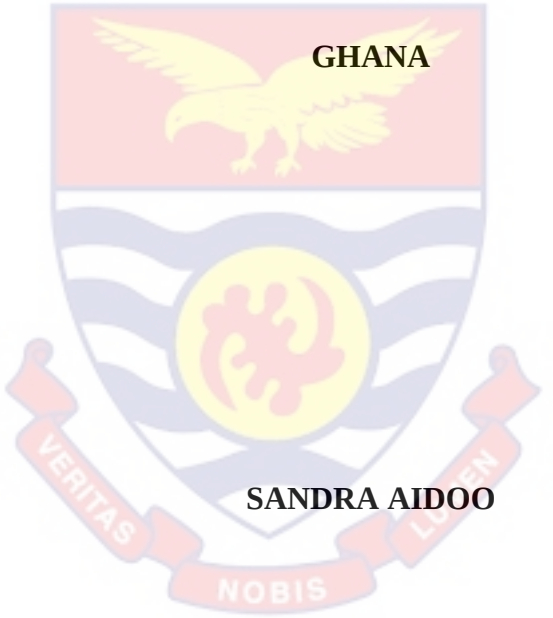
UNIVERSITY OF CAPE COAST

INFLUENCE OF TIME MANAGEMENT PRACTICES, DEPRESSION, ANXIETY AND STRESS ON ACADEMIC PERFORMANCE OF SENIOR HIGH SCHOOL STUDENTS IN THE OKERE DISTRICT OF GHANA



SANDRA AIDOO

2023

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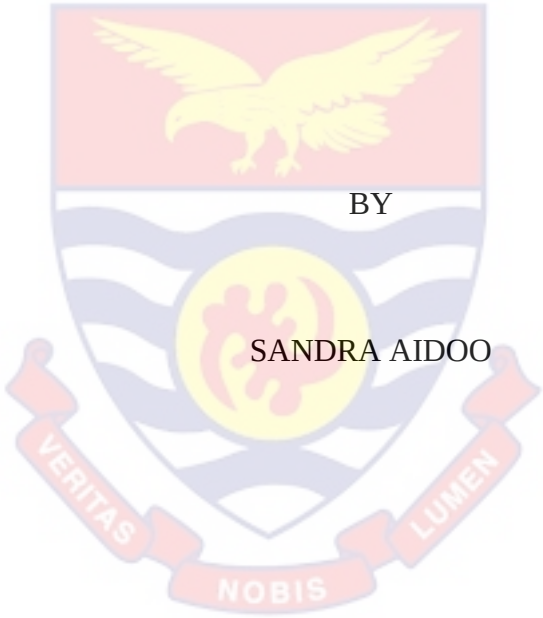

BY

SANDRA AIDOO

Thesis submitted to the Department of Vocational and Technical Education of the Faculty of Science and Technology Education, College of Education Studies, University of Cape Coast, in partial fulfilment of the requirements for the award of a Master of Philosophy degree in Home Economics

NOVEMBER, 2023

DECLARATION

Candidate's Declaration

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

Candidate's Signature…… Date ……

Name: …….

Supervisor Declaration

I hereby declare that the preparation and presentation of the thesis was supervised following the guidelines on supervision of thesis laid down by the University of Cape Coast, Cape Coast.

Supervisor's Signature…… Date ……..……

Name: ……..…….

ABSTRACT

This study examined the influence of time management practices, and distress on the academic performance of senior high school students in the Okere District, Ghana. The research was conducted with a focus on a single research question and four hypotheses. Employing a descriptive survey design and a quantitative approach, the study utilised multi-techniques procedures, including purposive, proportionate, and simple random sampling, to identify and select a sample of 313 participants. Time management practices scale, depression, anxiety and stress scale were adapted to collect data for the study. Mean and standard deviations, structural equation model, independent sample t-test and moderation analysis were used to analyse the data. The findings of the study revealed higher levels of time management practices among students. The findings indicated that despite time management practices having a positive relationship with academic performance, overall time management practices were not found to influence the academic performance of students. The study also showed that despite depression, anxiety and stress having a relationship with academic performance, overall depression, anxiety and stress were not statistically significant to the academic performance of the students. The study also revealed that there is no gender difference in depression, anxiety and stress among students. The study further indicated that gender did not moderate the effect between time management practices and the academic performance of the students. The study recommended that educational institutions should consider offering time management workshops to improve time management strategies, goal-setting and organization skills among students.

KEY WORDS

Time management practices

Depression

Anxiety

Stress

Academic Performance

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DEDICATION

To my family and husband

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CHAPTER ONE

INTRODUCTION

Background to the Study

The significance of successfully and efficiently managing time has been emphasized throughout history, and it is generally viewed as the key to success (Nasrullah & Khan, 2015). Time is an irreplaceable source. Time is the only resource that cannot be saved for later use, modified, or reclaimed once it has been spent. The flow of time is beyond anyone's control, yet individuals have the power to determine how they utilise it. Time management practices involve self-regulation, placing a significant focus on understanding which tasks to prioritise, how to perform them more effectively, the optimal timing for their completion, and when is the most suitable moment for specific activities (Savino, 2016). Additionally, research suggests that effective time management practices is connected to lower levels of anxiety and improved academic performance in students. (Jenaabadi *et al.*, 2016).

The characteristics that define a higher educational institution encompass various elements, with one crucial aspect being the academic achievements of its students. The student's academic success is shaped by a blend of factors, both academic and non-academic, as outlined by Adams and Blair (2019). Such non-academic related factors are time management practices depression, anxiety and stress. It is important to recognise that factors outside of academic realms, which impact students' ability to succeed in higher education, are significant and warrant examination. Hence, the need to investigate the influence of time management practices, depression, anxiety

and stress on the academic performance of Senior High School students in the Okere District.

Time management practices involve the behavioural skills crucial for handling the demands of academic studies and coursework (Douglas *et al.*, 2016). Aduke (2015) stated that time management involves the capacity to structure, plan, coordinate, and track one's time effectively to enhance productivity and efficiency. The rationale for effective time management among students is to help to make the most available time, increasing productivity. By prioritising tasks and focusing on what's most important, students can complete more work in less time. Time management allows students to set and work towards their goals efficiently. It helps students allocate time and resources to tasks and activities that align with their objectives, increasing their chances of success. Poor time management often leads to stress and anxiety. When students have a clear plan and allocate time for tasks, they can reduce the feeling of being overwhelmed, which helps them stay calm and composed. With better time management, students can make more informed decisions. By having a clear picture of their priorities and deadlines, students can make choices that are in line with their long-term objectives.

There are three components of effective time management practices: time attitudes, short-range planning, and long-range planning (Claessens *et al.*, 2007). Time attitude refers to students' positive or negative perspectives on present, future, and past time, which has a direct correlation with academic performance (Nieuwoudt & Brickhill, 2017). Short-range planning involves students' capacity to plan for day-to-day activities, focusing on short-term

goals within a day or week. On the other hand, long-range planning entails students' ability to manage daily tasks over extended periods and align them with objectives set for significant dates. Scholars argue that cultivating these time management behaviours and skills can enhance students' academic performance (Razali *et al.,* 2018). Research has explored the relationship between time management and academic performance, and the findings generally support the idea that effective time management positively correlates with better academic outcomes (Kelly, 2002; Kearns & Gardiner, 2007). For example, a study found that students who reported better time management skills tended to have higher grade point averages (Hensley *et al.,* 2018). Observational data indicates that effective time management helps students reduce procrastination which in turn influences their academic performance. Another study conducted by Wolters, and Brady (2020) demonstrated that students with good time management skills were less likely to procrastinate on assignments, resulting in better academic performance. Blessing (2024) assert that effective time management abilities alleviate students' concerns and stress, leading to improved productivity and performance. Thus, students who can manage their time well are likely to perform well in school.

Research on time management among students has explored gender differences, yielding contradictory results. Several studies, including those by Saketi and Taheri (2010), Pehlivan (2013), and Kaushar (2013), identified a noteworthy distinction between male and female students. Conversely, other studies, such as Saketi and Taheri (2010), and Razali *et al.* (2018), did not observe any significant difference in this regard. Research has also argued that males performed better than females in academics, while others have argued

that females performed better than males. For instance, it was found that girls outperform boys in academics in Senior High Schools (Campbell, 2000; Vincent-Lancrin, 2008; Fortin *et al.,* 2015). In a different scenario, it was observed that males exhibited superior performance compared to their female counterparts. (Goni *et al.,* 2015). Examining the gender differences in time management and academic performance, this current study proposed that gender can influence the association between time management and academic performance. This study, therefore, introduced gender as a moderating variable in moderating the relationship between time management and academic performance of Senior High School students.

Depression, identified as major depressive disorder (MDD), is a prevalent and significant mental health issue marked by enduring and profound emotions of sadness, despair, and a diminished inclination or enjoyment in various activities (Sarason, 2002). It transcends the usual fluctuations that individuals encounter in their day-to-day existence and can significantly disrupt a person's capability to function and lead a fulfilling life. Depression is a complex condition, and its causes can be multifactorial. Biological factors, such as imbalances in neurotransmitters in the brain, genetic predisposition, and hormonal changes, can contribute to depression (Jesulola *et al.,* 2018). Factors, like negative thought patterns and past traumatic experiences, also play a role. Various environmental factors, such as chronic stress, traumatic experiences, and significant life changes, have the potential to trigger or worsen depression.

Several Senior High School students experiencing depression might struggle to excel academically due to a lack of confidence in their endeavours

(Wang *et al.,* 2021). These students may perceive that they are not meeting their self-set performance standards, leading to persistent feelings of disappointment and despair. Consequently, they adopt a negative outlook, viewing themselves as failures. This mindset can lead to significant challenges in their academic journey, including the attainment of low grades.

Depression harms Senior High School students' mental health, affecting student's performance (Vos *et al.,* 2017). The prevalence of symptoms associated with depression in Senior High School students has been documented to be elevated on the whole (Rotenstein *et al.,* 2016). Various investigations indicated that the occurrence of depression in students ranged from 28% to 66.8%. (Kumar *et al.,* 2017; Shi *et al.,* 2016; Puthran *et al.,* 2016). Indications of depression in students encompass decreased time spent studying, weight increase or loss owing to changes in appetite, Impaired cognitive processes, challenges in focusing, and uncertainty in decision-making. (Yusoff *et al.,* 2013), which is recognised as a factor posing a risk to the performance of students (Bassols *et al.,* 2014). Research indicates that the academic performance of Senior High School (SHS) students can be impacted by various signs of depression. These signs encompass difficulties in sustaining concentration, reduced enthusiasm and drive, preoccupations, tiredness, and decreased participation (Macklem, 2015). Similarly, Surtees *et al.* (2002) supported this assertion by stating that these negative symptoms tend to reduce students from achieving higher performance.

Another factor that negatively influences students' success is anxiety. Anxiety is defined as the presence or absence of stress that causes fear, concern, uneasiness, and dread (Bouras & Holt, 2017). Anxiety can be

described as an anticipated emotional state, wherein a person prepares to confront an anticipated negative future event (Barlow, 2002). This distinction helps differentiate anxiety from fear, as anxiety is focused on the future, while fear pertains to addressing current threats (Sylvers & Jamie, 2011). Jacobs and Simon (2004), defines anxiety as the anticipation of something unfavourable happening, accompanied by a feeling of intense apprehension. In essence, anxiety can be described as the experience of unpleasant emotions marked by varying degrees of worry, apprehension, and fear. It emerges when an individual feels uneasy without a clear cause. If this sensation intensifies disproportionately and is not addressed, it can develop into a phobia. Students who exhibit such behaviour often display agitation, and restlessness, and may engage in activities without a clear purpose.

Booth *et al.* (2016) divided anxiety into two categories: state anxiety and trait anxiety. State anxiety is a transient emotional state that reflects one's assessment of a difficult situation at a specific point in time. Trait anxiety, on the other hand, is a set of persisting personality traits that refers to consistent variations among individuals that characterize either specific anxieties or overall levels of anxiety. Individuals with trait anxiety have an attitude that reflects their assessment of specific environmental stimuli and events as hazardous or threatening, whereas those with state anxiety experience tension, worry, or restlessness. In such situations, the person feels uptight and responds quickly or overly to external stimuli (Kaplan & Sacuezzo, 2005)

Researchers in the behavioural science domain have conducted thorough investigations into stress and its repercussions, determining that the subject requires further scrutiny (Khan, 2016). Stress is perceived as an

adverse emotional and cognitive behavioural phenomenon that arises when a person endeavours to adjust to or face challenges (Bernstein *et al.*, 2008). Sih (2011) define stress as an uneasy condition of both emotional and physiological heightened responsiveness experienced by individuals in circumstances they view as hazardous or menacing to their overall welfare. Wilks (2008) postulates that "academic stress is the result of a combination of academic-related pressures that surpass an individual's adaptive resources" (p. 107). Academic stress has the potential to impact various aspects of a student's life which encompasses aspects such as academic performance, drive, well-being, self-perception, adaptability, and diverse personality elements. Consequently, it appears that academic stress plays a noteworthy role in shaping a person's career trajectory, beginning as early as the start of their schooling journey. Jerusalem and Schwarzer (2014) individual may view stressful experiences as "challenging" or "threatening" throughout the evaluation process.

When students perceive their educational experience as a challenge, stress can foster a feeling of competence and enhance their ability to learn (Vestad & Tharaldsen, 2022). On the contrary, if education is viewed as a danger, stress may generate a sense of powerlessness, a sense of impending doom and a feeling of losing control (Thompson *et al.*, 2022). Research conducted by Erkutlu and Chafra (2006) affirmed that an abundance of stress has detrimental effects on students' academic performance. Factors contributing to students experiencing stress include time constraints, the pressure to excel in exams, the fear of academic setbacks, and the

overwhelming load of assignments or competition with peers (Fairbrother & Warn, 2003).

In summary, factors such as time management practices (Beiter *et al.*, 2015; Erschens *et al.*, 2018), depression (Webber *et al.*, 2019), anxiety (DeRosier *et al.*, 2013) and stress (Galatzer-Levy *et al.*, 2012) are important constructs that help students excel in their academic pursuits. The influence of time management practices, depression, anxiety and stress on the academic performance of students has been an issue of relevance for most scholars within the realm of education because their importance cannot be overlooked due to their impact, both positive and negative, on different results such as academic performance (Aryana, 2010) and the ability to confront life's challenges. This study, therefore, examines the influence of time management practices, depression, anxiety and stress on the academic performance of Senior High School students in the Okere District.

Statement of the Problem

In Ghana, Senior High Schools are well-known for training students to enter tertiary institutions to become future leaders (Manuh *et al.*, 2007). Before a student may enter into a tertiary institution, he or she must complete a significant amount of academic work. This then necessitates students to pass their examination before being issued a certificate. With this, there is a significant need for educators to deliver high-quality education at the Senior High School level. This demand on teachers has, in turn, been passed on to students through their academic engagements, whether directly or indirectly. Students are anticipated to engage in a combination of classroom sessions and hands-on tasks to fulfil the requirements of each term's courses. Successfully

managing their time is crucial for these students, given the combination of classroom activities and assessments associated with the courses. (Agormedah *et al.*, 2021). From my interactions with some of the students and supported by Agormedah *et al.* (2021), it appears that, given their academic pressures, some of the students experience inefficient time management practices. Students frequently express dissatisfaction with the insufficient time available to fulfil their assigned tasks. Attempting to cover all the prescribed readings, meet assignment deadlines, and engage in extracurricular activities can lead students to feel overwhelmed, as they perceive a scarcity of time to adequately complete their workload. This is because, without proper time management depression, anxiety and stress can set in their academic life which may negatively influence their performance (Gallardo-Lolandes *et al.*, 2020).

Existing literature presents contradictory findings regarding the relationship between time management practices and academic performance (Kharadze *et al.*, 2017; Uzir *et al.*, 2020). While some studies report that effective time management positively influences academic success (Nasrullah & Khan, 2015; Nigussie, 2019; Razali *et al.*, 2018; (Tanriogen & Iscan, 2009; Grave, 2011; Ogundipe & Falade, 2014), others argue that time management has no significant impact on academic performance (Agormedah *et al.*, 2021; Nzewi *et al.*, 2012; Swart *et al.*, 2010; Balduf, 2009; Alghaswyneh & Basri, 2015). These inconsistencies in findings may arise from differences in research methodologies, sample characteristics, or contexts where the studies were conducted (Chen *et al.*, 2021). However, most of these studies have been conducted outside of Ghana, leaving a contextual gap regarding how time

management relates to academic performance in Ghanaian Senior High Schools. Hence, the need for further research in this regard.

In addressing the issue of academic performance, studies conducted have focused on single elements in predicting academic performance. For example, a study by Mirhosseini *et al.* (2022) and Sindhu (2016) examined the influence of depression on academic performance. The results of the investigation confirmed that depression has a detrimental effect on students' performance, their study did not cover anxiety and stress. Similarly, Choudhury and Sharma (2020), and Vitasari *et al.* (2010) led a study on anxiety and academic performance among university students. Their study did not cover depression and stress among students. Moreover, majority of the studies found in literature were more on tertiary students and this current study focused on Senior High School students (Misra & McKean, 2000). What remains unknown from these studies in Ghana is the combined influence of depression, anxiety, and stress on the academic performance of Senior High School students in the Okere District. This leaves an important gap in understanding how depression, anxiety, and stress collectively impact academic performance, particularly in the Ghanaian educational setting.

Additionally, research on gender differences in time management and distress factors has produced mixed results (Kaya *et al.,* 2012; Misra & McKean, 2000). While some studies have found that gender influences time management skills and stress responses Strom *et al.* (2022), others report no significant differences (Chan, 2011). However, the moderating role of gender in the relationship between time management practices and academic

performance remains underexplored, particularly in Ghanaian Senior High Schools.

Given these contradictions and gaps in existing research, this study seeks to provide a comprehensive analysis of how time management practices, depression, anxiety, and stress influence the academic performance of Senior High School students in the Okere District of Ghana. The study further examines whether gender moderates the relationship between time management and academic performance.

Purpose of the Study

The goal was to examine whether time management practices, and distress influence academic performance. Specifically, the study sought to:

1. Examine time management practices among Senior High School students.
2. Determine whether time management practices influence the academic performance of Senior High School students in the Okere District.
3. Examine whether depression, anxiety and stress influence the academic performance of Senior High School students in the Okere District.
4. Determine the difference in depression, anxiety and stress between male and female Senior High School students in the Okere District.
5. Examine the moderating effects of gender in the link between time management practices and academic performance of Senior High School students in the Okere District.

Research Question

1. What are the time management practices among Senior High School students?

Research Hypotheses

1. $H_0$1: Time management practices will not influence the academic performance of Senior High School students in the Okere District.
2. $H_0$2: Depression, anxiety and stress will not influence the academic performance of Senior High School students in the Okere District.
3. $H_0$3: There is no statistically significant difference in depression, anxiety and stress between male and female Senior High School students in the Okere District.
4. $H_0$4: Gender will not moderate the relationship between time management practices and the academic performance of Senior High School students in the Okere District.

Significance of the Study

The significance of the investigation are as follows;

1. The research would be important to stakeholders such as educational administrators, the Directorate of Education, teachers and parents in considering the need to look at and probably add time management practice education to the training process in the country. It would highlight the importance of individuals acknowledging their essence and regulate his or her time management, especially among students in Senior High Schools.
2. Also, policymakers would be informed as to the need to inculcate depression, anxiety and stress training among students in the

formulation of policies founded on the results of the study. They would also be enlightened on the fact that it could be the solution to low academic performance.

