UNIVERSITY OF CAPE COAST

INFLUENCE OF ACADEMIC STRESS ON ACADEMIC SELF-CONCEPT AND ACADEMIC SELF-EFFICACY OF SENIOR HIGH SCHOOL STUDENTS IN THE CAPE COAST METROPOLIS, GHANA.

BY

ESENAM ADJETEY

Thesis work submitted to the Department of Education and Psychology of the Faculty of Educational Foundations, College of Education Studies, University of Cape Coast, in partial fulfilment of the requirements for the award of Master of Philosophy degree in Educational Psychology.

NOVEMBER 2020

DECLARATION

Candidate's Declaration

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

Candidate's signature…… Date: ……..

Name: ……

Supervisors' Declaration

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

Principal Supervisor's Signature ……. Date……

Name: ……

Co-Supervisor's Signature…… Date…….

Name: ……..

ABSTRACT

The main aim of the study was to examine the influence of academic stress on the academic self-concept and academic self-efficacy of Senior High School students in the Cape Coast Metropolis, Ghana. A descriptive survey research design was used. Through disproportionate stratified sampling technique five schools were selected while 370 students were selected using proportionate sampling technique. Data for the study were collected with an adapted standardised questionnaire. Descriptive statistics, linear regression and Pearson product moment correlation were the statistical tools used for analysis. The hypothesis for the study was tested using an independent sample t-test. The results of the study showed that academic stress influences the academic self-concept and academic self-efficacy of Senior High School students in the Cape Coast Metropolis. Main source of academic stress among students was stress from test scores. The study also found a significant gender difference in the experience of academic stress with male students experiencing more academic stress than female students. Based on the findings, it was recommended that, head teachers, teachers, and parents should help minimize academic stress on students and also roll out educational programmes that will improve the academic self-concept and academic self-efficacy of students.

ACKNOWLEDGEMENTS

I am grateful to the Almighty God for His grace that has brought me this far. I also appreciate my supervisors, Prof. Koawo Edjah and Dr. Lebbaeus Asamani, of the University of Cape Coast, through whose meticulous supervision and guidance this thesis was successfully completed. My final thanks to everyone who has played a role in my academic journey.

DEDICATION

This work is dedicated to all my loved ones for their prayers, guidance, encouragement and support all these years.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

Background to the Study

The concept of stress has been studied by many researchers such as Kumar and Singh (2017) who concluded that today's world has come to be known as the 'Age of Anxiety and Stress'. Stress produces anxiety and it is in this increasingly anxiety-ridden atmosphere that students find themselves today (Bhansali & Trivedi 2008). Mitra and Sengupta (2011) acknowledged in their work that the adolescent of today encounter temptations and challenges of the adult earlier than it used to be and they are often not prepared emotionally and cognitively to effectively go through such moments. They also assert that teenagers are in a tougher situation today than their parents and elders used to be in. This is due to the increasing academic demands especially in senior high schools where students must excel in order to gain admission into the university.

Other research suggests that social stimuli inevitably contribute negatively or positively to the growth of the adolescent's self-esteem, self-concept and self-efficacy (Dusek & McIntyre, 2003; Harter, 2006; Turnage, 2004). Common among these social stimuli is the school with its related stakeholders, which is ultimately tasked with the responsibility to formally educate the adolescent to become useful members in the society. Nalini (1997) as cited in Bhansali and Trivedi (2008) posited that today's adolescents are exposed to a system in which nothing appears to be assured with certainty; however, they are expected to perform at every endeavour of which academic work is of utmost importance. Such expectations put the student in a constant competitive state leading to the experience of academic stress.

The academic performance of students is critical to parents, guardians, teachers and other stakeholders as well as the learners themselves. The community at large is also conscious of the future influence of education on its members where school graduates are expected to contribute to develop and shape the destiny of society for future generations (Salami, 2001). In effect, students face inevitable obstacles in their quest to successfully meet some of these expectations (Womble, 2003). Among the obstacles that students encounter in their academic journey is academic stress, which when not well managed can affect the student psychologically, physically, academically and socially (Salami, 2001).

Stress is a concept associated with many life events and circumstances that people face due to constantly evolving values, lifestyle decisions, job aspirations and family expectations. These life conditions have the ability to increase the amount of stress faced by people (Amponsah & Owolabi, 2011). Very often, stress is considered a natural psychological and physical reaction to the demands exerted by events and situations. That is there is the expectation for individuals to give certain physiological or psychological reaction to certain situations. Bernstein et al. (2008), in their definition mentioned that stress is viewed as a negative emotional, cognitive, behavioural and physiological process that occurs as an individual tries to adjust or deal with stressors. Mallinckrodt and Wei (2005) also noted that stress indicators could typically include alertness and release of adrenaline, short-term resistance as a coping mechanism, and fatigue, as well as irritability, muscle stiffness, inability to focus, and a number of physiological reactions such as headache and elevated heart rate. This shows that results of stress can be either positive or negative.

Positive effects of stress can inspire people to enhance their quality of life. However, stress may be negative when it becomes destructive, depending on how a person experienced and responded to it. Researchers have classified stress into different domains depending on the source of stress or the stressor. One of these domains of stress is academic stress.

Academic stress is a specific type of stress that relates to students and schoolwork. It is the type of stress that is generated from academic related activities. Academic stress is considered as a mental distress with regards to any predicted dissatisfaction associated with academic failure or even a lack of knowledge of the likelihood of such failure. Duncan-Williams (2015) explained that academic stress has to do with school-related challenges students face and their inability to overcome those challenges. Academic stress and its sources among students have been an area of concern to researchers over the years. Some studies have identified stressors as too many assignments, competition with other students, failures, lack of pocket money, poor relationships with other students or lecturers and family problems (Busari, 2014; Fairbrother & Warn, 2003 cited in Agolla & Ongori, 2009). Other studies mentioned that academic stress is the product of a combination of academic demands that surpass the adaptive resources available to the student. It is said to happen when the student has insufficient resources to adapt or cope with the demands of the school.

Lin and Yusoff (2013) identified some other challenges secondary school students experience. These include fear of examination outcome, fear of not getting a university placement, course workload, inadequate revision time, high self-expectation, lack of interest in a particular subject, punishment, difficulty

understanding what the teacher is teaching, competing with other class mates, and the desire to meet the expectations of teachers and parents (Lal, 2014).

