave school. Anger affects the cognitive state of a student, and such a student is likely to experience challenges that will interfere

with smooth learning. Because anger is likely to rob a student with the ability to concentrate, it is likely to tamper with memory that is crucial in the student's efforts to excel in academics.

More so, Estévez, Jiménez, and Moreno (2018) explored how aggressive conduct contributed to maladjustment in twelve–seventeen-year-old adolescents with a history of peer aggressiveness. The results showed that aggressive conduct was linked to less empathy, poorer life satisfaction, low self-esteem, and greater depressive symptoms in both boys and girls, according to logistic regression analysis. Aggression was linked to a negative attitude regarding school, trouble making friends, and learning disengagement.

The findings of this study also concur with those of Menecha et al., (2018) that found that that student diagnosed with high levels of anger also had high levels of depression and anxiety. Menecha et al study also pointed out that because of these, secondary school students that experienced high levels of anger, depression, and anxiety recorded a decline academic performance across three consecutive terms. This is to say that anger has a negative correlation with academic achievement. Though Menecha et al. study was done in an urban setting, the proximity of Ruiru sub-County to Nairobi city can be said to harbor some negative influences which can be detrimental to the academic achievement of a secondary school student. The situational, geographical, and demographic characteristics of Ruiru sub-County can be said to expose students to anger provoking situations. It is also possible that due to social learning, the students might have copied some of the behaviours from their environment.

This study also found out that mean anger scores for form two students was higher than those of form three students. The findings were in line with those of Menecha

et al., (2018). In their study, Menecha et al., found out that form two students were more involved in troublesome activities in school than the form three students. This may call for more interventions to be given to form two students. It is most likely that the developmental stage of these students may have contributed to the elevated anger levels.

Difference in Expressing Anger Between Boys and Girls

The researcher also sought to determine the difference in anger expression between boys and girls. The results revealed that there is a statistically significant positive relationship between gender and punching someone ($r=0.142$; $p=0.044$). This means that boys and girls are different when it comes to punching someone when angry. The results also show a statistically significant strong negative relationship between gender and crying as an expression of anger ($r=-0.431$; $p=0.000$). The findings depict that the more students are angered, the more they tend to cry. This further ascertains that there is a significant difference in terms of crying between girls and boys when angry. When angry, the girls tend to cry more to express the feeling as opposed to their counterpart boys. Additionally, the table shows a positive relationship, that is statistically significant between gender and walking off ($r=0.147$; $p=0.037$). This can be explained to mean that walking away as an anger expression is significantly different between boys and girls; girls walk away when angry as opposed to their counterpart males. These results are in line with a study by Csibi and Csibi (2011) that found out that despite the fact that anger is gender-neutral, when compared to boys, girls often avoid stressful situations that cause emotional tension and, at times, resort to aggression as a way of releasing their tension.

The study's findings also revealed that there was a positive significant relationship between gender and eating a lot as an expression of anger ($r=0.228$;

$p=0.001$). This proves that over-eating can be attributed to anger issues among students. Additionally, the findings show a positive relationship, that is not statistically significant between gender and hurling insults when angry ($r= 0.038$; $p=0.259$). This can be explained to mean that when angry, children might tend to hurl insulting comments and hateful criticism to their offenders. There is a negative relationship that is not statistically significant between gender and swearing or yelling profanity at someone ($r=-0.108$; $p=0.126$). This implies that there are minimal chances the students will yelling at someone when angry. Also, the findings show that there is a negative relationship between gender and putting people down or belittling as an expression of anger ($r= -0.005$; $p=0.948$). This depicts that when angered, students will not express their anger by belittling someone. There is a positive relationship that is statistically insignificant between gender and kicking someone as an expression of anger ($r= 0.080$; $p=0.261$), implying that students will not choose to kick someone when angry. There is a negative relationship that is not statistically significant between gender and breaking things ($r=-0.063$; $p=0.373$). This shows that breaking things is not prevalent among students who are angry. Further, there is no statistical significance between gender and numbing feeling when angry as shown by $r=-0.04$ and $p=0.532$. This explains that students will not numb their anger feelings but rather will prefer to express these feelings in one way or the other. There is a negative relationship that is not statistically significant between gender and singing ($r=-0.071$ $p=0.315$). This shows that it is highly unlikely that students will express anger by singing. The table also shows that there is a positive relationship that is not statistically significant between gender and drinking water ($r=-0.137$; $p=0.053$), implying that drinking water is not an expression of anger among high school students.