3. Finally, the study would provide a literature base, conceptual framework, and procedures of analysis which may serve as a point of reference for scholars who might want to conduct research in the field or replicate the study in a different setting.

Delimitation of the Study

The study was delimited to the examination of specific variables: time management practices, distress (depression, anxiety, and stress), and their influence on the academic performance of Senior High School students. The time management variables included short-range planning, long-range planning, and time attitudes. Academic performance, as the dependent variable, was measured using test scores administered specifically for this study. The scope of the study was further limited to SHS two students in public Senior High Schools within the Okere District of Ghana.

Limitation of the Study

Having just one exam isn't enough to assess academic performance. Hence this could affect the reliability of the findings. Moreover as self-reported questionnaires were used common method of biases may erupt which might also affect the reliability of the findings.

The Organisation of the Rest of the Study

Chapter Two explored the literature relevant to the research, encompassing theoretical and conceptual frameworks alongside empirical investigations into the studied issue. The subsequent chapter, Chapter Three,

depicted the methodology employed in the research, detailing the research design, the research instrument, and the procedures for data collection and analysis. Moving on to Chapter Four, the findings and discussion of the study unveiled. Lastly, the concluding chapter combined key conclusions and recommendations derived from the research findings, while also proposing potential avenues for future studies.

CHAPTER TWO

LITERATURE REVIEW

Overview

This section offers an examination of pertinent literature, offering essential insights relevant to the subject of investigation, "Influence of time management practices and distress on academic performance of Senior High School students in the Okere District." The review of literature encompasses both the conceptual analysis and an examination of empirical evidence. The conceptual review delves into the exploration of relevant concepts, key variables, and theories essential for elucidating the study's variables. On the other hand, the empirical review focuses on summarising findings from studies conducted by other researchers, specifically concerning time management practices, depression, anxiety, and stress.

Theoretical Framework

Pickle Jar Theory

The Pickle Jar Theory, introduced by Wright in 2002, is a contemporary and applicable concept. It proves effective in instructing students on the management of their time. As per this theory, activities can be likened to rocks, pebbles, sand, and water, each representing various demands on our time. Using the pickle jar analogy, begin by placing the rocks into the jar, noting the gaps, and then filling those gaps with pebbles. This metaphor suggests that the primary objectives, symbolized by the rocks, should receive more attention as they occupy the most space, while hobbies, represented by pebbles, require less time. In the end, the sand particles serve as a parallel to both goals and hobbies. Any disturbances diverting attention from the path to

success are depicted as water. Now start adding water, sand, pebbles, and rocks using the same jar and ingredients. It's evident from the observation that the other components have already taken up the entire space, making it impossible for the rocks to fit. Thus, the Pickle Jar theory is based on the idea that time is limited, just like a pickle jar. Our lives symbolize that jar, and its contents whether in volume or space are affected. Each day, we allocate our time to activities of varying importance: some crucial, others less significant, and some entirely inconsequential.

Similar studies have used the Pickle Jar Theory including Wright (2002) who introduced the Pickle Jar Theory to teach individuals how to prioritise tasks effectively. Studies such as Britton and Tesser (1991) demonstrate how time management practices, including prioritization strategies, influence college students' grades. Nyarko (2022) applied short-range planning concepts (aligned with Pickle Jar Theory) to explore the correlation between time management and productivity among workers.

The Pickle Jar hypothesis provides an illustration aimed at assisting individuals in prioritising their day and discerning what is valuable from what is not. As a result, students must understand how to plan their days so that they only include high-priority duties and leave time for less important ones. This theory is relevant to the current study as it illustrates the value of utilising time wisely to achieve success. The analogy of a jar filled with various items without any organization highlights the consequences of lacking structure. Similarly, when one fails to organize their time, goals remain undefined, priorities are unclear, and schedules are absent. Consequently, success becomes elusive as the day becomes consumed by trivial and unimportant

activities. High school students face numerous significant priorities such as group studies, assignments, academic responsibilities, leisure, relationships, and the need for adequate sleep and rest. The ability of students to establish a balance among these activities through effective time management skills may significantly impact their academic accomplishment. Moreover, the theory is useful in this study in emphasizing time prioritisation as a tool for academic success. The metaphor of rocks, pebbles, and sand underscores the need for students to allocate time for high-priority activities like studying while managing other commitments. By organizing their day effectively, students can avoid distractions and inefficiencies

Transactional Model of Stress

Lazarus and Folkman (1984) developed the Transactional Model of Stress, outlining how individuals respond to specific stressors in their external environment. According to their model, not every circumstance or incident is naturally stressful rather, the stressfulness is determined by an individual's subjective assessment of the circumstances as tough, dangerous, or menacing. Consequently, people's reactions to similar stressors can vary due to their different perceptions. Stress, as defined by Lazarus and Folkman (1984), is a specific state between an individual and the surroundings, characterized by the person evaluating the situation as challenging or surpassing their resources and posing a threat to their well-being. For instance, a student facing too many assignments in a short time frame may perceive that they will struggle to complete them within the given time.

According to Lazarus and Folkman’s (1984), stress theory, there are two main ways to assess academic stress: primary assessment and secondary

assessment. Primary assessment involves an individual determining whether a situation is perceived as either threatening or positive. If the assessment deems the situation as threatening, various effects such as injury, illness, worry, anger, disgust, disappointment, anxiety, and fear may manifest. For instance, if a student anticipates a high likelihood of failing a specific course, they may experience pre-event worry before the actual occurrence.

Similar studies have used the Transactional Model of Stress including Vitasari *et al.* (2010) who examined how study anxiety impacts academic performance among engineering students. Wilks (2008) studied how social support mitigates academic stress among university students, reinforcing the role of coping strategies as suggested in the transactional model. These studies demonstrate that the ability to identify stressors and adopt coping strategies aligns with the theoretical underpinnings of the Transactional Model of Stress.

The secondary evaluation takes place when an appraisal is made of the available resources to combat or manage a stressor. Individuals have the option to make use of external resources or internal resources like willpower and inner strength like seeking assistance from peers or professionals. For instance, if a student struggles to grasp a specific lesson, they may decide to allocate additional time to that lesson or seek support from friends or a teacher. Hence, the stress model based on transactions underscores the interactive quality of stress, asserting that it involves a reciprocal interaction where stressors are created by the surroundings and the person looks for coping mechanisms. Lazarus and Folkman's (1984) stress theory are pertinent to this research, providing insights into the examination of significant stressors that may impact students' academic performance and offer strategies for

handling or mitigating these academic stressors. Additionally, this model highlights the role of stress perception and coping strategies in influencing academic outcomes. It is particularly relevant to the study because it explains how students' perceptions of academic challenges (e.g., tight deadlines, workload) can be mitigated by time management and stress-coping mechanisms

Conceptual Review

Time management

Time management is a longstanding subject within the realm of learning and study techniques, holding a pivotal role in educational courses and various guides on effective study methods. According to Claessens *et al.* (2007, p. 135), time management can be characterised as "behaviours that aim at achieving an effective use of time while performing certain goal-directed activities". Time management consists of habits or behaviours that can be learned through gaining more knowledge, training, or intentional practice. (Carolyn *et al.*, 2012). Time management involves establishing objectives, adhering to deadlines, utilizing tools like lists, adapting to changes, formulating plans, and efficiently structuring one's schedule. (Roberts *et al.*, 2006).

The objective of time management for students is to enhance the quality of tasks accomplished within a limited time frame. Effective time management practices, such as setting goals and priorities, along with monitoring time utilization, can promote productivity, boost academic performance, and reduce feelings of depression, anxiety, and stress among students. (Claessens *et al.*, 2004; Kearns & Gardiner, 2007). Aduke (2015)

contended that arranging tasks in order of importance enhances the enjoyment of work and study, leading to decreased inefficiencies, anxiety, and stress. Chaturvedi (2016) argued that effectively managing time, particularly for university students, is crucial as it contributes to improved productivity and academic performance. Time management provides individuals with the ability to organize and regulate their tasks and responsibilities. (Claessens *et al.*, 2004).

Short-Range Planning

Short-range planning was defined as time management activities within a daily or weekly time frame characterised as the process of organising one's time, this involved tasks like establishing daily goals, arranging and prioritizing activities, and formulating lists of tasks to be accomplished (Nyarko, 2022). Short-term planning behaviour, which involves predicting time within a week or less, correlates positively with the grade point average. This form of planning is also linked to achieving goals and managing performance effectively. (Noftle *et al.,* 2007). Similarly, the majority of research that takes student time into account typically assesses the overall time dedicated to the course, a variable often deemed insignificant. Academic achievement refers to the educational goals achieved by a student, teacher, or institution within a specific brief time frame (Lisa & Robert, 2008).

Long-Range Planning

Long-term planning involves establishing goals for an extended period, typically beyond a quarter, and cultivating efficient work habits (Nyarko, 2022). It entails gaining an overview of daily tasks, understanding time constraints, and prioritizing activities to enhance the perception of time

control, facilitating comprehensive planning for all tasks (Kelly, 2004). Conversely, a lack of control over time may result in a need to gauge the effort required for tasks within specific time frames, leading to immediate and measurable planning outcomes. This suggests that effective time management practices not only impact academic success but also influence other aspects beyond education (Brigitte *et al.,* 2005).

Time Attitudes

Nyarko (2022) identified a third aspect of time management that focuses on an individual's beliefs and attitudes toward time. This means that time attitudes encompass the individual's sense of control over time, the belief in effectively managing one's time, and the perception of making purposeful use of time. According to Britton and Tesser, these time attitudes are indicative of a sense of self-efficacy, potentially resulting from the practice of time management behaviours.

Concepts of Depression

Depression is a medical condition impacting individuals' emotions, judgment, and behaviour (American Medical Network, 2011). This condition leads individuals to experience overwhelming feelings of sadness, hopelessness, and helplessness. Described as a persistent mood disturbance, depression involves at least four of the following symptoms: sleep disruption, changes in psychomotor activity, diminished capacity to find pleasure or interest, fatigue, feelings of worthlessness or guilt, difficulty concentrating, and a preoccupation with death or a desire to die (American Psychiatric Association, 1994). It significantly influences one's self-perception. The causes of depression are multifaceted, encompassing genetic, environmental,

psychological, and social factors, often triggered by stressful life events (National Institute of Mental Health, 2011).

Depression can impact people at any point in their lives, with its prevalence being most significant during middle age. Ibrahim *et al.* (2013) notes that numerous students encounter the initial occurrence of a disorder, particularly depression. Those grappling with depression often endure sensations of emptiness and inadequacy, and they tend to achieve lower grades compared to their non-depressed counterparts. Additionally, depressed students commonly grapple with symptoms of anxiety, eating disorders, and substance abuse issues (American College Health Association, 2004).

Depression frequently comes with additional challenges such as anxiety, stress, diminished self-image, low self-confidence, substance abuse, and alcohol consumption. The prevalence of depression or depression-related mental disorders among students has been documented in the American College Health Association (2004). According to the report, approximately 32 per cent of students acknowledged that depression hinders their academic performance. Furthermore, fifteen per cent of students identified depression and anxiety as factors affecting their academic success, as highlighted in the same report.

Concepts of Anxiety

Anxiety, stemming from the Latin term anxietās denoting fear, worry, or apprehension, serves as a signal to the ego according to Freud (1920) when situations deviate from the expected norm, resulting in an inner unpleasant sensation that individuals often seek to evade. Described by Seligman *et al.* (2007) as a physiological state, anxiety encompasses somatic, emotional,

cognitive, and behavioural elements. The term itself, rooted in the concept of trouble, manifests whether or not a stressor is present, inducing sensations of unease, fear, worry, and dread (Bouras & Holt, 2007). Anxiety emerges as a fundamental human emotion in the face of threats to self-esteem or ego amid uncertain, future-oriented situations, as highlighted by Kaur (2024).

Anxiety can also be understood as an anticipated emotional state in which an individual prepares to confront a negative future event, as described by Barlow (2002). This distinction between anxiety and fear lies in the temporal aspect—where anxiety is a forward-looking mood, fear involves dealing with immediate threats (Sylvers & Jamie, 2011). Horwitz (2013) propose that anxiety is characterized by a diffuse and unsettling sense of sadness, accompanied by autonomic symptoms like palpitations, headaches, sweating, and gastric discomfort, leading to a general state of unease. They emphasise that while anxiety is a universal human experience, its symptoms and impacts can vary among individuals. Moreover, the causes of anxiety are diverse and may differ from person to person, making it a subjective and often situational phenomenon.

The primary factors contributing to anxiety among students, according to Shaikh *et al.* (2004), include academic demands, a sense of helplessness, an inability to cope, mental tension, exams, and workload. In these circumstances, students tend to magnify the negative outcomes and perceive themselves as individuals with limited control (Ross & Mirowsky, 2013). The impact of anxiety symptoms on the personal, social, and academic skills of children and adolescents is highlighted by de Lijster *et al.* (2018).

Cooper *et al.* (2018), active engagement in the learning process is more effective than a passive approach, with anxiety serving as a tool to either actively involve students in learning or to motivate them. On the flip side, severe anxiety, can significantly impair academic performance, leading to psychological issues (Ameringen *et al.,* 2003). Females may experience academic failure due to anxiety, while males may face both disruptive behavioural problems and academic challenges (Hasan & Husain, 2016). The cycle continues, as poor academic performance contributes to heightened anxiety, subsequently leading to low self-esteem and other personal and social problems, creating a self-sustaining cycle (Masi *et al.,* 2001).

Concepts of Stress

Stress arises from different stressors and can manifest as either a physical or mental state (Ekpenyong *et al.,* 2013). Describing the concept of stress proves to be a challenging task. Selye (1936, p. 9) suggested the initial and broadest interpretation of stress. "as a nonspecific response of the organism to any request for change." According to Lazarus and Folkman (1984), stress develops when people believe that their ability to adjust to external pressures is inadequate. As per Everly and Lating (2019), stress is a mental condition characterized by specific biochemical responses in the human body and manifested through feelings of anxiety. Stress occurs when an individual faces a load that surpasses their available resources. If stress becomes intense and prolonged, it may hinder academic performance, limit a student's engagement in campus activities, and elevate the risk of substance abuse and other harmful behaviours (Richlin-Klonsky & Hoe, 2003).

According to Khan *et al.* (2013), stress is defined as the perception of a mismatch between the environmental challenges (stressors) and an individual's capacity to meet them. Stress is commonly described by researchers as the negative response people undergo when faced with intense pressure or other forms of strain. It arises when a person encounters a situation deemed insurmountable and beyond their coping abilities (Khan *et al.,* 2013). In the context of advanced educational institutions, students face stress, as noted by Smith *et al.* (2000). This stress is primarily linked to the time constraints and the difficulty associated with excelling in tests or exams. Studies have identified various symptoms of stress, including loss of energy, elevated blood pressure, depressed mood, increased cravings, difficulty concentrating, impatience, nervousness, and anxiety (Agolla & Ongori, 2009). Wintre and Yaffe (2000) concluded that a heightened level of stress among first-year college students leads to lower overall adjustment levels and renders students more vulnerable to various social problems.

The exploration of stress has become a significant focus in both academic research and societal discourse. Research on academic stress, particularly in students, has been an enduring area of interest. Scholars have identified several crucial stressors, such as academic pressures, unhealthy competition among students, the fear of academic failure, financial constraints, strained relationships with teachers, and familial issues (Fairbrother & Warn, 2003). Students encounter stress stemming from diverse factors, including challenges in time management, financial constraints, teacher interactions, personal goals, social dynamics, and difficulties in adapting to a lack of cultural support (Wilks, 2008). Given that stress can have adverse effects on

academic performance, it is essential for students to proactively manage stress to mitigate its negative impact (Mushtaq & Khan, 2012).

Empirical Review

Time management and academic performance

Regarding the correlation between academic success and time management, the existing literature presents diverse results. Numerous empirical studies indicate that achieving effective time management is linked to higher academic performance (e.g., Nadinloyi *et al.*, 2013). For, example, Miqdadi *et al.* (2014) explored the correlation between senior high school students' academic performance and their time management skills, taking into account key factors such as procrastination, workload pressure, distraction, and disorganisation. The research indicate that academic performance is impacted by the way time is managed. In a study conducted by Khanam *et al.* (2017) found that senior high school students who exhibit effective time management skills tend to earn higher grades, whereas those who struggle with time management typically receive lower grades. Another investigation by Nasrullah and Khan (2015) delved into the effectiveness of students' time allocation in meeting academic standards. Their findings demonstrated a positive and noteworthy correlation between time management and senior high school students' overall success.

A study by Nigussie (2019) examines the influence of time management practices (planning, organizing, and directing) on the academic performance of students. The findings of the research indicated that effective planning strongly influenced academic performance among senior high school students. Furthermore, a statistically significant positive correlation was

observed between time management and academic achievement. Nasrullah and Khan (2015) and Al-Zoubi (2016) examined the impact of employing time management strategies on the academic performance of high school students in Jordan. The results indicated a connection between students' academic performance and their ability to manage time effectively.

Cyril (2014), Larbi (2015), Oyuga *et al.* (2016) and Abdulwadod (2017) sought to explore the factors associated with academic performance, specifically focusing on time management elements such as time planning, attitudes toward time, and time-wasting behaviours. Their results of the study emphasized the significant impact of the three factors. namely time planning, attitudes toward time, and time-wasting in strengthening the association with academic performance among secondary school students.

Ngowo (2013) researched the relationship between time management and academic performance in senior high schools, revealing that various indicators of time management skills, including handling time wastage, maintaining accurate attendance records, preventing procrastination, fostering motivation, adhering to strict regulations and policies, and ensuring effective supervision, significantly impacted students' academic performance. This influence was observed in aspects such as classroom and school attendance, syllabus coverage, proficiency in writing and reading skills, and performance in the mathematics subject.

Dahiel *et al.* (2015) and Arumugam *et al.* (2021) conducted an empirical survey exploring the correlation between time management and academic performance in senior high school. Their findings indicated a noteworthy and favourable influence of time management on academic

performance. Dalia and Putra (2023) conducted a study to explore students' perspectives on time management, encompassing planning, organising, directing, and censorship, and its impact on academic achievement. The study also aimed to identify how personal variables influence academic success. The findings indicated a strong correlation between planning and academic achievement, supported by a significant positive relationship between time management and academic performance among secondary school students.

Cemaloğlu and Filiz (2010) conducted at Ghazi University in Turkey, this study investigated the correlation between academic achievement and time management skills in the Education College. The findings revealed that students exhibited a high level of proficiency in planning their time and a minimal tendency to waste time. Additionally, the study identified a significant positive association between the effectiveness of time planning and the extent of time wastage. Moreover, a meaningful relationship was observed between moderate time management skills and academic achievement among students.

Abu Sakour (2003) investigated to identify challenges in time management and decision-making within the education departments of public schools. Employing a descriptive approach for data collection, the researcher found that hindrances in time management were closely linked to challenges in planning, coupled with resource shortages and a slowdown in academic services anticipated in the upcoming year, as revealed by the study results. Fedorov *et al.* (2015) researched to assess the time management capabilities of Yarmouk University students across various faculties. The study sought to explore the connection between time management skills and academic

achievement, taking into account variables such as gender, university year, and faculty. The findings revealed a moderate level of time management proficiency among Yarmouk University students, with a noteworthy association between time management skills and academic success. The study also established a statistically significant positive correlation, indicating a meaningful relationship between time management skills and academic achievement.