In Ghana, there have been some investigation into academic stress. For instance, a study conducted by Bekoe, Somuah, Akpalu and Ayisi (2015) found senior high school students' sources of academic stress to include boyfriend and girlfriend relationship problems, social activities, course load, examination, lack / inadequate family support and feeling homesick. There are other variety of issues, including health, socio-economic, psychological, structural and instructor related factors that affect the education sector. These issues can serve as stressors that affect students' psychological well-being and academic performance (Ackon, 2014 cited in Duncan-Williams, 2015; Atuahene & Owusu-Ansah, 2013; Etsey, 2005; Kamal & Bener, 2009). It is important to mention that academic-related stressors can lead to increased academic stress and poor psychological well-being, such as negative academic self-concept and negative academic self-efficacy among students (Duncan-Williams, 2015). MacGeorge, Samter, and Gillihan (2005) made mention that students' inability to cope effectively with academic stress may result in serious psycho-social-emotional health consequences. Thus, academic stress can have a significant influence on the academic self-concept and academic self-efficacy of students (Duncan-Williams, 2015).

According to Marsh and Craven (2002), academic self-concept (ASC) can be described as the perception and evaluation that a learner has or holds about his or her academic abilities. In addition, Santana, Feliciano and Jiménez (2009) acclaims that academic self-concept is one of the most significant variables in the academic domain, due to its major influence on appropriate cognitive

functioning. Other studies have shown that the Academic self-concept of students reveals extensive positive relations with several desirable educational outcomes, such as academic effort, academic interest and long-term educational attainment (Traütwein, Ludtke, Koller & Baumert, 2006; Pinxten, De Fraine, Van Damme & D'Haenens, 2010).

Positive ASC is important in promoting the academic achievement of students and has been described as one of the main goals of education (Seaton, Marsh, & Craven, 2009). For instance, Dramanu and Balarabe (2013), found a positive relationship between academic self-concept and academic performance among junior high school students in Ghana. That is to say that one of the aims of education is to help students develop positive perceptions that promote academic success. However, academic stress has been found to be an essential contributor which mostly negatively, affects the academic self-concept of adolescents (Sengupta, as cited in Afriandani & Hernawati 2019). The implication being that the experience of academic stress among students can be a hindrance to the achievement of an important educational goal. The system of examination, expectations of teachers and parents, constant unhealthy comparison with peers among others are some of the sources of academic stress that significantly affect or has the ability to cause a change in the academic self-concept of learners. Huh (2015) identified other sources of academic stress among adolescents as family, peers, illness, competition, success, and expectations become intertwined into stressful situations that impacts how students perceive themselves in the academic environment.

Academic self-efficacy is another psychological construct that is believed to impact on students and their academic work. It has also been established to

have a significant relationship with academic stress among students (Zajacova, Lynch & Espenshade, 2005 cited in Hassan, Alasmari, & Ahmed, 2015). It is said that the individuals' self-efficacy perceptions are affected if they are unable to successfully cope with demanding task, and the experience of stress (Crego, Carrillo-Diaz, Armfield & Romero, 2016). The feeling of aversive arousal, as response to stress, could be taken as a sign of possible failure and decrease the individual's self-efficacy perceptions (Crego et al 2016).

Elias and MacDonald (2007), posited that academic self-efficacy is a student's judgement about his or her ability to successfully attain educational goals. Self-efficacy is an important element of the self-regulatory human structure (Verešováa & Foglová, 2016) and academic self-efficacy – which is specific to on academic domain – has been found to be a predictor of grades and persistence in school. According to Verešováa and Foglová (2016), Self-efficacy develops based on personal experiences linked with one's own successes, including observing others and reflecting on their performance and achievements. Self-efficacy can be defined as beliefs in one's abilities to organize and execute the courses of action required to produce a given attainment. It is multidimensional and differs from one domain to domain. In the academic domain, academic-specific self-efficacy has been found to be a better predicter of academic performance than general self-efficacy. The concept of academic self-efficacy consists of the beliefs about the capabilities to achieve tasks in certain academic fields (Altunsoy, Çimen, Ekici, Atik & Gökmen, 2010). These beliefs are closely linked to self-concept which is a general self-descriptive belief that incorporates many forms of self-knowledge and self-evaluative feelings as established by Husain (2014).

There is considerable evidence that shows that high levels of academic stress results in undesirable outcomes, including poor memory and concentration, which lead to a number of negative outcomes (Aboalshamat, Hou, & Strodl, 2015; Goff, 2011; Hamdan-Mansour & Dawani, 2008). However, personal experience, observations and interactions with some senior high school students in Ghana indicate that factors such as course load, attitude of some teachers, bullying, frequent policy changes including the recent introduction of the double-track system and poor study habits are academic stressors among students in senior high schools. These factors are likely to impact students' academic self-concept and academic self-efficacy.

Statement of the Problem

It is often assumed that students are the least to worry about any sort of stress or problems. This is because studying is hardly perceived by many as stressful and students are only expected to go to school and study. Stress is often times understood as a lifestyle crisis (Masih & Gulrez, 2006) affecting any individuals regardless of their developmental stage (Banerjee & Chatterjee, 2016).

However, according to Bekoe et al. (2015), academic stress pervades the life of students, and tends to impact adversely their mental and physical health and their ability to perform schoolwork effectively. Over the years, the education system in Ghana has undergone many changes. The introduction and implementation of reform programs at senior high schools in Ghana has contributed in one way or another to the stress faced by students, as these reforms are mainly aimed at raising enrolment and academic performance (Affum-Osei, Asante & Forkuoh, 2014). The Government of Ghana in the year

2007 extended three years senior high school to four years of senior high school education and then readjusted back to three years in 2009. Many of these changes have the ability to put a lot of pressure and work on students (Affum-Osei, Asante & Forkuoh, 2014).

In addition, Jones (1993) stated that the academic stress levels of children and adolescents depends on time that students spend at schools and on academic activities. Also, scholars often allude to the fact that long-term academic stress causes cognitive, emotional and behavioural problems. According to Robinson-Wood (2009), adolescents experience stress related to academic work, relationships, financial difficulties, employment situations and personal factors. He also asserted that students report academic stress as a major hurdle in their academic journey and thus the need for adequate research on the subject. Academic stress - a mental distress - leads to some frustration with academic work and may produce other challenges in the academic journey of students (Lal, 2014). Senior high school students are burdened with coping with academic stress in their attempt in responding to academic demands and expectations. Families expend a great deal of their money educating their wards and exert pressure on them to succeed, secure jobs and contribute to the livelihood of their families (Duncan-Williams, 2015). There is also pressure on students to seek and pursue tertiary education in order to obtain one of the few opportunities for jobs (Ansong, 2013; Atuahene & Owusu-Ansah, 2013; Casely Hayford, Arnot, Dovie, & Salifu, 2010; Etsey, 2005).