These findings agree with the fact that females are more emotionally expressive than males, according to Brandts and Garofalo (2012). This implies that males are more exposed to rage than their female counterparts. Females experience rage as well, according to Sadeh et al., (2011), although it does not always manifest as physical aggressiveness. Due to social expectations and limitations, they have difficulty identifying and admitting that they are upset (Karreman & Bekker, 2012). Males, on the other hand, have no qualms about expressing their anger in any situation (Fischer & Evers, 2011). Boys find it easy to show their anger in many situations because it is socially acceptable (Burt, 2014). This is backed up by a study by Borroni et al. (2014), which found that male students were much more physically and verbally hostile than female students.

Despite the fact that this study didn't focus specifically on the specific types of anger and how they are expressed between boys and girls, the findings seem to concur with those of a study by Suman (2016) conducted in India to see if both genders show anger in the same way. Suman's study discovered that females scored higher in state anger while males scored higher in trait anger among 50 university graduates (25 males and 25 females) aged 20-30 years. The males scored a mean of 24.2 on anger expression, while females scored a mean of 20.64 on the same variable, according to the study. This study also discovered that, although anger expression is gender specific, variations in trait and state anger are not statistically significant across gender. Even in various cultural circumstances, females display rage less than males, according to the findings of this study. This was also evident in the expression of physical aggression and hostility in this study.

The current study's findings were also in line with those of Burt (2014). Burt's study was to investigate differences in the degrees of anger expression and anger control among teenage males and females. In this study, a strength-based anger management group promoting wellness was completed by eighteen participants (9 males and 9 females). Anger management group therapy was a 10-week continuous intervention that focused on anger reduction, anger control, and acceptable anger expression. The findings revealed gender disparities, with females displaying more anger expression and less anger control. Females, on the other hand, improved more overall. Burt's study is a further demonstration that there are differences in anger expression between boys and girls. The main difference between Burt's study and the current study was that Burt's study was an interventional one though the end results revealed differences in anger expression between boys and girls.

A recent study by Ahmad et al. (2021) investigated whether people with choleric temperaments become irritated easily and can be harmful if not communicated appropriately. Though there was a deviation on the key issue of investigation, the goal of this study was to find out if there were any gender differences in anger expressions among high school students. Respondents were secondary school students from four Malaysian states in the country's northern area. A total of 3348 students participated, with 1,800 males and 1,548 girls. Twenty secondary schools were chosen at random to provide respondents aged 13 to 16. To identify angry emotions among secondary school pupils, descriptive analysis and the t-test were performed. According to the findings, 780 individuals agreed that they are hot-tempered, whereas 2568 others did not. There were 370 men and 410 women among the 780 hot-tempered respondents. When they had anger

issues, 3160 of the 3348 respondents did not meet with their school counsellors for counselling sessions. The data also demonstrated a substantial difference between male and female pupils in four categories of rage expressions. They were aggressive, vocal, expressing intrinsic anger, and controlling intrinsic anger. The findings revealed that school counselors must provide students with specialized, creative, and novel interventions to help them cope with various forms of rage expression. These findings mirror to some degree with the current study.

The study's findings also agree with those of Menecha et al., (2018) that found out that there were significant differences in anger expression between boys and girls. The only difference here was in anger expression and control. According to Menecha et al., males express anger physically more than females. The two secondary schools sampled in this study were both mixed schools. The findings also revealed that there were differences in anger expression between boys and girls.

Conclusions

The following conclusions were drawn from the study:

- i. Destructive anger is strongly prevalent among students in public schools. The students get annoyed the most while both at home and in school. Therefore, the responsibility to address anger issues lies both on family and academic institutions.
- ii. There is a negative correlation between destructive anger and academic performance of the students. Academic performance of students who demonstrate anger traits tend to deteriorate over time.