Khan *et al.* (2020) examine the impact of time management on the academic performance among secondary school students. A descriptive survey design was employed in the study. The findings indicate that academic performance in students is affected by their ability to manage time effectively. In a study conducted by Ogundipe and Falade (2014), the impact of time allocation on academic performance was explored, with a specific focus on time dedicated to self-study, attendance in courses and seminars, as well as participation in group study. The results suggest a positive correlation between attending classes, participating in seminars, engaging in self-study, and academic success.

Miqdadi *et al.* (2014) explored the correlation between students' academic performance and their adeptness in time management, with a focus on factors such as procrastination, workload pressure, distraction, and disorganization. The research revealed that students who excel academically exhibit effective time management skills. George *et al.* (2008) find that among these factors, time management holds the greatest power over academic achievement and is strongly linked to success.

Ali *et al.* (2013) also determined the variables influencing students' academic performance, with the student's grades serving as the dependent variable. The independent variables considered included time management, parents' socio-economic background, medium of schooling, residential area, and accommodation trend. The research revealed a significant relationship between academic performance and both time management and socio-economic status.

Khanam *et al.* (2017) analysed the impact of students' ability to manage their time on academic achievement, with a specific emphasis on both short-term and long-term planning. The research findings indicated that students who excel in time management tend to attain higher academic grades, whereas those lacking effective time management skills often receive lower grades. Notably, only a minority of students, around one-third, consistently organize and execute their plans based on priorities, while the majority tend to operate without a structured plan, leading to less effective use of their time.

Zulauf and Gortner (2000) carried out a time diary survey at Ohio State Their findings indicated a positive correlation between time management behaviour and GPA. Similarly, Pehlivan (2013) investigated the impact of time management skills on students' academic performance, revealing that students at Karadeniz Technical Institute exhibit a moderate level of proficiency in time management. Britton and Tesser (1991) tested the study that aimed to examine whether college students' grade point averages could be anticipated based on their time-management habits. Regression analyses indicated that two of these time-management components significantly predicted cumulative grade point averages, explaining more variance than

SAT scores. The findings suggest that effective time-management practices may have an impact on academic success in college. Cyril (2014) conducted a study investigating the relationship between time management and the academic achievement of higher secondary students. The findings revealed a noteworthy connection between time management and the academic achievement of higher secondary students.

Despite the positive findings, a significant body of literature has indicated either a detrimental impact or no impact at all of time management on students' academic performance and stress. Consequently, these studies have demonstrated that ineffective time management behaviours lead to subpar academic achievement (e.g., Balduf, 2009; Swart *et al.,* 2010; Alghaswyneh & Basri, 2015). Nzewi *et al.* (2012) in Nigeria revealed that time management does not emerge as a significant factor influencing the Cumulative Grade Point Average (CGPA) among postgraduate students. Similarly, Gayef *et al.* (2017), in a study involving 341 students, observed no significant correlation between students' mean scores in the time management subscale and academic success.

Obiekwe (2019) explored the time management abilities and academic performance of students in public secondary schools through a descriptive survey design. The research utilized questionnaires and an interview guide for data gathering. The findings indicated that students were not effectively applying time management skills to enhance their academic performance. Consequently, no observable connection was identified between time management and academic success. Similarly, Ocal and Tek (2015) investigated the link between academic performance and time management

skills in secondary school students. The results demonstrated no significant correlations between time management subscales and students' academic performance.

Agormedah *et al.* (2021) iinvestigates the impact of time management strategies on the academic achievement of students enrolled in Ghana's Colleges of Education. Additionally, explore how gender may moderate this connection. The results indicated that the academic success of students cannot be predicted by their time management practices, including short-range planning, time attitudes, and long-range planning. Additionally, the study found no evidence that gender plays a moderating role in the connection between time management and students' academic achievement.

Aduke (2015) iinvestigated the relationship between time management and academic achievement among students in secondary school students through a case study. The findings indicated that no significant relationship exists between time management and academic performance in higher education. Al-Khatib (2014) investigated the correlation between time management, stress, gender, and academic performance among a group of students at Al Ain University of Science and Technology in the United Arab Emirates. Consequently, the findings suggested that students generally lacked sufficient knowledge of effective time management.

Kaushar (2013) examined how time management influences the academic performance of college students, revealing a significant and favourable correlation between students' time planning, time management, and their academic performance. Tanriogen and Iscan (2009) assessed students' time management skills and levels, exploring the impact of these skills on

their academic achievement. The results indicated that most students exhibit a moderate level of time management skills. However, the results revealed that time management skills influenced students' academic performance.

Necati and Sevil (2010) conducted an investigation aimed at understanding the correlation between students' academic achievement and their proficiency in time management. The findings revealed a meaningful and moderate association between time management skills and academic success. In a research effort by Sevari and Kandy (2011), the impact of time management skills on academic performance was examined, demonstrating that the cultivation of these skills had a positive influence on students' academic outcomes. Additionally, Swart *et al.* (2010) delved into the connection between time management skills and the academic success of African engineering students. However, the outcomes of the study, subjected to various tests, revealed no statistically significant relationship between time management skills and the academic achievement of African engineering students. Rashid *et al.* (2020) examined the relationship between time management behaviour and the academic performance of university students. The results revealed a notable correlation between the time management behaviour of undergraduate students and their academic performance.

Abdulwadod (2017) examined the impact of time management elements (such as planning, attitudes toward time, and time-wasting habits) on the academic performance of undergraduate students. The study demonstrated that effective time planning, positive time attitudes, and minimizing time-wasting behaviours significantly contribute to improving the correlation with academic performance.

Time Management and Gender

In a cross-sectional investigation conducted by Kaya *et al.* (2012), the time management abilities of 584 university students in nursing and midwifery were evaluated through a time management inventory. The assessment considered gender, age, and anxiety levels. The findings indicated a correlation between gender and efficiency in time management. On average, female students scored higher than their male counterparts, demonstrating greater proficiency in time management. Female students were found to be more successful in utilizing their time effectively, avoiding time wastage, and completing tasks within a shorter expected timeframe compared to male students.

Powell *et al.* (2020) examined the time management abilities of accounting, business, and information systems students, considering age and gender. The study utilized a descriptive survey design and found noteworthy variations between females and males in terms of daily planning and between younger and more mature students. Trueman and Hartley (1996) explored gender differences in time-management skills, specifically focusing on daily planning and confidence in long-term planning. The outcomes indicated that female students exhibited notably superior time-management skills compared to their male counterparts, as concluded by the authors.

Botha (2013) examined the time management proficiency of school principals concerning gender, the research outcomes reveal that male principals exhibit less effective time management skills compared to their female counterparts. According to the findings of Misra and McKean (2000), female principals reported significantly higher scores across various aspects of

time management behaviours, including a perceived better control of time, setting and prioritizing goals, planning, and maintaining an organized approach to tasks and workspace. Additionally, Macan *et al.* (1990) identified notable correlations between gender and time management, noting that women tend to adopt more mechanical time management behaviours, while men perceive a greater sense of control over their time management behaviours.

Carvalho *et al.* (2013) performed a study to determine students' time management skills and gender. The results revealed gender differences in time management practice. Female students obtained higher average scores than male students.

Numerous studies have found no significant gender differences in time management practices for instance, Adams *et al.* (2019) developed the Time Management Behaviour Scale and found no significant differences between male and female students in behaviours such as goal setting, prioritization, and scheduling. This early research challenged assumptions about inherent gender-based disparities in organizational skills.

Similarly, Britton and Tesser (1991) explored the relationship between time management and academic success among undergraduate students. Their findings indicated no differences in how men and women managed their time, including planning and avoiding procrastination, further supporting the idea that time management is not gender-specific. In a related study, Misra and McKean (2000) examined the role of time management in mediating academic stress among university students. They reported that both male and female students exhibited similar habits in task scheduling and balancing workloads.

This finding reinforced the notion that time management behaviours are universal and not influenced by gender.

Building on this, Nonis and Hudson (2010) analysed how time management impacted academic performance among college students. They also found no gender differences in behaviours such as planning and prioritizing tasks, suggesting that the ability to manage time effectively is consistent across genders. Furthermore, a meta-analysis by Claessens *et al.* (2007) synthesized findings from various studies on time management and found no evidence of gender-based differences. This comprehensive review highlighted that across diverse populations and contexts, men and women display similar levels of proficiency in adopting and utilizing time management strategies.

Across these studies, a common theme emerges: time management is a skill that depends on individual capabilities rather than gender. The research consistently shows that interventions designed to improve time management should be gender-neutral, focusing on developing skills applicable to all individuals. These findings challenge stereotypes about gender differences in organizational skills and emphasize the universal relevance of time management practices in both academic and professional settings.

Depression and academic performance

According to the American College Health Association (2012), depression ranked as the fourth most prevalent health issue among students. It adversely affects the learning process, primarily by diminishing concentration and memory function. Some studies indicated that depression can interfere considerably with students‟ studies by hampering concentration and

productivity and, at times, causing students to miss classes (Son *et al.*, 2020). Some other studies demonstrated that symptoms of depression, such as low motivation, can lead to poorer school performance and achievement scores (Quiroga *et al.*, 2013).

Depression harms cognitive functioning, thus, it can affect academic performance (Eweka *et al.*, 2024). A study from Turner *et al.* (2012) shows that even mild symptoms of depression can result in lower grades. Khurshid *et al.* (2015) examined the effects of depression on students' academic performance. The result showed that there is a negative effect of depression on students' academic performance whereas there is a significant difference between the academic performance of the students having low, medium and high-level depression.

Effiom *et al.* (2019) investigated the relationship between depression, academic concentration and students' academic performance among secondary school students. The findings revealed the influence of depression and academic concentration on academic performance. Ainsworth *et al.* (1978) examined the relationship between depression and the academic performance of undergraduate college students. The results of this study demonstrated that students who reported depressive symptoms missed more classes and experienced a drop in their academic performance than their peers who did not report depressive symptoms.

Akpan (2006) conducted a study to investigate the relationship between emotional depression and academic performance. The result of his findings revealed that there exists a significant relationship between emotional depression and the academic performance of students. Crosson (2008)

conducted a study investigating the relationship between depression and academic performance. The results from the findings revealed that depression significantly influenced the academic performance of students. Banihani (2022) examined the effect of depression on academic achievement among male and female students. The results of the study showed a significant negative correlation between depression and academic achievement. Also, the study did not reveal any significant differences between male and female students in the depression variable Andrews and Wilding (2004) examined the relationship between depression and academic achievement among graduate and postgraduate students. The major findings showed that there was a significant negative relationship between depression and academic achievement.

Numerous studies have found no relationship between depression and academic performance. For example, a study by Haines *et al.* (2020) involved 500 secondary school students in the United States. The findings revealed no significant correlation between depressive symptoms and academic performance across four semesters. The authors suggested that academic performance might be influenced by external factors, such as social support or institutional resources, which may buffer the effects of depression.

In a study conducted by Wang *et al.* (2014), 500 high school students in Canada participated, with the researchers' stratifying participants by socioeconomic status. The results showed that depression scores did not predict academic outcomes when controlling for variables like socioeconomic background and parental involvement. This study indicated that academic

performance might be more influenced by environmental factors than by depressive symptoms.

Figueroa (2024) examined 300 secondary school students in Spain through a mixed-methods study, combining depressive symptom surveys with instructor evaluations. The study found no significant association between depression levels and grades in core courses. The authors concluded that resilience and coping mechanisms might mitigate the potential negative impact of depression on academic success.

A study by Sanchez *et al.* (2018) investigated 700 students from various cultural backgrounds in Asia using structural equation modeling to assess mental health and academic performance. The study found that depression was not a significant predictor of academic achievement once cultural and familial expectations were taken into account. This suggests that academic performance may remain stable in certain cultural contexts where educational achievement is highly emphasized, even in the presence of depressive symptoms.

Anxiety and academic performance

Researchers have studied the relationship between emotions, such as anxiety, and their effect on academic performance. Research findings usually show an inverse association between the two. Higher anxiety levels during examinations or preparing for exams are correlated to poorer academic performance (Cassady & Johnson, 2002). Hernández *et al.* (2020) examined the relationship between anxiety and academic performance in university students. A descriptive survey design was employed in the study. A total sample of 294 students participated in the study. The results highlight a

positive relationship between anxiety and the academic performance of the students.

Vitasaria *et al.* (2010) examined the relationship between study anxiety levels and students' academic performance. The results showed that there was a significant correlation between anxiety and academic performance among engineering students. Mohammed *et al.* (2017) examined the effects of anxiety on university students' academic performance at Northwest University, Kano, Nigeria. The study established that students with heightened levels of anxiety scored lower grades as compared to their counterparts who obtained higher grades with moderate levels of anxiety. Bisson (2017) examined the effect of anxiety and depression on college students' academic performance. The results revealed a significant effect of anxiety and depression on academic performance.

While a considerable body of research suggests a positive relationship between anxiety and academic performance, there are also studies that find no significant relationship between the two. For example, Cassady's (2004) and McDonald *et al.* (2001) results revealed that while anxiety levels were significantly correlated with other factors like school attendance and social adjustment, there was no significant correlation between anxiety scores and academic grades. The author suggested that anxiety may not have a direct impact on academic performance, as it was found that high-anxiety students did not perform worse academically when other variables (e.g., motivation, school support) were accounted for.

Smillie *et al.* (2013) conducted a study to differentiate between the effects of state anxiety (temporary, situational anxiety) and trait anxiety (long-

term anxiety tendencies) on academic performance. The study found that while trait anxiety was linked to other mental health issues, it did not correlate with academic performance.

Stress and academic performance

Some studies have found a relationship between stress and academic performance (Clark & Rieker, 2006; Struthers *et al.,* 2010). Bankston and Mm (2002) reported a significant positive relationship between stress and the academic performance of university students. *Salehi et al.* (2010) reported that an optimal level of stress can enhance learning ability. Gelow *et al.* (2009) stated that a state of emotional stress was reported to have a significant positive relationship with reported school performance. In another research, Womble (2003) did not find any relationship between perceived stress and the academic achievement of university students.

Brobbey (2020) examined the effect of stress on the academic performance of University of Cape Coast, School of Business students. From the findings, it was discovered that academic stress could be controlled to enhance students' performance. Sadock and Sadock (2008) found a significant negative correlation between the stress levels of university students and their academic performance. In a similar study, Blumberg and Flaherty (2005) found an inverse relationship between self-reported stress levels and academic performance. Ronald (2018) examined the effect of stress on academic performance among students. The study revealed a weak negative correlation between stress and academic performance. Crystal (2013) examined the academic performance of college students as related to depression from stress. The study showed that the higher the depression rate among college students,

the more difficult it was for them to learn, remember, and concentrate; resulting in lower levels of academic performance. Thus, depression creates a negative impact on college students' academic performance.

Gender, depression, anxiety, and stress

Literature has proved that females are been identified as experiencing stress, anxiety and depression (Wahed & Hassan, 2017; Iqbal *et al.,* 2015; Kulsoom & Afsar, 2015; Desouky & Allam, 2017). Females are reported to have greater levels of depression, anxiety, and stress (Soysa & Wilcomb, 2015). While most studies reported higher levels of depression, anxiety, and stress among females, contradictory findings showed that depression and anxiety were more prevalent in males than females (Gao *et al.,* 2020).

The issue of gender differences in depression, anxiety and stress appears to yield greater consensus, with more studies showing that males are less likely to become depressed in response to stressors than females (Hammen, 2005). In addition, males handle stress more calmly compared to females (Klein *et al.*, 2002; Hyde & Plant, 1995), A study conducted by Hamaideh (2012) unfolded the difference in the perception of stressors between male and female students in five categories (frustration, conflicts, pressures, changes, and emotions). The study found that both genders react to stressors differently. Female students responded to stress emotionally, while male students reacted behaviourally and cognitively. Since male students are calmer when dealing with stress and present higher cognitive functioning, they are less likely to harm academic performance from stress than female students.

Studies have revealed that anxiety and mood disorders are more commonly found in females than males (Leibenluft, 1999). Research

suggested that gender roles caused females to experience more emotional issues than males, as females are typically socially expected to stay at home exposing them to greater frustration with the household workload, fewer opportunities for success and less gratifying and acknowledged work (Brody, 2013). Dyson and Renk (2006) examined the relationship between depressive symptoms stress, and coping in college freshmen, differences were also noted in the coping skills utilized by male and female students. The results demonstrated that male students, who utilized more problem-focused coping skills demonstrated lower levels of depressive symptoms and female students who utilized more emotion-focused coping skills demonstrated higher levels of depressive symptoms.

Banga (2016) carried out a study to find out the levels of anxiety among senior secondary boys and girls of Himachal Pradesh. The findings of the study clearly showed that significant differences existed in the levels of anxiety between boys and girls, Girls were more prone to anxiety than boys. Pathak *et al.* (2015) revealed a significant difference existed in the academic anxiety of male and female secondary school students moreover a significant difference is found in the academic anxiety of government and private secondary students. They also reported that academic stress was significantly and negatively correlated to parental encouragement.

Purcell *et al.* (2014) conducted a correlational study between academic anxiety and academic achievement based on gender. Findings clearly showed a negative relationship between academic anxiety and achievement. Gender also affects anxiety; females were more anxious than males. Prasad *et al.* (2014) investigated the relationship between academic anxiety and academic

achievement, in their study on senior secondary students and reported a negative and significant relationship between anxiety and academic achievement. Moreover, it was also reported that girls were more affected by anxiety than boys. Avison and McAlpine (1992) examined gender differences in symptoms of depression among adolescents. The study results revealed a substantial gender difference in the levels of psychological distress where males had a lot of psychological distress than their female counterparts.

Although numerous studies have indicated gender difference, however, a growing body of evidence also found no gender difference. For example, in the case of depression, Elliott (2001) found that when socioeconomic factors and coping mechanisms were controlled, gender differences in depression were significantly reduced. Similarly, a meta-analysis by Huang *et al.* (2016) reported no significant gender differences in depression across non-Western cultures, where societal norms appeared to equalize emotional expression between genders. Research on adolescents, such as that conducted by Ferentinos *et al.* (2011), further supports this finding, showing that gender differences in depression were not evident when structured interviews replaced self-report measures, suggesting that reporting biases may play a role.

In terms of anxiety, research has demonstrated similar findings. Hardin *et al.* (2006) used the State-Trait Anxiety Inventory (STAI) and reported no significant gender differences in trait anxiety when environmental factors such as occupational roles were accounted for. Additionally, Kim *et al.* (2000), measured stress-induced anxiety responses and found no significant differences in acute anxiety responses between men and women, indicating that gender disparities in anxiety prevalence may be overstated in self-report

measures. For stress, similar patterns emerge. Taylor *et al.* (2000) and Hämmig and Bauer (2014) examined occupational stress and found no significant gender differences in job-related stress when roles and responsibilities were equitably distributed.

Gaps identified

The review of existing literature reveals several gaps that necessitated conducting this study. First, there are inconsistent findings on the relationship between time management practices and academic performance, with some studies reporting positive effects (Nasrullah & Khan, 2015; Nigussie, 2019), while others find no significant or even negative correlations (Agormedah *et al.*, 2021; Ocal & Tek, 2015). This inconsistency highlights the need for further research to clarify the relationship, particularly within different educational and cultural settings. Second, many studies have examined depression, anxiety, and stress individually (Mohammed *et al.*, 2017; Khurshid *et al.*, 2015), yet few have explored their combined influence on academic performance. This leaves a critical gap in understanding how these psychological factors interact to impact students' academic outcomes. Third, while gender differences in academic performance and psychological factors like depression and anxiety have been widely studied (Kaya *et al.*, 2012; Misra & McKean, 2000), the moderating role of gender in the relationship between time management practices and academic performance remains underexplored. Lastly, much of the existing research has been conducted outside the Ghanaian context (Nasrullah & Khan, 2015; Fedorov *et al.*, 2015), leaving a gap in context-specific evidence. Therefore, this study addresses these gaps by examining the influence of time management practices,

depression, anxiety, and stress on the academic performance of Senior High School students in the Okere District, while also investigating the moderating role of gender.

