UNIVERSITY OF CAPE COAST

CAUSES, EFFECTS AND MANAGEMENT OF EXAMINATION ANXIETY AMONG SENIOR HIGH SCHOOL STUDENTS IN THE JOMORO MUNICIPALITY, GHANA

ELIJAH DONKOR

2023

Digitized by Sam Jonah Library

UNIVERSITY OF CAPE COAST

CAUSES, EFFECTS AND MANAGEMENT OF EXAMINATION ANXIETY AMONG SENIOR HIGH SCHOOL STUDENTS IN THE JOMORO MUNICIPALITY, GHANA

BY

ELIJAH DONKOR

Thesis submitted to the Department of Guidance and Counselling of the Faculty of Educational Foundations, College of Education Studies, University of Cape Coast, in partial fulfillment of the requirements for the award of Master of Philosophy degree in Guidance and Counselling

NOVEMBER, 2023

Digitized by Sam Jonah Library

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Supervisor's Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

ii

ABSTRACT

This research examined the causes, effects and ways of managing examination anxiety of senior high school students in Jomoro Municipality of Ghana. The research was carried out using a descriptive cross-sectional design with a quantitative approach. All of the 2,400 students enrolled in public senior high schools in the Jomoro Municipality made up the study's population. The respondents for the study were selected using a multi-stage sampling method through which a sample of 331 seniors from two senior high schools received close ended questionnaires. Means and standard deviations, independent samples t-test, and one-way analysis of variance (ANOVA) were used to analyze the data gathered. The findings indicated that senior high school students within the Jomoro Municipality generally experienced high levels of examination anxiety. The study further discovered that examination anxiety was caused by poor time management on the part of students, inadequate preparation for examination as well as adoption of rote learning approach by students. The investigation concluded that examination anxiety interfered with students' ability to perform excellently in examinations. Teachers, school counsellors, as well as academic advisors are therefore encouraged to sensitise students on the importance of adopting effective time management practices such as timetable, regular revision, elimination of distraction and positive attitude before examines.

iii

KEYWORDS

Examination anxiety

Management of examination anxiety

Senior high schools

Causes of examination anxiety

Effects of examination anxiety

ACKNOWLEDGEMENTS

I express my profound gratitude to my supervisor, Dr. Stephen Doh Fia, for his unwavering support, inspiration, and leadership during the writing of my thesis.

I owe a great deal of gratitude to Professor Godwin Awabil, Rev. Dr. Otopa Antiri, and Professor Linda Dzama Forde for their unending assistance with the study's execution. Additionally, I would like to express my gratitude to Rev. Professor Joseph Kwasi Essuman, a former director of the University of Cape Coast's Counseling Center, for his support. I want to express my sincere appreciation to the lecturers at the University of Cape Coast's counseling department.

I am extremely thankful of the Headmasters of Half Assini and Annor Adjaye Senior High Schools for their assistance during the gathering of the data. For their assistance during my education, I am incredibly appreciative of my coworkers and classmates. Last but not least, I want to express my gratitude to my family for their support throughout the programmes of study.

NOBIS

v

DEDICATION

To my wife and children.



TABLE OF CONTENTS

	Page
DECLARATION	ii
ABSTRACT	iii
KEYWORDS	iv
ACKNOWLEDGEMENTS	v
DEDICATION	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	xi
LIST OF FIGURES	xii
CHAPTER ONE: INTRODUCTION	1
Background to the Study	1
Statement of the Problem	4
Purpose of the Study	6
Research Questions	7
Hypotheses	7
Significance of the Study	8
Delimitations	9
Limitations	9
Definition of Terms	10
Organisation of the Study	10
CHAPTER TWO: LITERATURE REVIEW	12
Theoretical Framework	12
Rational Emotive Behavioural Therapy (REBT)	12
Relevance of Self-Efficacy Theory to the Study	29

Conceptual Review	29
Concept of Anxiety	29
Types of Anxiety	31
Concept of Test Anxiety	34
Symptoms of Test Anxiety	36
The Causes of Test Anxiety	36
Effects of Test Anxiety	39
Management of Examination Anxiety	40
Psychoeducation	40
Concept of Cognition	43
Concept of Behaviour	46
Concept of Stress and Examination Anxiety	48
Types of Stress	49
Causes of Stress	50
Concept of Environment and Examination Anxiety	51
Empirical Review	54
Causes of Test Anxiety among Students	54
The Relationship between Test Anxiety and Academic Performance	56
Conceptual Framework	67
Chapter Summary	68
CHAPTER THREE: RESEARCH METHODS	70
Research Design	70
Study Area	71
Population	72
Sampling Procedure	73

Research Instruments	74
Pilot Testing	75
Validity of Research Instrument	76
Ethical Consideration	76
Data Collection Procedure	77
Data Processing and Analysis	77
Chapter Summary	78
CHAPTER FOUR: RESULTS AND DISCUSSION	79
Background Characteristics of Participants	79
Research Question 1	80
Research Question 2	82
Research Question 3	84
Research Question 4	85
Hypotheses Testing	87
Hypothesis One	87
Hypothesis Two	89
Discussion	92
Levels of Examination Anxiety	92
Causes of Examination Anxiety	94
Effects/ Consequences of Examination Anxiety	96
Strategies of Reducing /Managing Examination Anxiety	97
Demographic characteristic (i.e., gender) and Students'	
Examination Anxiety	99
Demographic characteristic (i.e., age) and Students' Examination Anxiety	7 101
Chapter Summary	101

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND

RECOMMENDATIONS	103	
Summary 1		
Overview of the Study		
Research Questions		
Hypotheses	104	
Key Findings	105	
Conclusions	107	
Recommendations	108	
Implications for Counselling		
Suggestions for Future Research		
REFERENCES	113	
APPENDICES	135	
APPENDIX A INTRODUCTORY LETTER	135	
APPENDIX B ETHICAL CLEARANCE	136	
APPENDIX C QUESTIONNAIRE FOR STUDENTS	137	
APPENDIX D OUTPUT RESULTS	142	

NOBIS

LIST OF TABLES

Table		Page
1	Population Distribution of SHS Students in the Jomoro Mun	icipality 73
2	Sample Distribution of SHS Students in the Jomoro Municipality	
3	Data Collection Instrument	74
4	Internal Consistency of sub-scales of the Instrument	75
5	Demographic Characteristics of Respondents (n=309)	79
6	Levels of Examination Anxiety	81
7	Causes of Examination Anxiety	83
8	Effects of Examination Anxiety	84
9	Strategies of Managing/Reducing Examination Anxiety	86
10	Gender Differences in Students' Examination Anxiety	89
11	Testing for Normality (ANOVA) for Hypothesis Two	90
12	ANOVA Test	91
13	Descriptive Statistics for the Age-groups	91

NOBIS

88

LIST OF FIGURES

Figure	Page
1 Conceptual Framework	67

2 The normal Q-Q plot



CHAPTER ONE

INTRODUCTION

In our competitive environment, tests and examinations at all educational levels, particularly at the high levels, have been seen as strong tools for making decision, evaluating students' achievement, skills, and capacities (Rana & Mahmood, 2010). Students experience varied levels of examination anxiety based on the significance of the exam, how challenging they believe the subject to be, and how well-prepared they are (Akinsola & Nwajei, 2013).

The testing procedure is deemed to be a crucial component in the effectiveness of high-quality teaching and learning because of how significant it is (Burns, 2004). To successfully complete a programme, a student's performance in an examination is very important. This is because the grades obtained in the examination are used to determine whether the student could gain admission to the tertiary institution or not. In this test-conscious environment, people's test scores have a big impact on them (Keogh & French, 2001).

Background to the Study

Anxiety is a widespread disorder that affects people of all ages. It is a fundamental aspect of our existence and a normal human state. The Latin word "angere," which means to distress, is where the term "anxiety" originates (Sharma & Sharma 2015). Anxiety is described as a painful or fearful state of mind, typically related to an imminent event (Merrian-Webster, 2012). It is also described as a hazy, uneasy sensation made worse by protracted stress and the existence of several stressors (Lazarus & Folkman, 1984). It is a psychological and physiological condition that is marked by stress on the behavioral, cognitive, emotional, and physical levels. These make people feel anxious, fearful, uneasy, and dreadful (Holt, 2007).

According to Cohen, Yaakobi, Porat, and Chayoth (1989), anxiety is an emotional condition that manifests itself physically and psychologically. Anxiety generally has a negative impact on students' self-esteem. Students can gain knowledge about the triggers that induce anxiety by drawing on their personal experiences. However, because no two people have the same ideas or thoughts, these stimuli differ from person to person. Reber (1995) also explains anxiety is an emotional state that occurs under uncomfortable circumstances without a specified object.

Worldwide statistics on anxiety indicate that an estimated 284 million adults around the globe have anxiety (disorder). Out of these adults 179 million (63%) were female and 105 million (37%) were male (Alonso, 2018). A third (33.3%) of adolescents between the ages of thirteen (13) and eighteen (18) are estimated by the National Institute of Health to have an anxiety problem. Since 2007, there has been a steady increase in these figures.

Estimates indicate that thirty-one percent of adults in the United States will at some point in their lives suffer from an anxiety illness (Anxiety and Depression Association of America, 2020). According to data from the Global School-Based Health Survey conducted in Ghana, over eighty percent of teenagers report feeling anxious, depressed, or hopeless at some point throughout their adolescence (Owusu, 2008).

There are various types of anxiety disorders, including social phobia, agoraphobia, generalized anxiety disorder, obsessive compulsive disorder, and

panic disorder (American Psychological Association, 2000). Other categories of anxiety are separation anxiety, illness anxiety and examination or test anxiety.

Anxiety before examinations or tests is a widespread emotion of unease and worry among students throughout the world, and it may be a catastrophic situation for them because it could harm both their success in the examination and their health in the future (Farooqi, Ghani & Spielberger, 2012; Rafiq, Ghazal & Farooqi, 2007).

Wittmaier (1972) found that students with high test anxiety are less effective at studying properly than those with low test anxiety. Students who follow effective study habits are well-prepared, exhibit less anxiety, and pay closer attention during the test. Students who experience exam anxiety exhibit inferior academic accomplishment, lower test performance, lesser motivation, a higher proportion of school dropouts, and concerns with their mental and physical health (Cassady & Johnson, 2002; Cizek & Burg 2006).

Test anxiety is a cognitive attention process that interferes with performance in academic settings or exams, according to Spielberger and Vagg (1995). Zeidner (1998) identified three components of test anxiety namely affective, behavioral, and cognitive. He defined the affective component as a person's assessment of their physiological state, which may include tension, tight muscles, perspiration, and other things. Poor study habits, work avoidance and procrastination, as well as concern or pessimistic thoughts and self-deprecating utterances, are all examples of the behavioral component. Furthermore, according to Hong (1998), test anxiety is a complex, multidimensional concept that involves responses to evaluation settings on the levels of cognition, physiology, and behavior. According to Unruh and Lowe (2010), exam anxiety has four distinct elements: worry, cognitive interference, emotionality, and lack of confidence. However, they both concur that anxiety and emotion are the main factors in exam anxiety. Test anxiety is one of the problems facing the educational industry. The level of this worry rises as the test date gets closer and increases the night before the test (Tooranposhti, 2011).

According to Akinsola and Nwajei (2013), test-anxious people are more likely to have persistent, severe questions regarding their ability whether to manage their emotions to avoid being overcome by them or to do well enough on tests to receive favourable evaluations from significant individuals.

Additionally, test or exam anxiety has been defined as a subjective experience of tension, apprehension, and worry linked to an arousal of the autonomic nervous system (Asadulapoor, Fati & Ghara, 2010).

Statement of the Problem

Lufi, Okasha, and Cohen (2004) state that examination nervousness can negatively impact people in any sphere of life. They further explained that whenever individuals of various ages and classes must be examined, tested, and scored in regards to their abilities, successes, or passions they experience some form of anxiety. Students at all stages of school commonly experience test anxiety. Educationists and academicians such as Deb-Charteryee and Walsh (2010) have unveiled that the uncertain qualms and fears of the results of an examination and their resultant consequences make students susceptible to considerable anxiety. This assertion is buttressed by Cassady (2010) who found that between 25 per cent and 40 per cent of students in general feel examination anxiety which greatly interferes with their academic success.

According to Sarason and Stoops (1978), anxiety has detrimental and unfavorable consequences on the testing process. Students who perform poorly on tests can just be suffering from examination anxiety rather than being less intelligent. A number of studies have indicated that examination anxiety exists on continuum, that is, low, moderate and severe. Ferdous (2012) discovered that students who showed high level of examination anxiety have poor academic performance in both internal and external examinations. The debilitating consequences of examination anxiety include attrition among students. They usually become tensed, apprehensive, nervous and emotionally aroused which ultimately results in poor academic performance (Bonaccio & Reeve, 2010).

Students at whatsoever stage of education experience test anxiety, but the majority of research on the topic have just been conducted in wealthy nations. Research involving examination nervousness among undergraduates in Nigeria, done by Oladupo and Ogungbamila (2013), showed that examination anxiety is unavoidable regardless of one's academic standing and department. This research is one of many on examination anxiety that have been carried out in Africa.

Furthermore, research in Kenya by Syokwaa, Aloka and Ndunge (2014) found a link between anxiety levels and educational success and that extreme anxiety levels have a detrimental effect on the standard of the academic outcomes reported by the studies. Ntim (2016) drew the conclusion from his research that examination anxiety is a problem in Ghana and that it lowers academic achievement. Examination anxiety within students does occur and contribute to subpar academic achievement, according to Bruce's (2015) conclusion.

The researcher is also motivated to conduct this study because from his experience of 20 years of teaching in senior high schools, many students tend to be apprehensive or anxious over an impending examination. This leads to involvement in examination malpractices such as giraffing, copying, hiding of examination materials in socks and underwear. In some cases, students collapse few minutes into the examination. It is also known that some invigilators are even assaulted and stabbed in the course of the examination. It is clear from all of this that students in our institutions experience examination anxiety, and that measures must be taken to lessen or eliminate this uncomfortable circumstance.

This research examined the causes and effects, as well as the methods for managing test anxiety among senior high school students in the Jomoro Municipality. This is because the few researches that have been conducted in Ghana seem to focus on tertiary students with very little on senior high school (SHS). This study was focused on senior high school students.

Purpose of the Study

The study aimed to research the causes, effects, and methods for managing test anxiety among senior high school students in the Jomoro Municipality. In particular, the study was intended to:

 determine the level of examination anxiety among students in SHS in Jomoro Municipality.

- identify the causes of examination anxiety among SHS students in Jomoro Municipality.
- examine the effects or impacts of examination anxiety on the SHS students in Jomoro Municipality.
- find out ways of reducing or managing examination anxiety among students in SHS in Jomoro Municipality.
- 5. find the level of examination anxiety among students of SHS on basis of gender.
- find the level of examination anxiety among students of SHS on basis of age.

Research Questions

The study was guided by the following research questions:

- 1. What level of examination anxiety exists among SHS students in the Jomoro Municipality?
- 2. What are the causes of test anxiety among SHS students in Jomoro Municipality?
- 3. What are the effects of examination anxiety among SHS students in Jomoro Municipality?
- 4. How can examination anxiety be managed or reduced among SHS students in Jomoro Municipality?

Hypotheses

The following hypotheses were tested in the study:

 H_01 : There is no statistically significant difference in students' examination anxiety on the basis of gender.

H_A1: There is a statistically significant difference in students' examination anxiety on the basis of gender.

 H_02 : There is no statistically significance difference in students' examination anxiety on the basis of age

H_A2 There is a statistically difference in students' examination anxiety on the basis of age

Significance of the Study

Exam anxiety in students is likely to manifest as cognitive, behavioral, affective, and physiological symptoms. The outcomes of this can aid in reducing exam anxiety in a variety of ways.

First, the findings of this study should be useful to school counselors, teachers, students, parents, school administrators, educational policymakers, and the general public. School counselors, in collaboration with school officials, could recognize students who have exam anxiety and help them individually or in smaller groups to address the issue in greater detail. Again, school counselors can use the school's orientation program for new students to address the issue of examination anxiety and how it affects academic success, as well as the necessity to correct the problem. The findings of this research are also expected to provide information to school teachers about examination anxiety and how it affects their students' academic success.

The research is also expected to help students who experience test anxiety to learn effective techniques and mechanisms for controlling their anxiety levels before and during examinations. Parents are expected to benefit from the study by way of understanding their wards' academic challenges, particularly test anxiety and encourage them to seek counselling. Parents would understand the need not to over-burden their wards with unrealistic academic achievements which may lead to anxiety in examination.

The research could also help school administrators understand the extent to which test anxiety can negatively affect overall performance of their students and the need to organise workshops, seminars and symposiums in collaboration with the school counsellors to address such issues. Again, the research could help school administration to understand the academic needs of their students and attend to them rather than repeating them in class or expelling them from the school.

Furthermore, the study is expected to inspire policymakers to establish guidance and counselling centers in all senior high schools to meet the social and psychological needs of all students. Finally, the research would be useful to the general public and other researchers interested in reducing test anxiety in senior high school students.

Delimitations

The study was restricted in its scope of coverage. The study covered examination anxiety among only SHS students in the Jomoro Municipality. Again, due to sensitivity nature of the study, some of the respondents withheld some vital information during data collection. Besides, some school authorities restricted their students from participating in the study as a way of protecting them from stigmatization.

Limitations

The study faced the challenge of gathering data from some of the Senior High Schools. This is because some school authorities did not really cooperate. To solve this, a letter was taken from the University to the school authorities to clear any doubt concerning the research been conducted. Again, some few students were not able to complete the questionnaire satisfactorily and this could affect generalisation of the results.

Definition of Terms

The main terms used in the study are defined operationally in this section:

Examination anxiety: This is the sensation of having a panic attack that SHS students experience before or during an examination or assessment. It also refers to exam stress they get.

Test anxiety: It is SHS students' subjective feeling of tension, apprehensive nervousness and worry before, during and after examination. This term is used synonymously with examination anxiety.

Management: It refers to the act, manner of practise that SHS students use for handling or controlling disorders arising from examination anxiety.

Performance: It refers to how well an SHS student does a piece of work.

Capabilities: having the ability required for a specific task; being willing to do something; allowing or being susceptible to something.

Organisation of the Study

The research is split into five chapters. Chapter One is an introduction that covers the background to the research, statement of problem, purpose of the study, research questions, hypotheses, significance of the study, delimitation of the study, limitations of the study, definition of terms, and organization of the study. Chapter Two is devoted to a review of the literature. It consists of the theoretical framework, conceptual framework, and review of empirical studies. Chapter Three discusses the study's research methodology. It includes the research design, study area, population, sampling procedures, data collection instrument data collection procedures, and data processing and analysis. Chapter Four contains the findings and discussions. Finally, the Chapter Five includes a summary, conclusions, recommendations, and suggestions for further research.

CHAPTER TWO

LITERATURE REVIEW

The study's objective is to explore the causes, effects, and management of examination anxiety among senior high school students in Ghana's Jomoro Municipality. The review of related literature in this chapter included the theoretical framework, conceptual framework, conceptual review, and empirical review.

Theoretical Framework

This section discussed the study's two main theories. These are the Rational Emotive Behavioural Therapy and the Self-Efficacy Theory. These theories would be consistently used to discuss how test anxiety affects students as well as its management.

Rational Emotive Behavioural Therapy (REBT)

Albert Ellis proposed Rational Emotive Behavioural Therapy (REBT) in 1957. It was founded on the idea that emotions and behaviors are the result of cognitive processes, and that humans can change these processes to create unique ways of feeling and behaving. Thinking, feelings, and behaviors, according to Ellis, appear to be unavoidable, and over time, he incorporated more feelings and behavioral techniques into his theory. This theory was initially known as Rational Therapy then with time it was changed to Rational Emotive Therapy and finally changed to REBT. This change was due to Ellis' belief that his theory has always been highly cognitive, very emotive and particularly behavioural. **Major Concepts of REBT:** The REBT is based on major concepts. These are Rational beliefs, Irrational beliefs, emotive, therapy, theory of causation, theory of change, ABC theory and therapeutic techniques. Rational belief is a concept that refers to beliefs that are logical and have empirical and pragmatic support. Rational beliefs lead to thoughts and emotions that help to motivate an individual to do better and do not make an individual's worth dependent on their performance. This results in healthier lifestyles and people who accept themselves, others, as well as the way things are. Rational beliefs include preferential statements such as: "I prefer this test to go my way but if it does not, things will get better next time" and " I would like to have an 'A' in this subject but if I do not get an 'A', it is not the end of the world". Because of the logical manner and negation of irrational beliefs, rational beliefs are seen to be a more helpful alternative to irrational thoughts and seen to lead to helpful emotions.

Irrational beliefs can be termed as illogical beliefs, do not have any empirical support and are non-pragmatic (Ellis, 1994). These beliefs can lead to disturbing emotions such as extreme anger, depression, guilt, anxiety and many others. Irrational beliefs, also known as irrational thinking, frequently result in emotional distress, dysfunctional behaviours, and neurotic lifestyles. It tends to make people critical of others as well as themselves (Ellis & Maclaren, 2005). Twelve irrational beliefs were outlined by Ellis (1994). These are;

1. The idea that it is a "dire necessity for an adult to be loved by significant others for almost everything they do"

University of Cape Coast

- 2. The idea that certain acts are awful or wicked and people who perform such acts should be severely dammed.
- 3. The idea that it is horrible when things aren't the way we like them to be.
- 4. The idea that human misery is invariably caused externally and is forced on us by outside people and events.
- 5. The idea that if something is or may be dangerous or fearsome, we should be terribly upset and endlessly obsess about it.
- 6. The idea that it is easier to avoid than to face life difficulties and self-responsibilities.
- 7. The idea that you absolutely need something other or stronger or greater than yourself on which to rely.
- 8. The idea that we should be thoroughly competent, intelligent, and achieving in all possible respects.
- 9. The idea that because something once strongly affected one's life, it should indefinitely affect it.
- 10. The idea that we must have certain and perfect control over things.
- 11. The idea that human happiness can be achieved by inertia and inaction.
- 12. The idea that we have virtually no control over emotions and that we cannot help feeling disturbed about things.

Ellis later reduced these 12 irrational beliefs to the three core irrational beliefs, which are;

"1. I absolutely must under all conditions do important tasks well and be approved by significant others or else I am an inadequate and unlovable person.

- 2. Other people absolutely must under all conditions treat me fairly and justly or else they are rotten damnable persons.
- 3. Conditions under which I live absolutely must always be the way I want them to be, give me almost immediate gratification and not require me to work too hard to change or improve them or else it is awful, I cannot stand them and it is impossible for me to be happy at all."

Emotive in REBT: Dryden (2003) defines "emotive" in REBT as "that which is relevant to an individual's emotions or feelings." REBT is premised on an emotion model and a therapeutic approach, so it is primarily concerned with alleviating people's emotional distress. However, it also recognizes that people are bound to experience negative feelings when confronted with adversity. REBT distinguishes between emotions that are in tone and have largely unconstructive consequences and emotions that are negative in tone and have largely constructive consequences to aid acceptance of these two positions. The former are known as unhealthy negative emotions, while the latter are known as healthy negative emotions (Dryden, 2003).

Therapy in REBT: The term "therapy" is derived from the Greek word "therapeia," which means "service." REBT caregivers are thus seen as providing "service" to individuals who are struggling in multiple areas. These are the areas concerned:

- i. Emotional problems,
- ii. Practical dissatisfaction problems and
- iii. Personal development problems (Grieger, Boyd & Ellis, 1980).

Theory of Causation: REBT's main argument is that almost all emotions and behaviours are influenced by what people accept about the problems they

encounter. To begin, REBT suggests a biopsychosocial interpretation for how people feel and act (Froggatt, 2005). Ellis also believed that biological, social, and cognitive factors all play a role in the experiencing and acting processes. This belief is significant because it indicates that people's ability to change is limited. The common-sense view of human feeling and behavior is that circumstances define what one feels and how one acts.