Academic stress has become an important topic in academic discourse (Nandamuri & Gowthami, 2011). Scholars and researchers in the field of behavioural science have carried out extensive research on stress and its

outcomes and concluded that the topic needed more attention (Rees & Redfern, 2000; Ellison, 2004; Ongori & Agolla, 2008; Agolla, 2009). Busari (2014) argued that, students' academic stress has not gained much attention since most scholars were preoccupied with the conventional work related stress as opposed to academic stress among students. In Ghana, Bekoe, Somua, Akpalu and Ayisi (2015) found that senior high school students in the New Juaben Municipality experience stress. Although, some studies have been conducted in Ghana on the influence of academic stress on students' academic self-concepts, most of these studies focused on the university students (Budu, 2014; Amponsah & Owolabi, 2011). In the Cape Coast metropolis little is known about how academic stress influences academic self-concept and academic self-efficacy among students.

Depression, anxiety, behavioural problems, irritability, attempted suicide and suicide etc. are few of the many problems reported in students with high academic stress (Deb, Strodl& Sun, 2015; Verma, Sharma & Larson, 2002). Depression is the leading cause of death and suicide worldwide. Empirical research and theory have implicated stress as a critical risk factor for depression during childhood and adolescence (Rudolph, Kurlakowsky & Conley, 2001). Rudolph, Kurlakowsky and Conley (2001), demonstrated that the experience of school related stress (such as poor academic performance, negative feedback from parents and teachers about school work, and daily stressors in the school environment) leads to increases in depression in the context of a transition into middle school.

Research conducted by Quarshie, Osafo, Akotia, and Peprah, (2015) indicate that psychological distress and poor school work among other factors were the major causes of suicide and attempted suicide among Ghanaian

adolescents. These findings suggest a rise in the level of psychological symptoms among adolescents with a major stressor linked to academia.

Other studies such as Bekoe et al. (2015) and Duncan-Williams (2015) have identified that senior high school students in Ghana experience academic stress and recommended that studies involving stress and psychosocial elements among students should consider academic stress. However, research within the Cape Coast Metropolis on academic stress (Amponsah & Owolabi, 2011) have mainly focused on university students. It is therefore important to research and understand the prevalence of academic stress among senior high school students in order to address their needs and enhance their well-being as well as improve their academic performance. It is also important to research academic stress within the Cape Coast Metropolis as it is a major source of stress among students (Quarshie, et al., 2015), and therefore may influence the academic self-concept and academic self-efficacy of senior high school students. The researcher therefore sought to investigate the influence of academic stress on the academic self-concept and academic self-efficacy of senior high school students in the Cape Coast Metropolis of the Central Region of Ghana.

Purpose of the Study

The purpose of the study was to examine the influence of academic stress on academic self-concept and academic self-efficacy of Senior High School (SHS) students in the Cape Coast Metropolis (CCM). Specifically, the study sought to;

1. Determine the main source of academic stress among SHS in the Cape Coast Metropolis.

2. Examine the kinds of academic stress that influences the academic self-concept of SHS students in the Cape Coast Metropolis.
3. Examine the kinds of academic stress that influences academic self-efficacy of SHS students in the Cape Coast Metropolis.
4. Determine the relationship between academic stress, academic self-concept and academic self-efficacy of SHS students in the Cape Coast Metropolis.
5. Find out the statistical difference of academic stress among male and female Senior High School students in the Cape Coast Metropolis.

Research Questions

The following are the research questions

1. What is the main source of academic stress among students in Senior High Schools in the Cape Coast Metropolis?
2. What kind of academic stress influences the academic self-concept of SHS students in the Cape Coast Metropolis?
3. What kind of academic stress influences the academic self-efficacy of SHS students in the Cape Coast Metropolis?
4. What is the relationship between academic stress, academic self-concept and academic self-efficacy?

Research Hypothesis

1. H_0: There would be no significant difference in academic stress levels among male and female students

   H_1: There would be a significant difference in academic stress levels among male and female students.

Significance of the Study

According to Duncan-Williams (2015), one of the major aims of psychology is to obtain information in order to understand, explain, predict and change human behaviour. Research of this nature provides enlightenment on the concept of academic self-concept and academic self-efficacy and their importance to academic work among senior high school students. This will contribute to the available literature and therefore shed more light on human behaviour.

The study has also helped identify the most prevalent social, educational and personal stressors among senior high school students in the Cape Coast Metropolis that need counselling services. The results of this research will also serve as a strong basis for suggesting that stakeholders improve school counselling centres to help students handle academic stress.

The study will further come handy to teachers who would seek to understand the influence of stress among students. By this, they will resort to teaching methods that do not stress students and do away with teacher behaviours that stress students out.

In addition, this study would be a source of reference to educational psychologists, the Ghana Education Service, school psychologists and other stake holders in education who seek to improve learning in senior high schools to direct their efforts towards helping students to properly cope with academic stress in order to eliminate its negative effects on their academic self-concept and academic self-efficacy so they can graduate from high school as well-balanced individuals.

Again, the study has made recommendations to the Teacher Education Division of the Ghana Education Service put in more effort on the training of teachers to create learning atmospheres that do not create stress that could negatively affect students' academic self-concept and academic self-efficacy. This will go a long way to improve academic work of students in Senior High Schools especially in the Cape Coast Metropolis.

Findings from this study could help provide policy directions and recommendations to teachers and school counsellors on how to manage academic stress in Senior High Schools in order to improve students' performance.

Finally, the study has made recommendations for further studies on issues related to students' academic self-concept and academic self-efficacy that this study could not cover.

Delimitation

Geographically, the study was delimited to public Senior High Schools in the Cape Coast Metropolis of the Central Region of Ghana. The study was delimited methodologically to a quantitative descriptive survey design.

The research was also restricted to the influence of academic stress on academic self-concept and academic self-efficacy among senior high school students in the Cape Coast Metropolis.