- iii. Even though anger and depression are gender-neutral, there is a significant difference in anger expression between boys and girls. When compared to boys, girls often avoid stressful situations that cause emotional tension and, at times, resort to aggression as a way of releasing their tension.

Recommendations

The study revealed that students get annoyed while both at home and at school. Therefore, this study recommends that both parents and teachers are responsible for ensuring anger issues among students are addressed whenever they arise. There is need for these two to work harmoniously to address even the minor dissatisfactions and irritations such as impatience, rage and fury. The schools have the responsibility of detecting and regulating the emotions created by the teenagers. This study has clearly showed that despite the fact that some anger can be perceived as normal, higher amounts of anger can be harmful, as they are connected to problems including suicide, depression, and violence.

The results of this study further revealed that there is a strong correlation between destructive anger and academic achievement. Students with high prevalence levels of anger and depression will record deteriorating academic performance over time. The study has revealed that part of this can be attributed to time wastage owing to interruptions in learning caused by school violence. Therefore, there is need for family and academic institutions to implements policies that will mitigate prevalence of destructive anger among high school students. These policies should include offering psychoeducation to both parents and teachers such that they are able to not only deal with

angered and depressed students, but also be able to identify even the most minor forms of anger and depression among the teenagers.

Since there were some extra-curricular activities that annoy the students as shown by 81 (40.3%) of the respondents, the school administrators need to revise some of these extra-curricular activities. These activities need to be learner centred and learner friendly. The activities also need to be motivating to the learners and contribute to the overall development of a learner.

Schools need to revise the way they handle students' grievances. Good communication channels need to be put in place so that any time students face challenges, they get immediate help. This will lower cases of unrest among students. From the study findings, it was evident that there were differences in anger expression between boys and girls. This study therefore recommends that having separate schools for boys and girls will be of great help. This will ensure that there is full utilization of the different interventions to help in facilitating students to manage their anger levels appropriately. More gender appropriate interventions will be necessary to help the secondary school students cope with anger.

The government and other policy makers need to come up with ways of helping the form two students cope with the transition and developmental changes they go through. This study found out that form two students had higher levels of anger than the form three students. Among the possible reasons for this was the developmental stage crisis, a sense of freedom after successfully completing their first-year class in the university handling feelings of being caged, among other factors.

Secondary school students seem to need more appropriate therapeutic interventions. This study therefore recommends that the government need to employ more qualified professional psychologists to handle the emerging issues among students in schools. The assumption that the guidance and counseling head of department can manage the situation seem not to be working. These heads of departments also teach the same students who require psychotherapy. This will be a serious conflict of interest.

Recommendations For Further Research

This research was conducted in public schools in Ruiru Sub-County that is majorly populated by children from middle to low-class families. There is a need for more extensive research to evaluate the subject matter in different sociodemographic social classes. It would be worthwhile to do a comparative study on the same topic but focusing on private schools. This would provide more in-depth insight to parents and policymakers on the anger prevalence in private schools and the influence this has on the academic performance of the students.

Further studies need to be done on the correlation between anger and academic achievement among students in forms one and four. Though it is assumed that the form ones are new in schools while the form four students normally get busy preparing for examinations. This is basically an assumption. The form ones normally face adjustment issues hence a possibility of being more prone to anger. Because of the busy schedule of the form four students, anxiety about their forthcoming examinations, fear of unknown, and the anticipated life after school completion.

A similar study ought to be done among primary school pupils in Ruiru sub-County. This is possibly due to the fact that although cases of unrest among such pupils

goes unreported, there is a possibility that such students struggle with anger issues that get suppressed by the tough disciplinary measures but in place in the primary schools. These pupils in turn are likely not to perform to their potential in their academics and other co-curricular activities.