Theory of Change: REBT posits that change can happen at diverse levels. For example, when a student feels anxious because she thinks her teacher disapproves her. At the superficial level, according to Froggatt (2005), the student can feel better by adjusting her body chemistry, such as through exercise, dietary changes, medication, or adjusting the situation (e.g.; avoiding contact with other people).

This change includes changing the inherent fundamental beliefs that cause problems for the person in a variety of circumstances. REBT practitioners recognize that for some clients, surface-level adjustment may be the more practical choice, but they strive for basic change whenever possible. REBT employs a variety of cognitive, emotional, and behavioral strategies to assist clients to make guided decisions (Froggatt, 2005).

In conclusion, the REBT explanation of the concepts and guiding ideas of Rational Emotive Behavior Therapy (REBT) offers a strong framework for comprehending the causes, consequences, and treatment of exam anxiety. Student can understand their anxiety, lessen its consequences, and create healthy coping mechanisms for managing exam-related stress by addressing erroneous ideas, acknowledging their emotional impact, and using therapeutic procedures. "ABC" Theory: The ABC theory or model is the starting point for REBT. 'A' is for activating experiences such as family problems, unfulfilling work, childhood traumas, and anything else that individuals recognise as the origin of their sadness. The letter "B" represents beliefs, particularly irrational, self-defeating beliefs that are the root causes of an individual's unhappiness. The letter "C" stands for consequences, the neurotic symptoms and negative emotions that result from one's belief, such as depressive episodes, nervousness, and rage. Even though the activating experiences may have been quite real and have caused real pain, it is the irrational beliefs that induce the long-term disabling challenges, according to this theory. Later, Ellis introduced a "D" and a "E" to the ABC model. This inclusion necessitates the therapist disputing (D) the irrational beliefs in order for the client to eventually benefit from the beneficial psychological effects (E) of rational beliefs and behavioural change (Neukrung, 2010).

The ABCDE model of REBT identifies activating events and erroneous beliefs to assist people in understanding the origins of exam anxiety. By acknowledging the emotional effects of these ideas, it clarifies the effects. By challenging erroneous beliefs and encouraging the adoption of rational ones, it also provides a disciplined method for controlling exam anxiety, improving emotional wellbeing and exam performance. This concept offers therapists and students a useful foundation for addressing and overcoming test anxiety.

Therapeutic Techniques: The significance of the change process is the client's basic beliefs being challenged (D). Successful disagreement, either by the counsellor or by the clients (in the end), results in a new effect (E). This

effect produces a more suitable new feeling (F) as well as a behavioral change.

Corry (2009) enumerated the following seven steps in what he refers to as a philosophical restructuring of the personality.

1. Acknowledging that individuals largely create their emotional distress.

- 2. Accepting that individuals can change these disturbances significantly.
- 3. Recognising that anxiety and distress come largely from irrational beliefs
- 4. Identifying these core beliefs.

5. Believing in the value of disputation of these beliefs.

6. Realizing that hardworking is needed to change these beliefs.

7. Practising REBT methods for the rest of the person's life.

During Therapy, the therapist uses skills and techniques to argue against the irrational beliefs of the client or better still allow the client to argue the irrational thoughts themselves (Gregg, 2006). According to Ellis (1996), REBT is preferentially eclectic, which means that no one-way method is required. The therapy draws its techniques from the Cognitive Emotive and behavioural spheres.

The information provided in the therapeutic offers a comprehensive framework for understanding the causes, effects, and management of examination anxiety. By acknowledging the role of irrational beliefs, accepting the potential for change, and employing therapeutic techniques, students can gain insights into their anxiety, reduce its effects, and develop healthier coping strategies for dealing with the stress of exams. This approach not only addresses the symptoms but also works on the underlying thought patterns contributing to examination anxiety. **Relevance of this Theory to the study:** Exam anxiety has a negative impact on students' performance. Students can experience test anxiety when they have irrational thoughts about the test, their teachers, or their friends. This can severely affect the student during the test situation. REBT can therefore be used to treat or help reduce the incidence of irrational thoughts.

Moreover, REBT teaches the client to intensify, evaluate, dispute and act against one's irrational self-defeating beliefs (Joseph, 2004). This does not only make the client feel better but it also makes them get better. REBT has been shown to be efficient in the management of psychological problems like anxiety disorders and irrational fears, in addition to specific behaviours including extreme shyness and inordinate approval-seeking (Ellis, 1979).

Self-Efficacy Theory: Albert Bandura (1977), a Canadian-American psychologist and professor at Stanford University, invented the term "selfefficacy." Self-Efficacy, according to Bandura, is the belief in one's own ability to plan and carry out the actions necessary to achieve specific goals (Bandura, 1977). Thus, self-efficacy refers to a person's belief in his or her ability to carry out the behaviors required to achieve particular performance outcomes. Bandura (1986) Furthermore, Bandura (1986) described selfefficacy as people's ability to exert control over their performance and their daily activities in their lives.

People's confidence in their abilities has a variety of consequences. Such consequences influence people's course of action, the effort they invest in specific endeavors, the period they persevere in the face of challenges and failures, their resilience to hardship, and the degree of achievement they reach (Bandura, 1977). According to the theory, people try to exert control over events that affect their lives. They are better positioned to realize preferred futures and avert undesirable ones by exerting influence in spheres over which they have some control.

The desire to exert control over one's life situations pervades almost everything people do because it can provide them with numerous personal and social benefits. The ability to influence results makes them predictable, which promotes adoption readiness. However, the inability to exert influence over things that have a negative impact on one's life breeds anxiety, apathy, and/or despair. The ability to generate desired results while avoiding unwanted ones offers a strong motivation for the advancement and exercise of personal control. (Bandura,1986). Self-efficacy theory offers clear and specific guidelines for developing and improving human efficacy. As a result, how students or people think, feel, motivate themselves, and act is influenced.

Bandura's theory of self-efficacy emphasizes the significance of beliefs in one's ability to perform, which can offer insights into the causes of exam anxiety. It discusses how self-efficacy affects effort, tenacity, and resilience, which in turn affects how you feel when facing exam-related stress. Students can successfully manage and lessen exam anxiety by strengthening their selfefficacy beliefs and using cognitive-behavioral approaches.

Sources of Self-Efficacy: According to Bandura, four major sources of information fuel self-efficacy beliefs. Enactive mastery experience, vicarious experience, verbal persuasion, and physiological affective states are some of them.

Enactive Mastery Experience: The most influential source of efficacy information is enactive mastery experience. This is due to the fact that it gives

20

the most authentic evidence of whether or not a person has what it takes to be successful. Successes foster a strong belief in one's capabilities or efficacy. Failure weakens it, particularly if it takes place before a strong sense of efficacy is established. A robust sense of efficacy necessitates previous experience overcoming challenges through persistent effort. People who believe they have what is necessary to be successful persevere in the face of difficulties and make a full recovery from failures. The growth of efficacy through enactive experience produces the cognitive and self-regulatory capability required for effective achievement (Bandura, 1986).

The importance of prior triumphs and failures in forming self-efficacy beliefs is emphasized by Bandura's concept of enactive mastery experience. This in turn affects how pupils deal with test anxiety. Students can improve their self-efficacy, lower anxiety, and better manage the problems connected with tests by actively pursuing and developing positive enactive mastery experiences. This strategy can be helpful in encouraging a more assured and successful approach to exams because it is consistent with cognitivebehavioral techniques for anxiety control.

Vicarious Experience: Vicarious experience is another source of selfefficacy. This modifies efficacy belief through competency transfer and comparison with others' achievements. In other words, vicarious experience induced through modelled accomplishments influences efficacy evaluations. People regularly make a comparison with themselves in daily life to specific associates in similar circumstances, such as classmates, work colleagues, competitors, or people in other settings involved in similar endeavours. Outperforming colleagues or competitors increases efficacy beliefs, while being surpassed decreases them (Weinberg, 1979).

It also implies that seeing people who are comparable to oneself succeed typically adds up to efficacy beliefs in observers. These observers then believe they have the capability to perform similar functions. They convince themselves that if others can do it, they, too, can improve their performance (Bandura,1986; Schunk, Hanson & Cox, 1987).

Monitoring others regarded to be equally capable fail amidst great effort, on the other hand, decreases observers' assessment of their competence (Brown & Inouye,1978). Despite this difficulty, Bandura (1986) maintained that modeling that conveys effective methods of coping can enhance the selfefficacy of people who have been through a slew of such experiences.

Vicarious experience plays a crucial role in shaping students's selfefficacy beliefs and, by extension, their examination anxiety. Recognizing the impact of vicarious experiences on self-efficacy can help students better understand the causes of their anxiety and its effects. By selectively managing their exposure to such experiences and seeking positive role models, students can work towards managing and reducing examination anxiety effectively. This approach aligns with principles of cognitive-behavioral therapy and can contribute to a more confident and resilient approach to exams.

Verbal Persuasion: The next source of self-efficacy is verbal persuasion. Social or verbal persuasion is another way to reinforce people's beliefs that they have the ability to achieve their goals. People (students) who are verbally convinced that they have the ability to complete given tasks are more likely to exert greater effort. When problems occur, they are more likely to maintain such endeavor than if they contain self-doubt and settle on personal inadequacies. Persuasion increases efficacy, which motivates individuals to work hard enough to be successful. An example is, when students are constantly persuaded through evaluation feedback, they tend to work hard which leads to better performance. (Schunk, 1978).

Verbal persuasion plays a significant role in shaping students selfefficacy beliefs and, consequently, their examination anxiety. Recognizing the impact of verbal persuasion on self-doubt and motivation can help students understand the causes and effects of their anxiety. By actively seeking and providing positive verbal encouragement, reframing negative self-talk, and setting realistic goals, students can effectively manage and reduce examination anxiety. This approach aligns with principles of positive psychology and cognitive-behavioral strategies for anxiety management.

Physiological and affective states: are the fourth source of self-efficacy. Physiological efficacy metrics have an influence on health functioning and activities that require physical strength and stamina. Affective states can have a wide range of effects on beliefs about personal efficacy in a variety of contexts. Thus, improving physical status, reducing anxiety, stress, and negative emotional proclivities, and correcting false interpretation of bodily states are all important ways to change efficacy beliefs (Bandura, 1991).

A high level of physical activity produces a lot of somatic information that carries implications. (Bandura, 1992). For instance, during physical pursuits, fatigue, aches and pain are quite clear. In efforts of self-assessment, some individuals push themselves to their limits to gain knowledge of their physical

23

capabilities. Physiological states and reactions affect self-efficacy through cognitive process.

Moods are another origin of affective information for assessing personal efficacy. This is due to the fact that they frequently go along with changes in the quality of functioning. Mood states have an impact on how events are construed, cognitively organized, and remembered (Bower, 1981, 1983; Eich, 1995). For example, students can learn more quickly if the material they are studying is consistent with their mood. They also remember things best when they are in identical mood as when they first studied them. Intense moods exert stronger effects and weak ones (Bower, 1983).

Mediating Processes of Self-Efficacy: According to the theory, efficacy beliefs produce their effects through cognitive, motivational, affective and selective processes.

Cognitive processes: Efficacy beliefs affect how people think, which can enhance or hinder their performance. There are numerous ways in which these cognitive effects can be seen. People who have a strong sense of efficacy make plans for the future in their lives. Most actions start with a thought first. Following that, the cognitive constructions serve as guidelines for action in the acquisition of competencies (Bandura, 1986; Carroll & Bandura, 1990).

How people perceive circumstances is contingent on how efficient they believe themselves to be. As a result, influences the kinds of hypothetical futures and predictive situations they create. People with a strong sense of efficacy perceive situations as offering opportunities that are within reach. They design success scenarios that act as a roadmap for accomplishment. Conversely, those who feel inefficient view certain circumstances as dangerous and are more probable to envision situations (Krueger &Dickson, 1994). Therefore, a strong sense of efficacy encourages the cognitive construction of actions that are efficient, which in turn strengthens efficacy beliefs (Bandura & Adams, 1977).

The origins, consequences, and treatment of exam anxiety are clarified by Bandura's idea of self-efficacy and its impact on cognition. Students can improve their confidence, lessen worry, and approach tests with a more positive and effective mentality by actively establishing self-efficacy, reframing unfavorable thought patterns, adopting successful study practices, and seeking support. This strategy is consistent with positive psychology and cognitive-behavioral therapy theories, which can be helpful in reducing exam anxiety.

Motivational Processes: The vast bulk of human motivation is produced cognitively. Cognitive motivation refers to the process by which individuals motivate themselves and foresee their actions. They develop ideas about their capacities and anticipate the likely advantages and disadvantages of various endeavors. Efficacy beliefs play a significant role in the cognitive control of motivation. Three different types of cognitive motivation can influence motivations. Casual inferences, result expectations, and cognized targets are some of them.

Casual attribution is concerned with the attribution theory of motivation. It emphasizes that people who attribute their success to personal skills and their failures to inadequate time and energy will take on challenging tasks and persevere in the face of failure. They do this because they believe that how much effort they put in influences the outcome. Those who attribute

25

their failures to lack of capacity and their successes to chance will exhibit low strivings and give up easily when confronted with challenges (Weiner, 1985).

According to result expectancies, people typically drive their behavior and inspire themselves by anticipating the results of a particular course of action. With this in mind, it can be said that people are more motivated to engage in an activity when they have a higher expectation that their actions will lead to a desired result and value that result more. For example, students are motivated to study harder for promotion examinations because of the importance attached to the result.

Cognized goals correspond to goal theory. According to this, a key cognitive mechanism of motivation and self-direction is the ability to exert influence on oneself through personal challenge and assess effect to one's performance. (Jourdan & Bandura, 1991). The behaviour is motivated and guided by cognized aims instead of being moved by an unachieved future in this type of anticipatory self-regulation.

Affective Processes: All emotions and reactions, whether favourable or unfavourable, connected to emotionally charged actions, information, or beliefs are considered to be affective methods. Through individual's power over thought, action, and affect, efficacy beliefs primarily affect the type and severity of feelings and experiences.

There are two variations of the thought-oriented phase in the regulation of affective states. The first is that efficacy beliefs cause attentional biases and affect how life events are perceived, represented cognitively, and retrieved, determining if they are emotionally upsetting or normal. The second type of influence focuses on presumed cognitive capacities to suppress distracting thought trains when they obstruct the awareness stream.

Efficacy beliefs control emotional responses in the activity phase of impact by encouraging effective actions to change the context in ways that change its emotive potential. (1996; Bandura). The affect-oriented mode of effect focuses on the perception of efficacy in reducing unpleasant emotional orientation after they have been evoked. While people try to control anxiety, arousal, depressive moods, and stress reactions, these alternative paths of affect regulation are amply documented. (1996; Bandura). For instance, people with high levels of coping effectiveness develop techniques of doing things meant to transform dangerous environments into more benign ones. Efficacy beliefs in this mode of affective control influence coping behavior, which in turn regulates anxiety and stress.

By addressing and enhancing self-efficacy, reframing negative thought patterns, and teaching effective emotion regulation and coping skills, students can better manage anxiety associated with exams and improve their overall test-taking experience. This approach aligns with evidence-based practices in anxiety management and cognitive-behavioral therapy.

Selection Processes: Beliefs about one's abilities affect choices. As a result, individual efficacy beliefs can significantly influence the directions of lives. This is done by affecting the kinds of settings and activities people choose to engage in, as well as the kinds of settings they create. In self-development through choice processes, destinies are defined by the setting that is chosen, as some potentialities and was of living are known to be cultivated there. People avoid situations and activities they feel are outside of their skills, but they

27

quickly engage in situations and choose social environments they feel comfortable handling. The more difficult the operations they choose are, the greater their feeling of self is (Kavanagh, 1983; Meyer, 1987).

Once more, people with high efficacy not only favour normatively tough activities, but also show high persistence in them. Efficacy beliefs influence both the course of social development and career aspirations. Students who believe they are highly effective at using aggression to obtain their goals, for example, tend to behave aggressively.

Therapeutic Techniques: Self- efficacy theory puts emphasis on coping capabilities in the treatment of anxiety and phobic dysfunctions. The theory employs guided mastery for the treatment of anxiety disorders. During the course of treatment, challenging or daunting duties are divided into manageable steps, and at each step, users are asked to perform the duties to the best of their qualities with a little additional strength and perseverance.

In other words, with this therapeutic strategy, coping tasks are segmented hierarchically into progressively more taxing and threatening ones. Anxiety disorders are treated with guided mastery on the lowest failed coping task in the series until clients master it. Then they are tested for their perceived efficacy and performance attainments on all succeeding tasks that they had been unable to perform previously. For example, a treatment of the phobia of mathematics among students starts with simple mathematics exercises with less calculations and advances to more complex calculations. In a similar way treatment of driving phobia may start with brief trips on secluded streets with less traffic, advance to longer drives on more active routes with scattered traffic and culminate in lengthy excursion on crowded streets under unfavourable weather conditions.

Patients are also encouraged to try tasks they would otherwise avoid by participating in challenging tasks together with the clinician. The guided mastery strategy provides the highest, strongest and most generalized increases in personal efficacy. It eliminates phobic behaviours, subjective and physiological anxiety reactions. it transforms the abhorrent attitude towards fearful objects to positive ones and eradicates phobic ruminations in all clients within a relatively short time. (Bandura, 1977).

Relevance of Self-Efficacy Theory to the Study

The theory is also potential in controlling addictive behaviours such as smoking, alcoholism and substance abuse. The theory is very important to this research due to its usefulness in treating examination anxiety and other phobic dysfunctions within a relatively short time among students.

Conceptual Review

In this section, the study's key ideas are reviewed. These are anxiety, test anxiety, cognition, behaviour, stress and environment.

Concept of Anxiety

Anxiety is a state of unease brought on by one's environment or self, whether it arises in the conscious or unconscious mind. It is also a result of the body's attempt to bring back into consciousness concealed material (Dineman, 2004). According to Ellis (1994), anxiety is a disquieting state of emotion that makes a person feel helpless before a looming threat or incident. Exams are one instance of such a thing. Anxiety is a sensation brought on by the potential for danger in one's inner or outer world, or by one's viewpoint or explanation of such potential. The person experiences anxiety when they feel alarmed and fear the worst (Tasgin, Tekin & Altinok, 2007).

Sarson (1988) claimed that anxiety is the expression of the emotions that people experience when they are insecure, including worry, indecision, confusion, fear, pessimism, and hopelessness. When a person feels threatened, anxiety is a state that develops. It includes emotional distress, worry, and oppression as well as specific physical responses. Everyone will occasionally go through it. In his "state anxiety and trait anxiety" model, Spielberg (1972) described anxiety. He claimed that a person's perception of their present situation as being risky and intimidating is what causes state anxiety, and that the presence of such circumstances can make people feel less uneasy. Contrarily, trait anxiety is an identity characteristic that indicates a person's propensity to undergo anxiety and is not straightforwardly explained by the circumstance they are in. Trait anxiety refers to the propensity to perceive threat including in neutral circumstances and, when noticed at an incredibly high level, disrupts a person's coherence. State anxiety encompasses an interim threat or stress circumstance (Oner & LeCompte, 1985). An athlete might experience state anxiety before a race, for example.

Anxiety, according to Nemati (2012), is a real but difficult occurrence. According to Amalu (2017), anxiety is a physiological and psychological state that causes stress and worry before, during, and/or after taking a test. Anxiety is an emotional and behavioural disorder brought on by the sympathetic nervous system being activated. Due to pressure and a fear of failing, students frequently feel high levels of anxiety (distress) when confronted with resultsoriented activities like exams. Nwamwenda (1994).

Types of Anxiety

There are numerous varieties of anxiety disorders, some of which are as follows:

Generalized anxiety disorder (GAD): This anxiety condition is marked by intense, unrestrained, and unreasonable worry about things that are going to happen or not happen. Worry frequently gets in the way of daily activities. The people suffering are excessively preoccupied with mundane issues like their health, finances, impending death, families, relationship problems, or employment challenges (American psychiatric Association, 2013). Intense anxiety, restlessness, insomnia, exhaustion, irritability, sweating, and trembling are among the symptoms. Others include headaches, tense muscles, nausea, or digestive problems. For a GAD determination to be made formally, these manifestations have to be accurate and enduring for a minimum of six months (American Psychiatric Association, 2013). In America, 2 per cent to 5 per cent of people have GAD (Self, 2012).

Anxiety disorder called panic disorder is associated with persistent, unprovoked panic attacks (American Psychiatric Association, 2013). An extreme bout of fear known as a panic attack can come on suddenly and may be accompanied by palpitations, sweating, shaking, shortness of breath, numbness, or the perception that an awful thing is likely to occur. Within minutes, symptoms reach their peak intensity. These concerns could be ongoing apprehensions about additional attacks and avoiding areas where previous attacks have taken place. Smoking, emotional stress, and a background of child abuse are risk factors. Panic disorders affect about 2.5% of the population at a point in their lives. Adolescence tends to experience it more frequently than children or the elderly. Compared with men, women suffer it more frequently (American Psychiatric Association, 2013).

Post-traumatic stress disorder (PTSD): It is a psychiatric condition that affects individuals who have gone through a horrific incident, such as a natural disaster, a terrible accident, a terrorist attack, a hostage situation, a war, rape, or who have faced severe bodily harm or death threats (American Psychiatric Association, 2013) PTSD is referred to by a variety of names throughout history these include "Shell Shock" during the years of World War 1 and "combat fatigue" after WW II (National Institute of mental health, 2016). PTSD does not just occur to combat veterans also to all people and at any age. Long after the distressing event has passed, individuals suffering from PTSD remain confronted with intensely unsettling thoughts and feelings pertaining to their encounter. Via memories or bad dreams, they might find relief from the occurrences. They may feel detachment or estrangement from other persons as well as sadness, fear, or anger. People with PTSD have intense bad responses to seemingly unimportant things like a loud noise or an unforeseen contact (American Psychiatric Association, 2015).

Obsessive-compulsive disorder (OCD) is an anxiety condition in which an individual recurrently experiences certain thoughts (called obsessions) or feels compelled to carry out specific behaviours (called compulsions) to the point where it leads to distress or affects general functioning (National Institute of Mental Health, 2016). For longer than a brief period, the individual cannot control neither their thoughts nor their actions (DSM-5, 5th Ed, 2013). Writing style, counting objects, and verifying if a door is closed are examples of common compulsions. Others are asking the same questions over and over, confessing or apologizing exceedingly and superstitions. The frequency of these occurrences has a detrimental effect on the individual's everyday life. Most grown-ups are aware that their actions are illogical. The illness is linked to tics, anxiety disorders, and elevated suicidality. The reason is still unknown. However, it appears that there are certain hereditary factors at play, with identical twins being more frequently affected than non-identical twins. Child abuse background and stressful incidents are among the risk factors (DSM-5, 5th ed, 2013).

Agoraphobia: It is an anxiety condition marked by symptoms of anxiety in circumstances where the individual feels unsecure and there is no simple way to leave (American Psychiatric Association, 2013). Open areas, public transportation, shopping points, or merely being outside their residences are typical examples of such circumstances. In severe instances, it might cause a panic attack. The signs and symptoms show up almost each moment and last over six months (The National Institute of mental health, 2016). from factors both environmental and genetic (American Psychiatric Association, 2013). The conditions frequently exist in families and through traumatising experiences like parent's passing or an attack. Depression and drug use disorders are more common in those who are involved. Agoraphobia affects about 1.7% of the adult populace with females highly likely to be affected. Treatment or management is typically through Cognitive Behavioral Therapy (American Psychiatric Association, 2015).