Conceptual Framework

Figure 1 shows a conceptual structure developed by the researcher to aid in the analysis of time management practice, depression, anxiety stress and academic performance of students. This framework provided a foundation for making decisions on methodology and hypothesis formulation.

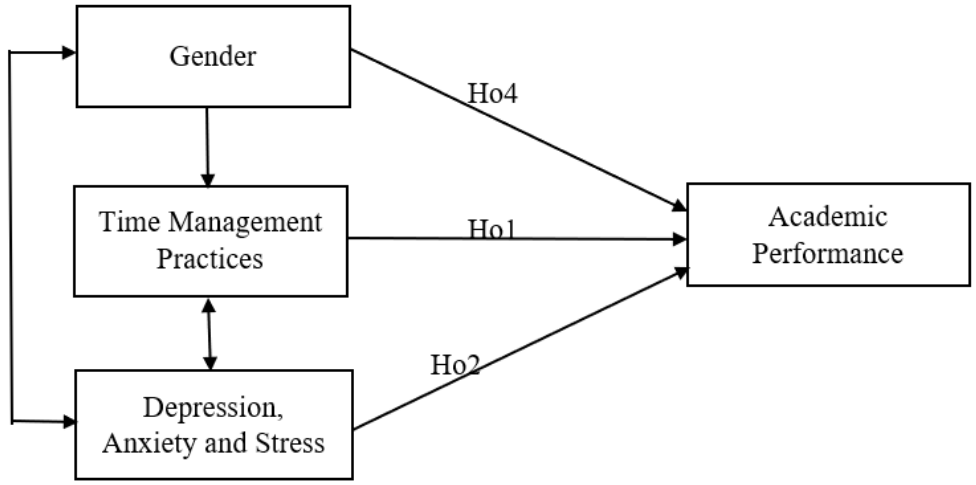

Figure 1: Conceptual framework of the respective variables

Source: Authors Construct, 2023

Conceptual framework refers to the interconnection or relationship among or between variables in a study. The conceptual; framework looks at how time management would influence the academic performance of the students. The study also looks at how depression, anxiety and stress will influence the academic performance of the students. The study also looks at how gender will moderate the link between time management practice and the academic performance of the students.

Summary of Review of Literature

The review of literature under the theoretical framework considered Wright's (2002) Pickle Jar theory of time management and Lazarus and Folkman's (1984) theory of the transactional model of stress. On the other hand, concepts and dimensions of time management, depression, anxiety and stress. Finally, empirical studies were carried out under the following headings: time management and academic achievement, depression, anxiety, and stress and academic achievement, time management and gender, depression, anxiety and stress and gender.

CHAPTER THREE

RESEARCH METHODS

Introduction

This section describes how the research process will be carried out. Areas discussed are the research design, study area, research population, sample and sampling procedures, data collection instruments, data collection procedures, and data processing and analysis.

Research Design

Bless and Higson-Smith (2000) observed that, to meet a study's aims, all research investigations require a study design. A research design is a framework or plan that the researcher uses to come up with answers to the research questions (Hanson *et al.*, 2011). The descriptive survey design was used for this study. Gay (2004, p. 187) postulated that "the descriptive survey involves collecting data to test hypotheses or to answer research questions concerning the current status of the subject of study." It also describes and predicts phenomena without manipulating factors that influence the phenomena (Amedahe, 2002). Kothari (2004) defined a descriptive survey as the process of describing, recording, assessing, and reporting situations that exist. The descriptive survey approach was used for this study since it permits the collection of facts at a single moment thereby allowing for the generalisation of findings from a smaller sample group to a larger group (Devetak *et al.*, 2010). This study design was chosen because it allows the researcher to make broad generalisations about the entire population. The design was also ideal for the study since it is good for getting the thoughts and

trends on a small scale as well as its low cost and availability of information (Shuttleworth, 2008).

Population

A population is a group of people from whom a sample is drawn to create study results (Gorard, 2001). The target population for the study involved all Senior High School students in the Okere District. Currently, there are three (3) accredited public Senior High Schools (SHS) in the Okere District (Regional Education Office, 2023). The accessible population for the study consisted of SHS two students from three (3) public SHS in the Okere District (see Table 1). The three SHS was selected because they are the only SHS in the Okere District.

Senior High School (SHS) two students were chosen for the study because their extended stay on campus may have exposed them to a variety of knowledge and experiences concerning academic performance. The total population of SHS two students in the three selected schools in the Okere District was 1712 (see Table 1). As Kothari (2004) pointed out, a study's sample is drawn from the accessible population. The distribution of SHS two students is illustrated in Table 1.

Table 1: Distribution of Senior High Schools

Senior High Schools	Population
Nifa Senior High School	945
Presbyterian Senior High Technical School	562
J Gknol Senior High School	205
Total	1712

Source: Regional Education Directorate, 2023

Sample and Sampling Procedure

A sample is a portion of a population that is studied to draw general conclusions about the target population (Creswell, 2014). The goal of

sampling in research is to select a subset of the population that is representative of the overall population (Fowler, 2009). To select the sample from the population of SHS students in the three selected schools in the Okere District, the Krejcie and Morgan (1970) sample size determination table was employed. Based on Krejcie and Morgan's (1970) sample size calculations, a sample of 313 students was chosen from a population of 1712. Hence the sample size that was used in the study was 313 SHS students. A multi-technique was used which is as follows;

Stage 1

Firstly, a purposive sampling procedure was used to select the three SHS for the study. Purposive sampling was chosen because it allows the researcher to intentionally select participants or groups that are most relevant to achieving the study's objectives. There are three (3) mixed SHS in the Okere District which was the researchers' focus. Purposively, the researcher selected all the SHS that were within the district.

Stage 2

Secondly, the proportional sampling procedure was used to obtain the total number of students from each of the three SHS (see Table 2). The proportional sampling procedure was used because the researcher wanted to ensure a fair representation of the various schools in terms of their class size. Also, in other to ensure a representation of the various gender groupings it was imperative to use a proportional sampling procedure. For example, proportionate sampling was employed at Nifa Senior High School to determine the number of respondents required at SHS two. For SHS two students of Nifa Senior High School, the proportion was given by the total

number of SHS two students in Nifa Senior High School (945) divided by the total number of SHS two students in the population (1,712) multiplied by the sample (313). Using the formula, a sample of one hundred and seventy-three (173) out of 945 students was selected for the Nifa Senior High School. This consisted of one hundred and eighteen (118) males and fifty-four (54) females. The sample distribution is illustrated in Table 2.

Stage 3

Finally, the students were selected using the table of random numbers of the simple random sampling with the list of each grade level as the sampling frame. To select one hundred and seventy-three (173) from 945 students in Nifa Senior High School, the table of random numbers was used. The list that contained the names of all the SHS two students was taken from the three SHS. The table was entered randomly and the numbers were labelled from 1 to 945 (where 945 is the total population of SHS two students in Nifa Senior High School). Moving in a vertical direction on the table of random numbers, the numbers that fall within the range were selected one after the other until all 173 students were needed in Nifa Senior High School. The same approach was used in selecting the rest of the respondents.

Table 2: Distribution of Samples based on Senior High School Students

SHS	Population			Sample		
	Male	Female	Total	Male	Female	Total
Nifa SHS	647	298	945	118	54	173
Presbyterian SHTS	327	235	562	60	43	103
J Gknol SHS	138	68	205	25	12	37
Total	1112	601	1712	203	109	313

Source: Field Data, 2023

Data Collection Instrument

The study adopted the use of questionnaires as the main research instrument. A questionnaire is a great way to assess the behaviour, attitudes, preferences, opinions, and intentions of a large group of individuals in a more cost-effective and time-efficient manner than other methods (Paralov, 2006). The questionnaire was made up of three sections. Section A consisted of the demographic information of the respondents based on their gender, and age.

Section B was made up of an adapted "Time Management Behaviour Scale (TMBS)" by (Britton & Tesser, 1991). The questionnaire was made up of 18 items which consisted of 3 subscales: Short-Range Planning has 7 items; Time Attitudes has 6 items and Long-Range Planning also has 5 items. The scale was measured on a five-point Likert scale namely Always-1, Frequently-2, Sometimes-3, Infrequently-4 and Never-5.

Section C was made up of an adapted Depression, Anxiety, and Stress Scales (DASS-21) by Lovibond and Lovibond (1995). The DASS-21 is a 21-item self-report scale that measures three dimensions: depression, anxiety, and stress. The three-dimensional self-reporting scales assessed the existence and severity of depressive, anxiety, and stress-affective states. The instrument was measured on a four-point Likert scale ranging from Strongly Disagree (SD)- 4, Disagree (D)- 3, Agree (A)- 2, and Strongly Agree (SA)- 1.

On the other hand, students' performance test scores in core subjects (Mathematics, English, and Science) were used to measure the academic performance of students. The test scores were constructed by the researcher.

Pilot-Test

A pilot test was done to validate the instrument, that is, to see if it was reliable and valid for the main data collection. The researcher used 40% of students from Okuapeman SHS students for piloting the instrument. Thus, 150 students were used in piloting the instrument. The piloting data was entered into SPSS to determine the instrument's consistency. The reliability analysis conducted for the 18 items time management instrument yielded Cronbach's alpha value of .89 with sub-scales Short-Range Planning .71, Time Attitudes .73, and Long-Range Planning .72. Again, the 21 items for the depression, anxiety and stress scale yielded a Cronbach's alpha value of .82 with sub-scales of .61 for Depression, .59 for Anxiety, and .58 for Stress. These Cronbach's alpha values indicates that the dimensions are more reliable according to Roland and Idsoe (2001) who indicates that Cronbach's alpha values more .50 is acceptable.

Validation of the Instruments

The validation was carried out utilising Confirmatory Factor Analysis (CFA) with a covariance-based structural equation model (Hair et al., 2014). This type of structural equation model is extremely effective when it comes to confirmatory factor analysis. In other words, the confirmatory factor analysis predetermines which factors will be loaded on an observable variable. As a result, the previously discovered time management practice scale and depression, anxiety and stress scale were validated using confirmatory factor analysis through the use of Analysis of Moment Structure (AMOS) software utilising 1000 bootstrap samples to re-confirm the acquired data.

Convergent and divergent validity were assessed using factor analysis. Low factor loadings (less than .30) were removed before the final data collection (Pallent, 2010). Convergent validity was also determined using an Average Variance Extraction (AVE) of .50 or above (Fornell & Larcker, 1981). This means that any value above .50 shows that AVE has been established. The discriminant validity was tested using Fornell and Larcker's (1981) criterion which states that the square roots of AVEs should be greater than the correlation between the dimensions. In addition, if the measure of the correlation between or among latent exogenous constructs (sub-scale) is less than.90, then, the discriminant validity has been achieved (Awang, 2012; Awang, 2014; *Hair et al.,* 2006).

Confirmatory Factor Analysis of Time Management Scale

The validity of the time management scale is presented in Table 3.

Table 3: Item loadings, Average Variance Extraction (AVE), and Composite Reliability (CR)

Dimensions	Items	Loadings	AVE	CR
Short Range	SR1	.460	.37	.71
	SR2	.653		
	SR3	.502		
	SR4	.640		
	SR5	.511		
	SR6	.424		
	SR7	.336		
Time Attitude	TA8	.125*	.09	.64
	TA9	.460		
	TA10	.303		
	TA11	.309		
	TA12	.385		
	TA13	.051*		
Long Range	LR14	.412	.11	.61
	LR15	.467		
	LR16	.398		
	LR17	.183*		
	LR18	.318		

Source: Field Data, 2023

In Table 3, items TA8, TA13 and LR17 had a factor loading of less than .30; hence, they were deleted. These were the only items that were eliminated because their factor loadings were less than the acceptable loading of .30 (Pallent, 2010). All of the AVEs for the various dimensions in Table 3 were less than .50. This indicated that the dimensions were not convergent valid. Average Variance Extraction (AVE) was also used to test convergent validity (Fornell & Larcker, 1981). Although the dimensions lacked convergent validity, the Composite Reliability (CR), was all above .50. This indicated that the dimensions were more reliable (Roland & Idsoe, 2001). The original measurement model with 18 items is presented in Figure 3.

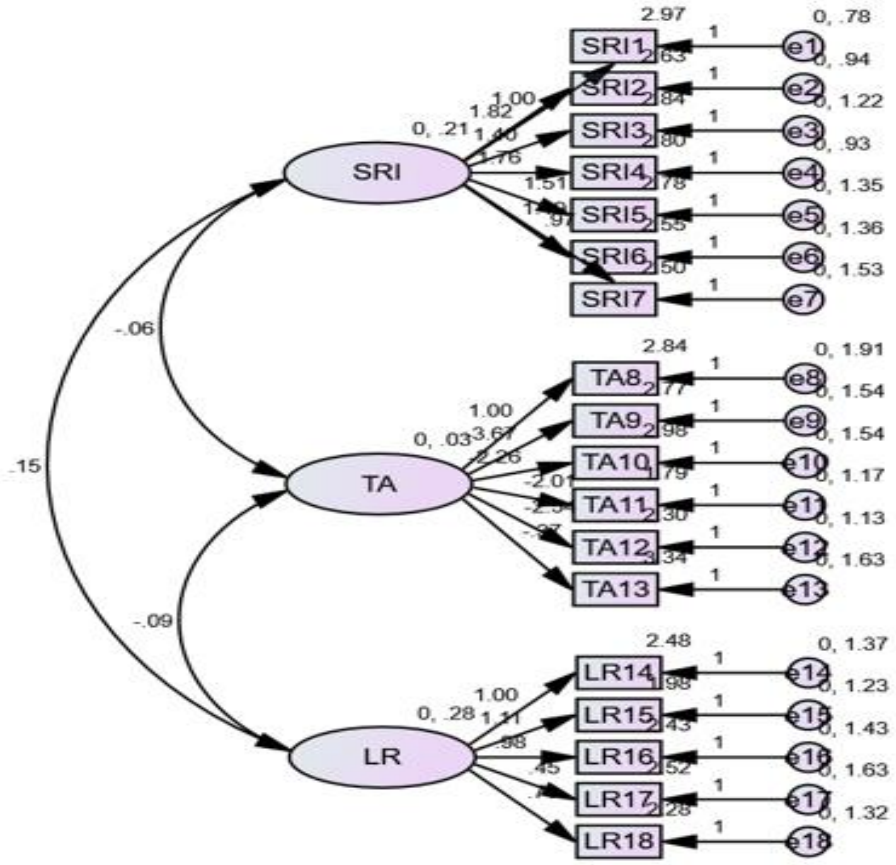

Figure 2: Initial hypothesised first-order CFA with three-factor structure model of Time Management Scale (18 items)

Source: Authors Construct, 2023

Table 4: Discriminant Validity

Variable	Short Range	Time Attitude	Long Range
Short Range	(.61)*		
Time Attitude	.74	(.31)*	
Long Range	.60	.89	(.34)*

Source: Field Data, 2023

In Table 4, the intercorrelation values of (.74, .60 and .89) of the sub-scale of time management was lower than the values of .90 (Hair *et al.*, 2006; Awang, 2012; Awang, 2014). This condition means that the problem of multicollinearity did not exist between or among the constructs. Consequently, all the observed variables of the time management scale were grouped under their respective dimensions. It was concluded that discriminant validity has been established as a result of this. The new measurement model for the time management scale is shown in Figure 4.

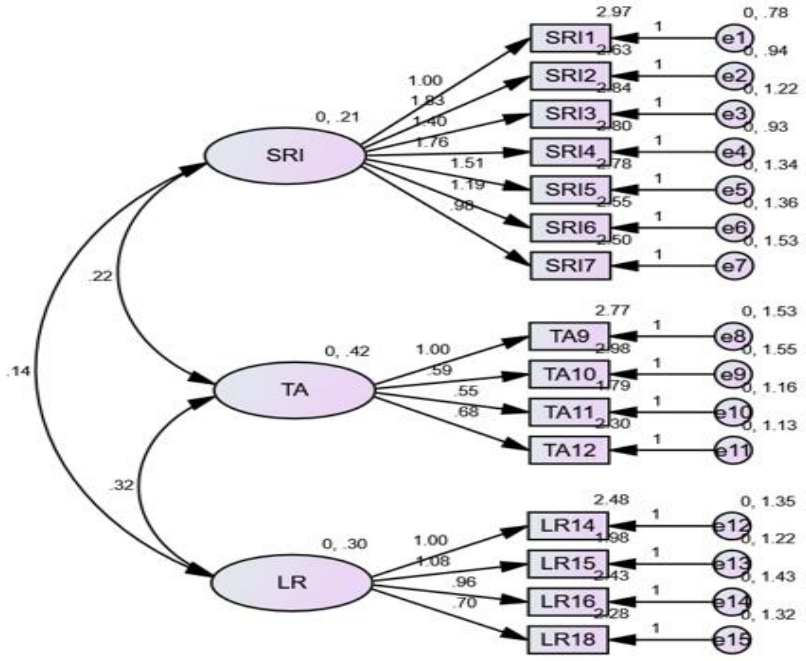

Figure 3: Final hypothesised first-order CFA with three-factor structure model of Time Management Scale (15 items)

Source: Authors Construct, 2023

Model Fit

The model fit indices were evaluated to see if the hypothesised model fitted the data gathered. In addition, the new model (with 15 items) was calculated using NFI, TLI, and CFI among other variables. The following thresholds or cut-off points were used to evaluate the model fit indices for the models: Chi-square ($p > 0.05$; Hair, Black, Babin, Anderson, & Tatham, 2006), CMIN/DF (2 or 3; Schreiber *et al.*, 2006), CFI (>0.90; Kline, 2013), NFI (>0.90; Kline, 2013), IFI (>0.90; Kline, 2013), TLI (>0.90; Kline, 2013), RMSEA (≤0.08; Schreiber *et al*., 2006) and AIC (least values approximate reality) (Civelek, 2018) (See Table 5). The model fit indices are shown in Table 5.

Table 5: Goodness of Fit Indices of Time Management Scale

Fit Indices	Values (18-items)	Values (15-items)	Threshold
Chi-square ($\chi 2$)	162.733, p<0.000	116.761, *p*<0.000	> .05
CMIN/DF	1.233	1.342	≤ 2 or 3
Comparative Fit Index	.898	.901	≥.90
Normed Fit Index	.656	.722	≥.90
Incremental Fit Index	.910	.911	≥.90
Tucker-Lewis Index	.868	.863	≥.90
Root Mean Square Error of Approximation	.028	.034	≤ .08
Akaike Information Criterion	276.733	212.761	

Source: Field Data, 2023: Note: Minimum discrepancy/degrees of freedom (CMIN/DF), Comparative Fit Index (CFI), Normed Fit Index (NFI), Incremental Fit Index (IFI), Tucker-Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), Akaike Information Criterion (AIC).