Summary

This chapter has summarized the key findings of the study and discussed the findings the study. The analysis has revealed destructive anger is prevalent among high school students and is strongly linked to depression, which consequently negatively impacts academic performance among students. The study concluded that there is need to address anger issues among adolescent children, as this not only negatively impacts their academic performance, but also the anger issues have future repercussions on the lives of the students. Based on these findings, the researcher suggested areas for further research.

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APPENDICES

Appendix I: Letter of Introduction

Ann Kangangi
Daystar University, Nairobi Campus,
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NAIROBI.
Email: Annkangangi201352@daystar.ac.ke

To whom it may concern

My name is Ann Kangangi, a Master in Clinical Psychology student at Daystar University. I am carrying out a study on the correlation between destructive anger and academic achievement of secondary school students in selected public secondary schools in Ruiru subcounty, Kiambu County, Kenya.

Destructive anger is serious emotion that school administrators are grappling with to scale down cases of indiscipline in our schools. From the recent heinous activities where students burn down dormitories from just a mere provocation, it is evident that destructive anger among the students need to be addressed. By participating in this study through giving your honest opinion we shall help our adolescents in public secondary schools to achieve their academic goals a great deal besides helping them experience an emotional and psychological growth.

Thank you for participation.

Yours sincerely,

Ann Kangangi
Researcher

Appendix II: Questionnaire for Students

I am currently studying for a Masters in Clinical Psychology at Daystar University. I am undertaking a study on the correlation between destructive anger and academic achievement of secondary school students in selected public secondary schools in Ruiru subcounty, Kiambu County, Kenya. The information obtained will be treated confidential and will be used by counselors, psychologists, social workers, teachers, educational planners, curriculum developers and the society who want to better understand the correlation between destructive anger and academic achievement.

SECTION A: DEMOGRAPHIC INFORMATION

Please tick appropriately

1. What is your Gender? Male Female
2. Please indicate your age in years.....
3. In what form are you? Form 2 Form 3
4. Indicate your nationality? Kenyan Non Kenyan
5. Are your parents alive? Yes No
6. Who are you currently living with?
 - Biological parents Adopted parents single parent
 - Foster Parents Grandparents
7. Have you ever been involved in any troublesome activities in school or outside school?
 - Yes No
8. If your answer is yes in 7 above, what is the frequency?
 - Rarely Frequently
 - Oftenly Always
9. When do you get annoyed most?
 - When at school when at home
 - When both at home and school
10. What are some of the factors at home that makes you feel angry?

11. What are some of the factors at school that make you feel angry?

12. Are there some extra-curricular activities that upsets you?
 Yes No

If yes, which ones?

.....
.....
.....

13. (a) How do you channel your grievances in school?.....

.....
.....

b) Are you satisfied by the way the grievances are handled.....

14. Was your school among the choices you selected in standard eight?

.....
.....

15. Please list any other issue in school or at home that makes you angry.

.....
.....
.....

SECTION II: PREVALENCE OF DESTRUCTIVE ANGER (BPAQ)

Using the 5-point scale shown below, indicate how uncharacteristic or characteristic each of the following statements is in describing you. Place your rating in the box to the right of the statement.

- 1 = extremely uncharacteristic of me
- 2 = somewhat uncharacteristic of me
- 3 = neither uncharacteristic nor characteristic of me
- 4 = somewhat characteristic of me
- 5 = extremely characteristic of me

- 1. Some of my friends think I am a hothead A
- 2. If I have to resort to violence to protect my rights, I will. PA
- 3. When people are especially nice to me, I wonder what they want. H
- 4. I tell my friends openly when I disagree with them. VA
- 5. I have become so mad that I have broken things. PA
- 6. I can't help getting into arguments when people disagree with me. VA
- 7. I wonder why sometimes I feel so bitter about things. H
- 8. Once in a while, I can't control the urge to strike another person. PA
- 9.* I am an even-tempered person. A
- 10. I am suspicious of overly friendly strangers. H
- 11. I have threatened people I know. PA
- 12. I flare up quickly but get over it quickly. A
- 13. Given enough provocation, I may hit another person. PA
- 14. When people annoy me, I may tell them what I think of them. VA
- 15. I am sometimes eaten up with jealousy. H