Social Anxiety Disorder (SAD): Another name for it is social phobia It is an anxiety disorder marked by feelings of dread and anxiety in social circumstances that result in great suffering and impede one's capacity to carry out certain everyday tasks (British Psychological Society, 2013). Individuals who suffer from social anxiety worry about receiving unfriendly judgments from other persons, which can be sparked by perceived or genuine surveillance from others. Inordinate blushing, excessive sweating, trembling, palpitations, and nausea are common obvious symptoms. Together with rapid speech, stuttering could be observed. Under conditions of extreme dread and uneasiness, a panic attack can happen. To overcome their apprehensions and inhibitions at social functions, some people with the condition turn to alcoholic beverages and other substances. SAD sufferers frequently selfmedicate in this way, — particularly if they receive neither treatment nor diagnosis, or either. Alcoholism, eating disorders, and other addictions to substances can develop as a result of social anxiety disorder. SAD is at times called "an illness of lost opportunities where individuals make major life choices to accommodate their illness" (Shields Margot, 2004). It is argued that this condition responds well to Cognitive Behavioral Therapy.

Concept of Test Anxiety

Spielberger (1995) defined test anxiety as a negative mood with cognitive, affective, and behavioral characteristics that is undergone in a formal examination or assessment setting, prevents people from giving their best effort, and causes them to feel anxious. Test anxiety is defined by Zeidner (1998) as the fear of failing followed by phenomenological, psychological, and behavioural reactions to potential negative results of tests or comparable appraisal circumstances. Extremely exam-anxious people may experience a sense of danger to their very presence during a test or assessment. When speaking in front of a group or during the exam, people experiencing these

University of Cape Coast

feelings become agitated and anxious. Such people tend to have negative selfperceptions, which makes them susceptible to distraction (Ayson, Thompson & Hamarat, 2001).

Examination anxiety is described by Alvarez, Carrion, Casanova, and Rubio (2008) as an ingrained behaviour within students and a significant emotional issue that has a detrimental impact on learning. Numerous students view it as a danger to the individual because it is perceived as a negative response brought on by an emotional character prior to the hopes formed by the existence of a test. Test anxiety is a response to stimuli related to an individual's past test or assessment experiences (Stangler, Clark & Ehlers, 2006)

According to Nemati (2012), test anxiety is a sense of apprehension and unease that individuals experience before, during, or after exams. Although it is rare to experience test anxiety, it is a common human feeling that can have both positive and negative impacts on studying (Mohamadi, Alishashi & Soleumani, 2014). Furthermore, test anxiety can be described as a type of distress that involves both physiological and psychological components. (Dauil, Elam & Verhust, 2007). The physiological and psychological components represent emotionality and worry as described by Candy and Johnson (2002). This psychological emotion could further hinder performance. Stressed students express anxiety by feeling uneasy, fearful or feign sickness as test approaches. A number of unfavourable outcomes, such underperformance, mental distress. educational poor academic as achievement, and lack of self-confidence, are influenced by this feeling (Olufemi, Olabisi & Akomolafe, 2013; Egbochuku, Obodo & Obadar 2008).

Symptoms of Test Anxiety

According to Zhang and Davidson (2004), test anxiety symptoms can be behavioural, mental, emotional, and physical. Test anxiety can manifest physically as shivering, sweating, an accelerated pulse, a dry mouth, dizziness, and nausea. In dire circumstances, it might make the test - taker visibly sick. Additionally, mental and behavioural signs include fiddling or explicitly avoiding testing environments. Some learners experience exam anxiety that is so bad that they decide to abandon their education to swerve the source of their fear (Anxiety and Depression Association of America, 2010). In addition, exam anxiety can manifest emotionally as depression, poor self-esteem, frustration, and loss of hope (DSM-5, 5th ed).

The Causes of Test Anxiety

There are both genetic and psychological causes of test anxiety. The following genetic causes are involved; The body produces the hormone adrenaline when under stress, such as prior to and during an exam. This is also known as the "fight-or-flight" response and aids the body to get ready to handle what is about to occur. This response principally readies the person to either stay and manage the stress or flee the situation completely (Ayson, Thompson & Hamarat, 2001). In many cases, this adrenaline rush is good to some extent because it helps students to prepare to deal with the situation. However, to some individuals, symptoms of anxiety experienced renders it hard or even impossible to set their minds on the test (Anxiety and Depression Association of America, 2012).

Students' hopes are a psychological contributing factor to exam anxiety. For example, a student is much more likely to experience

36

anxiety both prior to and during an exam if they trust they will fare badly on it. Exam anxiety can spiral out of control; if a student feels anxious during one test, they might start to fear the next one as well. People who experience test anxiety on a regular basis may start to believe that nothing can be done to make things better (Anxiety and Depression Association of America, 2011).

Another cause of exam anxiety is the tone of home discipline. The tone of the home discipline can create tension in the child that could lead to serious test anxiety problem. A child who just got harsh disciplinary measures for failing a certain examination is likely to experience test anxiety while preparing or during a testing process, due to fear of failing and fear of being disciplined. This unfavourable situation creates a narrow window of opportunities for the students.

The attitude of some parents may cause anxiety in their children. Parents who have regimental rules and regulations at home cause anxiety in their children as they strive to live by parental restrictions (Do's and Don'ts of the home). This leaves the students in excessive fear of being humiliated or judged negatively (Hoff, 2000).

The school system is supposed to have a democratic instructional mentality where students are given some measure of opportunity to express themselves, and make valuable contributions in the scheme of activities. Authoritarian educational instructional mentality produces negative outcomes. When students are faced with negative situations regarding school work, they are bound to live in fear and always under pressure, they may develop a feeling of insecurity, uncertainty, and low self-esteem that will constantly produce panic. Such behaviour always, leads to non-cooperative behaviour such as avoidance or withdrawal, and consequently anxious episodes begin to occur during test (Oxford, 1999).

Criticisms are builders of character and actions depending on the nature, whether positive or negative. Negative criticism will have a negative toll on students' self-esteem, and releases a feeling of inadequacy that increases test anxiety. The consequences of negative criticisms can be long lasting with grievous effects on the students' performance, especially when they come with self-deprecating comments.

Love by both parents and teachers doesn't diminish the negative impact of high levels of punishment (Newman 2018). Children who receive sanctions constantly struggle with anxiety symptoms. Sanction causes cognitive dissonance and instills panic in children and adolescents, both of which have been linked to poor mental growth (Straus & Paschall, 2009). Exam anxiety is a common problem for students with poor students results, and as their anxiety levels rise, so does their student results (Huberty, 2012).

The fear of negative evaluation makes test anxious students perfume worse and often remain below their actual potential (Cassady & Johnson, 2002). Negative evaluation has long term consequences on students as they often have lower professional qualifications and lower labor productivity (Bogels, Alden & Beided 2010). Individuals are usually apprehensive about the negative evaluation that others might have about their test performance. This state leaves them anxious, and distressed. The avoidance of negative evaluative situations and expectations that others might evaluate them negatively also arouses anxiety during test administration process. (Bogels, 2010). Poor study skills or lack of preparedness is also a cause of test anxiety. Students who do not prepare adequately for an exam more often than not face test anxiety as compared to students who do.

Effects of Test Anxiety

The impacts of exam anxiety can also change depending on when it is felt. For instance, feeling anxious before an exam can boost morale and an urgency feeling. However, lack of sleep, unavoidable remorse over not studying (at all or during assigned downtime), and feeling overburdened by the quantity of material students believe they need to learn are all factors in the days and weeks leading up to the test that can cause anxiety (Chamberlain, 2011).

Dependent on individual traits and environmental factors (such as personal identity disparities and trait/state anxiety), undergoing elevated levels of exam anxiety is likely to affect people differently. But after accounting for prior achievement, Von der Embse (2018) and Hembree (1988) meta-analyses suggest that high test anxiety levels are linked to poor performance. Deficits in cognitive ability, diction and understanding, and non-verbal reasoning abilities are probably what are responsible for this effect. However, any decline in test performance resulting from greater exam anxiety seems to be minimal and can be challenging to understand (Hembree, 1988; Putwain, 2008; Seipp, 1991; von der Embse, 2018). It is also likely that exam anxiety has less of an effect on score results than it does on test performance. Because only a narrow range of marks are given the same grade, this is caused by the size of predicted grades. A student with a mark in the midpoint of the predicted grades is thus less prone to be affected, even though students close to a border might be more likely to be affected in score results. However, the width of the grade boundary does have an impact on this effect. However, it is still crucial to make a distinction between the unpleasant feelings brought on by test anxiety and its effects on performance and scores. Elevated levels of exam anxiety can have bad consequences for students' psychological well-being even though they may not be negatively affected with regards to score results.

Management of Examination Anxiety

Examination anxiety can be controlled or minimized through the following;

Psychoeducation

"psychoeducation" describes the dissemination of The term knowledge, instruction, or guidance regarding a specific disorder. Psychoeducation for test anxiety addresses the psychological and physiological causes, consequences, and symptoms of test anxiety, as well as the normality of exam anxiety. Those who undergo exam anxiety are more likely to cope with it by being more aware of how it feels. The delivery of psychoeducational measures can be done in a variety of ways. Reduced exam anxiety symptoms can be achieved with the use of flyers, posters, or data provided in lectures or classroom settings (Raijah & Saravanan, 2014; Weems, Taylor, Costa, Marks, Romano & Verrett, 2009; Yahav & Cohen, 2008), in addition to generalized anxiety, depression, and mental distress (Donker, Griffiths, Cuijpers & Christiansen, 2009). Understanding exam anxiety may also aid someone in organizing their thinking and determining the source of their worries, which is a key component of cognitive-based remedies.

Academic Skill Building: Students' skill initiatives encourage productive study attitudes and exam techniques. Learning strategies are the level at which a student follows recommended learning procedures to get ready for a pending test (Crede & Kuncel, 2008). Appropriate learning techniques involve gathering, storing, organizing, synthesising, recalling, and applying information (Malhotra & Mehta, 2015). Profound subject knowledge, focus, time management, task-orientation, and participation in study-specific social interactions (such as debating subject matter with peers) are examples of these behaviours (Crede & Kuncel, 2008; Mukhopadhaya & Sansanwal, 1985; Tobias, 1985). As a result of taking part in activities that help with subject comprehension, there is an increased linking between preferred evaluation results and what can be individually obtainable, which is why efficient study practices are linked with lower degrees of exam anxiety. As a result, lowering anxiety levels involves feeling more ready for a test (Cassidy, 2004; Ergene, 2011).

Cognitive Restructuring: To gain viewpoint, decatastrophise (avoiding thinking of the worst-case scenario), and embrace the circumstance as it is, one must engage in cognitive restructuring. To be able to do this, an individual must be capable to give heed to and objectively assess their thinking as well as comprehend how thoughts can affect behaviour and emotions. Journaling is one way to achieve this. According to research, writing expressively about one's emotions and beliefs related to a forthcoming evaluation can help one deal with bad, unreasonable, and illogical ideas and lessen rumination. As a result, test anxiety's detrimental effects on achievement can be lessened (Ramirez & Beilock, 2011).

Relaxation Strategies: A person can use relaxation methods to lessen the physiological reactions connected to exam anxiety, and there are several methods that have been proven successful. Children's exam anxiety has been proven to decrease with diaphragmatic breathing and focused muscle relaxation, which involves gradually tightening and soothing a group of muscles (Larsson et al., 2010). It is also possible to gradually couple relaxation exercises with the anxiety-provoking stimuli (such as an assessment) to teach the person to encounter the evaluation accompanied by a sense of tranquility instead of stress. Systematic desensitization is a technique that has been shown to lessen the body's natural stress reaction when faced with anxiety (Egbochuku & Obodo, 2005). Additionally, stress and anxietyrelated physiological reactions can be deliberately managed by becoming cognizant of them. This could be accomplished through biofeedback methods (Bradley, 2010; Yahay & Cohen, 2008), where the student adjusts into their physiology, such as pulse rate or breathing, and uses relaxation methods to restore it to a tranquil state.

Mindfulness: The quality of mindfulness is being fully present in the moment. By helping us recognize and better manage our own stress and anxiety, mindfulness practice can promote a healthy mental state (NHS, 2018b). Children and teenagers who practice mindfulness are better able to recognize when they are worrying, manage their problems, and handle exam preparation and taking (Weare & Huppert, 2018; White, 2012). Although there is not a lot of facts to support the use of mindfulness to treat exam anxiety, the results so far are encouraging (Weare & Huppert, 2018).

Concept of Cognition

To acquire knowledge and understanding through thoughts, experiences, and senses is referred to as cognition (Neukrug, 2010). This includes a wide range of cognitive processes and abilities, including perception, attention, knowledge formation, memory and working memory, judgement and evaluation, reasoning, and calculation. Problem-solving, decision-making, understanding, and language production are some of the other cognitive processes. Piaget's theory of cognitive development, Vygotsky's sociocultural theory, and information processing theory are some of the most prevalent theories of cognition (Saul Mcleod, 2008). According to Piaget's Theory, infants grow cognitively in four phases as they build their knowledge of the world. During the sensorimotor phase, an infant builds a knowledge of a word by aligning sensory experiences. Children or adults begin linking sensory information with physical action in the pre-operational stage, during which time they also start to portray the physical world with pictures and drawings. Children can undertake functions involving objects and can use logic if it can be tried to apply to actual examples. This is known as the concrete operational phase (McLeod, 2018).

A social-cultural cognitive theory called Vygotsky's Theory highlights how social and cultural interactions influence mental performance (Vygotsky, 1978). Contrarily, the information processing theory places a strong emphasis on how people modify, watch, and plan around data (Vygotsky's, 1978). Psychologically, the individual's cognitive development has an impact on their level of anxiety. A cognitive distortion is a systematic way in which people twist information in an environment, reinforce bad thinking patterns and thus leading to high anxiety and a challenge in coping with daily life (Sun, 2008).

Additionally, an overstated or unreasonable thinking trend that adds to the initiation or maintenance of psychopathological states like depression and anxiety is known as a cognitive distortion (wrong cognition) (Helmond, Overbeek & Gibbs, 2015). Cognitive distortions are ideas that lead people to have erroneous perceptions of reality. Below is a discussion of the main categories of cognitive distortions;

Understanding of cognition, cognitive development theories, and cognitive distortions can offer valuable insights into the causes, effects, and management of examination anxiety. By addressing cognitive factors, tailoring interventions to cognitive development stages, and promoting cognitive resilience, educators, counselors, and psychologists can help students better manage and overcome examination anxiety.

Polarized Thinking: All-or-nothing or black-and-white thinking are other names for deeply divided thoughts. This distortion happens when individuals who are genuinely happy think of everything in black-and-white terms. There is no gray area; people are either successful or unsuccessful, good or bad (Beck, 1997). For instance, if they don't achieve perfection, they feel inferior. Again, the person might believe that his life is destined to fail.

In recognizing and addressing all-or-nothing thinking is crucial for understanding and managing examination anxiety. By helping students develop more flexible and balanced thinking patterns, educators, counselors, and psychologists can contribute to reducing anxiety and promoting a healthier approach to academic challenges. This can lead to improved well-being and academic performance for students.

Overgeneralization: An individual who overgeneralizes draws rushed inferences or suppositions from scant data. For instance, when a student scores a low mark in one mathematics test and concludes he is hopeless in mathematics in general (Tagg, 1996).

Catastrophizing: Catastrophizing is another type of cognitive distortion. When this happens, the person places more emphasis on the worst-case scenario and perceives it as unrealistic or intolerable when it is actually just unhappy (Beck, 1997). For example, an expected textbook does not arrive on the sue date; a student who catastrophizes may be afraid that it would not arrive, it would be impossible to complete the syllabus and thus may lead to poor performance in the examination.

Personalization: Personalization is the next cognitive error. It is defined as attributing individual fault that is out of proportion to how much actual power an individual actually has over a circumstance is what is meant by this term (Beck, 1967). The individual blames himself for a circumstance that is beyond his control. For instance, a student assumes he/she has not been promoted to form 3 because the school authority does not like him or her even though he/she failed all subjects.

Mental Filtering: Another type of cognitive distortion is mental filtering. This deals with the tendency of ignoring positives and focusing exclusively on negatives. For example, Andy has earned mostly good responses and nice comments regarding a class presentation he gave, but he has also gotten a minor amount of critique. Andy settles on this one negative response for a few days after the presentation, neglecting all the good responses he had received (Beck & Kovac, 1986). Cognitive distortions impact individuals thinking and cause anxiety, hence affecting performances (Sun, 2008).

Understanding cognitive distortions like mental filtering can help students better understand how exam anxiety develops and manifests. Student can more effectively manage their anxiety and approach exams with a balanced and helpful perspective by addressing these biases using therapy techniques, encouraging self-reflection, and mindfulness exercises. This can therefore result in better performance and less worry before exams.

Concept of Behaviour

Individuals, organisms, systems, and artificial entities all engage in behaviour when interacting with one another or their surroundings. It is the organism's calculated reaction to various inputs or stimuli, whether internal or external, aware or unconscious, explicit or hidden, and consensual or unintended (Minton & Khale, 2004).

Jerome (2019) observed that human behaviour is the capability and demonstrated ability of people to react to various stimuli during the period of their lives. Although particular individual qualities, disposition, and genes might be more consistent, other behaviours switch from birth through adolescence to adulthood (Jerome Bornstein & Lerner, 2020). Bryn (2019) posits that aspects of behaviour are influenced by ideas and emotions, that give guidance into a person's psychology and disclose elements like attitudes and values. Psychosocial characteristics influence people's behaviour because personal qualities vary from an individual to an individual, resulting in a range of actions and behaviours. Sociable persons are, for instance, more prone than shy persons to engage in social events (Argyle & Luolu, 1990). Students who are extroverts find it easier in joining discussion groups in the school which helps them to prepare well for the examination and thus, perform well.

There is a range of human behaviour, with certain behaviours being regular and others being rare or odd. Once more, certain behaviors are appropriate while others go too far. Social standards, that are governed by a variety of social regulation, have a significant impact on whether a behaviour is considered acceptable (Jerome, 2019). Human behaviour can be rational or irrational (Ellis, 1957). The term "rational behaviour" describes a judgment procedure that is centered on making decisions that produce the greatest possible advantage for a person. In other words, individuals take actions that will benefit them rather than harmful ones. It promotes academic excellence among students in the school.

Irrational behaviour on the other hand refers to a behaviour that is considered difficult to deal with. Irrational thinking is less useful and illogical. A person being irrational does not pay attention to logic, reason and common sense. Examples of irrational behaviours include: taking offence of becoming angry about a situation that has not yet occurred, expressing negative emotions, maintaining unrealistic expectations and engagement and irresponsible conduct (Ellis, 1996). This wrongful behaviour affects students' life in the school which impacts negatively on their academic performance.

Understanding how cognitive distortions, self-efficacy, rational and irrational conduct, social circumstances, and cognitive processes contribute to exam anxiety is based on the notion of behavior. Student can more effectively control and lessen the negative impacts of exam anxiety by being aware of these aspects and putting them into practice.

Concept of Stress and Examination Anxiety

In psychological parlance, stress is a term for an emotion of anxiety and discomfort (Mental health America, 2013). According to Dwyor and Cumming (2001), stress is the result of expectations placed on individuals, to which they react and which have an influence on their physical, mental, and behavioural traits. A little stress might be desirable, helpful, and even healthful. The right kind of stress can boost student outcomes. Additionally, it influences drive, adaption, and responses to their surroundings (Selye, 1975).

Stress, though, can evoke either pleasant or unpleasant emotions. Negative emotions can cause some wellbeing issues like headache, stomach discomfort, sleeplessness, increased blood pressure, and even stroke whereas stress can serve to motivate one to take greater initiative, which can result in more success (Shield, 1995). Sapolsky (2004) found that stress can raise the risk of heart attacks, strokes, ulcers, and mental diseases like melancholy and anxiety. Stress affects practically all aspects of life. It could be considered a significant cause of disease. It can result in a complete breakdown of a person's system and is harmful to both their psychological and physical wellbeing. It is recognized to be a contributing factor to some common mental issues, including anorexia, impaired memory, forgetfulness, depression, irritability, anxiousness, and high blood pressure (Adewole, 2006). Environmental factors and external stressors are also possible (Fiona, Jim & Angela, 2018). However, it can also be brought on by inner thoughts that make someone feel anxious or other unfavourable emotions in response to

University of Cape Coast

stress or distress. For example, academic load, exercises, quizzes and examinations make students very stressful which affects their academic performance.

Types of Stress

Stress comes in many different forms. First, there is acute stress, which is defined by Lazarus & Folhman (1984) as the "fight-or-flight" response to an immediate threat. Nearly every organ and system in the body, including the brain, heart, blood vessels, immunological system, lungs, digestive system, and sensory organs, prepares for anticipated danger. When needs and circumstances are satisfied, such as a deadline, a performance, or facing a challenging challenge or painful experience, stress can occasionally be temporary and situation-specific. Acute stress episodes can also occur. Salpolsky (2004) noted that certain persons appear to repeatedly endure acute stress. This is known to as acute episodic stress. A sequence of very genuine stressful obstacles, such as losing a job, then experiencing health issues, then losing a parent, may be the cause of this type of recurrent stress episode. Significant difficulties and a propensity to behave like a "stress machine" are two factors that contribute to episodic acute stress for some individuals. People frequently fret nonstop about the negative things that could occur to them (Herbert & Wetmore, 2002). Chronic stress is the third type of stress. Looker & Gregson (1997) observed that Chronic stress is characterized by persistent demands, pressures, and anxieties that appear to never end. Individual's health and pleasure are severely impacted by prolonged stress. It can wear individuals down and harm their performance.

Causes of Stress

One of the causes is crises or catastrophes. This kind of source of stress is unforeseeable and unexpected, and as a result, it is totally beyond the person's control. Disastrous natural catastrophes like floods, earthquakes, wars, and pandemics are instances of crisis and catastrophes (Pastorino & Doyle-Portillo, 2009). Even though it doesn't happen often, this kind of stressor usually adds a lot of tension to an individual's life. According to a Stanford University study, persons impacted by natural catastrophes saw a marked rise in stress levels afterward (Pastorino & Doyle-Portillo, 2009). For example, natural disasters such as flood in the school impacts negatively on students' academic performance due to loss incurred in the form of learning materials and study time.

Significant life experiences rank as the second source of stress. Major life experiences can include starting college, approaching finals, losing a loved one, getting divorced, and other things. Good or unpleasant occurrences like these might engender apprehension and dread, that will eventually result in stress. For example, studies have shown that level of stress rise significantly as students go from high school to college (Pastorino et al 2009).

Moreover, daily hassles such as making a decision, meeting deadlines at school or workplace, an encounter with irritating personalities and others cause stress (Campbell, 2016). Dispute with others is a common component of this kind of source of stress. Everyday stressors, though, vary from person to person because not every person finds the same circumstances difficult. As with most individuals, a politician with experience would not find public speaking burdensome. Everyday hassles can cause elevated stress among

50

adolescents as well as adults. It has psychological effects on an individual (Davies & McKay 1995). For example, students become tensed when the deadline for the submission of an assignment draws nearer.

Campbell (2016) describes the fourth cause of stress as ambient stressors. Like the name suggests, they are poor, worldwide stresses that are a normal aspect of the ecosystem. They are characterized as stressors that are persistent, negatively regarded, non-urgent, outwardly observable, and unchangeable regardless of the personal attempts. Environmental stressors including pollution, noise, crowding, and traffic are common manifestations. The ambient stressor, in contrast to the other three categories, can have a detrimental effect without the person being aware of it.

Stress has an impact on both exam anxiety and school performance. Agolla & Ongori (2019) discovered that most students in senior high schools' experience stress in their daily academic activities. This may be due to numerous homeworks, competition with other students, academic non-success, weak interactions with fellow students or teachers as well as inadequate pocket money (Woun, 2003; Ongori, 2007). Additionally, students claim that the thought of having to take exams is stressful due to the pressure to review all the course material in a set amount of time (Mani, 2010).