Almost all the model fit indicators for the 18-item model showed that the data did not fit the anticipated model as shown in Table 5. This may be due to the model's misspecification (Kline, 2011). Only the CMIN/DF, IFI and RMSEA fit indicators revealed a good fit based on Schreiber *et al.* (2006) criterion with very close values of 1.233, .910 and .028 respectively. Even though the CMIN/DF, IFI and RMSEA fit indicators for the 18 items suggested a good fit, the selected scholars' standards were not met.

The model fit indices for the new model (15 items) appeared better than the original model with 18 items (Table 5). The AIC index for the 18-item model was 276.733 and that of the 15-item model was 212.761 indicating that the new model (15-item) is the model which is closer to reality and demonstrated sufficient fit (Civelek, 2018). Although the 15-item model showed adequate fit as compared to the 18-item model, the model fit indices for the model (15 items) failed to meet the standards of the selected scholars. It is concluded that future researchers who intend to reproduce or re-examine the time management scale in the Ghanaian settings should use the final or the new model (15 items) instead of the original model (18 items) and re-validate the new model (15 items) in their settings.

Confirmatory Factor Analysis of Depression, Anxiety and Stress Scale

The validity of the Depression, Anxiety and Stress scale is presented in Table 6.

Table 6: Item loadings, Average Variance Extraction (AVE), and Composite Reliability (CR)

Dimensions	Items	Loadings	AVE	CR
Depression	DEP3	.621	.25	.59
	DEP5	.386		
	DEP10	.344		
	DEP13	.336		
	DEP16	.413		
	DEP17	.444		
	DEP21	.318		
Anxiety	ANX20	.391	.02	.63
	ANX19	.447		
	ANX15	.428		
	ANX9	.648		
	ANX7	.377		
	ANX4	.423		
	ANX2	.355		
Stress	STRS1	.210*	.11	.58
	STRS6	.270*		
	STRS8	.367		
	STRS11	.210*		
	STRS12	.532		
	STRS14	.282*		
	STRS18	.341		

Source: Field Data, 2023

Items STRS1, STRS6, STRS11 and STRS14 in Table 6, had factor loadings less than .30 (Pallent, 2010), hence, they were deleted. All of the AVEs for the various dimensions in Table 6 were less than .50 (Fornell & Larcker, 1981). This indicated that the dimensions were not convergent valid. Although the dimensions lacked convergent validity, the Composite Reliabilities (CR), were all above .50. This indicated that the dimensions were more reliable (Roland & Idsoe, 2001). The original measurement model with 21 items is presented in Figure 5.

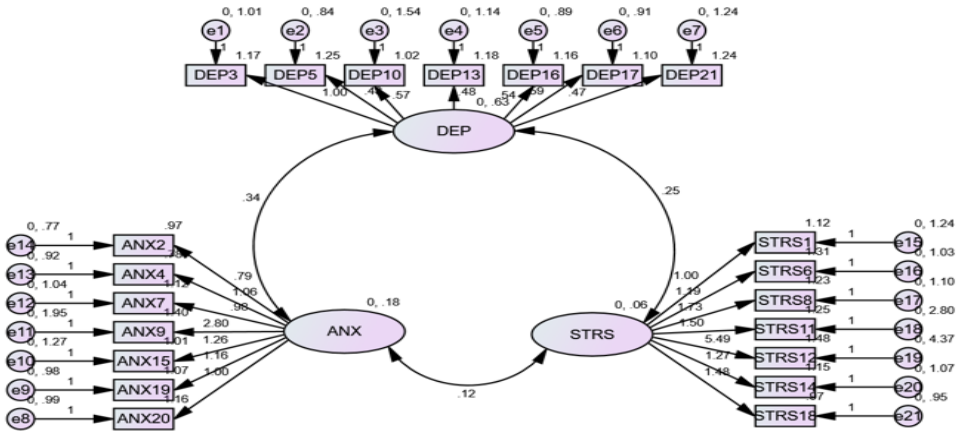

Figure 4: Initial hypothesised first-order CFA model of Depression, Anxiety and Stress Scale (21 items)

Source: Authors Construct, 2023

Table 7: Discriminant Validity

Variable	Depression	Anxiety	Stress
Depression	(.50)*		
Anxiety	.02	(.45)*	
Stress	.30	.19	(.33)*

Source: Field Data, 2023

In Table 7, all the square roots of the AVE were bigger than the respective dimensions as shown in Table 7. Again, the intercorrelation values of (.02, .30 and .19) are lower than .90 (Hair *et al.*, 2006; Awang, 2012; Awang, 2014). This condition means that the problem of multicollinearity did not exist between or among the constructs. Consequently, all the observed variables of the depression, anxiety and stress scale were grouped under their respective dimensions. It was concluded that discriminant validity has been established as a result of this. The new measurement model for the depression, anxiety and stress scale is shown in Figure 6.

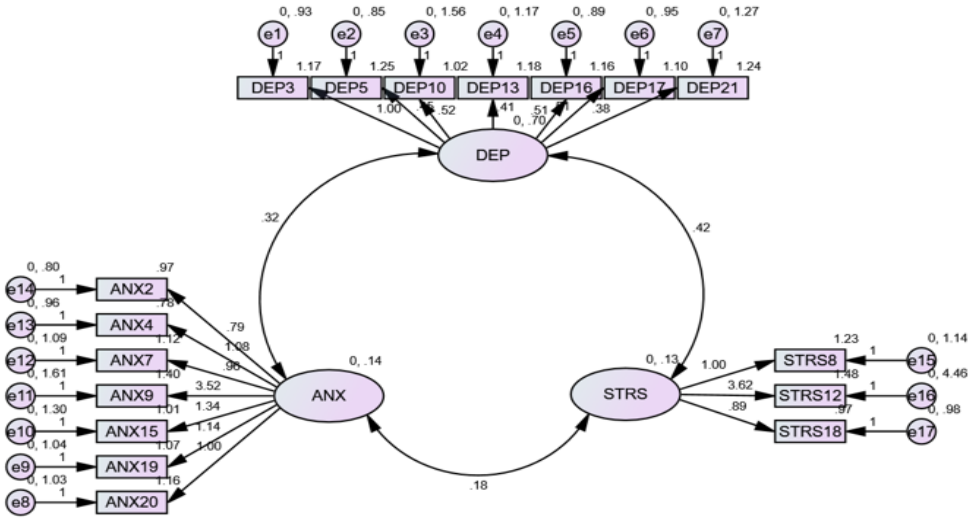

Figure 5: Final hypothesised first-order CFA model of Depression, Anxiety and Stress Scale (17 items)

Source: Authors Construct, 2023

Model Fit

The model fit indices were used to determine if the hypothesised model matched the data. In addition, the new model (which included 17 components) was calculated using NFI, TLI, and CFI among other factors. The following thresholds or cut-off points were used for the evaluation of the model fit indices for the models: Chi-square ($p > 0.05$; Hair *et al*., 2006), CMIN/DF (2 or 3; Schreiber *et al*., 2006), CFI (>0.90; Kline, 2013), NFI (>0.90; Kline, 2013), IFI (>0.90; Kline, 2013), TLI (>0.90; Kline, 2013), RMSEA (≤0.08; Schreiber *et al*, 2006) and AIC (least values approximate reality) (Civelek, 2018) (See Table 8). The model fit indices are shown in Table 8.

Table 8: Goodness of Fit Indices of Depression, Anxiety and Stress Scale

Fit Indices	Values (21-items)	Values (17-items)	Threshold
Chi-square ($\chi 2$)	542.622, p<0.000	325.091, *p*<0.000	> .05
CMIN/DF	2.563	2.803	≤ 2 or 3
Comparative Fit Index	.565	.662	≥.90
Normed Fit Index	.432	.579	≥.90
Incremental Fit Index	.516	.681	≥.90
Tucker-Lewis Index	.478	.555	≥.90
Root Mean Square Error of Approximation	.068	.079	≤ .08
Akaike Information Criterion	618.725	433.091	

Source: Field Data, 2023: Note: Minimum discrepancy/degrees of freedom (CMIN/DF), Comparative Fit Index (CFI), Normed Fit Index (NFI), Incremental Fit Index (IFI), Tucker-Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA).

Almost all the model fit indicators for the 21-item model showed that the data did not fit the anticipated model as shown in Table 8. This may be due to the model's misspecification (Kline, 2011). Only the CMIN/DF and RMSEA fit indicators revealed a good fit based on Schreiber *et al*. (2006) criterion with very close values of 2.563, and .068. Even though the CMIN/DF and RMSEA fit indicators for the 21 items suggested a good fit, they did not meet the threshold by the researchers.

The model fit indices for the final or the new model (17 items) appeared better than the initial or original model with 21 items (Table 8). The AIC index for the 21-item model was 618.725 and that of the 17-item model was 433.091 indicating that the final or the new model (17 items) was the model which was closer to reality and demonstrated sufficient fit (Civelek, 2018). Although the 17-item model showed adequate fit as compared to the

21-item model, the model fit indices for the model (17 items) failed to meet the standards of the researchers. It is concluded that future researchers who intend to reproduce or re-examine the Depression, Anxiety and Stress scale in the Ghanaian setting should use the final or the new model (17- items) instead of the original model (21 items).

Ethical Considerations

Ethical clearance was obtained from the Institutional Review Board of the University of Cape Coast. Inform concern was obtained from the participants. In pursuance of ethical issues, the right to privacy, voluntary participation, no harm to participants, anonymity and confidentiality were held in high esteem. It should be emphasised that students have privacy rights and as a result, these rights must be respected at every point in time. In this light, the rights of privacy of respondents in the study were respected and under no circumstances would respondents be studied without their knowledge or consent. In addition, one of the key components regarding ethical issues in research has to do with respondents' voluntary participation. Responding to questionnaires in a study of this nature demands a lot of time and energy which can lead to the disruption of the regular activities of respondents. It is for this motive that I explained the objectives and significance of the study to the respondents and therefore, allowed respondents to exercise their voluntary right in their participation in the study.

Another ethical issue in educational research has to do with the fact that, the exercise should not cause an injury to the participants under study irrespective of whether they volunteer or not to participate in the study. The concept of harm as used in this regard can be physical, psychological or

emotional. In pursuance of this, questions would be framed in a way that would give the respondents several alternatives and freedom in selecting the answers that are most appropriate to them.

Furthermore, as part of the ethical issues in research, the ultimate goal was to protect and safeguard the well-being, interests and identity of the respondents. In pursuance of this, I adopted anonymity and confidentiality techniques such as disclosure of respondents' names to ensure the protection of respondents. The respondents would therefore be assured that the information they provide will be kept confidential.

Data Collection Procedure

Data collection was done by the researcher together with the assistance of three field assistants. The field assistants were briefed by the researcher about the study's goal, and how to administer the questionnaire. The researcher received a letter of introduction from the Head of the Department of Vocational and Technical Education of the University of Cape Coast. The researcher met the Head Masters of the various Senior High Schools selected for the study. The researcher explained the purpose of the study to the students and advised them to cooperate as much as possible. The respondents were told of the time, venue, and how to answer the questionnaire. Two months were used to gather the data.

Data Processing and Analysis

The data from the study was examined for completeness, double responses, and non-response. The double responses and uncompleted questionnaires were taken out of the data collected and only single responses to items and completed questionnaires were used for the analysis. To make it

easier to identify the questionnaire, it was serially numbered. This precaution was important to ensure prompt discovery of any cause of errors that occur during data tabulation.

The response for each item on each scale was scored for easy entry and management purposes. The data was cleaned before the needed data transformation by executing consistency checks on each variable. Following data verification, corrections were made. Descriptive statistics, simple frequencies, and percentages were used to analyse the demographic variables of the respondents.

Hypotheses 1, and 2, were tested independently using 5000 bootstrap samples and bias-corrected accelerated confidence intervals using Structural Equation Path (SEM) analysis. The use of SEM in a regression-based approach is motivated by the need to model and analyse complex relationships among variables. It provides a more comprehensive and nuanced understanding of the relationships in data and offers a rigorous framework for hypothesis testing and model assessment. Hence the need to use the statistical tool

Hypothesis 3 was tested using an independent sample t-test. The independent samples t-test is a valuable statistical tool when you want to compare two independent groups in terms of a categorical variable (gender) and continuous variable (depression, anxiety and stress), under the assumption of normal distribution and roughly equal variances. It is widely used in research and data analysis to determine whether the observed differences between these groups are statistically significant, aiding in the interpretation of

research findings and decision-making. Hence the need to use the statistical tool.

Hypothesis 4, was tested using moderation analysis by Hayes (2018) Process. Moderation analysis is used to investigate and understand how the strength or direction of the relationship between two variables (predictor variable and outcome variable) changes under different conditions or levels of a third variable (moderator variable). The use of moderation analysis, particularly via the Process macro developed by Hayes (2018), is motivated by the need to understand how the relationship between variables varies under different conditions. It is a valuable tool for researchers aiming to explore, explain, and predict complex interactions in their data, providing a deeper and more nuanced understanding of the relationships between variables.

CHAPTER FOUR

RESULTS AND DISCUSSION

Overview

The purpose of the study was to examine the influence of time management practices and distress on the academic performance of students in the Okere District, Ghana. This chapter comprises the presentation and interpretation of the findings from the study. Table 9 presents the demographic distribution of the respondents.

Demographic/Background Characteristics of the Respondents

Each respondents were asked to provide information about his or her background characteristics, as these qualities and attributes could influence their responses. Table 9 shows the findings of the gender and age analysis of the respondents.

Table 9: Gender and age of Students

	Subscale	Frequency	Percentage (%)
Gender	Male	203	64.9
	Female	110	35.1
Age	13-15	9	2.9
	16-18	255	81.5
	19-21	46	15.3
	22 and above	1	3
Total		313	100.0

Source: Field Data, 2023

Inferring from Table 9, out of the 313 respondents who were involved in the study, 203 were males representing 64.9% whiles 110 were females representing 35.1%. Thus, the majority of the respondents were males. Regarding age distribution, a substantial proportion of participants (81.5%)

fell within the 16-18 age bracket, followed by 15.3% (19-21years), with a smaller (1%) segment falling under 22 years and above. In total, the study comprised 313 participants.

Research Question 1

What are the levels of time management practices among senior high school students in the Okere District?

This research question sought to determine the time management levels of senior high school students in the Okere District. A 5-point Likert-type scale with 15 items was used to assess time management practices among students. A mean score of 3 was used. To find the test value the mean scores of all the items were summed and divided by the number of responses to get the overall means. For example, 1+2+3+4+5=15/5=3. A mean score above 3 was considered a high level of time management practices, while a mean score below 3 was considered a low level of time management practice. Details of the level of time management practices are presented in Table 10.

Table 10: Respondents levels of Time Management Practices

Scale/sub-scales	No. of items	Mean	SD
Short Range Planning	7	2.67	.696
Time Attitude	4	2.68	.622
Long Range Planning	4	2.34	.684
Mean of means	15	2.56	.667

Source: Field Data, 2023

The established mean cut of point and the overall mean of the respondents on time management practices was 3. This implies respondents have higher levels of time management practices except long range planning which was below the overall mean of means. This implies respondents have higher levels of time management practices. Additionally, the mean scores of

the various dimensions were computed, and relatively, among the dimensions of time management practices, time attitude was the highest (M = 2.68, SD = .684), followed by short range planning (M = 2.67, SD = .696). However, long range planning was the lowest (M = 2.34, SD = .684). Generally, all the three dimensions of time management practices were practiced by the students except long range planning which was not adopted.

Hypotheses Testing

The study tested four hypotheses. Before these hypotheses testing, the normality assumption, which is the fundamental of all parametric assumptions were tested. This was tested using mean, median, 5% trimmed mean, skewness, and the normal Q-Q plot. Details of the results are presented in Table 11.

Table 11: Test for Normality

Parameters	TM	DAS	AP
Mean	37.795	18.894	205.498
Standard Deviation	8.446	10.302	17.082
5% Trimmed mean	37.535	18.394	205.492
Median	37.000	17.000	204.000
Skewness	.516	1.511	.071
Std. Error	.477	.582	.965
Zskewness	1.08	2.60	.07

Source: Field Data, 2023; Note: Time Management (TM), Depression, Anxiety and Stress (DAS), and Academic Performance (AP)

As presented in Table 11, the mean, median, and 5% trimmed mean of time management, depression, anxiety and stress, and academic performance were approximately equal. This implies that the distribution of scores of the aforementioned variables was normally distributed. Further examination of the *Zskewness* shows that the coefficients of time management (*Zskew* = 1.08), DASS (*Zskew* = 2.60) and academic performance (*Zskew* = .07) were within

the range of +3.29 and -3.29 (Fidell & Tabachnick, 2003), hence they were normally distributed. Additionally, the normal Q-Q plots for all the variables were examined. The distribution of scores being closer to the straight line indicates that the data approximates normality. This is confirmed using a Q-Q plot as shown in Appendix D. A Q-Q plot compares the quantiles of the observed data with the expected quantiles under a normal distribution. When the points in the plot align closely with the straight line, it suggests that the data is normally distributed, which is a key assumption for many statistical tests used in this study. Normality ensures that the results derived from parametric tests are reliable and valid (Pallent, 2010) (see Appendix D).

Research Hypothesis 1

$H_0$1: Time management practices will not influence the academic performance of Senior High School students in the Okere District.

The hypothesis sought to determine whether time management practices influenced the academic performance of students in the Okere District. The Structural Equation Model (SEM) path analysis with 5000 bootstrap samples and bias-corrected accelerated confidence intervals was used. The exogenous (predictor) variable was time management practices which was measured continuously. The criterion variable was an academic performance, which was measured using students' performance test scores. This section are in two folds. The first part looks at the sub dimensions of time management practices (short range planning, time attitude and long range planning) and the second part looks at the total construct of time management practices and academic performance. Details of the results are presented in Figure 7 and Table 12.

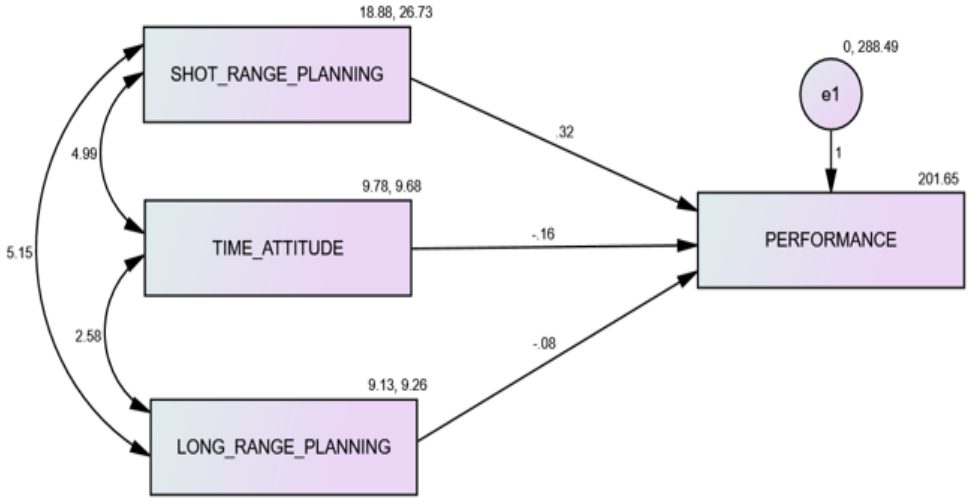

Figure 6: Path model for sub-dimensions of Time Management Practices and Academic Performance

Source: Authors Construct, 2023

As presented in the path analysis (Figure 7), short range planning indirectly predicted academic performance by .32 with a mean and error variance of (18.88, 26.73), time attitude indirectly predicted academic performance by -.16 with a mean and error variance of (9.78, 9.66), long range planning indirectly predicted academic performance by -.08 with a mean and error variance of (9.13, 9.26) and an intercept of 201.65 for academic performance. Table 12 presents the significance of the path model.