Limitations

Data for the study was collected at a time when students were preparing for their examinations. This could have influenced the results of the study. It is also possible that students rushed through the questionnaire and did not pay

attention to what was required of them since the items were many and students were in a hurry to continue their studies.

Organization of the Study

The study is organized into five chapters. Chapter one presents background to the study, statement of problem, purpose of the study, research questions, research hypotheses, significance of the study, delimitation of the study, and the organization of the study. Chapter Two presents the review of related literature, whiles chapter three focuses on a detailed discussion on the methodology used to carry out the research. The results and discussion of the study are presented in chapter four, and finally chapter five focuses on the summary of key findings, conclusions, recommendations and suggestions for further research.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter reviews the theoretical underpinnings and discusses empirical studies relating to academic stress and its influence on students' academic self-concept and academic self-efficacy, differences in academic stress, academic self-concept and academic self-efficacy on account of gender. The chapter also contains conceptual review on academic stress, academic self-concept and academic self-efficacy.

Theoretical Review

Carl Rogers' (1959) Theory of Self-Concept

Rogers believed in the humanistic approach to understanding human personality. He agreed with the main assumptions of Abraham Maslow, but added that for a person to grow, they need an environment that provides them with genuineness (openness and self-disclosure), acceptance (being seen with unconditional positive regard), and empathy (being listened to and understood) (McLeod, 2014). Without these, relationships and healthy personalities will not develop as they should, much like a tree will not grow without sunlight and water (McLeod, 2014). Under the humanistic perspective, his view of human behaviour was that it is exquisitely rational and that the core of man's nature is essentially positive and a trustworthy organism (Rogers, 1961). These beliefs were reflected in his theory about personality. Rogers believed that every human is constantly reacting to stimuli with their subjective reality (phenomenal field)

which changes continuously. Over time, a person develops a self-concept based on the feedback from this field of reality.

According to Ismail and Tekke (2015), Rogers' personality theory focuses on the notion of self or self-concept. Rogers believed that people are aware of their self-concepts. He was of the view that a person's self is influenced by the experiences the person has in his life, and the interpretations of those experiences. Two primary sources that influence our self-concept, as mentioned by Rogers, are childhood experiences and evaluation by others. Rogers introduced key concepts in his theory that sums up to form the self-concept of every individual. These key concepts are the self, positive regard, self-actualization, real self, ideal self and fully functioning person.

The self or self-concept refers to the individual's organized and persistent perceptions of the characteristics of the 'I' or 'me'. The concept of self is the perceptions of the relationships of the 'I' or 'me' to others (Patterson, 1977). According to Rogers (1959), the self-concept is defined as the organized, consistent set of perceptions and beliefs about oneself. In Rogers's opinion, the self-concept is the most important feature of personality, and it includes all the feelings, thoughts and beliefs individuals have about their identity.

The self-concept is an umbrella term that was coined by Rogers. Psychologists later broke down the self-concept into specific aspects to describe beliefs about oneself in the different areas of life. Thus, people have different perceptions about themselves in different areas such as social life, academic life and family life. Students' academic self-concepts regarding their academic abilities is, therefore, a result of their childhood experiences in school and the feedback they have received over the years from parents, teachers and

classmates. A positive academic self-concept is an indicator that can predict academic success. Students' tendency to reach their highest academic potential is largely dependent on their individual academic self-concept. Students with a positive academic self-concept perform better academically than students with a negative academic self-concept (Jaiswal & Choudhuri, 2017). By extension, any negative impact of academic stress on academic self-concept will greatly influence students' academic life in general.

According to Ismail and Tekke (2015), in developing his theory, Rogers weighed the impact of the experiential world in which we operate daily. This provides a frame of reference or context that influences our growth. We are exposed to countless sources of stimulation, some trivial and some important, some threatening and others rewarding. He wanted to know how we perceive and react to this multifaceted world of experience. He answered the question by saying that the reality of our environment depends on our perception of it, which may not always coincide with reality. We may react to an experience far differently from the way our best friend does. You may react in a different way to the outcome of your test score. Our views are shifting with time and circumstances. Your own view of acceptable high-behaviour in senior high school will be different when you are 70.

The idea that perception is subjective is old and not special to Rogers. This idea, called phenomenology, argues that the only reality we can be sure of is our own subjective world of experience, our inner perception of reality. Phenomenological approach within philosophy refers to an unbiased description of our conscious perception of the world, just as it happens, without any attempt on our part to interpret or analyse it. In Rogers' view, the most important point

about our world of experience is that it is private and therefore can only be fully known to each and every one of us. This implies that academic stress has the tendency of influencing how students perceive academic work which then becomes their subjective reality of school and school work. Students with negative experiences and feedback will form gloomy academic concepts of themselves and will not believe in their ability to successfully climb the academic ladder. The negative experience can also be in a specific area in which case, only this specific subject area will be affected. Perhaps, the consistent poor performance of students in Mathematics could be attributed to students' subjective realities about the subject hence the need to investigate the influence of academic stress on students.

Schultz and Schultz (2005) mentioned in their work that as the actualization tendency in infancy leads us to grow and develop, our experiential world broadens. Infants are exposed to more and more sources of stimulation and respond to them as they are subjectively perceived. Our experiences become the only basis for our judgments and behaviours. Higher levels of development sharpen our experiential world and ultimately lead to the formation of the self. The need to provide students with the right experiences that would influence the formation of the self cannot be overemphasized.

According to McLeod (2014), self-worth or self-esteem comprises what we think about ourselves. Rogers believed feelings of self-worth develop in early childhood and were formed from the interaction of the child with the immediate family. Vinney (2019) said self-esteem or worth is the value people place upon themselves. Individual levels of self-esteem are dependent on the way one evaluates himself. Those evaluations incorporate our personal

comparisons to others as well as others' responses to us. It refers to the extent to which one accepts or approves of himself or how much an individual values himself. Self-esteem always involves a degree of evaluation and we may have either a positive or a negative view of ourselves. When we compare ourselves to others and find that we are better at something than others and/or that people respond favourably to what we do, our self-esteem in that area grows (Vinney, 2019). On the other hand, when we compare ourselves to others and find we are not as successful in a given area and/or people respond negatively to what we do, our self-esteem decreases (Vinney, 2019). There is research evidence that students are constantly comparing themselves with their classmates. They also compare the performance to set standards. The kind of feedback they receive from these comparisms will influence their self-worth.