Concept of Environment and Examination Anxiety

Gisburet (2010) describes the environment as everything that is directly influencing an entity and therefore is instantly around it. According to Douglas and Holland (1947), the term "environment" is used to collectively characterize all environmental factors, effects, and situations that have an impact on a living organism's existence, form, behavior, expansion, progress, and maturity.

Types of Environments: The term "physical environment" relates to all the geographical elements that have an impact on the person. Food, temperature, climate, means for a decent lifestyle, and natural relaxation are some instances (APA, 2010). An environment that is necessary and beneficial for an individual's psychological growth is referred to as their "mental environment." The intellectual climate at home, at school, in the libraries, in the common areas, and in the labs are all included in this. Unknowingly, the youngster picks up new information from the psychological surroundings (APA, 2010). The social climate refers to the initial social connections that the kid makes. It also encompasses the social customs, folklore, literature, art, music, and political structures that make up the culture of the society. Each person acquires cultural characteristics from their social setting (APA, 2010). Both mental and social environment has impact on students' learning in the school.

The environmental factors that contribute to test anxiety include parental pressure. It has a significant impact on student's test anxiety. The pressurization from parents is vital because parents are key factors in a child's life. They are the student's immediate providers and protectors. They provide a sort of buffer the student needs. For example, the adolescent or child needs parental support when he is under stress due to a burdening curriculum. Parents criticism and condemnation affect the child profoundly. It can make the adolescent feel frustrated and less competent leading to the development of an aversion to studies (DSM, 2013).

Many psychiatrists and educationists confirm that rising psychosomatic learning and behavioural problems of adolescents can be attributed to over-ambitious parents. Adolescents suffer from depression and severe anxiety, especially when the examination time approaches (APA, 2012). Another environmental factor that contributes to test anxiety is peer influence. This is the power that members of a given social circle possess. The phrase is also employed to explain how this impact leads an individual to comply in order to fit in with the group. Both good and bad peer influence are possible. When a person's peers urge him to do something good or assist him in developing in a better direction, this is known as positive peer influence. An illustration would be to motivate a colleague to learn more diligently so they can do well on a test. However, negative peer pressure influence normally outweighs that of the former. Negative peer pressure entails persuading teammates to take a risk or do anything harmful to themselves or others. In senior high schools, there are many instances of harmful peer influence. These include pushing a peer to fight someone or bully another student, encouraging a peer to skip school or flee from classes, persuading a friend to smoke, pressuring a mate to consume or experiment with drugs, and showing disrespect for authority. These negative pressures create tension and worry among students. It leads to increased test anxiety which impacts negatively on academic performance (National Health Institute, 2010). Finally, other mental factors that impact test anxiety connote sleep deprivation, substance abuse, pollution, exposure to toxins during childhood and extremely bad weather conditions (Anastasi, 2015).

The concept underscores the importance of comprehending these external pressures as fundamental to uncovering the underlying causes of anxiety. Furthermore, it underscores the severe consequences of examination anxiety, including heightened stress, depression, and emotional challenges, underscoring the urgent need to address anxiety to safeguard students' mental well-being. Additionally, it subtly underscores the significance of counseling services and awareness campaigns in managing examination anxiety. Schools can proactively offer counseling support to students and promote awareness regarding mental health issues, thereby contributing to the effective management of test anxiety within educational settings.

Empirical Review

Some of the previous works related to the current study are reviewed in this section. The review is done under the subheadings relating to the objectives of the study.

Causes of Test Anxiety among Students

In the literature, the root reasons of test anxiety have been examined. This subheading provides a review of some research that have looked into this phenomenon. In their 2015 study, Bentil, Simon, and Adzifomie investigated at the causes of test anxiety in senior high school learners. The research adopted a cross-sectional descriptive survey methodology with a quantitative approach, and a sample of 746 pupils from both government and private schools in the Effutu municipal assembly was selected by proportionate stratified random sampling. A structured questionnaire was used to gather the data, and descriptive and inferential statistics were used to evaluate it. The research concluded that while a variety of reasons can make learners anxious before exams, a lack of confidence emerged as the most important one, with the subjects' workload having the lowest impact.

Chamberlain, Daly and Spalding (2011) examined how test anxiety affected students taking A-level exams. In the south of England, four focus groups were held with 19 participants to discuss the causes of examination anxiety and the perceived need for assistance to help worried learners manage the test process. The research results revealed that the participants dealt with "pre-exam anxiety and exam day anxiety," respectively. Only 3 participants claimed that examination anxiety had a substantial negative impact on their ability to do well on the examination. Several people said that having some examination anxiety helped them do well.

Vaz, Pothyil Alex and Kamath (2018) explored what influences undergraduates' test anxiety. 314 undergraduates participated in the exploratory study. To gather demographic data, a demographic proforma was used to obtain the data. Exam anxiety was measured using the test anxiety scale. The Likert scale was also utilized in the research to measure the variables affecting test anxiety. SPSS version 16.0 was used to analyze the data. Test anxiety ratings and demographic proforma were examined employing frequency and percentage. The majority of the participants (61%) experienced normal or no test anxiety, according to the results. Two per cent of participants reported suffering serious test anxiety, 12% experienced moderate test anxiety, and 25% had light test anxiety.

Additionally, Putwain and Daly (2014) investigated the incidence of test anxiety and gender disparities among high school students in England. Data on exam anxiety self-reported by 2435 high school students in 11 academic institutions was gathered. According to the findings, 16.4% of the respondents admitted to having severe examination anxiety, with the percentage being significantly greater among female students (22.5%) compared to male students (10.3%). The concern and tension parts of test anxiety showed a moderate gender disparity, whereas the social derogation part showed a slight gender disparity. The research also showed that not all students who struggle with exam anxiety run the risk of performing poorly in class and losing interest in academic pursuits.

The Relationship between Test Anxiety and Academic Performance

There is evidence in several studies linking examination anxiety to pupils' academic achievement. For instance, Alemu and Feyssa (2020) studied how secondary school students' examination anxiety and academic performance related to one another. It used a cross-sectional, descriptive - correlational design. 300 students in grade 10 and 8 teachers made up a stratified sample that was taken from three high schools. Spielberg's test anxiety scale, which has 20 questions on a four-point scale and is used to measure how frequently respondents experience the feeling expressed in each sentence, was used to gather the data.

The participants' first semester mean scores across six subjects throughout the 2019 academic year were utilized to gauge their academic success. The mean, standard deviation, and Pearson correlation coefficients were calculated. It was shown that there is a significant inverse association between students' accomplishment scores and examination anxiety. The findings indicated that cognitive elements have a greater impact on examination anxiety than do affective factors. The study's findings also indicated that compared to men, women recorded much greater levels of exam anxiety. As a result, it was determined that examination anxiety is among the reasons contributing to students' academic failure and poor performance, but it can be controlled by providing them with the correct guidance in how to handle the situations that lead to examination anxiety.

Hembree (1988) used meta-analysis to examine the findings from 562 publications to describe the causes, consequences, and remedies of examination anxiety in academic settings. Effect sizes were calculated using the approach of Glass, McGraw and Smith (1981). Hedges & Olkin used inferential statistics to examine the consistency and significance of correlations and effect size groups (1985). Results demonstrate that exam anxiety results in subpar performance. It is indirectly linked to students' self-esteem and directly related to their worries about being judged negatively, acting defensively, and other types of anxiety. Ability, gender, and academic grades are among the factors causing differing examination anxiety levels.

Seipp (1991) studied the robustness of the connection among examination anxiety and performance due to inconsistent findings in earlier research. The Schmidth-Hunter algorithm for effect sizes, or "r," was used to undertake a number of the meta-analysis. After conducting a thorough literature review, 126 papers with a total number of participants of 36,626 people that were published between 1975 and 1988 were found. This consists of separate samples drawn from 156 different sources. Using all 156 effect estimates, an overall analysis produced a population effect size of r=-21.

The examination of gender, culture, and anxiety stability, among other analyses designed to explore moderator variables that would explain for the residual variation, fell short of revealing the moderator effect that was anticipated. However, examination of the anxiety components—worry and emotionality, types of anxiety, such overall and examination anxiety, and anxiety assessment point in time—resulted in systematic variations; the nearer the anxiety assessment was to being cognitively generated and particular, the nearer it was related to educational performance. When anxiety was assessed after an achievement circumstance rather than before, the study discovered a stronger correlation.

Furthermore, 5,414 students' academic success was studied together with their examination anxiety by Chapell, Blanding, Silverstein and Newman (2005). They discovered a tiny but substantial inverse relation among examination anxiety and grade point average in both categories. High exam anxiety students often received a B, while low examination anxiety students gained a B+. The grade point average (GPA) of the low-test-anxious female postgraduates was significantly greater than that of the high-test-anxious male postgraduate. Between male graduate students who reported low or high exam anxiety, there were no discernible GPA variations. Undergraduates who were female had much more exam anxiety and higher GPAs than those who were male. Postgraduates who were female had much more exam anxiety and higher GPAs than those who were male.

In a research published in 2017, Balogun, Shyngle, and Chidi investigated the moderating effect of achievement motivation on the association between test anxiety and academic achievement. The research included 393 individuals, 129 men and 201 women, who were chosen from a public college in Ondo State, Nigeria, employing a purposive sampling

58

method. They reacted to tests of exam anxiety and drive for success. The moderated hierarchical multiple regression analysis was used to evaluate three hypotheses. A negative correlation between examination anxiety and academic achievement was found (B = -0.23, P 0.05).

School achievements was positively affected by achievement motivation (B= 0.38, P 0.05). Additionally, examination anxiety and school achievement were significantly moderated by accomplishment drive (B= 0.10, P = 0.01). According to these results, school administration should develop suitable psycho-educational programs to boost learners' aspirational drive.

A survey on examination anxiety as a predictor of learners' academic achievement was done by Mittus and Nandana in 2020. The study's methodology was a descriptive survey. The convenience sampling method was used to choose 100 graduates. Nist and Diehl's (1991) test anxiety questionnaire was utilized to gather the responses from the participants. The data were analyzed using statistical methods including Pearson's coefficient of correlation and linear regression analysis. The research's findings revealed that;

- (i) There is a statistically significant negative correlation between examination anxiety and academic achievement.
- (ii) Although test anxiety has a statistically significant impact on academic achievement, graduates' examination anxiety does not strongly predict academic achievement.

A research on secondary school students' test scores and academic anxiety was done in 2014 by Das, Haldar and Mishra. The scholars made an effort to look into how the genders of secondary school students differed in terms of learning outcomes and academic anxiety. Additionally, the researchers scholars looked for a link between academic anxiety and success. Random selection was used to choose a sample of 237 secondary school pupils, including 109 girls and 128 boys. After data analysis, it became clear that female students experience higher academic anxiety than male students do. Additionally, it was discovered that there is a weak and substantial negative association (r=0.01) between academic anxiety and test scores.

Along with the aforementioned, Mirawdali, Morrissey and Ball (2018) investigated academic anxiety and its impacts on success. The goal of the research was to quantify the level of academic anxiety, examine how it affects academic test scores, and evaluate whether social and familial causes of worry also have an impact. This cross-sectional research employed a survey premised on methods that had already been verified. The research included a sample of 132 students. The results demonstrate a significant relationship between academic achievement and traits including exam anxiety, academic proficiency, and time management abilities.

Given the perceived high coursework and the quantity of learning resources supplied for every test, a large percentage of the research participants reported inadequate academic success. Educational success, stressors, and social and familial anxiety causes all showed positive correlations. The research also found that social characteristics, including a background of anxiety in the family and various anxiety phases, may have either beneficial or detrimental effects on academic success. The survey's findings support the need for initiatives to help students cope with school life and enhance their performance going forward. Neemati, Hooshangi, and Shurideh (2014) examined students' perceptions on the variables influencing their test scores. Two sets of questionnaires created by Rasul and Bukhsh (2011) in addition to Cassidy and Johnson were used to gather data (2002). 300 Razi University students made up the sample. With the aid of descriptive statistics, the data was examined. The survey's conclusions revealed that the frequently mentioned issues were the test's degree of difficulty, the setting in which it was administered, students' unfamiliarity with both the test's aims, and home responsibilities.

In their 2018 survey, Embrose, Jester, Roy and Post explored how examination anxiety affects various academic results. 238 articles with dates ranging from 1988 to 2018 served as sources of data. A meta-analytic approach was used to combine the findings from such research and explain the predictor, determinants, and linkages with the examination anxiety concept. The computed effect sizes were aggregated. The results showed that examination anxiety was significantly and negatively connected to a variety of academic results, including grade point average, admission examinations, and standardized examinations. The middle school level had the most obvious results. Test anxiety was significantly and strongly predicted by self-esteem. Higher test anxiety was likewise correlated with anticipated examination complexity and the text's high stacking. It was concluded that effect of the correlation of examination anxiety across several variables ranged from small to moderate.

Iranian students' locus of control, examination anxiety, and religious affiliation were examined by Rastegar and Heidari (2012). 100 students (57 men and 43 women) readying English at Bahoner College provided the data. Junior and senior students were randomly chosen as respondents. Three sets of questionnaires were used to gather the necessary information: Sarson's (1975) Test Anxiety Scale (TAS), Rotter's (1966) Locus of Control Scales (LOC), to assess participants' Loc levels, Allports and Ross' (1967) Religious Orientation Scale, to assess participants' intrinsic and extrinsic religious affiliation. The Pearson product-moment correlation and T-test were used to analyze the data. Results revealed a substantial positive association among examination anxiety and external locus of control (ELOC), but a significant negative correlation among locus of control and test anxiety. Additionally, there was a substantial positive association between the external locus of control (ELOC) and the extrinsic religious affiliation as well as between the internal locus of control and the latter. Finally, there were no appreciable disparities between the responses from male and female participants.

Banks and Smyth (2015) researched into what causes stress and anxiety for secondary school students. An analysis of personal and institutional factors influencing stress and anxiety within secondary students preparing for the National standardized leaving certificate test used data from the Irish post-primary longitudinal research. Results indicate that various features of the learning process have an influence on the stress levels in addition to their personal characteristics. Students' stress levels are discovered to be significantly influenced by peer relationships and the degree of studentteacher engagement particularly. Stress levels are lower in learners who connect with instructors more positively. Those who experience bullying from peers have a high-stress level. To explore more about test anxiety, Akinsola and Nwajei (2013), studied examination anxiety, depression and test scores. The sample size was 420 students from senior high schools in Lagos, Nigeria. The participants ranged in age from 13 to 19 and included 210 boys and 210 females. They replied to questionnaires that assessed trait anxiety, examination anxiety, and depression symptom inventories.

Seventy-two participants whose examination anxiety ratings were higher than the norm for the sample were categorized into 3 groups and handled under the following three scenarios: "no treatment, relaxation treatment alone, and combined relaxation and cognitive restructuring treatment." The findings indicate that depression, examination anxiety, and trait anxiety are all linked to academic achievement both favourably and adversely. Additionally, relaxation combined with cognitive restructuring therapy is more effective at reducing anxiety and depression than relaxation therapy alone.

Comparable to this, Ergene (2003) explored the successful strategies for lowering examination anxiety. The outcomes of the program to reduce test anxiety were summarized in this meta-analysis. 56 articles (n = 2,482) served as the basis for the analyses. The test anxiety reduction program's overall mean effective size (Es) was 0.65 (95%). The range of the reliability was from +0.582 to +0.73. On anxiety-reduction measures, the typical patient who completes treatment is judged to have improved over 74% of the patients who did not receive therapy. Students' examination anxiety degrees have been significantly reduced by the therapy of test anxiety. Therapy that blends skillfocused strategies with behavioural or cognitive strategies seem to be the most successful.

Gregor (2005) investigated factors affecting examination anxiety. As a school-based project, the research examined intervention tactics to assist secondary school pupils in controlling their test anxiety. The research examined how different strategies affected respondents' achievement on the General Certificate of Secondary Education (GCSE) test as well as their behaviour and self-reported examination anxiety. Prior to this, pilot study treatment procedures had been tested in smaller groups. Data was evaluated, and the results show that interventions combining relaxation with cognitive behavioural therapy techniques helped children work better on mathematics examinations. Results also point to a relationship among pre-anxiety level and performance, suggesting that improved performance is not the result of little anxiety but rather of optimal anxiety. Results support the idea that, as compared to a single treatment, school-based programs combining combined interventions may be more successful in preventing excessive test anxiety and improving exam performance. According to the study, anxiety related to mathematics in particularly may have a significant effect on employment decisions.

Abouserie (1994) also investigated the causes and degrees of stress experienced by college students with regard to locus of control and self-worth. Student stress levels were evaluated using two stress questionnaires: The Life Stress Questionnaire and the Academic Stress Questionnaire (LSQ). The first (ASQ) examines sources of stress related to academics, and the (LSQ) evaluates the student's degree of life stress. The Locus of Control was measured using the achievement scale of the multi-dimensional multiattributional scale damage (MMCS), and the self-worth of the students was evaluated using the Rosenberg self-esteem scale. 675 second-year undergraduate students, including 202 men and 473 women, comprised the research sample.

The findings showed that preparing for a test, having many work to accomplish, and the quantity of information to learn were, in that order, the top sources of stress experienced by students, followed by exams and examination outcomes. According to the findings, 77.6% and 10.4% of the pupils fell into the groups of intermediate and severe stress, accordingly. Both personal and educational stress varied significantly across male and female students, with female students being more anxious than males. A substantial positive link among locus of control and academic stress was also found in the data, indicating that students with external beliefs are under more stress than those with internal views. Students with high self-worth are more stressed compared to those with low self-worth, according to a significant negative link between self-worth and both life-related and educational stress that has been found.

Research was carried out in 2008 by Ndirangu, Muola, Kuthaka and Nassiuma to see how examination anxiety affected students' school achievement in Nyeri, Kenya. It was performed using a correlational research methodology. Along with their professors, form four students took part in the research. The intended audience consisted of 83,000 students and 600 districtemployed instructors. A random sample of 80 children, twelve instructors, and four schools was taken. A questionnaire for students, an interview schedule with teachers, and an interview schedule with students were all three tools the authors had created.

The findings revealed a statistically significant distinction among examination anxiety degrees before and after tests (P 0.01, t= -3.736). Prior to exams, an intense anxiety is encountered in all courses. It was also determined that examination anxiety affects both men and women equally. The findings indicated that instructors fall short in their efforts to assist students in overcoming exam anxiety. There was no correlation between examination anxiety and academic achievement (r=0.06). It was suggested that a syllabus be created that covers stress management for examination anxiety.

Antwi-Danso, Amissah, and Effrim (2015) explored the link between examination anxiety and test scores of third-year senior high school students in the Agona municipal assembly of Ghana using descriptive cross-sectional survey design. Test anxiety scale (TAS) developed by Sarson (1978), r = 0.80and authors' self-developed questionnaire were employed to assess examination anxiety degrees and attitude of 270 students randomly selected from five schools. Quantitative data gathered was analyzed using Pearson product-moment correlation, linear regression, independent sample T-test and multiple regression to test the study hypotheses. Findings revealed a moderate degree of students' test anxiety. Comparatively, female students reported higher levels of examination anxiety than male students. Similarly, test scores of male examination-anxious students overwhelmed the scores of their examination-anxious female counterparts.

Additionally, a statistically significant negative relationship among examination anxiety and test performance was discovered. Furthermore,

66

multiple regression demonstrated that examination anxiety had a more detrimental effect on students' test scores than their test mood. Given these results, the research recommended that students be oriented on study skill acquisition as well as anxiety reduction strategies like systematic desensitization and stress inoculation for better academic outcomes.

Conceptual Framework

CAUSES OF EXAMINATION ANXIETY

EFFECTS OF EXAMINATION ANXIETY

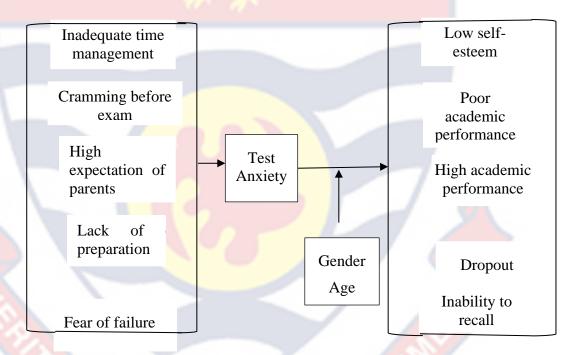


Figure 1: Conceptual Framework

Figure 1 represent the conceptual framework of the study. Examination anxiety among students can have various specific causes that are often related to the unique challenges and pressures they face in an educational context. Here are some common causes of examination anxiety among students: Inadequate time management, cramming before, high expectation of parents, lack of preparation and fear of failure. These causes results into test anxiety among the students. The inability of student been able to handle this causes or adopt a coping strategy to deal with the test anxiety leads to effects of examination anxiety which includes low self-esteem, poor academic performance, high academic performance, dropout and inability to recall. According to Yerkes and Dodson (1908), "Performance increases with physiological or mental arousal (anxiety) but only up to a point. When anxiety or stress levels becomes too high, performance decreases".

Again, the age and gender the student can influence the effects and experiences of examination anxiety. While examination anxiety can affect individuals of all ages, including children, adolescents, and adults, the nature and impact of this anxiety can vary based on the developmental stage and life circumstances of the student. For example, younger children could have less mature cognitive processes and coping mechanisms (Shmader, Johns & Forbes, 2008). They could find it difficult to express their worry and may not completely comprehend the repercussions of testing. Based on gender, there is a notion that connects femininity with being more sensitive or worried in many cultures. According to this stereotype, women are thought to be more prone to anxiety, including exam anxiety (Brody & Hall, 2008)

Chapter Summary

This chapter examined research-related literature. The theoretical framework, conceptual framework, conceptual review, and past studies of the research were the main subjects of the review. The Rational Emotive Behavioural Therapy (REBT) and Self-Efficacy Theory served as the foundation for the theoretical review. Albert Ellis created the Rational Emotive Behavioural Therapy. The theory is based on concepts of rational beliefs, irrational beliefs and theory of change. The rational belief is a concept which denotes beliefs that are logical and have empirical and pragmatic support. The theory is very useful for the management of test anxiety among students. Albert Bandura propounded the Self-Efficacy Theory in 1977. Bandura defines self-efficacy as the belief in a person's capacity to plan and carry out the actions that are necessary to create specific accomplishments. Enactive mastery experiences, vicarious experiences, verbal conviction, physiological and affective states, and others are the causes of self-efficacy. Since it can be utilized to cure students' test anxiety and other phobic dysfunctions, the theory is extremely pertinent to the research.



CHAPTER THREE

RESEARCH METHODS

The goal of the research is to better comprehend the factors that contribute to test anxiety among senior high school students in the Western Region of Ghana, and how to manage it. Additionally, this chapter outlines the study's research design, population under investigation, sample and sampling procedure, research instrumentation, pilot testing, data collection process, data processing and analysis, as well as the justification for the selected technique used for the study.

Research Design

All research requires a properly crafted research design that adheres to relevant requirements for quality research (Bless & Higson-Smith, 2000). The general strategy a researcher uses to find the solution to their survey questions or test their study's hypotheses is known as their research design (Amedahe & Asamoah-Gyimah, 2015). The fundamental framework for the investigation is provided by the research design. There are many different research designs, but which one a study chooses depends on the issues it attempts to address. The descriptive survey approach employed in this research as it aims to objectively investigate the causes, consequences, and strategies for controlling test anxiety within senior high school students in the Jomoro Municipality. Observing, describing, and documenting a scenario as it happens naturally is the core goal of descriptive design (Amedahe & Asamoah-Gyimah, 2015). This investigation is a descriptive research. Since this research intends to gather data from individuals in a variety of age categories at one time and summarize their answers to answer the study's questions, the descriptive survey was suitable.