Table 12: Regression Model for sub-dimensions of Time Management Practices and Academic Performance

					95% Confidence Interval	
Model	*B*	*SE*	*CR*	*P*	Lower	Upper
(Constant)	201.651	4.425	45.575	.000	192.903	210.400
Short Range	.323	.203	1.591	.112	-.078	.724
Time Attitude	-.160	.331	-.482	.630	-.815	.495
Long Range	-.075	.341	-.220	.826	-.749	.599

Source: Field Data, 2023: *Significant, p > .05; R = .090 R^2 = .008

The results from Table 12 show that short range planning, time attitude and long-range planning jointly explained 8% of the variations in academic performance of students. The results further revealed that short range planning [*b* = .323, *SE* = .203, *p* = .112, *Boot95%CI* (-.078, .724)], was not found to influence academic performance of the students. Although the results was not significant, the result (*b* = .323) implies that short range planning had a positive influence on the academic performance of students.

The results further revealed that time attitude [*b* = -.160, *SE* = .331, *p* = .630, *Boot95%CI* (-.815, .495)] and long range [*b* = -.075, *SE* = .341, *p* = .826, *Boot95%CI* (-.749, .599)] negatively influence the academic performance of students. This means that students need more time attitude and long range planning in order to have higher academic performance.

The study further proceeded to look at the total construct of time management practices. Figure 8 presents the model.

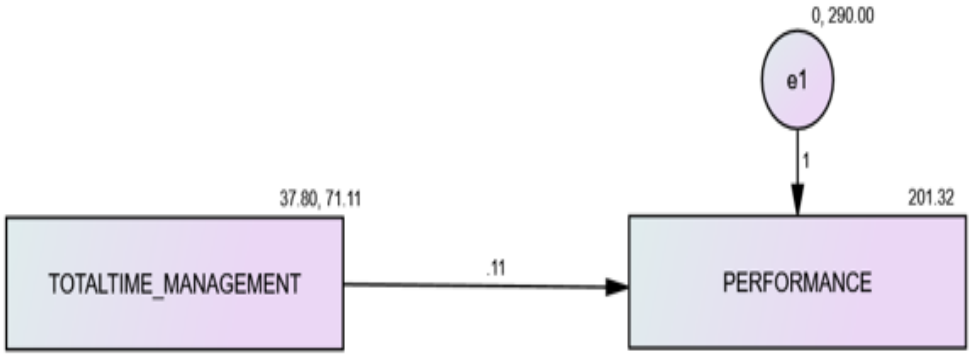

Figure 7: Path model for Time Management Practices and Academic Performance

Source: Authors Construct, 2023

From Figure 8, time management indirectly predicted academic performance by .11 with a mean and error variance of (37.80, 71.11) and an intercept of 201.32 for academic performance. Table 13 presents the significance of the path model.

Table 13: Regression Model for Time Management Practices and Academic Performance

					95% Confidence Interval	
Model	*B*	*SE*	*CR*	*P*	Lower	Upper
(Constant)	201.316	4.427	45.470	.000	192.591	210.042
Time Manag.	.111	.114	.968	.333	-.115	.336

Source: Field Data, 2023: *Significant, p > .05; R = 055; R^2 = .003

The results from Table 13 show that time management practices explained 3% of the variations in academic performance of students. The results further revealed that time management practices [*b* = .111, *SE* = .114, *p* = .333, *Boot95%CI* (-.115, .336)], was not found to influence academic performance of the students. Although the results was not significant, the result (*b* = .111) implies that time management practices had a positive influence on the academic performance of students. Based on the results the study failed to reject the null hypothesis which states that time management practices will not influence academic performance of the students.

Research Hypothesis 2

H_01: Depression, anxiety and stress will not influence the academic performance of Senior High School students in the Okere District.

The hypothesis sought to determine whether depression, anxiety and stress influenced the academic performance of students in the Okere District.

The Structural Equation Model (SEM) path analysis with 5000 bootstrap samples and bias-corrected accelerated confidence intervals was used. The exogenous (predictor) variable was depression, anxiety and stress which was measured continuously. The criterion variable was an academic performance, which was measured using students' performance test scores. Details of the results are presented in Figure 9 and Table 14.

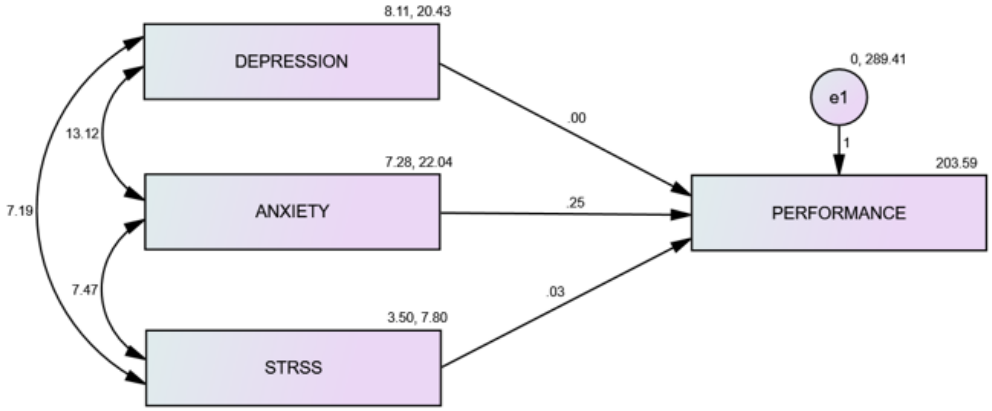

Figure 8: Path model for Depression, Anxiety Stress and Academic Performance

Source: Authors Construct, 2023

As presented in the path analysis (Figure 7), depression indirectly predicted academic performance by .00 with a mean and error variance of (8.11, 20.43), anxiety indirectly predicted academic performance by .25 with a mean and error variance of (7.28, 22.04), stress indirectly predicted academic performance by .03 with a mean and error variance of (3.50, 7.80) and an intercept of 203.59 for academic performance. Table 14 presents the significance of the path model.

Table 14: Regression Model for Depression, Anxiety, Stress and Academic Performance

					95% Confidence Interval	
Model	*B*	*SE*	*CR*	*P*	Lower	Upper
(Constant)	203.589	2.054	99.128	.000	199.528	207.650
Depression	.001	.288	.002	.998	-.569	.570
Anxiety	.245	.277	.884	.377	-.303	.793
Stress	.034	.466	.076	.939	-.847	.916

Source: Field Data, 2023: *Significant, p > .05; R = .071; R^2 = .005

The results from Table 14 show that depression, anxiety and stress jointly explained 5% of the variations in academic performance of students. The results further revealed that depression [*b* = .001, *SE* = .288, *p* = .998, *Boot95%CI* (-.569, .570)], anxiety [*b* = .245, *SE* = .277, *p* = .377, *Boot95%CI* (-.303, .793)] and stress [*b* = .034, *SE* = .466, *p* = .939, *Boot95%CI* (-.847, .916)] were not found to influence academic performance of the students.

Although the result was not significant, the result (*b* = .323; *b* = .245; .034) implies that depression, anxiety and stress had a positive influence on the academic performance of students. Based on the results the study failed to reject the null hypothesis which states that depression, anxiety and stress will not influence academic performance of students.

Research Hypothesis 3

H0: There is no statistically significant difference among depression, anxiety and stress of male and female Senior High School students in the Okere District.

H1: There is no statistically significant difference between depression, anxiety and stress of male and female Senior High School students in the Okere District.

This hypothesis sought to examine gender differences in depression, anxiety and stress of students. An independent sample T-test was used to test this hypothesis. The results are presented in Table 15.

Table 15: Difference in student's depression, anxiety and stress based on gender

Variable	Gender	N	*M*	*SD*	*T*	*df*	*p*
Depression	Male	203	8.18	4.61	.347	.311	.729
	Female	110	7.99	4.39			
Anxiety	Male	203	7.06	4.48	-1.127	.311	.261
	Female	110	7.69	5.08			
Stress	Male	203	3.52	2.27	.162	.311	.872
	Female	110	3.46	3.58			

Source: Field survey, 2023

As shown in Table 15, the difference in depression, anxiety and stress of the students based on gender was examined using independent sample t-test. The results of Levene's Test for Equality of Variances revealed that there were equal variances assumed in the scores for depression (F = 1.216; p = .271), anxiety (F = .916; p = .339) and stress (F = .899; p = .344). This evidence suggests that the assumption of homogeneity of variance has been met. The results of the independent sample t-test revealed that there was no

statistically significant difference in the mean score of depression for male students (M = 8.18; SD = 4.61) and female students [M = 7.99; SD = 4.39; t(.311) = .347, p = .729), anxiety for male students (M = 7.06; SD = 4.48) and female students [M = 7.69; SD = 5.08; t(.311) = -1.127, p = .261) and stress for male students (M = 3.52; SD = 2.27) and female students [M = 3.46; SD = 3.58; t(.311) = .162, p = .872). Based on the results the study failed to reject the null hypothesis which states that there is no statistical significance gender difference in depression, anxiety and stress.

Research Hypothesis 4

$H_0$1: Gender will not moderate the relationship between time management practices and the academic performance of Senior High School students in the Okere District.

H1: Gender will moderate the relationship between time management practices and the academic performance of Senior High School students in the Okere District.

The hypothesis examined the moderating role of gender in the relationship between time management practices and the academic performance of Senior High School students. Moderation analysis was conducted to find out if a third variable (i.e., Gender) could strengthen or weaken the relationship between the predictor (i.e., time management) and an outcome variable (i.e., academic performance). The analysis employed 5000 bootstrap samples by using a 95% confidence interval. Details are shown in Tables 16 and 17.

Table 16: Model Summary

Model	R	R-Square	F	df1	df2	P
1	. 1165	.0136	1.4170	3.0000	309.0000	.2378

Source: Field Data, 2023: *Significant, p > 0.05.

From Table 17, it was revealed that the R^2 value was .0136 which accounted for 1.36% of the variance in the self-reported academic performance of the students. The model, was not significant, F(3, 309) = 1.4170, p = .2378. Table 17 shows the details

Table 17: Moderating Role of Gender in the Relationship between time management and academic performance

Variable	B	SE	t-value	p-value	BootLL	BootUL
Constant	197.8763	13.2971	14.8812	.0000	171.7120	224.0406
Ti_Ma.	.3244	.3434	.9445	.3457	-.3514	1.0001
Gender	2.3783	9.5400	.2493	. 8033	-16.3934	21.1499
Ti_Ma*Gen.	-.1530	.2446	-.6257	.5320	-.6343	.3282

Source: Field data, 2023

The results in Table 17 showed that gender was not found as a substantial moderator between time management and academic performance (*b* = -.1530; *SE* = .2446; *t* = -.6257; *p* = .5320, *Boot95%CI* (-.6343, .3282). It is concluded that gender does not have effect on the relationship between time management and academic performance. This suggest that the relationship between time management and academic performance does not depend on gender. Based on the results the study failed to reject the null hypothesis which states that gender will not moderate the effect between time management and academic performance.

Discussion

Levels of Time Management

The findings that students had higher levels of time management practice indicate that the students in the current study or context being examined demonstrated more effective and consistent time management skills and behaviours. The outcome is remarkable since as students of the senior high schools, it was anticipated that students will score high on time management practice measure as one needs to demonstrate a higher level of academic achievement before getting admission into the senior high school. As put by Claessens *et al.* (2007) higher levels of time management practice are generally seen as a positive outcome. This suggests that the students have developed skills and habits that allow them to allocate their time efficiently, which can lead to better academic performance and reduced stress.

Claessens *et al.* (2007) is of the view that effective time management is often associated with improved academic performance. When students can prioritise their tasks, set goals, and allocate their time wisely, they are more likely to meet deadlines and excel in their studies. The finding of the current study may also reflect a higher degree of self-discipline among the students. Effective time management often requires setting priorities and sticking to schedules, which can be indicative of self-discipline (Claessens, 2004). Thus, students with higher levels of time management practice may prioritize their time very well in order to reduce academic stress on their studies.

Time management and academic performance

The investigation into the time management practices and academic performance of students was warranted as there is a need for empirical

evidence in this regard. Invariably, it was demonstrated by respondents that time management practices have some positive influence and the academic performance of students. This is evident in other studies and is attested to in other parts of the world (Michael *et al.*, 2014; Akomolafe & Adesua, 2016). Although this positive relation was not significant in the current study it attests to the possibility that the academic performance of senior high school students in Ghana is being affected by other variables which require further research.

The assertion that time management practices play a positive important role in educational endeavour as found in previous research is also evident in this study (Boniwell & Zimbardo, 2015; Ramzan *et al.*, 2023; Biesta, 2007). This finding is supported by previous research which mentioned positive relations between time management practices and academic performance although the predictiveness of time management practices was not established in this current study as in others (Menni *et al.*, 2020). In this case, the findings suggest a potential positive influence of time management practices on academic performance, but more research might be needed to confirm and better understand this relationship. This means that students who are more effective at managing their time are likely to perform better academically. This finding has practical implications in that it suggests that teaching and promoting effective time management skills could potentially lead to better academic outcomes for students.

The rationale for time management among student is to improve their quality of activities completed in a restricted amount of time (Agormedah *et al.*, 2021). Quality time management behaviours can facilitate students' productivity, academic performance and minimise depression, anxiety and

stress in students (Claessens, 2004; Kearns & Gardiner, 2007; Aduke, 2015; Chaturvedi, 2016). From these results, the study asserted that effective time management among students cannot be deemphasised. So, learning the art of time management is a necessity for quality life and academic success. In summary, this finding suggests that time management practices have a positive influence on the academic performance of students although it was not significant in the current study. It is a valuable piece of information that can inform educational strategies and interventions aimed at improving students' academic success. However, it's essential to consider other variables and factors that may also impact academic performance.

Depression, anxiety, stress and academic performance

The current results revealed positive coefficients which generally imply a positive relationship, suggesting that higher levels of depression, anxiety, and stress are associated with academic performance although the results were not significance in the current study, but there was a positive but weak influence of depression, anxiety, and stress on academic performance. Research has consistently shown that high levels of depression, anxiety, and stress can negatively impact academic performance (Andrews & Wilding, 2004). Students experiencing these distresses often struggle with motivation, which can lead to lower grades and diminished learning outcomes.

It was put by Schmidt *et al.* (2011) who indicated that students may have difficulty in problem-solving, and retaining knowledge, all of which are essential for successful learning and academic performance. These issues can lead to increased absenteeism and reduced class engagement. Students dealing with depression, anxiety, or stress may find it challenging to attend classes

regularly, participate in discussions, or complete assignments on time (Song *et al.*, 2004). Depression, anxiety, and stress can disrupt effective study habits. Students may struggle to manage their time, organize their work, and maintain a consistent study schedule, all of which are crucial for academic success. *et al.*,

Some other studies demonstrated that depression, anxiety and stress can lead low motivation, poorer school performance and achievement scores (Owens et al., 2012; Turner *et al.*, 2012) Naz *et al.* (2020) examined the relationship between distress and the academic performance of undergraduate college students. The results of this study demonstrated that students who reported depressive symptoms missed more classes and experienced a drop in their academic performance than their peers that did not report depressive symptoms. It's important to note that the relationship between these distress and academic performance is often cyclical. Poor academic performance can also contribute to increased depression, anxiety, and stress, creating a vicious cycle. In summary, the relationship between depression, anxiety, and stress and academic performance is complex, but research consistently shows that these negative factors can have a detrimental impact on students' ability to excel in their studies. Recognizing this connection is vital for educators, institutions, and policymakers in developing strategies to support students in managing their mental health and, in turn, improving their academic performance.

Depression anxiety, stress and gender

The current results revealed that there is no gender difference in depression anxiety, and stress of the students. While the study's findings

indicate no significant gender differences in depression, anxiety, and stress, it's essential to consider that these results are specific to the sample and context of the current study. The finding suggests that, in the specific context of this current study, male and female, or individuals of different gender identities, are experiencing similar levels of depression, anxiety, and stress. This is a positive sign for gender equality, indicating that these mental health issues are not significantly biased towards one gender. The current findings contribute to the understanding of how gender may or may not play a significant role in mental health. They highlight the importance of considering individual differences and other factors that might contribute to mental health challenges, such as personal experiences, social support, and cultural influences (Kim, Sherman, & Taylor, 2008).

The current study results contradict numerous studies that reported that females are more likely to experience depression compared to men (Addis, 2008). This gender difference in depression has often been attributed to biological factors, as well as psychosocial factors, including gender roles and socialization. However, other studies have challenged this gender disparity, finding no significant differences in the prevalence of depression between men and women (Salk *et al.,* 2017; Van de Velde *et al.,* 2010) which is evident in the current study. Some researchers argue that the diagnostic criteria for depression, anxiety and stress might not fully account for the gender-specific manifestations of this condition (Narrow *et al.,* 2008; Salk *et al.,* 2017).

The current study disagrees with most studies which proved that females are been identified as experiencing stress, anxiety and depression than males (Wahed & Hassan, 2017; Iqbal *et al.,* 2015; Kulsoom & Afsar, 2015;

Desouky & Allam, 2017). Females are reported to have greater levels of depression, anxiety, and stress (Soysa & Wilcomb, 2015). Contradictory studies reported higher levels of depression, anxiety, and stress among females, contradictory findings showed that depression and anxiety were more prevalent in males than females (Gao *et al.*, 2020). However, this current study found that depression, anxiety and stress are similar for both male and female students. The finding of no statistical significance in gender differences in depression, anxiety, and stress is consistent with a substantial body of literature, but it's also important to recognise that the relationship between gender and depression, anxiety, and stress is complex and can vary across studies and populations.

Gender, time management and academic performance

The finding that gender was not identified as a substantial moderator between time management and academic performance indicates that, in the context of the study, the relationship between time management practices and academic performance does not significantly differ between genders. The results suggest that, regardless of gender, the influence of time management on academic performance is consistent. In other words, effective time management practices are equally beneficial for both male and female students, and individuals of different gender identities. This finding supports the idea that academic success should be achievable and equitable for individuals of all genders (Voyer & Voyer, 2014). It implies that gender should not be a determining factor in academic performance when time management is effectively practiced.

While this result emphasises the non-significant role of gender, it also highlights those individual differences, such as one's ability to manage time effectively, may have a more substantial impact on academic performance than gender. The implication here is that institutions, educators, and students themselves should focus on promoting time management skills to improve academic performance, irrespective of gender (Farrington *et al.*, 2012). This could include workshops, counselling, and resources aimed at enhancing time management abilities.

The current results are in line with many studies examining the relationship between time management and academic performance which explored whether gender acts as a moderator (Yener *et al.*, 2021; Balkis & Duru, 2017). These studies often use regression or moderation analyses to determine if the impact of time management on academic performance differs significantly between genders. Their findings reveal that gender is not a substantial moderator, which means that the relationship between time management and academic performance is relatively consistent for both males and females. In these research contexts, when gender is consistently found not to substantially moderate the relationship between time management and academic performance, it suggests that effective time management practices are universally beneficial regardless of gender. This reinforces the importance of promoting time management skills among all students to enhance their academic success and supports the idea of gender equality in education.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

In this chapter, the summary, conclusions and recommendations of the study were highlighted. The summary highlighted the main objective of the study, aspects of the methodology, and the key findings of the study. The conclusions drawn from the findings of the study and finally, recommendations and areas for further research were suggested in the chapter.