The real self or self-image is an inherent part of the influence of our body image. How we see ourselves, which is also very important for good psychological well-being. We might see ourselves as beautiful or ugly or a good or a bad person. Personality has a straightforward effect on the way a person feels, thinks and acts in the world. According to Rogers (1954) the real-self is initiated by the actualizing tendency, follows organismic valuing, needs and receives positive regard and self-regard. It is described that you will become successful, if everything continues well for you. Grice (2007), Rogers believed that we all possess a real self.

The ideal-self briefly reflects our attempts to fulfil our goals or values. These are our dynamic goals and priorities. The ideal-self is the self we would like to be (Vinney, 2019). There is often a difference between one's self-image and one's ideal self. This incongruity can negatively affect one's self-esteem

(Vinney, 2019). Ideally, Rogers (1961) proposed that there are circumstances beyond our control that might arise from the distance between the real self and the ideal self (Boeree, 2006). This self is born out of forces outside of us. Self retains ideals absorbed from others; the product of all those qualities that we believe we should be and that we assume that others think we should be. A students' academic goals could be referred to as their "ideal academic self." The presence of academic stress among students could bring a disparity between their "real academic self" and their "ideal academic self." This disparity is likely to distort their academic progress.

According to Schultz and Schultz (2005), as the self emerges, infants develop a need for what Rogers called positive regard. This need is probably learned, although Rogers said the source was not important. The need for positive regard is universal and persistent. It includes acceptance, love, and approval from other people, most notably from the mother during infancy.

Again, Schultz and Schultz (2005), said that infants find it satisfying to receive positive regard and frustrating not to receive it or to have it withdrawn. Because positive regard is crucial to personality development, infants' behaviour is guided by the amount of affection and love bestowed. If the mother does not offer positive regard, then the infant's innate tendency toward actualization and development of the self-concept will be hampered. Infants perceive parental disapproval of their behaviour as disapproval of their newly developing self. If this occurs frequently, infants will cease to strive for actualization and development. Instead, they will act in ways that will bring positive regard from others, even if these actions are inconsistent with their self-concept. Even though infants may obtain ample acceptance, affection, and

approval, some particular actions may result in punishment. However, if there is still positive regard for the child despite the unwelcome actions of the infant, the situation is called unconditional positive regard. Through this, Rogers meant that the mother's affection for the child was offered freely and fully; that she was not conditioned or dependent on the child's actions. Reciprocal nature is an essential part of the need for constructive consideration. If people believe like they fulfil someone else's desire for positive attention, they experience the fulfilment of their own needs (Schultz & Schultz, 2005).

Conditional positive regard is where positive regard, praise, and approval, depend upon the child's behaviour. The child is not loved for the person he or she is, but on condition, that he or she behaves only in ways approved by the parent (s) (McLeod, 2014). At the extreme, a person who constantly seeks approval from other people is likely only to have experienced conditional positive regard as a child (McLeod, 2014). Parents may not respond with positive regard to everything their child does. Some habits are irritating, scary, or repetitive, and may not give them love or approval for such behaviour. As a result, infants understand that parental love is priced; it depends on acting properly. They come to understand that sometimes they are respected, and sometimes they are not. If the parent expresses disappointment every time the child drops the object out of the crib, the child learns to disapprove of himself or herself for acting in that way. External criteria of judgment shall become internal and confidential. Students may experience distortions in their self-concept if they do not receive unconditional positive regard from parents and significant others.

Again, Schultz and Schultz (2005) mentioned that in a sense, then, children come to punish themselves as their parents did. Children develop self-regard only in situations that have brought parental approval, and in time, the self-concept, thus formed, comes to function as a parental surrogate. These are conditions of worth. Children believe they are worthy only under certain conditions, the ones that brought parental positive regard and then personal positive self-regard. Having internalized their parents' norms and standards, they view themselves as worthy or unworthy, good or bad, according to the terms their parents defined. Children thus learn to avoid behaviours that otherwise might be personally satisfying. Therefore, they no longer function freely. Because they feel the need to evaluate their behaviours and attitudes so carefully, and refrain from taking certain actions, children are prevented from fully developing or actualizing the self. They inhibit their development by living within the confines of their conditions of worth.

An individual's ideal self may not be consistent with what actually happens in life and experiences of the person. A difference may exist between a person's ideal self and actual experience. This is called incongruence. Where a person's ideal self and actual experience are consistent or very similar, a state of congruence exists. Rarely, if ever, does a total state of congruence exist; all people experience a certain amount of incongruence (McLeod, 2014).

Ideally, children learn not only to inhibit unacceptable behaviours, but also to deny or distort unacceptable ways of perceiving their experiential world. By maintaining an incorrect view of those experiences, they risk being alienated from their true selves. We come to assess and embrace or reject knowledge, not in terms of how it contributes to the overall trend of actualization through the

organism assessment process, but in terms of whether it brings positive regard from others. This leads to incongruity between the idea of self and the experiential world, the reality as we experience it. Experiences that are contradictory or incompatible with our self-concept become threatening and manifest as anxiety. For example, if our self-concept involves the illusion that we love all of humanity, when we meet someone to whom we feel animosity, we are likely to experience anxiety. Hating is not in line with our picture of ourselves as loving people. In order to preserve our self-concept, we must reject hate. We protect ourselves against the fear that follows the danger by distorting it thus closing off a portion of our experiential sector. As a result, some of our perceptions are rigid.

Rogers believed that every person could achieve their goal. This means that the person is in touch with the here and now, his or her subjective experiences and feelings, continually growing and changing (McLeod, 2014). To Rogers, the fully functioning person is the desired result of psychological development and social evolution (Schultz & Schultz, 2005). Rogers regarded the fully functioning person as an ideal and one that people hardly achieve (Proctor, Tweed & Morris 2016).

Rogers (1959) described personality as a structured, consistent prototype of understanding the 'I' and myself' that has been influenced by previous experiences. That self-actualization occurs when the ideal self of the individual (whom I would like to be) is congruent with the self-image (actual behaviour). Rogers describes a person who is self-actualizing as a fully functioning person (McLeod, 2007) when a strong self-concept or external environment supports the process of evaluation, and becomes constructive.

Rogers believed that they had to be in a state of congruence in order to achieve self-actualization for a person.