This design was selected its benefit of assessing ongoing acts. The structure allows for the evaluation of the causes, consequences, and treatment of test anxiety in senior high school students. Additionally, it offers data in a brief period, like the period needed to conduct the research and gather the data. Furthermore, this methodology is appropriate because the purpose of the research is to generalize findings from a subset to the larger society in order to draw conclusions regarding the origins, consequences, and treatment of test anxiety across the board. Nevertheless, it should be highlighted that this approach is not a fact-finding procedure per se; rather, it acts as a springboard for the creation of hypothesis or the construction of theories. Additionally, descriptive design is time-bound in that data is gathered at a specific moment and results are highly likely to change over time. There is a chance that the results of this research could alter as a result of changes in the environment and other circumstances (Creswell, 2012).

Study Area

The Jomoro Municipality in Ghana's Western Region was the research location. Among the ten municipalities in the Western Region is the Jomoro Municipality. The Municipal, which formerly belonged to the Nzema District, was established in 1988 by Legislative Instrument 1394. Half Assini serves as the municipality's capital. Ten local councils serve the district (Jomoro District MTDP, 2010). The Jomoro District is situated in Ghana's Western Region's south-western corner. It is situated within Longitudes 20, 35'' W and 30, 07'' W and Latitudes 40, 80'' N and 50, 21'' N. Its borders include La Côte d'Ivoire to the west, Wassa-Amenfi and Aowin-Suaman to the north, Nzema East District to the east, and Aowin-Suaman and the Gulf of Guinea to the south. The municipality has a 1,495 square kilometer land size. This represents roughly 5.6% of the Western Region's entire land size.

Population

The population is the focus group that a scholar is seeking to learn more about in order to make inferences. A research population is defined by Degu and Yigzaw (2006) as an elements from which the sample would certainly be selected and conclusions regarding which can be derived. A population can also be described as a collection of people, things, or things from which samples are drawn for analysis (Mugo, 2008). A sample is taken as a reflection of the full research from the bigger group.

This research's target population comprised all students in government senior high schools in the Jomoro Municipality. The population that interests the study is the targeted population, making it the group for which the investigator wishes to apply the research outcome (Fraenkel, Wallen, & Hyun 2012). The accessible population was however made up of SHS 1 and SHS 2 students of public schools within the Jomoro Municipality. Due to their absence from the school during the data was collected, third-year students were not included in the study participants. That is to say, such students have exited the school after writing final examinations. Records from the Ghana Education Service within the Jomoro Municipality indicate that there are two public SHSs within the Municipality, that is, Half Assin SHS and Annor Adjaye SHS. The aforementioned SHSs have a population of 1600 and 800 respectively (Ghana Education Service, 2021). Only students in Form One and Form Two in each SHS are included in these statistics. There were 2,400 participants in the research as a whole. This number would serve as the population for the study. Table 1 shows the distribution of the study's participants.

Table 1- Population Distribution of SHS Students in the Jomoro Municipality					
			GENDER		
SCHOOL	CLASS			TOTAL	
		MALE	FEMALE		
Half Assin SHS	SHS 1	350	502	852	
	SHS 2	306	442	748	
Annor Adjaye SHS	SHS 1	185	210	395	
	SHS 2	198	207	405	
TOTAL	20	1039	1361	2400	
Source: Jomoro M	unicipality GI	ES, (2021)			

Sampling Procedure

The number of people involved in research is referred to as the sample size (Neuman, 2007). An ideal representation of the full population is a sample, which is a portion of the population. Using a sampling approach, a subset is chosen from a population (Neuman, 2007). Using the sample size calculation table developed by Krejcie and Morgan, the sample size for this investigation was established. Krejcie and Morgan claim that a sample size of 331 is adequate for a population of 2400 in to draw valid conclusions about the population.

A multi-stage sampling strategy was utilized to select the 331 participants for the research to involve the specific participants. First, the sample size from each of the two (2) government schools was determined using a proportionate stratified survey method. The proportion of students to be chosen from every school was based on number of students in each form and the participants' gender. The students were therefore rolled in for the research using a simple random sampling procedure, more precisely the table

of random method. Information about the student participants are presented in Table 2.

			GENDER		
SCHOOL	CLASS			TOTAL	
		MALE	FEMALE		
Half Assin SHS	SHS 1	48	69	117	
	SHS 2	42	61	103	
Annor Adjaye SHS	SHS 1	26	29	55	
	SHS 2	27	29	56	
TOTAL		143	188	331	

Table 2- Sample Distribution of SHS Students in the Jomoro Municipality

Source: Jomoro Municipality GES, (2021)

Research Instruments

The data for the research were gathered via a questionnaire. The questionnaire was adopted from Spielberger (1980). The background characteristics of the participants is in Section A covering their gender and age. Section B measures what test anxiety entails. Section C is on the causes of anxiety. Section D is on the effects and Section E is on management of test anxiety. Table 3 shows the various scales and their sub-dimensions of the questionnaire. A copy of the questionnaire is presented at Appendix c.

Table 3-Data Collection Instrument

Variable	Author(s)	Name of	Subscales/Number of items
		Instrument	
Examination	Spielberger	Test Anxiety	Test Anxiety-Total
anxiety	(1980)	Inventory (20	(4 items, alpha = .96)
		items 4-point	Test Anxiety-Worry
		Likert scale)	(8 items, alpha = .91)
			Test Anxiety-Emotionality
			(8 items, alpha = .91)
Causes of	Spielberger	Perceived causes	11 items, .81
examination	(1980)/	of examination	
anxiety	Asamoah	anxiety	
	(2018)		
Effects of	Spielberger	Perceived effect of	7 items, .76
examination	(1980)	examination	
anxiety		anxiety	
Anxiety	Spielberger	Anxiety managing	12 items, .79
managing	(1980)/	strategies	
strategies	Howard 2020		

Pilot Testing

The adapted instrument was pilot-tested using 50 students from Edinaman SHS in the Cape Coast Metropolitan Assembly (CCMA). The students in CCMA were chosen for the pilot testing because they possessed similar attributes as those selected for the actual investigation and could equally serve as respondents for the study. Due to the scale's adaptation from many scholars, a pilot test was conducted to examine if the questions on the questionnaire accurately represented the original investigators' intentions in the Ghanaian setting. Before the actual study, the instrument was improved in response to the pilot study's input.

Cronbach Alpha (0.82) was employed to measure the internal consistency of the sub-sections of the instruments in order to ascertain the reliability of the questions on the questionnaires. The internal consistency of the items on the different sub-sections of the questionnaire may therefore be determined thanks to this. It was deemed acceptable to use an alpha value of at least 0.70 (Karagoz, 2016). Table 4 provides more information on the reliability coefficients.

Name of Sub-scale	No. of Items	Alpha
Examination Anxiety		
Test Anxiety-Total	4	.85
Test Anxiety-Worry	8	.82
Anxiety-Emotionality	8	.84
Causes of Examination Anxiety	11	.86
Effects of Examination Anxiety	7	.76
Anxiety Managing Strategies	12	.77
Overall	50	.82

 Table 4- Internal Consistency of sub-scales of the Instrument

Source: Field survey (2022)

The Cronbach's alpha coefficients for the different scales spanned from 0.76 to 0.86, as indicated in Table 4. Pallant (2010) states that a reliability coefficient of at least 0.70 is required for the research instrument to be fit for the actual study, thus the alpha values found for the instrument fall in this allowable threshold. The scales on the questionnaire can thus be deemed to as very consistent because the internal consistency values of the different scales were over 0.70 (Karagoz, 2016).

Validity of Research Instrument

Fraenkel, Wallen and Hun (2012) contend that professional judgment must be used to assess a study instrument's correctness. The questions on the questionnaire were thus presented to my study advisor for professional examination in order to determine the content validity. This was carried out to ensure that the items (a) associated with the study questions, (b) would obtain the right answers from the participants, (c) the diction was suitable, (d) the questions were organized, (e) the statements fitted into the sections and (f) whether any of the statements were vague. The instruments were enhanced using the advisor's ideas, which also contributed to verifying the instrument's correctness.

Ethical Consideration

Ethics concentrates on thoughts about what people do, think, and act like. In a study setting, ethics is concerned with the ethical views and precepts that support legal responsibilities and socially accepted professional responsibilities. (Manion, Morrison, & Cohen, 2007). the ethical responsibility of the research is to preserve the rights of the participants and the institutions where the research would be done and uphold the credibility of science (Fraenkel & Wallen, 2006).

In this research, the participants' rights would be protected. The choice to participate in the research or to drop out would be presented to participants. The participants' data would be treated in confidence. The participants would be asked to leave their names off of the questionnaires in order to ensure this. The administrators of the schools would be provided a written authorization requesting their consent to perform the research at separate venues.

Data Collection Procedure

The questionnaires were administered directly by the investigator to guarantee a high response rate. The University of Cape Coast was consulted for ethical approval before to the distribution of the questionnaires. Half-Assini SHS and Annor Adjaye SHS were issued an introduction letter and the ethical clearance from the University of Cape Coast to request official authorization to undertake the research. This introduction letter's goals were to ask for participation and to forge relationships between the investigator, the personnel, and the research's participants.

To decide on a suitable period and day to distribute the questionnaires, a meeting was convened with the school administrators. The researcher visited the schools on the specified date to deliver the questionnaire. The sample was selected through simple random sampling technique.

Data Processing and Analysis

Data analysis is the method of analysing data rationally and scientifically in order to evaluate at every element of the evidence gathered utilizing the survey questionnaire. Following data gathering, replies were organized, coded, and inputed into the computer by using newest edition of the Statistical Package for Social Science (SPSS) programme (25). Means and standard deviations were used to analyze data in order to respond to research questions 1, 2, 3, and 4. The independent samples t-test and one-way analysis of variance were used, correspondingly, to test hypotheses 1 and 2.

Chapter Summary

The research techniques utilized to carry out the research were detailed in this chapter. It included the following: the research design, the research location, the participants, the sampling techniques, the data collection tools, the data collection techniques, and the data processing and analysis. However, a survey method for descriptive study was used to conduct the research. To do this, data must be gathered from research participants to test and address research hypotheses. The survey's targeted respondents also included Jomoro Municipality public SHS students. Through a multistage sample procedure, 331 SHS students were given questionnaires. Employing both descriptive statistics like means and standard deviations and inferential statistics like the independent samples t-test and one-way analysis of variance, the acquired data was analysed.

NOBIS

78

CHAPTER FOUR

RESULTS AND DISCUSSION

The goal of this research was to investigate the factors that lead to test anxiety among SHS students in the Jomoro Municipality. It also ascertained the impact and the treatment options for text anxiety. The findings from the analyses of the data obtained are discussed in this section. There were two sections to this chapter. The survey's findings were presented in the first section, while the discussions was covered in the next. The participants' background characteristics were also discussed in this chapter. The major findings were provided in a subsequent section.

Background Characteristics of Participants

Information about participants' background traits are presented in this section. The focus was on gender, age range, and level of education of the participants. Information on the participants' background characteristics is provided in Table 5.

 Table 5- Demographic Characteristics of Respondents (n=309)

Variable	Frequency	Percentage (%)
Gender		
Male	149	48.2
Female	160	51.8
Age-range		
15-18 years	240	77.7
19-21 years	62	20.1
22-25 years	7	2.3
Level of Education		
SHS 1	145	46.9
SHS 2	164	53.1

Source: Field survey (2022)

From Table 5, majority of the respondents (51.8%) were females, while the remaining 48.2% were males. This suggest that there are more female SHS students compared to male SHS students within Jomoro Municipality. Regarding the age of the respondents, most of the respondents 240 (77.7%) were within the ages of 15 - 18 years, 62 (20.1%) were within the ages of 19 - 21 years, whereas only a hand few of the respondents 7 (23%) were within the ages of were 22 - 25 years. The findings further indicated that most of the participants (53.1%) were in SHS 2, while the remaining (46.9%) were in SHS 1.

Research Question 1

What is the level of examination anxiety among the SHS students in the Jomoro Municipality?

This research question investigated how anxious SHS students in the Jomoro Municipality are about tests anxiety. The data gathered for this research question was analyzed using descriptive statistics like means and standard deviation. The benchmark for comparing was set at 2.5, which is the median of the scale that was employed (Almost never-1, Sometime-2, Often-3, Almost always-4). In Table 6, a mean value of more than 2.5 was categorized as agreeing with the statement, while a mean value of less than 2.5 was categorized as disagreeing with the statement.

NOBIS

University of Cape Coast

M 2.49 2.79 3.19 2.44 2.55 3.07 2.75 2.95 2.87 2.94	SD 0.92 1.12 0.10 1.03 1.08 1.01 1.15 1.04 1.03 1.07
2.79 3.19 2.44 2.55 3.07 2.75 2.95 2.87	$1.12 \\ 0.10 \\ 1.03 \\ 1.08 \\ 1.01 \\ 1.15 \\ 1.04 \\ 1.03$
 3.19 2.44 2.55 3.07 2.75 2.95 2.87 	0.10 1.03 1.08 1.01 1.15 1.04 1.03
 2.44 2.55 3.07 2.75 2.95 2.87 	1.03 1.08 1.01 1.15 1.04 1.03
2.55 3.07 2.75 2.95 2.87	1.08 1.01 1.15 1.04 1.03
2.55 3.07 2.75 2.95 2.87	1.08 1.01 1.15 1.04 1.03
 3.07 2.75 2.95 2.87 	1.01 1.15 1.04 1.03
 3.07 2.75 2.95 2.87 	1.01 1.15 1.04 1.03
2.75 2.95 2.87	1.15 1.04 1.03
2.95 2.87	1.04 1.03
2.95 2.87	1.04 1.03
2.87	1.03
2.87	1.03
2.94	1.07
2.94	1.07
2.77	1.05
2.67	0.93
3.14	0.89
2.87	0.96
2.56	1.00
2.64	1.01
2.70	0.96
2.73	1.05
2.86	0.10
2.50	1.08
2.77	0.37
	2.67 3.14 2.87 2.56 2.64 2.70 2.73 2.86 2.50

 Table 6- Levels of Examination Anxiety

Based on Table 6, all the respondents supported the assertions about levels of examination anxiety. Overall, the majority of the participants agreed that they experienced high anxiety levels during examination (M = 2.77, SD = 0.37). Particularly, majority of the participants indicated that "during important tests, they are so tense that their stomach gets upset" (M = 3.19, SD = 0.99). The participants again agreed that "even when they are well prepared for a test, they feel very nervous about it" (M = 3.12, SD = 0.89). The participants moreover, revealed that "during exams, they find themselves thinking about whether they will ever get through school" (M = 3.07, SD = 1.00). The respondents furthermore revealed that "thoughts of doing poorly interfere with their concentration on tests" (M = 2.95, SD = 1.041).

The respondents also agreed that "during tests, they find themselves thinking about the consequences of failing" (M = 2.94, SD = 1.07). Moreover, respondents agreed that "they often start feeling very uneasy just before getting a test paper back" (M = 2.87, SD = 0.96). Other respondents also indicated that "While taking examinations, they often have an uneasy sad feeling (M = 2.86, SD = 1.0). Most participants, however, opposed the fact that "they felt confident and relaxed while taking tests" (M = 2.28, SD =0.92).

Research Question 2

What are the causes of test anxiety among SHS students in Jomoro Municipality?

The intent of this survey was to find the root of test anxiety within SHS students in the Jomoro Municipality. Means and standard deviations were used to analyze the data gathered in response to the study question. This occurs due to a fact that a mean value of 3.0 was selected as the threshold of comparison since the statements were scored on a five-point Likert-type scale (Strongly Agree-5, Agree-4, Uncertain-3 Disagree-2, Strongly Disagree-1). Hence, mean values above 3.0 indicated that the majority of participants believed the proposition. A mean score less than 3.0, on the other hand, indicated that the majority of participants disagreed with the assertion. Table 7 displays specifics of the findings.

Statements	Μ	SD
Fear of failure makes me anxious.	3.63	1.39
Pressure to perform well on high-stakes tests causes, anxiety in me.	3.40	1.32
Focusing on negative consequences of a failing test makes me anxious.	3.31	1.45
Past negative experience with taking a test worries me.	3.32	1.40
Perfectionism makes me anxious when taking a test.	3.18	1.33
Examination performance related to self-esteem makes	3.35	1.29
me tense		
Competitiveness and comparison with other students score makes me anxious when taking a test.	3.66	1.35
Lack of preparation creates tense in me during exam.	3.67	1.33
Cramming before the examination makes me to perform poorly.	3.34	1.37
Lack of sleep before examination day worries me during a test.	3.12	1.49
Inadequate time management causes my failure in examination.	3.69	1.38
Mean of means	3.43	0.63

Table 7- Causes of Examination Anxiety

Source: Field survey (2022)

From Table 7, all the respondents backed the statements concerning the causes or examination anxiety. Generally, all the respondents agreed to the fact that, the statements presented pose some level of anxiety during examination (M = 3.43, SD = 0.63). The topmost cause of examination anxiety among respondents was "Inadequate time management" (M = 3.69, SD = 1.38). Most of the respondents also agreed that "Lack of preparation creates tense in them during examination" (M = 3.69, SD = 1.33). Respondents also agreed to the fact that "Competitiveness and comparison with other students score often makes them anxious when taking a test" (M =3.66, SD = 1.35). Most of the respondents further indicated that "Fear of failure makes them anxious" (M = 3.63, SD = 1.39). In addition, the respondents agreed to the fact that "Pressure to perform well on high-stakes tests sparks anxiety in them" (M = 3.40, SD = 1.32). The participants further revealed that "Cramming before the examination makes them to perform poorly in examination" (M = 3.34, SD = 1.37).

Research Question 3

What are the effects of examination anxiety among SHS students in Jomoro

Municipality?

This research question sought determine consequences of examination anxiety among SHS students in the Jomoro municipal assembly. Data gathered on this research question were analyzed using descriptive statistics like means and standard deviation. A mean value of 2.5 was utilized as the reference point for comparison in accordance with the scale that was employed (Almost never-1, Sometime-2, Often-3, Almost always-4). In other words, a mean value above 2.5 meant that the majority of participants agreed with the assertion. In contrast, a mean score less than 2.5 indicated that the majority of participants disagreed with the assertion. Table 8 lists specifics of the outcomes.

Table 8- Effects of Exa	mination Anxiety
-------------------------	------------------

Μ	SD
2.77	0.96
2.66	0.97
2.84	1.02
2.77	1.07
2.29	1.03
2.81	0.96
2.93	1.02
2.724	0.448
	2.77 2.66 2.84 2.77 2.29 2.81 2.93

Source: Field survey (2022)

Base on the results in Table 8, the participants agreed to all the statements regarding the effects of examination anxiety (M=2.72 SD = 0.45). Specifically, majority of the participants agreed that "Examination anxiety hinders them from demonstrating their knowledge on examinations" (M = 2.93, SD = 1.02). Participants agreed that "Test anxiety impedes their performance as a student and this limits their educational and vocational opportunities" (M = 2.84, SD = 1.02).

Respondents also agreed to the fact that "Examination anxiety makes it difficult for them to concentrate in the examination hall" (M = 2.81, SD = 0.96). Moreover, respondents agreed to the statement that "Test anxiety hinders or interferes with their ability to perform excellently in any examination" (M = 2.77, SD = 0.96). In contrast, respondents disagreed to the fact that "Examination anxiety affects their ability to recall all that they learnt" (M = 2.30, SD = 1.03).

Research Question 4

How can examination anxiety be managed or reduced among SHS students in Jomoro Municipality?

This research question focuses on the strategies the participants adopted in managing or reducing examination anxiety. Descriptive statistics were used to analyse the data obtained. In reference to the scale employed (Almost never-1, Sometime-2, Often-3, Almost always-4), a mid-point of 2.5 served as the threshold for comparison. In other words, an average value over 2.5 meant that the majority of the participants agreed with the assertion. In contrast, an average score below 2.5 indicated that the majority of participants disagreed with the assertion. Table 9 lists specifics of the outcomes.

Statements	Μ	SD
Adequate preparation towards examinations, helps me to managing anxiety provoking situations.	2.74	1.12
Maintaining a positive attitude before, during and after the test play a significant role in reducing my test anxiety level.	2.74	1.06
Exercising and having a good sleep before the test reduces my test anxiety level.	2.62	1.17
I often take a deep breathe in order to manage anxiety provoking situations during examinations.	2.56	1.05
In my quest to manage examination anxiety, I slowly and carefully read the instructions before attempting the questions	3.10	1.06
I usually go through the test questions in order to know the strategy to use in answering them; this helps me in managing examination anxiety.	3.17	1.18
Getting myself familiar with the testing environment by finding my seat and relaxing before the start of the examination reduces my anxiety level.	2.65	1.07
Regular completion of past questions before the start of any examination reduces my anxiety level.	2.67	1.11
Words of encouragement from my teachers, parents and friends empowers me to manage my anxiety level.	2.10	1.08
Studying at regular intervals as well as avoidance of last-minute reviewing of my study materials helps me to reduce anxiety provoking situations.	2.67	1.08
In my quest to manage examination anxiety, I often write important formulas, keywords definitions behind my answer booklet.	2.53	1.13
In order to manage examination anxiety, I often skip difficult questions and concentrate on simple ones.	2.93	1.08
Mean of means	2.79	0.50

Table 9- Strategies of Managing/Reducing Examination Anxiety

Source: Field survey (2022)

As shown in Table 9, all the participants agreed to all the statements presented. Generally, results from the Table 5 revealed that respondents employed various strategies to manage test anxiety (M = 2.79, SD = 0.50). Specifically, majority of the respondents agreed that "they usually go through the test questions in order to know the strategy to use in answering them; this helps them in managing examination anxiety" (M = 3.17, SD = 1.18). Respondents agreed that "In their quest to manage examination anxiety, they slowly and carefully read the instructions before attempting the questions" (M = 3.10, SD = 1.06). Respondents also agreed that "Words of encouragement from their teachers, parents and friends empower them to manage their anxiety level" (M = 3.0, SD = 1.08). The participants sided with the assertion that "Adequate preparation towards examinations, helps them to manage anxiety provoking situations" (M = 2.74, SD = 1.12). Moreover, the participants agreed that "Maintaining a positive attitude before, during and after the test play a significant role in reducing their test anxiety level" (M = 2.74, SD =1.06). Respondents further reported that "Regular completion of past questions before the start of any examination reduces their anxiety level" (M = 2.70, SD = 1.11). Respondents also agreed to the fact that "Studying at regular intervals as well as avoidance of last-minute reviewing of study materials helps them to reduce anxiety provoking situations" (M = 2.67, SD = 1.08).

Hypotheses Testing

The research put two hypotheses to test. A significance threshold of 0.05 and a 95% confidence level were employed to examine the hypotheses. The one-way analysis of variance and independent t-test were used as analytical methods.

Hypothesis One

H₀: No statistically significant disparity exists in students' examination anxiety on the basis of gender.

This hypothesis tested if there was a statistically significant gender disparity in test anxiety among students in the Jomoro Municipal. To verify this hypothesis, an independent samples t-test analysis was performed. The average value for participants' test anxiety served as the predicted variable. The independent t- test's underlying presumptions were examined before the study began. The data did not defy the premise of normality, according to findings from the normal Q-Q plot (Figure 2).

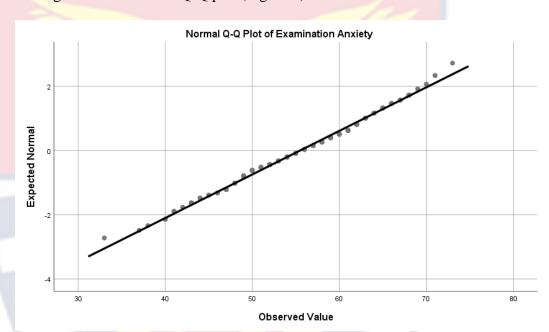


Figure 2- The normal Q-Q plot

Additional analysis, which demonstrated that the average ((x)=55.48) and median (Md=56.00) are roughly equal, corroborated the finding. The histogram, which revealed that the most of the raw values fell within 2 standard deviations, further supported the database's normalcy (see Appendix C). This grants the analysis's use of a parametric test tool the "all clear." The independent t-test was therefore applied. To determine if the variations between the groups are equal, the equal variance assumption was also put to the test. The equal variance assumption was also not broken, according to the outcomes of Levene's test for equal variances (F=.036, p=.849). Table 8 also included the results of the real comparison of the two groups for the predicted variable.