Summary

The purpose of the study was to examine the influence of time management practice and distress on academic performance of students in the senior high schools in the Okere District, Ghana. The study was guided by one research question and four hypotheses. Descriptive survey design was used in the study with the quantitative approach which was anchored in the positivist paradigm. The study used a sample size of 313 respondents in the study. Multistage sampling procedures namely purposive, proportionate sampling technique, and table of random numbers were used in the sampling process. Time management scale, and depression, anxiety and stress scale were used to gather data for the study. This instrument was validated using 150 Okuapeman SHS students who were not part of the sample selection for the study. Simple frequencies and percentages were used to analyse the demographic variable of the study. Research question 1 was analysed using means and standard deviation. Hypotheses one and two, were tested using a structural equation model while hypothesis three was tested using an independent sample t-test. However, hypothesis four was tested using PROCESS analysis.

Key Findings

1. The results of the study revealed higher levels of time management practices among senior high school students.
2. The results of the study revealed that time management practices had a positive relationship with academic performance. Despite the relationship, time management practices did not significantly influence academic performance.
3. The results of the study revealed that depression, anxiety and stress had a positive relationship with academic performance. Despite the relationship, depression, anxiety and stress did not significantly influence academic performance.
4. Again, the results showed that there is no gender differences in depression, anxiety and stress of the students.
5. The results further revealed that gender did not moderate the effect between time management and academic performance of students.

Conclusion

The study underscores the complexity of relationships among time management practices, psychological distress, and academic performance in senior high school students. While a positive association was observed, time management and psychological distress did not significantly predict academic outcomes. Additionally, the absence of gender differences in depression, anxiety, and stress, as well as the non-significant moderation effect of gender on time management and academic performance, highlights the universal applicability of these findings.

These results suggest that while time management is valuable, academic success is influenced by a broader interplay of factors including motivation and support systems. The findings advocate for interventions such as time management training and mental health education to holistically support students' academic journeys.

Recommendations

Based on the findings and the conclusions, the following recommendations were made:

1. The study recommends that educational institutions should consider offering time management workshops or training programs for students. These sessions can teach effective time management strategies, goal-setting and organization skills.
2. The study recommends that Ghana Education Service incorporate mental health education and awareness programs into the curriculum. Promote discussions on mental health, reduce stigma, and teach students about the signs and symptoms of depression, anxiety, and stress. This education can help students recognise when they need assistance.
3. The study recommends head teachers, and teachers in the various senior high schools to establish gender-inclusive mental health support groups or clubs where students can openly discuss their experiences with psychological distress and seek peer support. This approach fosters an environment of solidarity and understanding among students of all gender identities.

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APPENDICES

APPENDIX A

QUESTIONNAIRE FOR SHS STUDENTS

Dear Respondent,

This item asks about time management, depression, anxiety and stress. You are kindly requested to check the boxes that best describe you. Please rest assured that the information you supply will be used just for academic purposes and will be kept completely confidential. As a result, you are urged to react to all items honestly and objectively.

Instruction: Please provide the appropriate response as frankly as possible. Tick boldly against the responses which are applicable.

SECTION A: BACKGROUND / DEMOGRAPHIC INFORMATION

1. Sex: Male [ ] Female [ ]

2. Age: 13 – 15years [ ] 16 – 18years [ ]

19 – 21years [ ] 22years and above [ ]

SECTION B

The rating scale is as follows:

1 = Always, 2 = Frequently, 3 = Sometimes, 4 = Infrequently, 5 = Never

	Short-Range Planning	1	2	3	4	5
1	Do you make a list of the things you have to do each day?	1	2	3	4	5
2	Do you plan your day before you start it?	1	2	3	4	5
3	Do you make a schedule of the activities you have to do on work days?	1	2	3	4	5
4	Do you write a set of goals for yourself for each	1	2	3	4	5

	day?					
5	Do you spend time each day planning	1	2	3	4	5
6	Do you have a clear idea of what you want to accomplish during the next week	1	2	3	4	5
7	Do you set and honour priorities?	1	2	3	4	5
	Time Attitudes	1	2	3	4	5
8	Do you often find yourself doing things which interfere with your schoolwork simply because you hate to say "No" to people?	1	2	3	4	5
9	Do you feel you are in charge of your own time, by and large?	1	2	3	4	5
10	On an average class day do you spend more time with personal grooming than doing schoolwork	1	2	3	4	5
11	Do you believe that there is room for improvement in the way you manage your time?	1	2	3	4	5
12	Do you make constructive use of your time?	1	2	3	4	5
13	Do you continue unprofitable routines or activities?	1	2	3	4	5
	Long-Range Planning	1	2	3	4	5
14	Do you usually keep you desk clear of everything other than what you are currently working on?	1	2	3	4	5
15	Do you have a set of goals for the entire quarter?	1	2	3	4	5
16	The night before a major assignment is due, are you usually still working on it?	1	2	3	4	5

17	When you have several things to do, do you think it is best to do a little bit of work on each one?	1	2	3	4	5
18	Do you regularly review your class notes, even when a test is not imminent?	1	2	3	4	5

SECTION C: Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applies. There are no right or wrong answers.

The rating scale is as follows:

Did not apply to me at all = 0, Applied to me to some degree, or some of the time = 1, Applied to me to a considerable degree or a good part of time = 2, Applied to me very much or most of the time = 3

1	I found it hard to wind down	0	1	2	3
2	I was aware of dryness of my mouth	0	1	2	3
3	I couldn't seem to experience any positive feeling at all	0	1	2	3
4	I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3
5	I found it difficult to work up the initiative to do things	0	1	2	3
6	I tended to over-react to situations	0	1	2	3
7	I experienced trembling (e.g. in the hands)	0	1	2	3
8	I felt that I was using a lot of nervous energy	0	1	2	3
9	I was worried about situations in which I might	0	1	2	3

	panic and make a fool of myself				
10	I felt that I had nothing to look forward to	0	1	2	3
11	I found myself getting agitated	0	1	2	3
12	I found it difficult to relax	0	1	2	3
13	I felt down-hearted and blue	0	1	2	3
14	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
15	I felt I was close to panic	0	1	2	3
16	I was unable to become enthusiastic about anything	0	1	2	3
17	I felt I wasn't worth much as a person	0	1	2	3
18	I felt that I was rather touchy	0	1	2	3
19	I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat)	0	1	2	3
20	I felt scared without any good reason	0	1	2	3
21	I felt that life was meaningless	0	1	2	3

APPENDIX B

CORE MATHEMATICS

FORM TWO **DURATION: 40 MINS**

ANSWER ALL QUESTIONS

1. Simplify $21_{three} \times 21_{three}$

   a) 1211_{three} b) 1210_{three} c) 1202_{three} d) 1021_{three}

2. If P = {3, 4, 5, 6}, Q = {5, 6, 7, 8} and R= {2, 3, 7, 9}, which of the following represents the set P∩ (Q∪R)?

   a) {5, 6} b) {3, 4, 5}

   c) {3, 5, 6} d) {3, 4, 5, 6}

3. Calculate 83 × 98, giving the answer in a standard form.

   a) 8.134×10^{-4}

   b) 8.134×10^{-3}

   c) 8.134×10^{3}

   d) 8.134×10^{4}

4. If $2^{-n} = x$, find 2^{n+1}

   a) $\frac{2}{x}$ b) $\frac{2}{2x}$

   c) $\frac{x}{2}$ d) $-2x$

5. Solve the simultaneous equations $2x + y = 7$ and $x + y = 3$

   a) $x = 4, \quad y = -1$

   b) $x = 3, \quad y = 1$

   c) $x = 2, \quad y = 3$

   d) $x = -4, \quad y = 1$

6. Express in standard form the value of $\frac{6.2\times10^{-8}\times5\times10^{-5}}{4.8\times10^{-9}}$

   a) 6.458×10^{-22}

   b) 6.458×10^{-4}

   c) 6.458×10^{4}

   d) 6.458×10^{22}

7. Simplify: $(x-1+2\sqrt{2})(x-1-2\sqrt{2})$

   a) x^2-2x-7 b) x^2-2x+7

   c) x^2+2x-7 d) x^2+2x+7

8. Make T the subject of the relation $l=g\left(\frac{T}{2\pi}\right)^2$

   a) $T=2\pi\sqrt{\frac{g}{l}}$

   b) $T=2\pi\sqrt{\frac{l}{g}}$

   c) $T=2\pi\left(\frac{l}{g}\right)^2$

   d) $T=2\pi\left(\frac{g}{l}\right)^2$

9. Arrange the fractions $\frac{3}{4},\frac{2}{3},\frac{4}{5}$ in an ascending order of magnitude.

   a) $\frac{3}{4},\frac{2}{3},\frac{4}{5}$ b) $\frac{4}{5},\frac{2}{3},\frac{3}{4}$

   c) $\frac{4}{5},\frac{3}{4},\frac{2}{3}$ d) $\frac{2}{3},\frac{3}{4},\frac{4}{5}$

10. In a class of 28 pupils, 13 have pencils, 9 have erasers and 9 have neither pencils nor erasers. How many pupils have both pencils and erasers?

    a) 3 b) 5 c) 6 d) 9

11. Correct 0.0395387 to three significant figures.

    a) 0.395 b) 0.040

c) 0.0400 d) 0.0395

12. A set has 64 subsets, how many elements are in the set?

a) 6 b) 5 c) 4 d) 3

13. Find the exact value of y if $\sqrt{24} + \sqrt{96} - \sqrt{600} = y\sqrt{6}$

a) 4 b) 2 c) -2 d) -4

14. The exterior angle of a regular pentagon is 72^o. Find the sum of its interior angle.

a) 72^o b) 110^o

b) c) 350^o d) 540^o

15. Factorize the expression: $5x^2 - 13x - 6$

a) $(5x + 3)(x - 2)$

b) $(5x + 2)(x + 3)$

c) $(5x - 3)(x + 2)$

d) $(5x + 2)(x - 3)$

16. Determine the least value of y such that $7 + y = (3mod\ 8)$

a) 3 b) 4 c) 5 d) 6

17. Simplify: $\frac{a-1}{a^2-1}$

a) $\frac{1}{a}$ b) $\frac{1}{a-1}$

c) $\frac{1}{1-a}$ d) $\frac{1}{a+1}$

18. Find the value(s) of x for which the expression $\frac{(2x+3)(1-x)}{x(x+1)}$ is not defined.

a) -1 b) -1.5

c) $-1, 0$ d) $-1, 1.5$

19. The sum of three consecutive odd numbers is 45. Find the smallest number.

    a) 9 b) 11 c) 13 d) 15

20. Two apples and a coconut cost 3,100 N. an apple and two coconuts cost 2,600 N. What is the cost of a coconut?

    a) 520 N b) 700 N

    c) 1140 N d) 1200 N

21. The operation* is defined by $x * y = x + y + x^2$ in arithmetic modulo 6. Find (3 * 2) * 5

    a) 5 (mod 6) b) 4 (mod 6)

    c) 3 (mod 6) d) 2 (mod 6)

22. The sum of the interior angles of a regular polygon is 30 right angles. How many sides has the polygon?

    a) 34 b) 30 c) 26 d) 17

23. A certain number x is multiplied by 5. Another number that is 6 less than x is also multiplied by 5. By how much is the first product greater than the second?

    a) 5 b) 6 c) 25 d) 30

24. Solve the equation $x^2 - 121 = 0$

    a) $x = -11$

    b) $x = 11$

    c) $x = -11 \; or \; 12$

    d) $x = -11 \; or \; 11$

25. Given that $2x + 1 = 4 \; mod \; 7$, where x is an integer, which of the following is the least value of x?

a) 2 b) 3 c) 4 d) 5

26. Find the gradient of the line whose equation is $2y - 4x - 5 = 0$

a) 2 b) – 2 c) 4 d) – 4

27. If $2\sqrt{5} + \sqrt{125} - \sqrt{45} + 4 \equiv a + b\sqrt{c}$, evaluate $(2a - b)$

a) 8 b) 4 c) 2 d) 0

28. State the domain of the function , $f(x) = \frac{1}{x^2-1}$

a) $\{x: x \in R, x \neq 1, x \neq -1\}$

b) $\{x: x \in R, x \neq 1\}$

c) $\{x: x \in R, x \neq -1\}$

d) $\{x: x \in R\}$

Use the information below to answer Questions 29 and 30.

Under the mapping $x \rightarrow ax - b^2$, the image of 1 is 3 and the image of 2 is 15.

29. Find the value of a

a) 6 b) 12 c) 3 d) 9

30. Find the value of b

a) 9 b) 3 c) -9 d) 3

ENGLISH LANGUAGE

FORM TWO **DURATION: 30 MINS**

ANSWER ALL QUESTIONS

Choose among the alternatives the verb that best completes each of the following sentences.

1. The man together with his wife ……the family every day.

A. visit B. visits C. visiting D. visited

2. In the field……. a big log.

A. lies B. lie C. lay D. lied

3. Neither Kwame nor you ……... my friend.

A. is B. was C. am D. are

4. Twenty years in prison ……. a long period of time.

A. were B. is C. are D. have

5. A committee of four was …….. to look into the issue.

A. set out B. set off C. set up D. set in

6. I want my book and ……..

A. nobody's B. nobody else C. nobody elses D. nobody else's

7. It is high time we ……for the party.

A. leave B. left C. have to leave D. will leave

Identify the pattern (i.e. subject, verb, object, complement and adjunct) in the following sentences choosing from letter A-D.

8. George gave me the book.

A. SVOA B. SVOOC C. SVOO D. SVOC

9. Ben angrily argued in class.

A. SVAA B. SVA C. SAVA D. SAVO

10. I called home this afternoon.

A. SVAA B. SVOC C. ASVO D. SVOOA

11. They proved the president wrong.

A. SVOA B. SVOC C. SVCA D. SVO

12. Yesterday, the students voted him representative at the class.

A. SVOOA B. SVAC C. ASVOCA D. ASVOAA.

From the list of words letters, A-D, choose the word that is mostly nearly opposite in meaning to the underlined word and that will at the same time correctly fill the gap in the following sentences.

13. The editor's intention was to **expand** the manuscript and not……. it.

A. lesson B. decrease C. shorten D. subtract.

14. Many Christians often forget the **temporal** responsibility of their leaders.

A. material B. permanent C. secular D. spiritual

15. Opoku made an **invaluable** contribution during the group discussion.

A. worthless B. substantial C. incredible D. incomparable.

16. David will need an **expert** mechanic to repair your car.

A. inelegant B. uneducated C. inexperienced D. accomplished

17. All the houses **erected** without the permission of the health authorities had to be ……..

A. evacuated B. demolished C. rebuilt D. deserted

18. Some of the colours were certainly **attractive** but the others were.

A. unique B.passive C. pleasant D. repulsive

19. Kwame **vanished** when the fight began.

A. jumped high B. moved C. appeared D. collapsed

Choose from the letters A to D the one which is nearest in meaning to the underlined word or expression in the following sentences.

20. Adjei is not only hardworking; he is also **meticulous**.

A. resolute B. particular C. fortunate D. optimistic.

My cousin claimed that Mr. Kwame was **despotic**.

A. vindictive B. dictatorial C. hash D. wicked

22. Rocket science is **incomprehensible**.

A. intelligible B. unfathomable C. understandable D. penetrable.

23. It is very **common** to experience power outages in Ghana

A. rare B. normal C. rampant D. dangerous

24. High **demand** for goods like rice, chicken and oil is overwhelming this December.

A. supply B. provision C. need D. want

25. Some people display high level of **cognizance** when it comes to investment avenues.

A. intelligence B. knowledge C. sense D. education

After each of the following sentences, a list of possible interpretations of all or part of the sentences is given. Choose the interpretation you consider most appropriate for each sentence.

26. What you said is **quite beside the point**, this means that what you said is …….

A. very important B. another good point

C. an obvious lie D. very near the point

27. Collins decided to **turn a deaf ear** to her nagging when I realized that it was the only way to peace. This means ……..

A. Collins turned his deaf ear to her whenever she nagged

B. Collins allowed himself to be made unhappy by her nagging

C. Collins became deaf as a result of her nagging

D. Collins disregarded her nagging

28. Drivers **grease the palm of policemen** in other to do what pleases them on our roads. This means ……

A. deceive the police B. put grease on their hands

C. trick the policemen D. bribe the policemen

29. Christiana was **in two minds** about her future career. This implies that she ……

A. wished to become well know B. was dreaming about her future

C. did not like the idea she was given D. had not yet chosen a profession

30. The students have **bitten more than they can chew**. This means the students …….

A. have rather poor table manners B. have many difference

C. are too greedy D. have commit to more than they can do

INTEGRATED SCIENCE

SHS TWO **TIME: 30 MINS**

ANSWER ALL QUESTIONS

1. Bacteria belong to the Kingdom

   a) Fungi b) Plantae

   c) Prokaryote d) Protoctista

2. Which of the following levels of classification embraces the largest number of classification?

   a) Class b) Genus

   c) Order d) Phylum

3. Which of the following can be classified as an organ?

   a) Leaf b) Muscle

   c) Palisade layer d) Spermatozoon

4. Which of the following organelles is associated with protein synthesis?

   a) Golgi body b) Lysosome

   c) Mitochondrion d) Ribosome

5. It is desired to dilute 4 cm^3 of 1 M solution to obtain 0.2 M solution. Calculate the volume of distilled water needed for dilution.

   a) 10 cm^3 b) 16 cm^3

   b) 20 cm^3 d) 24 cm^3

6. The IUPAC name for the compound with the formula $CuSO_4$ is ……..

   a) Copper (II) tetraoxosulphate (VI)

   b) Copper (I) tetraoxosulphate (VI)

   c) Copper tetraoxosulphate (IV)

d) Copper (IV) tetraoxosulphate (II)