For this study, Rogers' theory is essential in drawing a relationship between students' ideal self in academic work and their academic self-concept and to determine the role of academic stress in the type of concept students have of themselves. Determining the strength of the students' academic self-concept, with the help of Rogers' theory, will help in making predictions about students' self-actualizing potentials in their academic work. This will further create the grounds for making recommendations to stake holders regarding what measures to put in place to create appropriate school environment filled with unconditional positive regard for students to develop a strong, positive academic self-concept.

Bandura's (1995) Theory of Self-Efficacy

Self-Efficacy was developed by Albert Bandura (1995), as part of a major theory he propounded called the social learning theory (Ashford & LeCroy, 2010), which later progressed into the social cognitive theory (Levin, Culkin, & Perrotto, 2001). Social cognitive theory puts emphasis on how cognitive, behavioural, personal, and environmental factors interact to determine motivation and behaviour of an individual (Crothers, Hughes, & Morine, 2008). By social cognitive theory, Bandura clearly suggests that people do not simply respond to environmental influences, but rather actively explore and interpret knowledge (Nevide, 2009). The person functions as a contributor to his or her own actions, motivation and growth within a framework of reciprocally interacting factors (Bandura, 1999). By reciprocal determinism, Bandura refers to the interaction of behavioural variables (what individuals

actually do) environmental variables (the setting in which the behaviour occurs) and personal/ cognitive variables (how an individual thinks about, perceives, or expects events to occur). The beliefs, thinking and feeling of people influence their behaviour.

The biological and extrinsic effects of people's actions, one way or another establish their thought models and their subsequent actions. The fulfilments people accomplish from what they do are established, to a large extent, by their self-evaluative standards (Nasrollahi & Barjasteh, 2013). Even though social cognitive theory covers many topics such as physiological arousal and moral judgment, research has predominantly been focused on self-efficacy, or the beliefs regarding one's capabilities of successfully completing tasks or goals (Locke & Latham, 2002).

Self-efficacy beliefs are significant aspect of human motivation and behaviour as well as influence the actions that can affect one's life. According to Bandura (1995), self-efficacy refers to beliefs in one's capabilities to organize and execute the courses of action required to manage prospective situations. Self-efficacy is what a person believes he or she can accomplish using his or her own skills under certain circumstances (Snyder & Lopez, 2007). Bandura (1994) posits that the human cognitive self-regulation system and self-efficacy beliefs are the most central and persistent influence on the choices individuals make. Their goals, the amount of effort they apply to a specific task, how long they endure at a task in the face of failure or difficulty, the amount of stress they experience and the degree to which they are vulnerable to depression all depend on it.

Bandura (1995) also discussed that self-efficacy beliefs decide how individuals feel, think, motivate and act. Self-efficacy values provide the basis for human motivation, well-being and personal achievement. This means that once individuals feel that their acts will deliver the results they deserve, they have little motivation to act or to persist in the face of difficulties (Sharma & Nasa, 2014). Several empirical evidence supports Bandura's claim that self-efficacy influences nearly every aspect of people's lives, whether productively, pessimistically or optimistically, how much they motivate themselves, their susceptibility to stress and depression, and the life choices they make (Sharma & Nasa, 2014).

Self-efficacy is the confidence that an individual possesses, that he or she can successfully execute a behaviour required to produce an outcome such that the higher the level of self-efficacy, the more an individual believes he or she can execute the behaviour necessary to obtain a particular outcome (Bandura, 1995). People tend to avoid situations and events they believe exceed their abilities and on the contrary readily get involved in activities for which they feel capable (Bandura, 1977). A principal idea posed in social cognitive theory by Bandura is that success experiences raise self-efficacy but repeated failures lower self-efficacy (Iroegbu, 2015).

Self-efficacy has been linked to persistence, tenacity and achievement in educational settings (Bandura, 1986; Schunk, 1981; Zimmerman, 1989). A meta-analysis of research in educational settings (Multon, Brown, & Lent, 1991) found that self-efficacy was linked to both academic success and persistence. The contribution of self-efficacy to educational achievement is focused on both the enhanced use of particular cognitive tasks and techniques

and the positive effect of efficacy beliefs on the larger, more general groups of metacognitive skills and coping skills. Social cognitive theory offers some general advice on potential sources of effectiveness for students. Bandura (1986, 1997) argued that self-efficacy is based on four sources of efficacy information: mastery, vicarious experience, verbal persuasion, and physiological states (Mohamadi, Asadzadeh, Ahadi & Jomehri, 2011). Likewise, Goddard (2001) stated that efficacy beliefs are developed through individual cognitive processing that uniquely weighs the influence of efficacy shaping information obtained through mastery experience, vicarious experience, social persuasion, and affective states.

According to Bandura (1997), mastery experiences are the most significant source of efficacy information. Based on Redmond and Slaugenhoup (2016) mastery experiences are the most influential source of efficacy information because they provide the most reliable evidence of whether one can muster whatever it takes to succeed. Successful accomplishments build a strong belief in one's personal efficacy but failures undermine it, especially if failures occur before a sense of efficacy is firmly established (Bandura, 1997). According to Bandura (1997), the most influential source of information comes from the interpreted results of past performance. These past performance accomplishments can create a strong sense of efficacy to accomplish similar tasks in the future. Alternatively, repeated failure can lower efficacy perceptions. Performance accomplishment refers to learning through personal experience where an individual achieves mastery over a difficult or previously feared task (Fitzgerald, 1991). Efficacy assumptions are increased if a student views his or her academic achievement as a success, which then leads to

perceptions that future output is likely to be good (Tschannen-Moran & Woolfolk-Hoy, 2007). Experiences of accomplishment and a sense of mastery enhance self-efficacy, while frequent failure decreases self-efficacy, particularly when failure occurs early in the learning process (Bijl & Shortridge-Baggett, 2001). Once the individual has developed a high self-efficacy, the loss of the individual may not have much impact. The effect of failure depends on the timing of the learning process and the cumulative pattern of experience. When a person has a high self-efficacy, he or she tends to generalize from one experience to another, with the obvious danger that the skills of the former experience are not always applicable to the latter (Bijl & Shortridge-Baggett, 2001). Behavioural practice and the qualities of success and failure are important sources for the creation of efficacy standards. People who are confident of their abilities tend to attribute failure to situational causes, such as inadequate commitment or poor plan, but people with low self-efficacy attribute failure to their own weakness (Bijl & Shortridge-Baggett, 2001).