University of Cape Coast

Table 10- Ge	ender Differ	ences in Stu	dents' Exan	ination .	Anxiety	
Gender	Ν	Mean	SD	Df	t-value	p-value
Male	149	56.564	7.446	307	2.512	.013
Female	160	54.475	7.168			
Source: Field survey (2022)				*Si	gnificant,	p < 0.05

Results from Table 10 revealed a statistically significant difference in the test anxiety levels of male and female students in the Jomoro Municipality, t (307) = 2.512, p = .013. The results suggest that male and female students in the Jomoro Municipality differed in terms of their levels of anxiety experienced during examinations. That is to say, the level of anxiety experienced by males (M= 56.564, SD = 7.446) during examination was higher than the level of anxiety experienced by their female counterparts during examinations (M = 54.475, SD = 7.168).

Hypothesis Two

H_{0:} No statistically difference exists in students' examination anxiety on the basis of age

This hypothesis determined whether significant disparities exist in students' anxiety levels with vis a vis age. The predictor variable, age-range, comprised three categories (15-18 years, 19-21 years, and 22-25 years) while the The outcome variable was a weighted score on "students' examination anxiety," which was calculated on an interval scale. This hypothesis was tested using one-way ANOVA.

As a rule of thumb, for one-way ANOVA test to be conducted, the data needs to meet the normality assumption and thus, Shapiro-Wilk test was performed in testing the data's normality (Table 11).

			Shapiro-Wilk	
		Statistic	df	Sig.
Groups	15-18 years	.989	240	.056
	19-21 years	.972	62	.163
	22-25 years	.905	7	.365

Table 11-	Testing for No	ormality (ANO	VA) for Hypoth	hesis Two

*Significant at .05 level; Source: Field survey (2022)

With reference to Table 11, the respondents' scores in the various groups i.e., 15-18 years (p = .056), 19-21 years (p = .163), and 22-25 years (p= .365), conformed to the normality assumption since the significant value for the respective groups were greater .05. Similarly, observation of the Q-Q plot for the aforementioned categories reveals enough evidence to suggest that the normality assumption was satisfied (see Appendix D).

Based on this result, there was the need to conduct a test for homogeneity of variance to ensure the variances are the same among all the categories. Results for the homogeneity of variance test also showed that the data conformed to the assumption of homogeneity of variance (p = .698). This is evident as the p-value for the test exceeded the significance level (p > .05), and consequently not significant. This implies that the variances are the same (equal variance assumed). Following meeting the normality and homogeneity of variance assumptions of ANOVA, the actual test was conducted to establish the disparities in score of "students' examination anxiety levels" on the basis of age. The outcomes of the ANOVA test are shown in Table 12.

University of Cape Coast

	Sum of		Mean		
	Squares	Df	Square	F	Sig.
Between Groups	79.782	2	39.891	.734	.481
Within Groups	16631.370	306	54.351		
Total	16711.152	308			

Table 12- ANOVA Test

*Significant at .05 level

The ANOVA test (Table 12) discovered a statistically insignificant disparity, F (2, 306) = .734, p = .481, in students' anxiety levels with respect to age. This stands to reason that SHS students in the Jomoro Municipality did not differ in their anxiety levels as far as their ages were concerned. In order words, students irrespective of their ages, experienced the same level or some form of examination anxiety. Although the result was not significant, the descriptive results for the different categories are shown in Table 13.

Level of Study	Ν	Mean	Standard	
			deviation	
15-18 years	240	55.64	7.27	
19-21 years	62	54.65	7.75	
22-25 years	7	57.57	7.55	
Total	309	55.48	7.37	

Source: Field survey (2022)

The analysis shows that the average scores for the various groups range from 54.64 – 57.57 (Table 13). Students who fell within 15-18 years scored an average of 55.64(M=55.64, SD=7.27), those who were within the ages of 19-21 years scored an average of 54.64 (M=54.64, SD= 7.75) whereas students who were within the ages of 22-25 years had 57.57 as their mean (M=57.57, SD=7.54). Comparatively, this stands to reason that, students who were within the ages of 22-25 years had the highest mean (M = 57.57) whiles students who were within the ages of 19-21 years had the lowest mean (M = 54.64).

Discussion

The research's findings, as they were described in the preceding sections, are discussed in this part. The following core topics were used to organize the discussions:

- 1. Levels of Examination Anxiety
- 2. Causes of Examination Anxiety
- 3. Effects/Consequences of Examination Anxiety
- 4. Strategies of Reducing /Managing Examination Anxiety
- 5. Demographic characteristics (i.e., gender, and age-) and students' examination anxiety

Levels of Examination Anxiety

The results of this research generally revealed that Senior High School students in the Jomoro Municipality experienced high levels of examination anxiety. Topmost among the examination anxieties experienced by the students include: feeling tensed as well as experiencing stomach upsets during important examinations, feeling very nervous even after preparing adequately for a test, increased thoughts regarding the negative consequences of performing poorly in examination. The results of this research suggests that students in the Jomoro Municipality attach a lot of importance to their examinations. That is to say, most of the respondents are nervous when taking test, this can be explained by their fear of the consequences of failing the examination. Put differently, the negative consequences that comes with performing poorly in examinations often puts a lot of anxiety on students as

they prepare to write such examinations. For the negative consequence of repeating a class or the inability of a student to further his/her education as a result of poor academic performance increases students' anxiety during examinations. Students' high examination anxiety could also be attributed to their low self-confidence or low self-esteem as they prepare to write examinations.

The results of this research mirror the study of Gurses, Kaya, Dogar, Gunes, and Yolcu (2010) as well as Qashoa (2013) who found that during test, anxious students experience physical discomforts such as stomach upsets, sweating, headache, cramps and nausea. The results of this research also align with those of (Duraku & Hoxha, 2018; Dan & Raz, 2015). These studies revealed that low self-esteem has a tremendous effect on examination anxiety. In particular, Chukwuorji and Nwonyi (2015) discovered that students' anxiety and tension about performing better on an examination was elevated when they had a lower educational self-concept. In addition, the results from this research agree with the study of Nesrine (2019). The research revealed that students experience emotional disorders during examinations. Nesrine (2019) found that students often experience worry for the fear of performing poorly during examinations.

The results of this study, however, differ from those of Vaz, Pothyil Alex, and Kamath (2018), who looked into factors impacting undergraduate students' test anxiety. The majority of respondents (61%) experienced minimal or zero test anxiety, according to the results. Two percent of respondents reported having severe test anxiety, 12% experienced moderate test anxiety, and 25% had light examination anxiety. The findings of Vaz, Pothyil et al.

(2018) suggests that most of the respondents had low examination anxiety which is contrary to the results of the current research. This is because the current research was implemented for SHS students who are of tender age as compared to undergraduates.

Causes of Examination Anxiety

The results of the research indicated that anxiety during examination is caused by myriad of factors. The topmost cause of anxiety was students' inability to manage their time effectively. This was followed by the fact that lack of adequate examination preparation on the part of students increases students' anxiety during tests. The research's findings further revealed that when students compare and compete with other studies on test scores, it makes them anxious and this increases their level of anxiety when taking a test. The study further revealed that cramming before examination instill anxiety in the respondents and makes them to perform poorly in examination.

The research implies that students who are able to adhere to effective time management while preparing for examinations are likely to experience less anxiety compared to students who do not adhere to effective time management while preparing for examination. This finding has significant implications, in that, students who are able to manage their time properly while preparing to write an examination, are more likely to eschew engaging in any activity that could waste most of their precious time that could have been channeled to effective study time. When this is done, such students are more likely of covering a lot of ground as far as their examinations are concerned. This could in effect, help reduce any form of anxiety that could pop up while writing a test. The outcome of this research corroborates Qashoa (2013) and Neemati, Hooshangi and Shurideh (2014). On his part, Qashoa (2013) found that students' inability to manage their time effectively is a major cause of test anxiety. Time mismanagement resulting mostly from procrastination leads students to engage in "last-minute learning". Typically, a day or two prior to the examination, students believe that they have not prepared sufficiently. Therefore, owing to last-minute studying, knowledge gets fragmented in students' brains, which causes them to be too anxious throughout the examination setting and, as a result, impairs their memory and capacity to reason coherently. The results of this study also agree with Khan and Madden (2018) who found that fear of failure, poor testing history and lack of preparation are major causes of examination anxiety.

The outcomes of this research are consistent with those of Bentil, Simon, and Adzifomie (2015), who studied at the causes of test anxiety in SHS students. The research used a cross-sectional descriptive survey methodology with a quantitative methodology, and participants of 746 students from both government and private schools in the Effutu municipal assembly was selected by proportionate stratified random sampling. A structured questionnaire was used to gather the data, and descriptive and inferential statistics were used to evaluate it. The researchers reported that although a variety of reasons can make students anxious before exams, a low self-worth emerged as the most important one, with the subjects' workload having the smallest impact.

Effects/ Consequences of Examination Anxiety

The results of the research indicated that examination anxiety has a number of effects on SHS students in the Jomoro Municipality. Among some of these effects include: examination anxiety hinders students' ability to demonstrate their knowledge during examination; it impedes students' performance which intends limits their educational and vocational opportunities, examination anxiety makes it difficult for students to concentrate in the examination hall, it also hinders or interferes with students' ability to do very well in tests. It was however discovered that examination anxiety does not affect students' ability to recall all that they learn. The results of this research implies that students who often experience examination anxiety are likely to face some negative consequences which could largely affect their academic performance. It is therefore important for headteachers, parents as well as school counsellors to put certain practical measure which could assist in resolving the issue of examination anxiety faced by students during examinations. This will greatly aid in enhancing students' intellectual development.

The present research's results concur with those of several authors (Yousefi &Talib, 2010; Harris et al., 2019; Aydin, et al., 2020). For instance, according to Aydin et al. (2020), increased examination anxiety negatively affects studying, which in turn detrimentally impact on students' school performance. Thus, a negative association implies that pupils' educational success declines as examinatio anxiety rises. Similar to this, Yousefi and Talib (2010) found that examination anxiety affects focus and concentration, which in turn affects recall and academic achievement. This is only one means that

examination anxiety affects school achievement. Test anxiety hinders students' ability to demonstrate their knowledge (Aydin, et al, 2020). Additionally, Alemu and Feyssa (2020) noted that examination anxiety is among the elements contributing to students' academic failure and underperformance.

The results of the present research are in line with those of Von der Embse (2018), who suggested that having a high degree of examination anxiety may have a variety of effects on people based on their own qualities and the situation. For example, personality differences between persons and qualities anxiety may affect the level of test anxiety. However, the researchers made it clear that having a lot of examination anxiety has mostly been linked to students' poorer student academic achievement.

Strategies of Reducing /Managing Examination Anxiety

Generally, the study revealed that students employed varied strategies in their quest to manage examination anxiety. Topmost among the strategies employed by students in handling examination anxiety include: going through test questions in order to know the strategy to adopt to answer them, slowly and carefully reading instructions before attempting examination questions, relying on words of encouragement from teachers, parents and friends, displaying positive attitude before, during and after the test plays a significant role in reducing their test anxiety level. It was further discovered that regular completion of past questions before the start of any examination was instrumental in reducing respondents' anxiety level during examination.

Others strategies adopted by students in their attempt to handle include: skipping difficult questions in order to concentrate on simple

questions, writing important formulas, definitions behind the answer booklet, taking a deep breathe in order to manage anxiety provoking situations during examinations, exercising and having a good sleep before writing a test, studying at regular intervals as well as avoidance of last-minute reviewing of my study materials were among the methods adopted by students in their quest to decrease anxiety provoking situations. The research's outcomes suggest that SHS students in the Jomoro Municipality adopt many strategies in the quest to overcome the issue of test anxiety.

This research's results confirm Qashoa (2013) as well as Neuderth, Jabs and Schmidtke (2009). On his part, Qashoa (2013) posited that students must be knowledgeable about the examination. Students should be aware of the exam's length, number of questions, structure, methodologies, grading methodology, and time limits for taking the examination. This means that the more student would feel at ease in a genuine examination situation the more familiar they are with the rules for completing the examination. The results of the present research concur with those of Duraku and Hoxha (2018), who discovered that students can control examination anxiety by developing better habits of studying. Studying at regular intervals as well as avoidance of lastminute reviewing of study materials were the measures adopted by the students to manage anxiety provoking situations. Moreover, the current study is in accordance with that of Weissgerber and Reinhard (2018) who observed that the use of self-testing was effective in reducing anxiety during an examination. Self-testing involves students solving past questions regularly, writing mock tests, quizzes and other preparatory tests. These activities help

students to familiarise themselves with the nature of the test ahead of them and it also boosts their self-confidence.

This study also agrees with Duraku and Hoxha (2018) who indicated that teachers. and friends help children parents, can reduce examination anxiety by promoting confidence in their capacity to complete a variety of school assignments. Words of encouragement from these individuals instill positive emotions and confidence in students during an examination. Brady, Hard and Gross (2018) also found that students benefited from the reappraisal message which encouraged them before writing their examinations, these learners showed less anxiety, improved performance on the test the next day, and improved performance in their various courses.

Demographic characteristic (i.e., gender) and Students' Examination Anxiety

Demographic characteristics are important to students' examination anxiety. The study explored demographic characteristics of respondents' gender against students' examination anxiety. Thus, the research explored whether statistically significant disparities exist in students' examination based on gender respondents.

According to the research's results a statistically significant disparity existed in the test anxiety levels of male and female students in the Jomoro Municipality, t (307) = 2.512, p = .013. The results suggest that both genders of students in the Jomoro Municipality differed in terms of their levels of anxiety experienced during examinations. That is to say, the level of anxiety experienced by males (M= 56.564, SD = 7.446) during examination was higher than the level of anxiety experienced by their female counterparts during examinations (M = 54.475, SD = 7.168).

The implication of this result suggests that, in as much as males are often regarded as head of families, there is a higher responsibility on them to pass their examinations in their quest of achieving their individual career objectives. Because of this, the stakes attached to examinations often pressurize students, which in turn increases their anxiety levels. From this research's finding, the study refused to accept the null hypothesis that "There is no statistically significant difference in students' examination anxiety on the basis of gender" in favour of the alternated hypothesis that "There is a statistically significant difference in students' examination anxiety on the basis of gender".

The study's results concur with Wills and Leathem (2004) that the mean score of test anxiety was more for males than for females. This implies that males were found to be anxious during examinations compared with their female counterparts.

In contrast the findings of this study disagree with various authors (Gurses, Kaya, Gunes & Yolcu 2010; Dan, Ilan & Kurman, 2014; Nunez-Pena, Suarez-Pellicioni & Bono, 2016). For instance, in a 2010 study, Gurses, Kaya, Gunes, and Yolcu found that female students experience greater test anxiety than their male counterparts. These findings imply that variations in demeanor, amounts of contact to threat circumstances, and susceptibility to such circumstances, together with emotional impact surrounding gender roles, could all contribute to gender disparities in anxiety. Thus, it was discovered that female learners were more likely than their male counterparts to have

examination anxiety and uneasiness. The findings of this study also disagree with the ancient perception that test anxiety is a feminine trait (Qashoa, 2013). Such perception encourages females to admit to anxiety.

Demographic characteristic (i.e., age) and Students' Examination Anxiety

Further, this research again investigated disparities that exist in students' examination anxiety based on age. The research discovered a statistically insignificant dispartiy, F(2, 306) = .734, p = .481, in students' anxiety levels with respect to age. This stands to reason that SHS students in the Jomoro Municipality did not differ in their anxiety levels as far as their ages were concerned. In order words, students irrespective of their ages, experienced the same level or some form of examination anxiety.

The results of this research are congruent with those of Chukwuorji and Nwonyi (2015), who reported insignificant association between age and examination anxiety. They observed that students' varying levels of examination anxiety were not significantly influenced by their age.

Chapter Summary

The research conducted in the Jomoro Municipality revealed that senior high school (SHS) students experience high levels of examination anxiety, with common symptoms including tension, stomach upsets, nervousness despite adequate preparation, and increased fear of negative consequences associated with poor performance. Several factors contribute to this anxiety, including poor time management, inadequate preparation, competition with peers, and last-minute cramming.

The study also highlighted various negative effects of examination anxiety on SHS students. It hindered their ability to demonstrate their knowledge, impeded their overall performance, disrupted concentration during exams, and interfered with their excellence in academics. However, it did not significantly affect their ability to recall what they had learned.

In response to this anxiety, students employed various coping strategies. These included reviewing test questions to plan their approach, carefully reading instructions, seeking encouragement from teachers, parents, and friends, maintaining a positive attitude, completing past questions, and using relaxation techniques such as deep breathing and exercise. Regular study intervals and avoiding last-minute cramming were also effective measures.

Interestingly, the research found a statistically significant difference in anxiety levels between male and female students, with males experiencing higher anxiety during examinations. However, no significant differences were observed in anxiety levels based on age, indicating that students of different ages experienced similar levels of examination anxiety.

Overall, the study sheds light on the prevalence, causes, effects, and management strategies of examination anxiety among SHS students in the Jomoro Municipality, underscoring the importance of addressing this issue to enhance students' academic performance and well-being.

NOBIS

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The research's findings are summarized in this chapter, along with recommendations and suggestions for additional research. The research's results served as the foundation for the proposals and counsel for additional research.

Summary

Overview of the Study

The research explored the factors that lead to test anxiety in SHS students in the Jomoro Municipality as well as its impacts and management options. Six objectives guided the research, and they were then translated into four research questions and two hypotheses. These are:

Research Questions

The following research questions guided the study:

- 1. What is the level of examination anxiety among the SHS students in the Jomoro municipality?
- 2. What are the causes of test anxiety among SHS students in Jomoro Municipality?
- 3. What are the effects of examination anxiety among SHS students in Jomoro Municipality?
- 4. How can examination anxiety be managed or reduced among SHS students in Jomoro Municipality?

Hypotheses

The following hypotheses were tested in the study:

 H_{01} : No statistically significant difference exists in students' examination anxiety based on gender.

H_{A1}: A statistically significant difference exists in students' examination anxiety based on gender.

H₀₂: No statistically difference exists in students' examination anxiety based on age

H_{A2}: A statistically difference exists in students' examination anxiety based on age

The related literature, which included the theories and concepts related to the study, as well as empirical studies, was reviewed. The theories that guied the research included Rational Emotive Behavioural Therapy (REBT) and Self-Efficacy. The Conceptual Review covered the concept of anxiety, types of anxiety, symptoms of examination anxiety and the causes and effects of examination anxiety as well as management of examination anxiety. The Empirical Review also discussed the factors that contribute to examination anxiety in students as well as the connection between examination anxiety and academic success.

The research was executed using a descriptive survey design, namely a cross-sectional design with a quantitative research method. All 2,400 SHS students in the Jomoro Municipality's public senior high schools made up the survey's respondents. Three hundred and thirty-one (331) SHS students were surveyed through a multi-stage sampling procedure, although 309 of the questionnaires were completed and submitted, yielding a 93 per cent response

rate. Therefore, 309 responses served as the basis for all analyses. The various scales on the questionnaire were standardised scales adapted from authors in the area of examination anxiety. The scales were pilot tested and acceptable Cronbach's alpha values, (i.e., $\alpha = .70$ and above) were achieved for the research to proceed. Means and standard deviations, independent samples t-test, and one-way analysis of variance were used to analyze the data gathered (ANOVA).

Key Findings

The research yielded the following findings:

- The research generally showed that SHS students within the Jomoro Municipality experienced high levels of examination anxiety. Topmost among the examination anxieties experienced by the students include: feeling tensed as well as experiencing stomach upsets during important examinations, feeling very nervous even after preparing adequately for a test, as well as increased thoughts regarding the negative consequences of performing poorly in examination.
- 2. The study also revealed that anxiety during examination is caused by myriad of factors. The topmost cause of anxiety was students' inability to manage their time effectively. This was followed by the fact that lack of adequate examination preparation on the part of students increases students' anxiety during tests. The research findings further revealed that when students compare and compete with other studies on test scores, it makes them anxious and this increases their level of anxiety when taking a test. The study further revealed that cramming

before examination instill anxiety in the respondents and makes them to perform poorly in examination.

- 3. The study also discovered that examination anxiety has a number of effects on SHS students in the Jomoro Municipality. Among some of these effects include: examination anxiety hinders students' ability to demonstrate their knowledge during examination; it impedes students' performance which intends limits their educational and vocational opportunities, examination anxiety makes it difficult for students to concentrate in the examination hall, it also hinders or interferes with students' ability to perform excellently in examinations. It was however discovered that examination anxiety does not affect students' ability to recall all that they learn.
- 4. Generally, the study revealed that students employed varied strategies in their quest to manage examination anxiety. Topmost among the strategies employed by students in handling examination anxiety include: going through test questions in order to know the strategy to adopt to answer them, slowly and carefully reading instructions before attempting examination questions, relying on words of encouragement from teachers, parents and friends, displaying positive attitude before, during and after the test plays a significant role in reducing their test anxiety level. It was further discovered that regular completion of past questions before the start of any examination was instrumental in reducing respondents' anxiety level during examination. Others strategies adopted by students in their attempt to handle include: skipping difficult questions in order to concentrate of simple questions,

writing important formulas, definitions behind the answer booklet, taking a deep breathe in order to manage anxiety provoking situations during examinations, exercising and having a good sleep before writing a test, studying at regular intervals as well as avoidance of lastminute reviewing of my study materials were some measures the students adopted in their quest to decrease anxiety provoking situations.

- 5. The findings from the research revealed a statistically significant disparity in the test anxiety levels of male and female students in the Jomoro Municipality. The findings suggest that male and female students in the Jomoro Municipality differed based on their degrees of anxiety experienced during examinations. That is to say, the degree of anxiety encountered by males during examination was higher than that of their female counterparts.
- 6. Finally, the research discovered a statistically insignificant disparity in students' anxiety levels with respect to age. This stands to reason that SHS students in the Jomoro Municipality did not differ in their anxiety levels as far as their ages were concerned. In order words, students irrespective of their ages, experienced the same level or some form of examination anxiety.

Conclusions

Premised on the research results, SHS students in the Jomoro Municipality experienced high levels of examination anxiety anytime such students prepare to write examinations. This high examination anxiety could be attributed the consequences of performing poorly in such examination. This to say, the risky nature of Senior High school tests exposes students to high anxieties while they strive to do better in these tests. The research findings also yield adequate facts to conclude that examination anxieties results from a number of causes. Topmost among these factors are the absence of effective time management on the part of examinees. Thus, it is inferred that students who can adhere to effective time management while preparing for examinations are likely to experience less anxiety compared to students who do not adhere to effective time management while preparing for examination.

The study further concluded that the consequences of examination anxiety affect students' academic performances in diverse ways. For instance, the study concluded that examination anxiety hinders or interferes with students' ability to perform excellently in examinations. The study also concluded that SHS students within the Jomoro municipality adopted strategies such as skipping of difficult questions in order to concentrate on simple questions, taking a deep breathe in order to manage anxiety provoking situations during examinations, exercising and having a good sleep before writing a test, in their quest to reduce anxiety provoking situations. It was further concluded that male students experienced intense examination anxiety compared to their female counterpart. The study's ultimate finding was that all students, regardless of their ages, experienced the same amount of examination anxiety.