7. The major fractions of crude oil are separated by …….

a) Chromatography

b) Condensation

c) Fractional crystalisation

d) Fractional distillation

8. The main method of propagating cassava is ……..

a) Budding b) Grafting

c) Use of stem d) Stem cutting

9. An athlete of mass 80.0 kg with a speed 9.0 ms^{-1} has a kinetic energy of ……..

a) 720 J b) 3240 J

c) 1440 J d) 7200 J

10. Which of the following structures controls the passage of substance in and out of a cell?

a) Nuclear membrane

b) Cell wall

c) Plasma membrane

d) Endoplasmic reticulum

11. The electron configuration of sodium ion is ……

a) 2, 8, 1 b) 2, 2, 7

c) 2, 7, 2 d) 2, 8

12. In the formation of an ionic compound, atoms of one of the combining elements must ……..

a) convert neutrons to electrons

b) lose protons

c) gain protons

d) gain electrons

13. Which of the following units is derived?

a) K b) s c) kg d) Pa

14. The following are characteristics of living things except ……..

a) Respiration b) secretion

b) c) excretion d) nutrition

15. Living cells of plants and animals contain ……

a) cell wall

b) chloroplast

c) contractile vacuoles

d) mitochondria

16. Which of the following processes brings about the disintegration of a rock?

a) Weathering b) Moulting

c) Metamorphosis d) Dissociation

17. A joint which allows movement in all direction is found at the …….

a) hip b) wrist

c) knee d) elbow

18. An atom is said to be electrically neutral when it contains equal numbers of electrons and …….

a) Isotopes b) neutrons

c) nucleon d) protons

19. Atoms which defer in mass number but have the same proton number are referred to as…….

    a) allotropes b) isomers

    c) isotopes d) nuclides

20. Which of the following devices operate by going through the following transformations? Electrical energy → magnetic energy → kinetic energy → sound energy

    a) Electric fan b) Electric kettle

    c) Electric bell d) Transformer

21. A lump of gold has a density of 8 gcm^{-3} and a volume of 20 cm^3. Determine mass of the gold

    a) 0.4 g b) 2.5 g

    c) 28.0 g d) 160 g

22. Covalent compounds usually have melting and boiling points because they ……

    a) possess weak intermolecular bonds

    b) are organic compounds

    c) are polar compounds

    d) are formed by sharing electrons

23. Potential and kinetic energy are collectively known as ……

    a) renewable energy

    b) mechanical energy

    c) elastic energy

    d) gravitational energy

24. In photosynthesis, light energy is converted to …….

    a) chemical energy

    b) heat energy

    c) potential energy

    d) kinetic energy

25. The sedimentary rock is also referred to as ……

    a) stratified b) slate rock

    c) silica rock d) separated rock

26. The energy possessed by a student on top of a building is ……

    a) chemical energy

    b) kinetic energy

    c) heat energy

    d) potential energy

27. A solution of 250 cm^3 HCl has a concentration of 2 $moldm^{-3}$. Determine the number of moles of the acid.

    a) 0.25 moles b) 0.50 moles

    c) 1.00 moles d) 1.50 moles

28. For any system to produce sound, it must …….

    a) possess potential energy

    b) be vibrating

    c) both kinetic and potential energy

    d) possess kinetic energy

29. An object has a mass of 220.0 kg. calculate its weight (g = 10.0 ms^{-2})

    a) 2200.0 N b) 220.0 N

    c) 2.20 N d) 0.22 N

30. Calculate the kinetic energy of an athlete of mass 60 kg running at 8 ms^{-1}.

a) 2.4×10^3 J b) 2.6×10^3 J

c) 1.92×10^3 J d) 3.84×10^3 J

CORE MATHEMATICS

ANSWERS

1.	A	11.	D	21.	A
2.	C	12.	A	22.	D
3.	C	13.	D	23.	D
4.	A	14	D	24.	D
5.	A	15.	D	25.	D
6.	B	16.	B	26.	A
7.	A	17.	D	27.	B
8.	B	18.	C	28.	A
8.	D	19.	C	29.	B
10.	A	20.	B	30.	B

ENGLISH LANGUAGE

ANSWERS

1.	A	11.	B	21.	B
2.	A	12.	D	22.	B
3.	A	13.	B	23.	C
4.	B	14	B	24.	C
5.	C	15.	B	25.	B
6.	A	16.	C	26.	C
7.	B	17.	B	27.	D
8.	D	18.	D	28.	D
8.	C	19.	C	29.	D
10.	A	20.	B	30.	D

INTEGRATED SCIENCE

ANSWERS

1.	C	11.	A	21.	D
2.	D	12.	D	22.	D
3.	A	13.	D	23.	B
4.	D	14	B	24.	A
5.	C	15.	C	25.	A
6.	A	16.	A	26.	D
7.	D	17.	A	27.	B
8.	D	18.	D	28.	B
8.	B	19.	C	29.	A
10.	C	20.	C	30.	C

APPENDIX C

TIME MANAGEMENT

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	150	100.0
	Excluded[a]	0	.0
	Total	150	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.894	18

SUB SCALES OF TIME MANAGEMENT

SHORT RANGE PLANNING

Case Processing Summary

		N	%
Cases	Valid	150	100.0
	Excluded[a]	0	.0
	Total	150	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
. 712	7

TIME ATTITUDE

Case Processing Summary

		N	%
Cases	Valid	150	100.0
	Excluded[a]	0	.0
	Total	150	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
. 732	6

LONG RANGE PLANNING

Case Processing Summary

		N	%
Cases	Valid	150	100.0
	Excluded[a]	0	.0
	Total	150	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.724	5

DASS-21

Case Processing Summary

		N	%
Cases	Valid	146	97.3
	Excluded[a]	4	2.7
	Total	150	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.820	21

SUB SCALES OF DASS-21

DEPRESSION

Case Processing Summary

		N	%
Cases	Valid	149	99.3
	Excluded[a]	1	.7
	Total	150	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.608	7

ANXIETY

Case Processing Summary

		N	%
Cases	Valid	149	99.3
	Excluded[a]	1	.7
	Total	150	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.595	7

STRESS

Case Processing Summary

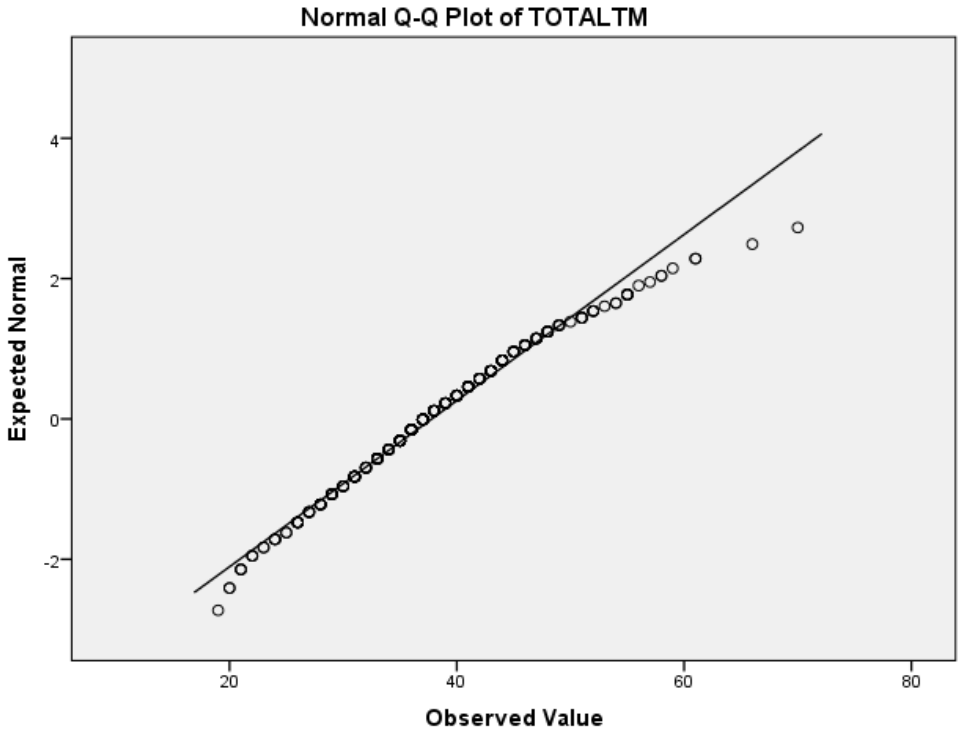
		N	%
Cases	Valid	148	98.7
	Excluded[a]	2	1.3
	Total	150	100.0

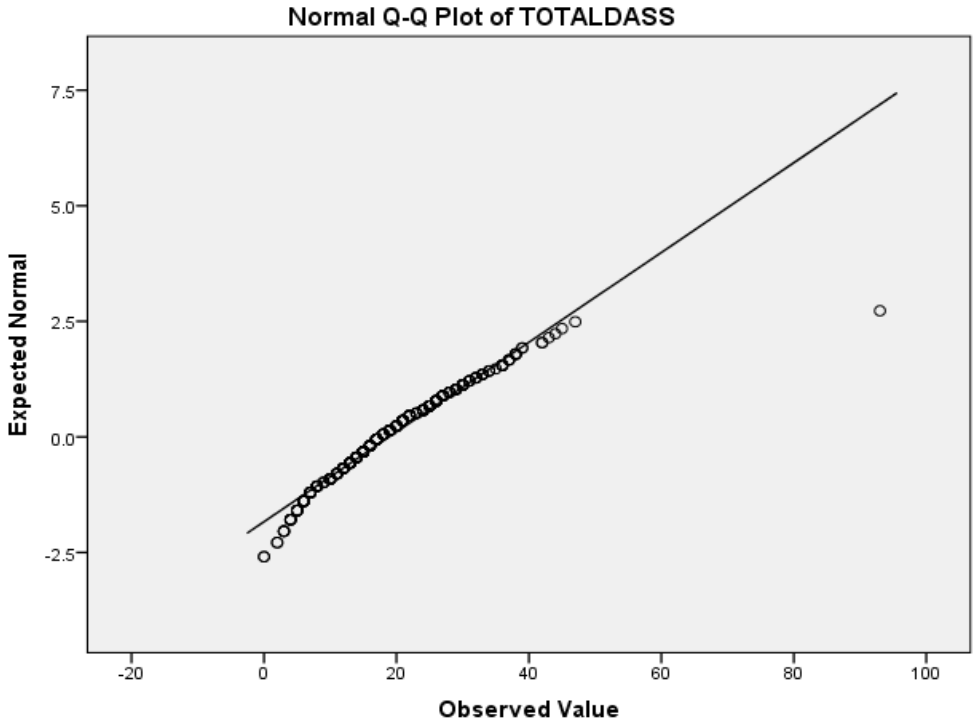
a. Listwise deletion based on all variables in the procedure.

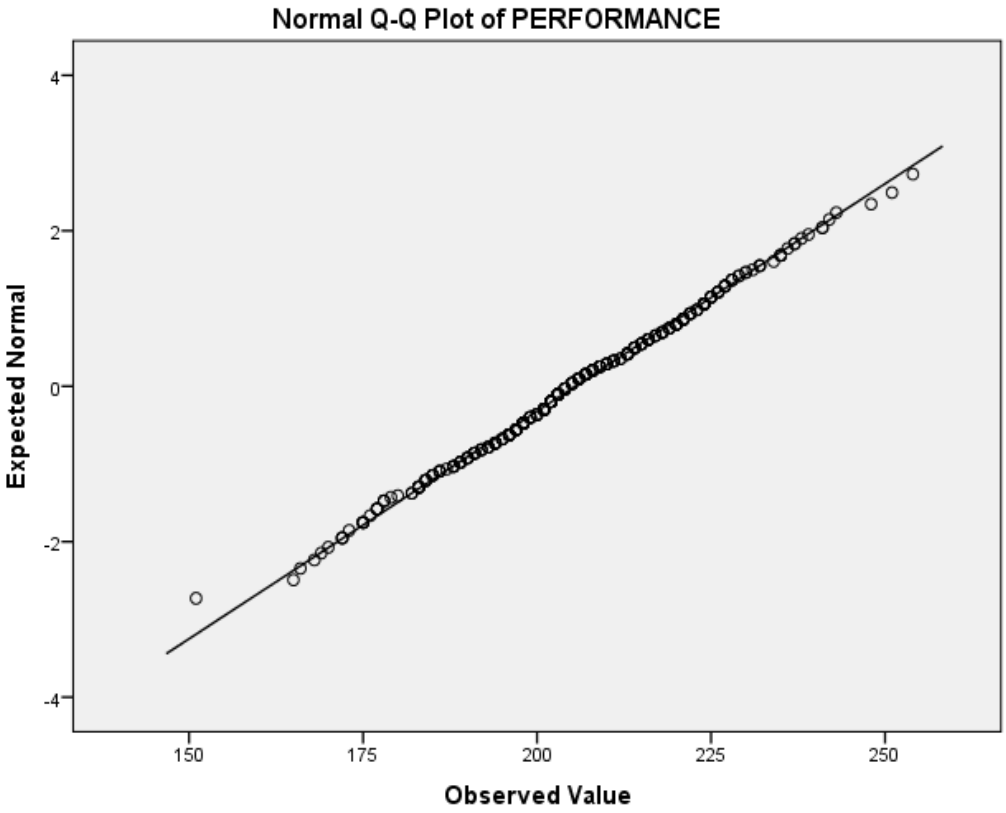
Reliability Statistics

Cronbach's Alpha	N of Items
.585	7

APPENDIX D

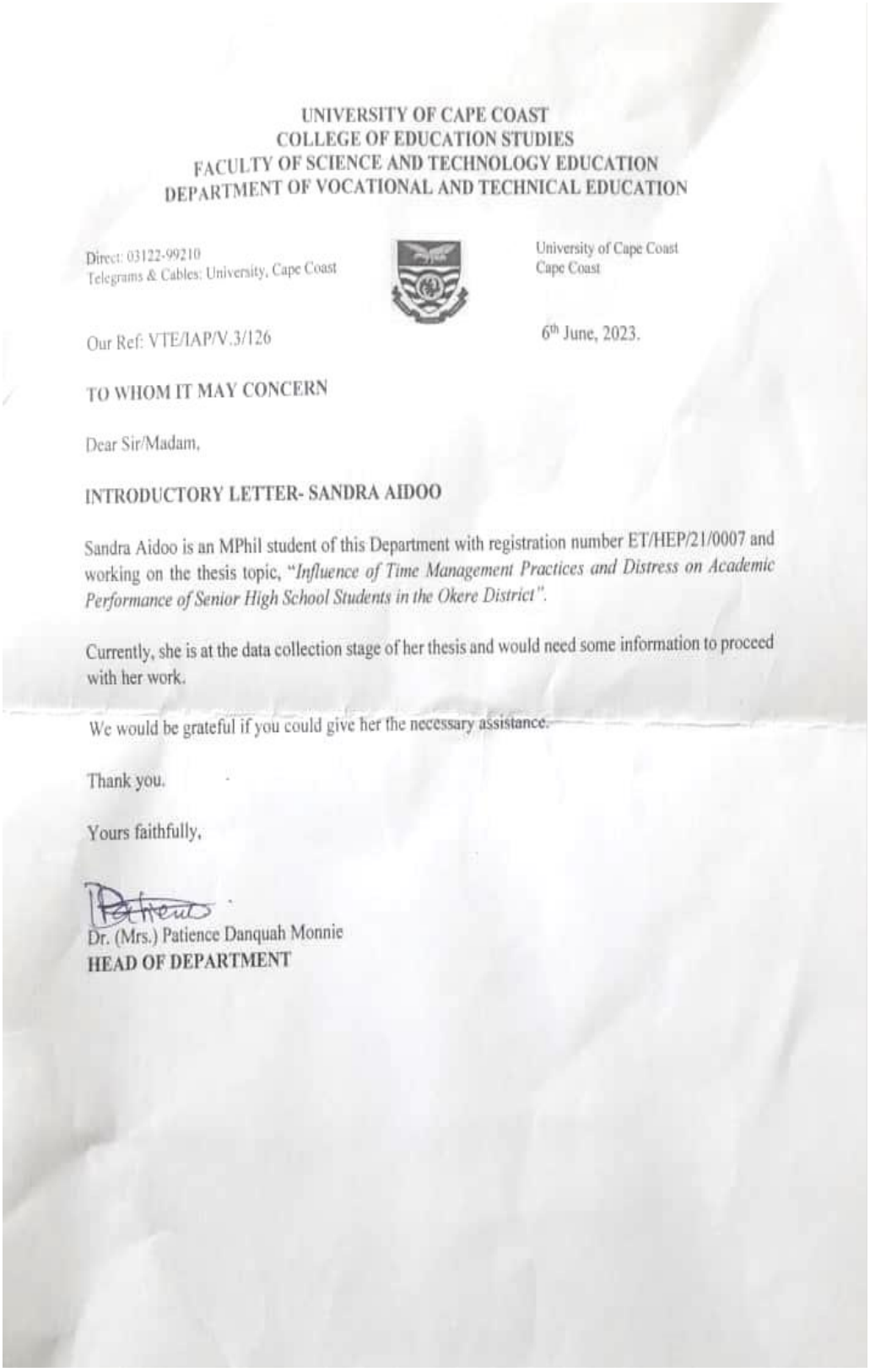






APPENDIX E

INTRODUCTORY LETTER



UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
FACULTY OF SCIENCE AND TECHNOLOGY EDUCATION
DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION

Direct: 03122-99210
Telegrams & Cables: University, Cape Coast

University of Cape Coast
Cape Coast

Our Ref: VTE/IAP/V.3/126

6th June, 2023.

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

INTRODUCTORY LETTER- SANDRA AIDOO

Sandra Aidoo is an MPhil student of this Department with registration number ET/HEP/21/0007 and working on the thesis topic, "*Influence of Time Management Practices and Distress on Academic Performance of Senior High School Students in the Okere District*".

Currently, she is at the data collection stage of her thesis and would need some information to proceed with her work.

We would be grateful if you could give her the necessary assistance.

Thank you.

Yours faithfully,

Dr. (Mrs.) Patience Danquah Monnie
HEAD OF DEPARTMENT

APPENDIX F

APPLICATION FORM FOR ETHICAL CLEARANCE OF NEW PROPOSAL

Department of Vocational and Technical Education

Faculty of Home Economic

College of Education Studies

University of Cape Coast

6th June, 2023

THE CHAIRMAN

INSTITUTIONAL REVIEW BOARD

UNIVERSITY OF CAPE COAST

Thro'

THE HEAD OF DEPARTMENT

DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION

UNIVERSITY OF CAPE COAST

Thro'

THE SUPERVISOR

DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION

Dear Sir,

APPLICATION FOR ETHICAL CLEARANCE TO CONDUCT A STUDY

I am an M.Phil. Home Economics students with registration number ET/HEP/21/0007. I write this letter to apply for ethical clearance to conduct a research study on "Influence of Time Management Practice and Distress on Academic Performance of Senior High School Students in the Okere District of Ghana".

I have attached my proposal and other document for your perusal.

I am counting on your cooperation.

Yours faithfully,

Sandra Aidoo

Sandra.aidoo@stu.ucc.edu.gh

(0545366377)

APPENDIX G

REQUEST FOR ETHICAL CLEARANCE BY MY SUPERVISOR

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
FACULTY OF SCIENCE AND TECHNOLOGY EDUCATION
DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION

Telephone 024-32440-9 & 32480-9 Ext. 262
Direct: 03321-33803
TELEX 2552, UCC, GH
Telegrams & Cables: University, Cape Coast

University Post Office
Cape Coast, Ghana

Our Ref: VTE/

6th June, 2023

The Director
Institutional Review Board
UCC

Dear Sir

REQUEST FOR ETHICAL CLEARANCE

I have the pleasure of introducing to you **Ms. Sandra Aidoo** who I am supervising her work. She is a 2nd Year M.Phil. Student of the Department of Vocational and Technical Education. She is working on the topic **"influence of time management practices and distress on academic performance of senior high school students in the Okere District of Ghana ".**

Sandra is currently at the data collection stage of her research work and I would be most grateful if you could grant her an Ethical Clearance from your outfit to enable her proceed with the collection of data.

Thank you.

Yours faithfully,

Dr. Augustina Araba Amissah
SUPERVISOR

APPENDIX H

REQUEST FOR ETHICAL CLEARANCE BY HOD

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
FACULTY OF SCIENCE AND TECHNOLOGY EDUCATION
DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION

Direct: 03122-99210
Telegrams & Cables: University, Cape Coast

University of Cape Coast
Cape Coast

Our Ref: VTE/IAP/V.3/125

6th June, 2023.

The Head
Institutional Review Board
UCC

Dear Sir,

REQUEST FOR ETHICAL CLEARANCE

We have the pleasure of introducing to you Sandra Aidoo who is an MPhil student of the Department with registration number ET/HEP/21/0007 and working on the thesis topic, "*Influence of Time Management Practices and Distress on Academic Performance of Senior High School Students in the Okere District*".

We would be grateful if you could grant her Ethical Clearance to enable her proceed with the work.

Thank you.

Yours faithfully,

Dr. (Mrs.) Patience Danquah Monnie
HEAD OF DEPARTMENT