Positive and negative experiences can affect an individual's ability to perform a given task. If one has performed well at a task previously, he or she is more likely to feel competent and perform well at a similarly associated task (Bandura, 1977). For instance, in a positive experience, if a senior high student preparing for WACCE exams performed well in previous examinations like end of term examinations, mock exams and class test, the student is more likely to feel confident and have high self-efficacy in performing the task writing the WACCE. The individual's self-efficacy will be high in that particular area, and since he or she has a high self-efficacy, the individual is more likely to try harder and complete the task with much better results (Redmond & Slaugenhoup,

2016). On the other hand, with a negative experience, if a student experiences failure, he or she will most likely experience a reduction in self-efficacy. However, if these failures are later overcome by conviction, it can serve to increase self-motivated persistence when the situation is viewed as an achievable challenge (Bandura, 1977).

The second source of self-efficacy information Bandura (1997) stated, is the vicarious experience gained by observing others performance tasks. Observing others to perform successfully is also a significant source of self-efficacy (Bijl & Shortridge-Baggett, 2001). By studying the achievements and shortcomings of others, individuals gather knowledge that leads to their decisions about their own capabilities (Mohamadi, et al., 2011). Other individuals can serve as role models and provide information on the level of complexity of a particular type of behaviour (Bijl & Shortridge-Baggett, 2001). Modelling has the greatest influence when the models observed are perceived to be similar to the observer and in situations in which the observer has little personal experience (Mohamadi, et al., 2011). According to Bijl and Shortridge-Baggett (2001), the person serving as a model must show similarity to the observer in those characteristics which are relevant for the issue. In case of uncertainty about one's own capacities, or inexperience with a specific kind of behaviour, people use observed indicators to which they can measure their own abilities and base their estimation of accomplishment on.

People can develop high or low self-efficacy vicariously through other people's performances (Redmond & Slaugenhoup, 2016). A person may watch someone in a similar role perform, and then equate his or her competence with that of the other individual (Bandura, 1977). If a person sees someone similar

to them succeed, they may increase their self-efficacy. However, on the contrary, watching someone else struggle in a similar way will minimize self-efficacy. For example, with enhanced self-efficacy, mentoring programs where a person is partnered with someone on a similar career path, the success of which would improve the individual's confidence in self-efficacy. This is further improved if both have a similar skill set, so that a person can see first-hand what they can do (Redmond & Slaugenhoup, 2016). In the other hand, with a decline in self-efficacy, for example: entrance exams for a program where if individuals witness a number of people of the same rank as him fail to pass, they might be worried about their own chances of completion, leading to a low self-efficacy in writing the test. Observing another person master situations that have been feared or seen as difficult can enhance one's own expectations of mastery. In order for modelling to affect or influence an observer's self-efficacy positively, however, the model must be viewed as overcoming difficulties through determined effort rather than with ease, and the model must be similar to the observer with respect to other characteristics (e.g., age, gender etc.) (Fitzgerald, 1991). Modelled behaviours with clearly rewarding outcomes are more effective (Fitzgerald, 1991). Observing others is a weaker source of self-efficacy than direct experience, but can contribute to an individual's judgement of his or her own self-efficacy (Bijl & Shortridge-Baggett, 2001).

Verbal persuasion source of efficacy information is the least effective for the long term although it might be effective in the short term and it is the most often used source of self-efficacy, because it is easy to use (Mohamadi, et al., 2011; Bijl & Shortridge-Baggett, 2001). In verbal persuasion, the potency of the persuasion depends on the credibility, trustworthiness, and expertise of

the persuader (Bandura, 1997).Verbal persuasion has to do with verbal interactions that a student receives about his or her performance and prospects for success from significant others such as peers, teachers, parents and members of the community at large (Mohamadi, et al., 2011). Redmond (2010) mentioned that a person's self-efficacy is also influenced by encouragement and discouragement relating to the person's performance or ability to perform. For instance, a student can have positive self-efficacy outcome if his teacher encourages him by telling him *"You can do it. I have confidence in you*". The use of verbal persuasion in a positive light generally lead people to put forth more effort; therefore, they have a greater chance at succeeding. On the contrary, a student can have negative self-efficacy if the teacher uses discouraging words by saying, "*This is bad performance is unacceptable! I thought you could handle this exam*" can lead to doubts about oneself resulting in lower chances of success. In addition, Redmond (2010) said that the level of credibility directly influences the effectiveness of verbal persuasion; where there is more credibility; there will be a greater influence.

The credibility, expertise, trustworthiness, and prestige of the person doing the persuasion are of critical importance (Bijl & Shortridge-Baggett, 2001). In the example above, a pep talk by a teacher who has students' interest at heart and has established respectable and friendly relationship with students would have a stronger influence than the one who is strict and does not have the interest of the students at heart. Although verbal persuasion is also likely to be a weaker source of self-efficacy beliefs than performance outcomes, it is widely used because of its ease and ready availability (Redmond, 2010). According to Bijl and Shortridge-Baggett (2001), convincing individuals of their ability to

perform a behaviour is weaker than the previous two sources because it does not concern one's own experiences. To some extent, it can be of a good supplement to other sources. If a person is convinced of his abilities, the person will be more inclined to persevere and will not give up easily. However, this is only the case with people who already think they are able to carry out a task and is useless if it is not realistic.

Physiological or emotional states are also sources of efficacy information. Knowledge on the human body may also affect a person's evaluation of his or her capacity to display a particular behaviour. People feel stimuli from their bodies and how they perceive this emotional excitement affects their confidence in efficacy (Bandura, 1977). Powerful emotional arousal, such as anxiety, can effectively alter people's beliefs about their capabilities. A person may interpret a state of arousal as an energizing factor that can contribute to a successful performance, or may view arousal as completely disabling (Mohamadi, et al., 2011). Examples of physiological input are speaking to a wide group of people, presenting to a significant client, taking an exam, etc. All of these tasks can cause irritation, anxiety, sweaty palms, and/or a racing heart (Redmond, 2010). People use knowledge about their physiological and emotional state to determine their own abilities. They experience anxiety, stress, and depression as indicators of personal deficiency (Bijl & Shortridge-Baggett, 2001).