Recommendations

In order to direct the formation of policies and practices, the recommendations below were made premised on the research's results and the conclusions:

- Since Senior High School students within the Jomoro Municipality generally experienced high levels of examination anxiety, teachers, school counsellors as well as academic advisors are entreated to counsel students on some anxiety reducing strategies (e.i deep breathing, positive self-talk, time management, physical activity among others) preparation, that could assist students deal with the issue of high examination anxiety.
- 2. In view of the findings that rote learning (i.e., cramming before examination) increases students' anxiety level, counsellors should encourage students within the Jomoro Municipality to adopt deep learning approach rather than a surface learning approach. Students who adopt a deep learning approach in their studies, try as much as possible to understand and internalise all that they learn rather than just memorising concepts. Such students are less likely to experience high anxiety relative to students who adopt a rote learning approach in their studies.
- 3. Students within the Jomoro Municipality must be encouraged by school authorities (i.e. headmaster, teachers, etc.) to ensure adequate preparation towards examinations, since inadequate examination preparation on the part of students increases students' examination anxiety. Students can achieve this by ensuring prudent utilisation of their study periods as they prepare to write examinations.
- 4. Since the consequences of high examination anxiety are detrimental to students' academic performance, headteachers, parents as well as school counsellors are entreated to put in place certain practical measures which could assist in resolving the issue of examination anxiety faced by students

during examinations. This to a very large extent, will help promote students' academic performance.

- 5. In view of the findings that regular completion of past questions before the start of any examination is instrumental in reducing students' examinations anxiety, SHS students within the Jomoro Municipality are encouraged to continue to solve pasts questions before sitting for any examination. Solving of past questions could serve as a yardstick to evaluate students' performance as far as what they have studied is concerned. This to a very large extent will help increase students' self-confidence, thereby reducing the issue of examination anxiety. Students are however advised by the findings of this study not to put all their hopes in past questions but rather prepare adequately towards writing every examination.
- 6. Finally, since male students reported greater examination anxiety than their female colleagues, academic counselors at senior high schools in the Jomoro Municipality are inspired by the research outcomes to implement intervention programmes (assessment and evaluation, psychoeducation, relaxation techniques, stress management and study skills training) like student mentoring that could help male students deal with their high exam anxiety.

Implications for Counselling

There are numerous counseling considerations to the research, but only a handful have been included below:

1. The findings of the study depicted that students faced or experienced high tension and stomach upset over impending examinations. This implies that the counsellors must focus on psychoeducation to reduce the tension. This means that counsellors need to provide information, educational materials about tension as well as behavioural disorders. Also, counsellors must focus on relaxation strategies since this will help individuals to reduce physiological responses which comes with test anxiety. Again, diaphragmatic breathing can be used to address the tension among students.

- 2. The research also discovered that students in Jomoro Municipality experienced negative taught about an impending test or examination which affects their performance. The implication is that counsellors need to focus on rational emotive behavioural therapy. The theory helps to address irrational thoughts. Effective application of REBT technique helps individual to change negative thoughts to positive ones which is needed for effective learning. Also, mindfulness must be practiced. Counsellors must encourage students to practice mindfulness which could enhance good mental health and promote efficient learning.
- 3. The study revealed that, examination anxiety is caused by students' inability to manage their time effectively. This implies that counsellors need to focus on effective time management. Students could be encouraged to draw personal timetables which must be inspected by counsellors and teachers regularly.
- 4. It was also discovered from the study that, the students in Jomoro Municipality lacked adequate preparation towards examination. The counsellors need to help the students to be well prepared for the examinations. Students must be counselled to space out their study over few days or weeks and continue to review their notes well ahead of the

examination date. The students must be counselled to have enough sleep prior to the examination day.

- 5. The study also found that cramming contributed to examination anxiety which led to poor academic performance. This implies that academic ability development, including appropriate learning techniques and test-writing abilities, is what counselors should concentrate on. Counselors must make students aware that cramming for examination will not help if a sentence or a word is forgotten.
- 6. The study also revealed that as a result of examination anxiety or fear of test results students could not concentrate in the examination hall. This implies that, counsellors need to make students aware that some level of test anxiety is natural and helpful. Students must focus on positive thinking. That is, they will perform well in the examination. There is the need to counsel the students by making use of self-efficacy approach which encourages one to be firm despites obstacles and failures they may go through in course of the examination. The approach put emphasis on resilience. The counsellors need to help students to cultivate the belief of resilience to be able to cope with difficulties.

Suggestions for Future Research

Future research considerations can should include the following:

- 1. As a result of potential variances in domestic policies, it is advised that this research be reproduced in other private elementary schools.
- 2. The results and conclusions of this research should be supplemented or challenged by qualitative analysis in future studies.

REFERENCES

- Abouserie, R. (1994). Sources and levels of stress in relation to locus of control and self-esteem in university students. *Educational Psychology*, 14(3), 323-330.
- Adler, A. (2013). Understanding human nature (Psychology revivals). Routledge.
- Akinsola, E. F., & Nwajei, A. D. (2013). Test anxiety, depression and academic performance: assessment and management using relaxation and cognitive restructuring techniques. *Psychology*, 4(06), 18-25.
- Akomolafe, M. J., & Ogunmakin, A. O. (2014). Job satisfaction among secondary school teachers: Emotional intelligence, occupational stress and self-efficacy as predictors. *Journal of Educational and Social Research*, 4(3), 487-487.
- Alemu, B. M., & Feyssa, T. (2020). The relationship between test anxiety and academic achievement of grade ten students of Shirka Woreda, Oromia Regional State, Ethiopia. *African Educational Research Journal*, 8(3), 540-550.
- Allport, G. W., & Ross, J. M. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology*, 5(4), 432-440.
- Alonso, J., Liu, Z., Evans-Lacko, S., Sadikova, E., Sampson, N., Chatterji, S.,
 ... & WHO World Mental Health Survey Collaborators. (2018).
 Treatment gap for anxiety disorders is global: Results of the World
 Mental Health Surveys in 21 countries. *Depression and anxiety*, 35(3), 195-208.

Allsop, J. (2018). Health policy and the NHS: Towards 2000. Routledge.

- Amalu, M. N. (2017). Cognitive test anxiety as a predictor of academic achievement among secondary school students in Makurdi Metropolis, Benue State. *International Journal of Scientific Research in Education*, 10(4), 362-372.
- Amedahe, F. K., & Asamoah-Gyimah, K. (2015). *Introduction to educational research*. UCC Printing Press.
- American Psychiatric Association Division of Research. (2013). Highlights of changes from DSM-IV to DSM-V: Somatic symptom and related disorders. *Focus*, *11*(4), 525-527.
- American Psychological Association. (2000). *Encyclopedia of psychology* (Vol. 8, p. 4128). American Psychological Association.
- Amoah-Saah, I. (2018). Causes, effects, and prevention of teenage pregnancy among students in senior high schools in the Agona west municipality in the Central Region, Ghana [Unpublished master's dissertation, University of Cape Coast].
- Asadullapoor, A. Fati, L. & Gharaee, B. (2010) Metacognitive anxiety and the immediate and delayed judgment of learning. *Journal Psychiat Clinic Psychol. 16 (4), 412–19.*
- Asamoah, D. (2018). Perceived causes of low academic performance of Senior high school students in core mathematics in the Kumasi metropolis [Unpublish Doctoral dissertation, University of Cape coast].

- Balogun, A. G., Balogun, S. K., & Onyencho, C. V. (2017). Test anxiety and academic performance among undergraduates: the moderating role of achievement motivation. *The Spanish Journal of Psychology*, 20. E14, 1-8.
- Balwan, W. K., & Kour, S. (2022). Test anxiety research: Twenty first century in retrospect. J Advanced Educational Philosophy, 6(5), 306-310.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioural change. *Psychological Review*, 84(2), 191-215.
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, 4(3), 359.
- Bandura, A., Adams, N. E., & Beyer, J. (1977). Cognitive processes mediating behavioural change. *Journal of Personality and Social Psychology*, 35(3), 125-138.
- Banks, J., & Smyth, E. (2015). 'Your whole life depends on it': Academic stress and high-stakes testing in Ireland. Journal of Youth Studies, 18(5), 598-616.
- Beck, A. T., & Clark, D. A. (1997). An information processing model of anxiety: Automatic and strategic processes. *Behaviour Research and Therapy*, 35(1), 49-58.
- Bello, S., Afolabi, R. F., & Adewole, D. A. (2019). Job satisfaction and psychiatric morbidity among resident doctors in selected teaching hospitals in southern Nigeria: a web-based survey. *Journal of Occupational Health and Epidemiology*, 8(4), 199-206.

- Bentil, J. (2020). Examination anxiety as correlate of junior high school pupils academic performance in the Effutu Municipality of Ghana. *Advances in Social Sciences Research Journal*, 7(1), 10-23.
- Bless, C., & Higson-Smith, C. (2000). Fundamentals of social research methods, an African perspective (3rd ed.). Cape Town: Juta.
- Bogels, S. M., Alden, L., Beidel, D. C., Clark, L. A., Pine, D. S., Stein, M. B.,
 & Voncken, M. (2010). Social anxiety disorder: Questions and answers for the DSM-V. *Depression and Anxiety*, 27(2), 168-189.
- Bonaccio, S., & Reeve, C. L. (2010). The nature and relative importance of students' perceptions of the sources of test anxiety. *Learning and Individual Differences*, 20(6), 617-625.
- Bower, G. H. (1981). Mood and memory. *American Psychologist*, 36(2), 129-148.
- Bradley, R. T., McCraty, R., Atkinson, M., Tomasino, D., Daugherty, A., & Arguelles, L. (2010). Emotion self-regulation, psychophysiological coherence, and test anxiety: Results from an experiment using electrophysiological measures. *Applied Psychophysiology and Biofeedback*, 35(4), 261-283.
- Branco, R. C. (2021). A semester without exams: Approaches in a small and large course. Journal of Undergraduate Neuroscience Education, 20(1), 58-65.
- Brody, L. R., & Hall, J. A. (2008). Gender and emotion in context. *Handbook* of emotions, 3, 395-408.

- Brown, I., & Inouye, D. K. (1978). Learned helplessness through modelling:
 The role of perceived similarity in competence. *Journal of Personality* and Social Psychology, 36(8), 900-908.
- Brown, R., Duck, J., & Jimmieson, N. (2014). E-mail in the workplace: The role of stress appraisals and normative response pressure in the relationship between e-mail stressors and employee strain. *International Journal of Stress Management*, 21(4), 325-347.
- Bruce, K. L. (2015). A study of the impact of individual student goal-setting based on formative assessment on student achievement (Doctoral dissertation, University of St. Francis).
- Bruce, S. E., Yonkers, K. A., Otto, M. W., Eisen, J. L., Weisberg, R. B., Pagano, M., & Keller, M. B. (2005). Influence of psychiatric comorbidity on recovery and recurrence in generalized anxiety disorder, social phobia, and panic disorder: a 12-year prospective study. *American Journal of Psychiatry*, 162(6), 1179-1187.
- Burden, P. (2004). The teacher as facilitator: Reducing anxiety in the EFL university classroom. *JALT Hokkaido Journal*, 8(1), 3-18.
- Burns, D. J. (2004). Anxiety at the time of the final exam: Relationships with expectations and performance. *Journal of Education for Business*, 80(2), 119.
- Carroll, W. R., & Bandura, A. (1990). Representational guidance of action production in observational learning: A causal analysis. *Journal of Motor Behaviour*, 22(1), 85-97.
- Cassady, J. C. (2010). Test anxiety: Contemporary theories and implications. Anxiety in Schools, (3), 7-26.

- Cassady, J. C., & Johnson, R. E. (2002). Cognitive test anxiety and academic performance. *Contemporary Educational Psychology*, 27(2), 270-295.
- Chamberlain, S., Daly, A. L., & Spalding, V. (2011). The fear factor: Students' experiences of test anxiety when taking A-level examinations. *Pastoral Care in Education*, 29(3), 193-205.
- Chambers, C. T., & Johnston, C. (2002). Developmental differences in children's use of rating scales. *Journal of Paediatric Psychology*, 27(1), 27-36.
- Chapell, M. S., Blanding, Z. B., Silverstein, M. E., Takahashi, M., Newman,
 B., Gubi, A., & McCann, N. (2005). Test anxiety and academic performance in undergraduate and graduate students. *Journal of Educational Psychology*, 97(2), 268-274.
- Chaudhary, A. (2015). Token economy: Important technologies of behaviour modifiers and applied behaviour. *International Journal of Engineering and Management Research (IJEMR)*, 5(2), 497-504.
- Cizek, G. J., & Burg, S. S. (2006). Addressing test anxiety in a high-stakes environment: Strategies for classroom and schools. Corwin Press.
- Cohen, A., Yaakobi, D., Ben-Porat, A., & Chayoth, R. (1989). The effects of biology games on students' anxiety and in their achievement.
 International Journal of Science Education, 11(4), 387-394.
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (6th ed.). Routledge.
- Concannon, F., Flynn, A., & Campbell, M. (2005). What campus-based students think about the quality and benefits of e-learning. *British Journal of Educational Technology*, *36*(3), 501-512.

- Corey, G. (2011). *Theory and practice of counselling and psychotherapy*. Cengage learning.
- Coria-Avila, G. A., Pfaus, J. G., Orihuela, A., Domínguez-Oliva, A., José-Pérez, N., Hernández, L. A., & Mota-Rojas, D. (2022). The neurobiology of behaviour and its applicability for animal welfare: A review. *Animals*, 12(7), 928-931.
- Credé, M., & Kuncel, N. R. (2008). Study habits, skills, and attitudes: The third pillar supporting collegiate academic performance. *Perspectives* on Psychological Science, 3(6), 425-453.
- Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th ed.). Pearson Education.
- Dada, J. O., Babatunde, S. O., & Adeleye, R. O. (2019). Assessment of academic stress and coping strategies among built environment undergraduate students in Nigerian higher education. *Journal of Applied Research in Higher Education*, 11(3), 367-378.
- Das, S. K., Halder, U. K., & Mishra, B. (2014). A study on academic anxiety and academic achievement on secondary level school students. *Indian Streams Research Journal*, 4(6), 1-5.

Deb, S., Chatterjee, P., & Walsh, K. (2010). Anxiety among high school

- students in India: Comparisons across gender, school type, social strata and perceptions of quality time with parents. *Australian Journal of Educational and Developmental Psychology*, *10*, 18-31.
- Degu, G., & Yigzaw, T. (2006). *Research methodology*. Ethiopia Public Health Training Initiative. Retrieved from http://www.cartercenter

- Donker, T., Griffiths, K. M., Cuijpers, P., & Christensen, H. (2009).
 Psychoeducation for depression, anxiety and psychological distress: A meta-analysis. *BMC Medicine*, 7(1), 1-9.
- Dryden, W. (2003). *Reason to change: A rational emotive behaviour therapy* (*REBT*) workbook. Routledge.
- Egbochuku, E. O., & Obodo, B. O. (2005). Effects of systematic desensitisation (SD) therapy on the reduction of test anxiety among adolescents in Nigerian schools. *Journal of Instructional Psychology*, *32*(4), 12-20.
- Eich, E. (1995). Searching for mood dependent memory. *Psychological Science*, 6(2), 67-75.
- Ellis, A. (1980). An overview of the clinical theory of rational-therapy. *A Skill-Based Approach*, (1)29, 13-20.
- Ellis, A. (1994). Reason and emotion in psychotherapy: Revised and updated. New York: Birch Lane Press.
- Ellis, A. (1996). Responses to criticisms of rational emotive behaviour therapy (REBT) by Ray DiGiuseppe, Frank Bond, Windy Dryden, Steve Weinrach, and Richard Wessler. *Journal of Rational-Emotive and Cognitive Behaviour Therapy*, 14(2), 97-121.
- Ellis, A., & MacLaren, C. (2005). *Rational Emotive Behaviour Therapy* (Vol. 40). PORTÁL sro.
- Ergene, T. (2011). The relationships among test anxiety study habits achievement motivation and academic performance among Turkish secondary school students. *Education and Science*, *36*(160), 320-330.

- Farooqi, Y. N., Ghani, R., & Spielberger, C. D. (2012). Gender differences in test anxiety and academic performance of medical Students. *International Journal of Psychology and Behavioral sciences*, 2(2), 38-43.
- Ferdous, F. (2012). A case study of first-year non-English undergraduate students' English learning anxiety in Bangladesh. *Journal of Education* and Practice, 3(9), 1-12.
- Ferris, D., & Tagg, T. (1996). Academic listening/speaking tasks for ESL students: Problems, suggestions, and implications. *TESOL Quarterly*, 30(2), 297-320.
- Fraenkel R.J. & Wallen E.N. (2006) How to design and evaluate research in education. McGraw-Hill.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to design and* evaluate research in education (8th ed.). McGrawHiil.
- Ghana Education Service (2021). *Students' population, Jomoro Municipality*. Retrieved from https://www.google.com/url.
- Glass, G. V., McGraw, B., & Smith, M. L. (1981). Meta-analysis in research. Beverly Hills.
- Goldfried, M. R. (2016). On possible consequences of National Institute of
 Mental Health funding for psychotherapy research and training.
 Professional Psychology: Research and Practice, 47(1), 77-83.
- Gregor, A. (2005). Examination anxiety: Live with it, control it or make it work for you. *School Psychology International*, *26*(5), 617-635.

- Helmond, P., Overbeek, G., Brugman, D., & Gibbs, J. C. (2015). A metaanalysis on cognitive distortions and externalizing problem behaviour: Associations, moderators, and treatment effectiveness. *Criminal Justice and Behaviour*, 42(3), 245-262.
- Hembree, R. (1988). Correlates, causes, effects, and treatment of test anxiety. *Review of Educational Research*, 58(1), 47-77.
- Heng, C. S., Abdullah, A. N., & Yusof, N. B. (2012). Investigating the construct of anxiety in relation to speaking skills among ESL tertiary Learners. 3L: Southeast Asian Journal of English Language Studies, 18(3), 45-50.
- Holt, M. (2007). Agency and dependency within treatment: Drug treatment clients negotiating methadone and antidepressants. *Social Science & Medicine*, 64(9), 1937-1947.
- Hong, E. (1998). Differential stability of individual differences in state, and trait test anxiety. *Learning and Individual differences*, *10*(1), 51-69.
- Howard, E. (2020). A review of the literature concerning anxiety for educational assessments. Retrieved from https://www.researchgate. net/profile
- Huberty, T. J. (2012). Anxiety and depression in children and adolescents:
 Assessment, intervention, and prevention. Springer Science & Business
 Media.
- Iwamoto, D. H., Hargis, J., & Vuong, K. (2016). The effect of project-based learning on student performance: An action research study. *International Journal for the Scholarship of Technology Enhanced Learning*, 1(1), 24-42.

- Jane-Llopis, E. V. A., Hosman, C., Jenkins, R., & Anderson, P. (2003). Predictors of efficacy in depression prevention programmes: Metaanalysis. *The British Journal of Psychiatry*, 183(5), 384-397.
- Jorn, A. C. (2015). Elements of the Biopsychosocial interview of the chronic pain patient: a new expanded model using rational emotive behaviour therapy. *Journal of Rational-Emotive & Cognitive-Behaviour Therapy*, *33*(3), 284-307.
- Kagan, J., Bornstein, M. H., & Lerner, R. M. (2020). Human behaviour. Encyclopedia Britannica, 5, 56-72.
- Karagoz, Y. (2016). SPSS and Amos 23 applied Statistical Analysis. NobelPublishing House.
- Kavanagh, D. J. (1992). Self-efficacy and depression. Self-efficacy. Thought control of action, 177-193.
- Kenny, D. T. (2010). The role of negative emotions in performance anxiety. *Handbook of music and emotion: Theory, research, applications*, 425-451.
- Keogh, E., & French, C. C. (2001). Test anxiety, evaluative stress, and susceptibility to distraction from threat. *European Journal of Personality*, 15(2), 123-141.
- Khripunov, I. (2006). The social and psychological impact of radiological terrorism. *Non-proliferation Review*, *13*(2), 275-316.
- Kidhr, A. Y. (2015). The relationship between social anxiety and mindfulness in Iraqi women living in Iraq and The UK; A comparison Study. *Journal of Educational and Psychological Researches*, 12(44), 1-18.

- Killian, K. D. (2008). Helping till it hurts? A multimethod study of compassion fatigue, burnout, and self-care in clinicians working with trauma survivors. *Traumatology*, 14(2), 32-44.
- Kollmuss, A., & Agyeman, J. (2002). Mind the gap: why do people act environmentally and what are the barriers to pro-environmental behaviour? *Environmental education research*, 8(3), 239-260.
- Kowal, M., Conroy, E., Ramsbottom, N., Smithies, T., Toth, A., & Campbell, M. (2021). Gaming your mental health: A narrative review on mitigating symptoms of depression and anxiety using commercial video games. *JMIR Serious Games*, 9(2), 26-45.
- Krejcie, R. V, & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Krueger Jr, N., & Dickson, P. R. (1994). How believing in ourselves increases
 risk taking: Perceived self-efficacy and opportunity recognition. *Decision sciences*, 25(3), 385-400.
- Lai, J. C. (2009). Dispositional optimism buffers the impact of daily hassles on mental health in Chinese adolescents. *Personality and Individual Differences*, 47(4), 247-249.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing Company.
- Levykh, M. G. (2008). The affective establishment and maintenance of Vygotsky's zone of proximal development. *Educational Theory*, 58(1), 83-101.

- Li, H., & Wang, S. (2013). The role of cognitive distortion in online game addiction among Chinese adolescents. *Children and Youth Services Review*, 35(9), 1468-1475.
- Lindgren, K. P., Kaysen, D., Werntz, A. J., Gasser, M. L., & Teachman, B. A.
 (2013). Wounds that can't be seen: Implicit trauma associations predict posttraumatic stress disorder symptoms. *Journal of Behaviour Therapy and Experimental Psychiatry*, 44(4), 368-375.
- Liza, V. (2011). Stress management techniques: Evidence-based procedures that reduce stress and promote health. *Health Science Journal*, 5(2), 134-140.
- Looker, T., & Gregson, O. (1997). Managing stress: Teach yourself. Psychology, 7. 3-5.
- Lu, L., & Argyle, M. (1991). Happiness and cooperation. *Personality and Individual Differences*, 12(10), 1019-1030.
- Lufi, D., Okasha, S., & Cohen, A. (2004). Test anxiety and its effect on the personality of students with learning disabilities. *Learning Disability Quarterly*, 27(3), 176-184.
- Maddux, J. E., & Kleiman, E. M. (2016). Self-efficacy: A foundational concept for positive clinical psychology. *The Wiley handbook of positive clinical psychology*, 89-101.
- Malhotra, G. S., & Mehta, M. (2015). Study skills. A practical approach to cognitive behaviour therapy for adolescents, 57-90.
- Manso, B. F., Awabil, G., & Ntim, E. K. (2017). Efficacy of combined therapy of cognitive restructuring and study skills counselling on test anxiety among senior high school students in Ghana: Efficacy of combined

therapy of cognitive restructuring and study skills counselling on test anxiety among senior high school students in Ghana. *Ghana Journal of Health, Physical Education, Recreation, Sports and Dance, 10*(1), 161-176.

- McCarthy, P. J. (2011). Positive emotion in sport performance: current status and future directions. *International Review of Sport and Exercise Psychology*, 4(1), 50-69.
- McLeod, S. (2008). Social identity theory. Retrieved from www. simply.psychology.com
- Merriam-Webster, I. (2012). Merriam-Webster's Dictionary. Retrieved from https://www.merriam-websster.com/dictionary/dictionary
- Mikulincer, M., Gillath, O., & Shaver, P. R. (2002). Activation of the attachment system in adulthood: threat-related primes increase the accessibility of mental representations of attachment figures. *Journal of Personality and Social Psychology*, 83(4), 881.
- Mirawdali, S., Morrissey, H., & Ball, P. (2018). Academic anxiety and its effects on academic performance. *Journal of Personality and Social Psychology*, 63(2), 7-11.
- Mowrer, O. H. (1939). A stimulus-response analysis of anxiety and its role as a reinforcing agent. *Psychological Review*, 46(6), 553.
- Mugo, L. W. (2012). Factors affecting entrepreneurs' performance in Kenya:
 A case of Nairobi women groups in the Central Business District.
 [Unpublish dissertation, University of Nairobi, Kenya].