- 16.* I can think of no good reason for ever hitting a person. PA
17. At times I feel I have gotten a raw deal out of life. H
18. I have trouble controlling my temper. A
19. When frustrated, I let my irritation show. A
20. I sometimes feel that people are laughing at me behind my back. H
21. I often find myself disagreeing with people. VA
22. If somebody hits me, I hit back. PA
23. I sometimes feel like a powder keg ready to explode. A
24. Other people always seem to get the breaks. H
25. There are people who pushed me so far that we came to blows. PA
26. I know that "friends" talk about me behind my back. H
27. My friends say that I'm somewhat argumentative. VA
28. Sometimes I fly off the handle for no good reason. A
29. I get into fights a little more than the average person. PA

Scoring

The two questions with the asterisk are reverse scored.

The Aggression scale consists of 4 factors, Physical Aggression (PA), Verbal Aggression (VA),

Anger (A) and Hostility (H). The total score for Aggression is the sum of the factor scores.

SECTION III: DIFFERENCES IN EXPRESSING ANGER BETWEEN BOYS AND GIRLS

17. Please ways in which you express your anger from the list below:
- i. Hurling insulting comments and hurtful criticism
 - ii. Swearing or yelling profanity at someone
 - iii. Putting them down, or belittling
 - iv. Punching others
 - v. Kicking others
 - vi. Breaking things
 - vii. Numbing feelings
 - viii. Crying
 - ix. Walking off
 - x. Singing
 - xi. Drinking water
 - xii. Eating a lot

Appendix III: ERB Approval

VERDICT – APPROVAL WITH COMMENTS

Daystar University Institutional Scientific Ethical Review Committee

Our Ref: **DU-ISERC/26/07/2022/000681**Date: 26th July 2022

To: Ann Catherine Njeri Kangangi,

Dear Ann,

RE: CORRELATION BETWEEN DESTRUCTIVE ANGER AND ACADEMIC ACHIEVEMENT OF SECONDARY SCHOOL STUDENTS: CASE OF SELECTED PUBLIC SECONDARY SCHOOLS IN RUIRU SUBCOUNTY, KIAMBU COUNTY, KENYA

Reference is made to your ISERC application reference no. 130722-01 dated 13th July 2022 in which you requested for ethical approval of your proposal by Daystar University Institutional Scientific Ethical Review Committee.


We are pleased to inform you that ethical review has been done and the **verdict is to revise, to the satisfaction of the Supervisors and Head of Department and then proceed to the next stage**. As guidance, ensure that the attached comments are addressed. Please be advised that it is an offence to proceed to collect data without addressing the concerns of the Institutional Scientific Ethical Review Committee. Your application approval number is **DU-ISERC-000681**. The approval period for the research is between **26th July 2022 to 25th July 2023** after which the ethical approval lapses. Should you wish to continue with the research after the lapse, you will be required to apply for an extension from DU-ISERC at half the review charges.

This approval is subject to compliance with the following requirements.

- i. Only approved documents including (informed consents, study instruments, MTA) will be used.
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by Daystar University Institutional Scientific Ethical Review Committee.
- iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to Daystar University Institutional Scientific Ethical Review Committee within 72 hours of notification.
- iv. Any changes anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to Daystar University Institutional Scientific Ethical Review Committee within 72 hours.
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of a signed one page executive summary report and a closure report within 90 days upon completion of the study to Daystar University Institutional Scientific Ethical Review Committee via email [duerb@daystar.ac.ke].

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke> and other clearances needed.

Yours sincerely,


 Dr. Susan Mufiungi, PhD

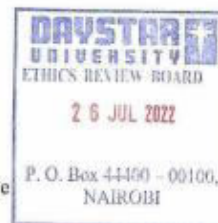
Vice Chair, Daystar University Institutional Scientific Ethical Review Committee


 Nairobi Campus
 P.O. Box 44400 - 00100, GPO
 Nairobi, Kenya.

 Athi River Campus
 P.O. Box 17 - 90145
 Athi River, Kenya.