- Mwamwenda, T. S. (1994). Gender differences in scores on test anxiety and academic achievement among South African university graduate students. *South African Journal of Psychology*, 24(4), 228-230.
- Nadeak, B., Naibaho, L., & Silalahi, M. (2020). COVID-19 and students' anxiety management. *International Journal of Innovation, Creativity and Change*, *13*(7), 1574-1587.
- National Collaborating Centre for Mental Health (Great Britain), National Institute for Health, Clinical Excellence (Great Britain), British Psychological Society, & Royal College of Psychiatrists. (2011). Common mental health disorders: identification and pathways to care.
- Neemati, N., Hooshangi, R., & Shurideh, A. (2014). An investigation into the learners' attitudes towards factors affecting their exam performance: A case from Razi University. *Procedia-Social and Behavioural Sciences*, 98, 1331-1339.
- Nemati, A. (2012). On the dimensions of test anxiety and foreign language. International Journal of English and Literature, 3(4), 97-102.
- Neukrug, E. S., & Fawcett, R. C. (2019). Essentials of testing and assessment: A practical guide for counsellors, social workers, and psychologists, enhanced. Cengage Learning.
- Neukrug, E. S., & Milliken, T. (2011). Counsellors' perceptions of ethical behaviours. *Journal of Counselling & Development*, 89(2), 206-216.
- Neuman, L. W. (2007). *Basics of social research: Qualitative and quantitative approaches* (2nd ed.). Pearson Education Inc.
- Newfield, C. (2018). *The great mistake: How we wrecked public universities and how we can fix them.* Johns Hopkins University Press.

Novak, G., & Pelaez, M. (2004). Child and adolescent development: A behavioural systems approach. Sage.

Ntim, S. (2016). Do Restrictions in Working Memory Capacity Account for

Decrements in Cognitive Performance of Highly Test-Anxious Individuals? A

Study among Selected Ghanaian University Students. International Journal of Applied Psychology, 6(4), 110-120.

- Oladipo, S. E., & Ogungbamila, A. (2013). Demographic predictors of test anxiety among undergraduates. *International Journal of Learning & Development*, 3(1), 62-66.
- Öner, N. & LeCompte, A. (1985). Durumluk-sürekli kaygı envanteri el kitabı. İstanbul, Boğaziçi Üniversitesi Yayınları

Owusu, G. (2008). Indigenes' and migrants' access to land in peri-urban areas of Accra, Ghana. *International Development Planning Review*, *30*(2), 177-199.

Pallant, J. (2010). SPSS survival manual. Allen & Unwin Publishers.

- Pastorino, E., & Doyle-Portillo, S. (2009). What is psychology? Thomson Wadsworth.
- Paul, G., Elam, B., & Verhulst, S. J. (2007). A longitudinal study of students' perceptions of using deep breathing meditation to reduce testing stresses. *Teaching and Learning in Medicine*, 19(3), 287-292.
- Pena, M., & Losada, L. (2017). Test anxiety in Spanish adolescents: examining the role of emotional attention, and ruminative self-focus and regulation. *Frontiers in Psychology*, 8, 1-7.
- Putwain, D. W. (2008). Deconstructing test anxiety. *Emotional and Behavioural Difficulties*, 13(2), 141-155.

- Putwain, D., & Daly, A. L. (2014). Test anxiety prevalence and gender differences in a sample of English secondary school students. *Educational Studies*, 40(5), 554-570.
- Rafiq, R., Ghazal, S., & Farooqi, Y. N. (2007). Test anxiety in students: semesters vs. annual system. *Journal of Behavioural Sciences*, *17*(1/2), 79-90.
- Rajiah, K., & Saravanan, C. (2014). The effectiveness of psychoeducation and systematic desensitization to reduce test anxiety among first-year pharmacy students. *American Journal of Pharmaceutical Education*, 78(9), 12-20.
- Ramirez, G., & Beilock, S. L. (2011). Writing about testing worries boosts exam performance in the classroom. *Science*, *331*(6014), 211-213.
- Rana, R., & Mahmood, N. (2010). The relationship between test anxiety and academic achievement. *Bulletin of Education and Research*, *32*(2), 63-74.
- Rastegar, M., Akbarzadeh, M., & Heidari, N. (2012). The darker side of motivation: Demotivation and its relation with two variables of anxiety among Iranian EFL learners. International Scholarly Research Notices, Iran.
- Rasul, S., & Bukhsh, Q. (2011). A study of factors affecting students' performance in examination at university level. *Procedia-Social and Behavioural Sciences*, 15, 2042-2047.

Reber, A. S. (1995). The Penguin dictionary of psychology. penguin press.

Ridner, S. H. (2004). Psychological distress: Concept analysis. *Journal of Advanced Nursing*, 45(5), 536-545.

- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 80(1), 1-8.
- Sapolsky, R. M. (2004). Social status and health in humans and other animals. *Annual Review of Anthropology*, 33(1), 393-418.
- Sarason, I. G., & Stoops, R. (1978). Test anxiety and the passage of time. Journal of Consulting and Clinical Psychology, 46(1), 102-109.
- Sarson, S. (2000). Distribution of Wealth in Prince George's Country, Maryland, 1800–1820. *The Journal of Economic History*, 60(3), 847-855.

Schmader, T., Johns, M., & Forbes, C. (2008). An integrated process model of stereotype threat effects on performance. *Psychological Review*, *115*(2), 336.

- Schunk, D. H., Hanson, A. R., & Cox, P. D. (1987). Peer-model attributes and children's achievement behaviours. *Journal of Educational Psychology*, 79(1), 54-60.
- Seipp, B. (1991). Anxiety and academic performance: A meta-analysis of findings. *Anxiety Research*, 4(1), 27-41.

Selye, H. (1975). Stress and distress. *Comprehensive Therapy*, 1(8), 9-13.

- Sharma, G. (2017). Study habit of high and low achiever. Indian Journal of Positive Psychology, 8(2), 158-161.
- Sharma, R. R., & Sharma, N. P. (2015). Opening the gender diversity black box: causality of perceived gender equity and locus of control and mediation of work engagement in employee well-being. *Frontiers in Psychology*, *6*, 1371.

- Shield, T. W. (1995). Orientation dependence of the pseudoelastic behaviour of single crystals of Cu- Al- Ni in tension. *Journal of the Mechanics and Physics of Solids*, 43(6), 869-895.
- Shields, M. (2004). Use of wheelchairs and other mobility support devices. *Health Reports*, 15(3), 37-41.
- Singh, K., Junnarkar, M., & Sharma, S. (2015). Anxiety, stress, depression, and psychosocial functioning of Indian adolescents. *Indian Journal of Psychiatry*, 57(4), 367-374.
- Slawson, C. D. (1991). Improving materials for teaching context skills. *Journal of Reading*, *34*(6), 456-461.
- Spielberg, S. P. (1980). Acetaminophen toxicity in human lymphocytes in vitro. Journal of Pharmacology and Experimental Therapeutics, 213(2), 395-398.
- Spielberger, C. D. (1980). *Test anxiety inventory: Preliminary professional manual*. Consulting Psychologists Press.
- Spielberger, C. D., & Vagg, P. R. (Eds.). (1995). Test anxiety: Theory, assessment, and treatment. Taylor & Francis.
- Straus, M. A., & Donnelly, D. A. (2017). Beating the devil out of them: Corporal punishment in American families and its effects on children. Routledge.
- Straus, M. A., & Paschall, M. J. (2009). Corporal punishment by mothers and development of children's cognitive ability: A longitudinal study of two nationally representative age cohorts. *Journal of Aggression*, *Maltreatment & Trauma*, 18(5), 459-483.

- Syokwaa, K. A., Aloka, P. J., & Ndunge, S. N. F. (2014). The relationship between anxiety levels and academic achievement among students in selected secondary schools in Lang'ata District, Kenya. *Journal of Educational and Social Research*, 4(3), 403-403.
- Tang, K. H. D. (2018). Correlation between sustainability education and engineering students' attitudes towards sustainability. *International Journal of Sustainability in Higher Education*, 19(3), 459-472.
- Tarrier, N., Liversidge, T., & Gregg, L. (2006). The acceptability and preference for the psychological treatment of PTSD. *Behaviour Research and Therapy*, 44(11), 1643-1656.
- Taşğin, O.., Tekin, M., & Altinok, E. (2007). The study about physical education teachers 'levels of anxiety from the aspect of a number of modifiers (sample Batman). Ataturk Journal of Physical Education and Sports Sciences, 9, 12-20.
- Tobias, S. (1985). Test anxiety: Interference, defective skills, and cognitive capacity. *Educational Psychologist*, 20(3), 135-142.
- Tooranposhti, M. G. (2011). A new approach for test anxiety treatment, academic achievement and met cognition. *International Journal of Information and Education Technology*, 1(3), 221-230.
- Twenge, J. M., & Joiner, T. E. (2020). US Census Bureau-assessed prevalence of anxiety and depressive symptoms in 2019 and during the 2020 COVID-19 pandemic. *Depression and Anxiety*, 37(10), 954-956.

- Unruh, S. M., & Lowe, P. A. (2010). The development and validation of a Spanish language version of the test anxiety inventory for children and adolescents. *Hispanic Journal of Behavioural Sciences*, *32*(1), 164-183.
- Vaz, C. J., Pothiyil, T. D., George, L. S., Alex, S., Pothiyil, D. I., & Kamath,
 A. (2018). Factors influencing examination anxiety among undergraduate nursing students: An Exploratory Factor Analysis. *Journal of Clinical & Diagnostic Research*, 12(7),18-25.
- Von der Embse, N. (2018). The promise of school-based mental health within multi-tiered systems of support: A Response to Humphrey. *Psychology of Education Review*, 42(1), 39-44.
- Weare, K., & Huppert, F. (2016). Mindfulness in education. The psychology of meditation: Research and Practice, 10(1), 259-281.
- Weems, C. F., Taylor, L. K., Costa, N. M., Marks, A. B., Romano, D. M., Verrett, S. L., & Brown, D. M. (2009). Effect of a school-based test anxiety intervention in ethnic minority youth exposed to Hurricane Katrina. *Journal of Applied Developmental Psychology*, 30(3), 218-226.
- Weinberg, R., Gould, D., & Jackson, A. (1979). Expectations and performance: An empirical test of Bandura's self-efficacy theory. *Journal of Sport and Exercise Psychology*, 1(4), 320-331.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92(4), 548-555.
- Wittmaier, B. C. (1972). Test anxiety and study habits. *The Journal of Educational Research*, 65(8), 352-354.

- Yahav, R., & Cohen, M. (2008). Evaluation of a cognitive-behavioural intervention for adolescents. *International Journal of Stress Management*, 15(2), 173-188.
- Yasmin, H., Khalil, S., & Mazhar, R. (2020). COVID 19: Stress management among students and its impact on their effective learning. *International Technology and Education Journal*, 4(2), 65-74.
- Yerkes, R. M., & Dodson, J. D. (1908). The relation of strength of stimulus to rapidity of habit-formation. *Journal of Comparative Neurology and Psychology*, 18, 459-482.

Zeidner, M. (1998). Test anxiety: The state of the art. New York: Plenum

- Zeidner, M. (2007). Test anxiety in educational contexts: Concepts, findings, and future directions. In *Emotion in education* (pp. 165-184). Academic Press.
- Zhang, W., Ross, J., & Davidson, J. R. (2004). Social anxiety disorder in callers to the Anxiety Disorders Association of America. *Depression and anxiety*, 20(3), 101-106.

NOBIS

APPENDICES

APPENDIX A

INTRODUCTORY LETTER UNIVERSITY OF CAPE COAST

COLLEGE OF EDUCATION STUDIES FACULTY OF EDUCATIONAL FOUNDATIONS

DEPARTMENT OF GUIDANCE AND COUNSELLING

Telephone: 0332091854 E-mail: dgc@ucc.edu.gh



UNIVERSITY POST OFFICE CAPE COAST, GHANA

March 17, 2022

Our Ref: DGC/L.2/Vol.1/ 174 Your Ref:

TO WHOM IT MAY CONCERN

LETTER OF INTRODUCTION

We introduce to you, Elijah Donkolr a student pursuing an M.Phil programme in Guidance and Counselling at the Department of Guidance and Counselling of the University of Cape Coast. As a requirement, he is to submit a Thesis on the topic: "Causes, Effects and Management of Examination Anxiety Among Senior High School Students in Jomoro Municipality, Ghana". We are by this letter affirming that, the information he will obtain from your Institution will be solely used for academic purposes.

We would be most grateful if you could provide him with the necessary assistance.

Thank you.

Dr. Stephen Doh Fia **HEAD OF DEPARTMENT**

APPENDIX B

ETHICAL CLEARANCE

	UNIVERSITY OF ĆAPE COAST
	COLLEGE OF EDUCATION STUDIES
*	ETHICAL REVIEW BOARD
· ·	UNIVERSITY POST OFFICE
	CAPE COAST, GHANA
Our Ref: CD-ERB/U	cc.edu/V6/22-20 200 Date: 25th Mond, 2022
Your Rof:	
	Dear Sir/Madam,
•	ETHICAL REQUIREMENTS CLEARANCE FOR RESEARCH STUDY
<u>Chairman, CES-ERB</u> Prof. J. A. Omotosho <u>iomotosho@ucc.edu.gh</u> 0243784739	The bearer, flijah Donkor, Reg. No. Flace 20/00/4 M.Phil. / Her Student in the Department of Guidence. and Courselling in the College of Education Studies, University of Cape Coast, Cape Coast, Ghana. He / She wishes to
<u>Vice-Chairman, CES-ERB</u> Prof. K. Edjah	undertake a research study on the topic:
kedjah@ucc.edu.gh 0244742357	Causes, effects and management of examination
	anociety onlong genin high school students
<u>Secretary, CES-ERB</u> Prof. Linda Dzama Forde Hordo@ucc.edu.gh	in Jonisno Municipality, Ghang.
0244786680	
	The Ethical Review Board (ERB) of the College of Education Studies
	(CES) has assessed his/her proposal and confirm that the proposal

(CES) has assessed his/her proposal and confirm that the proposal satisfies the College's ethical requirements for the conduct of the study.

In view of the above, the researcher has been cleared and given approval to commence his/her study. The ERB would be grateful if you would give him/her the necessary assistance to facilitate the conduct of the said research.

Thank you. Yours faithfully,

Prof. Linda Dzama Forde (Secretary, CES-ERB)

APPENDIX C

QUESTIONNAIRE FOR STUDENTS

This study seeks to examine the causes and effects, as well as the management of examination anxiety among students in Senior High Schools in Jomoro Municipality The information you provide in this questionnaire is strictly for academic purposes. Participation in this study is not compulsory. Any information you provide will be kept anonymous and confidential. Please provide responses as honestly as possible. Thank you.

SECTION A – DEMOGRAPHIC INFORMATION

Instruction: Please check $(\sqrt{})$ or write where necessary.

NOBIS

SECTION B – SPIELBERGER'S INSTRUMENT ON LEVEL OF EXAMINATION ANXIETY AMONG STUDENTS

Please read the following statements carefully and check $[\sqrt{}]$ the option which best applies to you, using the following options: Almost Never, Sometimes, Often, Almost Always.

SN	Statements	Almost never	Some times	Often	Almost always
	Test Anxiety-Trait				
1.	I feel confident and relaxed while taking tests.				
2.	I wish examinations did not bother me so much.	5	3		
3.	During important tests, I am so tense that my stomach gets upset.	~			
4.	After an examination is over, I try to stop worrying about it, I just can't.	5			
	Test Anxiety-Worry				
5.	Thinking about my grade in a course				
0.	interferes with my work on tests.				
6.	I freeze up on important exams.				
7.	During exams, I find myself thinking				
	about whether I will ever get through		_		
	school.			1	
8.	The harder I work at taking a test, the				
	more confused I get.			/	
9.	Thoughts of doing poorly interfere with				
	my concentration on tests.				
10.	I seem to defeat myself while working				
	on important test.			- <u>y</u>	
11.	During tests, I find myself thinking	1-	1		~
	about the consequences of failing.		V		
12.	During examination, I get so nervous			X	
	that I forget facts I really know.				
	Test Anxiety-Emotionality			0	
13.	While taking examinations, I have an				
	uneasy sad feeling.				
14.	I feel very jittery when taking an	~			
	important test.				
15.	Even when I am well prepared for a test,				
	I feel very nervous about it.				
16.	I start feeling very uneasy just before				
	getting a test paper back.				
17.	During test, I feel much tensed.				
18.	I feel very panicky when I take				
	important test				
19.	I worry a great deal before taking an				
	important examination.				
20.	I feel my heart beating fast during				
	important tests.				

statements

SECTION C: SPIELBERGER'S INSTRUMENT ON CAUSES OF

EXAMINATION ANXIETY

Using a continuum of 1-5, where 5= strongly agree, 4 = agree, 3 = uncertain, 2

= disagree and 1 = strongly disagree, how do you agree to the following

SN	Statements	1	2	3	4	5
1.	Fear of failure makes me anxious.	2	Ŋ			
2.	Pressure to perform well on high- stakes tests causes, anxiety in me.	(
3.	Focusing on negative consequences of a failing test makes me anxious.					
4.	Past negative experience with taking a test worries me.					
5.	Perfectionism makes me anxious when taking a test.			_	/	
6.	Examination performance related to self-esteem makes me tense			_		
7.	Competitiveness and comparison with other students score makes me anxious when taking a test.				9	
8.	Lack of preparation creates tense in me during exam.				5	
9.	Cramming before the examination makes me to perform poorly.				ð,	
10.	Lack of sleep before examination day worries me during a test.		X	S		
11.	Inadequate time management causes my failure in examination.	5	2			



SECTION D – SPIELBERGER'S INSTRUMENT ON EFFECT OF TEST ANXIETY AMONG STUDENTS

Please read the following statements carefully and check $[\sqrt{}]$ the option which best applies to you, using the following options: Almost Never, Sometimes, Often, Almost Always.

	SN	Statements	Almost never	Some times	Often	Almost always
	1.	Test anxiety hinders or interferes with my ability to perform excellently in my examinations.	NI			
	2.	I often end up expressing self-doubt and lack the ability to handle challenging academic activities as a result of examination anxiety	<i>U</i>),			
	3.	Testanxietyimpedesmyperformanceasa student, and thislimitsmyeducationalandvocationalopportunities.				
	4.	High test anxiety often propels me to choose and pursue careers that are not proportional to my cognitive abilities	Y			
	5.	Examination anxiety affects my ability to recall all that I learnt.			9	
2	6.	Examination anxiety makes it difficult for me to concentrate in the examination hall.	Ľ,		5	$\langle \rangle$
	7.	Examination anxiety hinders me from demonstrating my knowledge on examinations.			S.	

NOBIS

SECTION E – SPIELBERGER'S INSTRUMENT ON MANAGING TEST ANXIETY AMONG STUDENTS

Please read the following statements carefully and check $[\sqrt{}]$ the option which best applies to you, using the following options: Almost Never, Sometimes, Often, Almost Always.

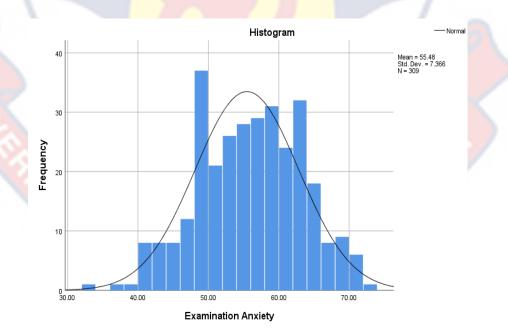
SN	Statements	Almost never	Some times	Often	Almost always
1.	Adequate preparation towards examinations, helps me to managing anxiety provoking situations.				
2.	Maintaining a positive attitude before, during and after the test play a significant role in reducing my test anxiety level.		3		
3.	Exercising and having a good sleep before the test reduces my test anxiety level.				
4.	I often take a deep breathe in order to manage anxiety provoking situations during examinations.				
5.	In my quest to manage examination anxiety, I slowly and carefully read the instructions before attempting the questions				
6.	I usually go through the test questions in order to know the strategy to use in answering them; this helps me in managing examination anxiety.				
7.	Getting myself familiar with the testing environment by finding my seat and relaxing before the start of the examination reduces my anxiety level.			2	
8.	Regular completion of past questions before the start of any examination reduces my anxiety level.	7			
9.	Words of encouragement from my teachers, parents and friends empowers me to manage my anxiety level.				
10.	Studying at regular intervals as well as avoidance of last-minute reviewing of my study materials helps me to reduce anxiety provoking situations.	R			
11.	In my quest to manage examination anxiety, I often write important formulas, keywords definitions behind my answer booklet.				
12.	In order to manage examination anxiety, I often skip difficult questions and concentrate on simple ones.				

APPENDIX D

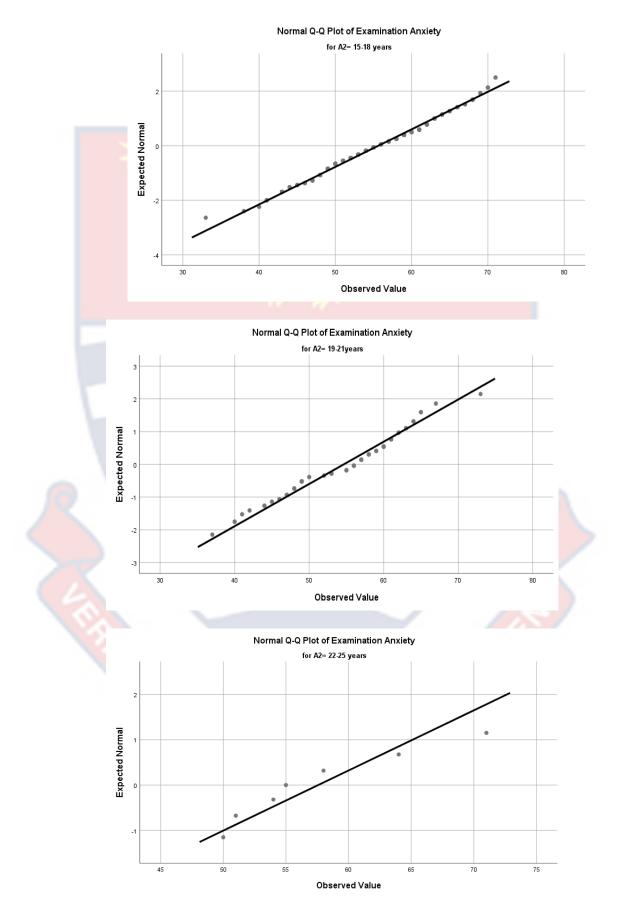
OUTPUT RESULTS

HYPOTHESIS ONE

	Descriptive						
	-			Std.			
			Error				
Examination	Mean		55.4822	.41903			
Anxiety	95% Confidence	95% Confidence Lower					
	Interval for Mean	Bound					
		Upper	56.3067				
		Bound					
	5% Trimmed Mean	5% Trimmed Mean					
	Median	56.0000					
	Variance		54.257				
	Std. Deviation		7.36593				
	Minimum		33.00				
	Maximum						
	Range	40.00					
	Interquartile Range	11.00					
	Skewness		142	.139			
	Kurtosis	417	.276				



OUTPUT RESULTS FOR HYPOTHESIS TWO



Digitized by Sam Jonah Library