 Tel: 0709 972 000
 0716 170 313
 0748 100 759
 0724 256 408

 Email: admission@daystar.ac.ke OR
info@daystar.ac.ke

 Website: www.daystar.ac.ke


Encl. Review Report

Appendix IV: NACOSTI Permit


**NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION**

Date of Issue: **04/August/2022**

RESEARCH LICENSE



This is to Certify that Ms. Ann Catherine Kangangi of Daystar University, has been licensed to conduct research in Kiambu on the topic: CORRELATION BETWEEN DESTRUCTIVE ANGER AND ACADEMIC ACHIEVEMENT OF SECONDARY SCHOOL STUDENTS: CASE OF SELECTED PUBLIC SECONDARY SCHOOLS IN RUIRU SUBCOUNTY, KIAMBU COUNTY, KENYA for the period ending : 04/August/2023.

License No: **NACOSTI/P/22/19488**

Applicant Identification Number
723468

Director General
**NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION**

Verification QR Code



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Appendix V: Authorization from the County Commissioner

DAYSTAR UNIVERSITY



OFFICE OF THE PRESIDENT
MINISTRY OF INTERIOR AND CO-ORDINATION OF NATIONAL GOVERNMENT
COUNTY COMMISSIONER, KIAMBU

Telephone: 066-2022709
Fax: 066-2022644
E-mail: countycommkiambu@yahoo.com
When replying please quote

County Commissioner
Kiambu County
P.O. Box 32-00900
KIAMBU

Ref.No: ED.12 (A)/1/VOL.V/141

23rd August, 2022

Ms .. Ann Catherine Kangangi
Daystar University
P.O Box 44400-00100
NAIROBI, KENYA

RE: RESEARCH AUTHORIZATION

Reference is made to National Commission for Science, Technology and Innovation Letter Ref No. NACOSTI/P/22/19488 Dated 4th August, 2022.

You have been authorized to conduct research on "*CORRELATION BETWEEN DESTRUCTIVE ANGER AND ACADEMIC ACHIEVEMENT OF SECONDARY SCHOOL STUDENTS: CASE OF SELECTED PUBLIC SECONDARY SCHOOLS IN RUIRU SUBCOUNTY, KIAMBU COUNTY, KENYA.*" The data collection will be carried out in *Ruiru sub-county, Kiambu County for a period ending 4th August, 2023.*

You are requested to share your findings with the County Education Office upon completion of your research.

Festus Kimeu
FOR: COUNTY COMMISSIONER
KIAMBU COUNTY

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

County Director of Education
KIAMBU COUNTY

Deputy County Commissioners
RUIRU SUB-COUNTY

"Our Youth our Future. Join us for a Drug and Substance free County".

Appendix VI: Authorization from the County Director of Education



MINISTRY OF EDUCATION
State Department of Early Learning and Basic Education

Telephone: Kiambu (office) 0768 970412

Email: directoreducationkiambu@yahoo.com
 When replying please quote

KBU/CDE/DEPT 8/VOL.I

COUNTY DIRECTOR OF EDUCATION
 KIAMBU COUNTY
 P. O. Box 2300
 KIAMBU

23rd August, 2022

Ms. Ann Catherine Kangangi
 Daystar University
 P.O. Box 44400-00100
NAIROBI- KENYA

RE: RESEARCH AUTHORIZATION

Reference is made to NACOSTI letter Ref. No. NACOSTI/P/22/19488 dated 4th August, 2022

You have been authorized to research on **“Correlation between destructive anger and academic achievement of secondary school students: case of selected public secondary schools in Ruiru Sub-County Kiambu County, Kenya”** for a period ending 4th August, 2023

Please accord her the necessary assistance. You are requested to share with us a copy of your research findings when you conclude



AGNES THEURI
 For: COUNTY DIRECTOR OF EDUCATION
KIAMBU COUNTY

MY EDUCATION, MY FUTURE

MY EDUCATION, MY FUTURE

Appendix VII: Similarity Index

Anne Kangangi Thesis

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Isaac Burt. "Identifying Gender Differences in Male and Female Anger Among an Adolescent"

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