In activities involving strength and perseverance, weakness, pain, hypoglycaemia are interpreted as signs of low physical efficacy. Although this source is the least influential of the four, it is important to emphasise that, if one is more at ease with the task at hand they will feel more capable and have higher

beliefs of self-efficacy. People expect to be more effective if they are not stressed out than when they are. Stress may have a detrimental effect on self-efficacy. In the assessment of efficacy, a person must weigh and incorporate information from various sources (Bandura, 1997).

Students construct their self-efficacy beliefs by understanding and incorporating knowledge from these four sources. The intensity of the contribution made by each source varies depending on the domain in question and the individual's cognitive processing strategies. The way in which different sources of knowledge are weighted and combined determines the resulting self-efficacy.

Apart from the four origins of self-efficacy of Bandura, other factors have been established that have an effect on self-efficacy. Strecher, DeVelli, Becker, and Rosenstock (1986) have shown that personality characteristics, personality states, and processes can affect perceptions of self-efficacy. They explored many concepts closely related to self-efficacy, such as the locus of influence, self-esteem, self-confidence and hardness. Studies have verified the relationship between self-efficiency and other personal factors (Bijl & Shortridge-Baggett, 2001). Coppel (1980) found a positive relationship between self-esteem and self-efficacy, and Schneewind and Pfeiffer (1995), reported that people with an internal locus of control had a high self-efficacy.

Hans Selye's (1976) Theory of Stress

Hans Selye is frequently claimed to be the father of the stress concept. Selye viewed stress as all adaptive reactions in the body and complete freedom from stress as death (Selye, 1974). In his first publication on stress in Nature in 1936, Selye defined stress as the nonspecific response of the body to any

demand made on it. Following criticisms for being too confusing and ambiguous, he offered the following operational definition. According to him, stress is "a state manifested by a specific syndrome which consists of all the non-specifically induced changes within the biological system" (Selye, 1976).

Selye first found stress to be a trigger and based his attention on the environmental factors that cause stress. In the 1950s, he turned his attention to stress as a reaction made by the organism. To differentiate the two, Selye started to use the word stressor to refer to the stimulus and stress to mean the reaction. Selye conceptualized stress as a nonspecific response, repeatedly insisting that stress is a general physical response caused by any of a number of environmental stressors. He believed that a wide variety of different situations could prompt the stress response, but the response would always be the same. He indicated that these improvements would be measurable and would occur both at the structure and at the local level. The entire system-level stress phase, including the danger and the individual's response to it was called the General Adaptation Syndrome (GAS). According to him, GAS is the body's generalized attempt to defend itself against noxious agents (Selye, 1976).

Selye (1976), labelled this process *general* because only agents that have a general effect upon great portions of the body produced it. *Adaptive* because it stimulated defence and, thereby, helped in the acquisition and maintenance of a state of inurement. *Syndrome* because its individual manifestations are coordinated and, even partly, dependent upon one another.

Selye (1976) further divided GAS into three stages namely; alarm reaction, resistance stage, and exhaustion stage. During the alarm reaction stage, the body's defences against stressors are mobilized through activation of the

sympathetic nervous system. This division activates the body systems to maximize strength and prepares them for the fight-or-flight response. Adrenaline (epinephrine) is released, heart rate and blood pressure increases, respiration becomes faster, blood is diverted away from the internal organs toward the skeletal muscles, sweat glands are activated, and the gastrointestinal system decreases its activity. As a short-term response to an emergency, these physical reactions are adaptive, but many modern stress situations involve prolonged exposure to stress and do not require physical action.

If noxious stimulation continues, the organism reaches the second stage of resistance. At this point, the symptoms of the alarm reaction disappear, which seems to suggest the adaptation of the organism to the stressor. However, while resistance to noxious stimuli increases, resistance to other forms of stressors decreases at the same time. The organism adapts to the stressor at this point. How long this stage lasts depends on the magnitude of the stressor and the adaptive ability of the body. If the organism is able to adapt, the resistance stage can continue for a long time. During this time the individual gives the external appearance of normality, but the internal functioning of the body is not normal physiologically. Continued stress can induce continued neurological and hormonal changes.

According to Selye (1976, p.237), if the aversive stimulation persists, resistance gives way to the stage of exhaustion which is the third stage. The organism's capability of adapting to the stressor is exhausted, the symptoms of the first stage reappear, but resistance is no longer possible. At the end the organism's ability to resist is depleted, and a breakdown results. This stage is characterized by activation of the parasympathetic division of the autonomic

nervous system. Under normal circumstances, parasympathetic activation keeps the body functioning in a balanced state. In the exhaustion stage, however, parasympathetic functioning is at an abnormally low level, causing a person to become exhausted. He again believed that exhaustion frequently results in depression and sometimes even death. At this time, endocrine activity is heightened; high circulating levels of cortisol begin to have pronounced negative effects on the circulatory, digestive, immune, and other systems. The symptoms are strikingly similar to those of the initial alarm reaction, but such a high level of resistance cannot be maintained indefinitely. Human resources become depleted, and permanent damage to the system through wear and tear or death or both is likely to occur.

Selye's (1976) early definition of stress as "a stimulus, and his later focus on the physical dimensions of stress, both inspired the study and measurement of stress. The stimulus-based view of stress has led researchers to examine the different environmental factors that lead people to feel stress.

Irrespective of Selye's enormous work on stress, it did not go without criticisms. Many criticisms of Selye's conceptualization of stress and the GAS were raised (Rice, 2012). According to Rice (2012), some of the criticisms identified were (a) Stress has too many ambiguous meanings (Selye should have coined a new word rather than selected one already in use); (b) stress is an abstraction—it has no real independent existence; (c) stress has been applied to both the agent and the consequence; (d) the stress response cannot be both specific and nonspecific; (e) there have been few attempts to arrive at a consensus definition and operationalization for the term stress; and (f) the stress

definition and the GAS do not take into consideration cognition, perception, and interpretation of the stimulus.

Conceptual Review

Conceptualisation of Stress

There is research evidence, which indicate that the modern world is plagued with stress. It is regarded as the world of achievements where there is constant pressure on individuals to excel in their chosen fields Sarita (2015). One finds stress everywhere; whether it is within the family, business organization or any other social or economic activity. Stress is physiological and psychological imbalance that arises due to the demands on a person and that person's inability to adequately meet those demands. Researchers Vermunt and Steensman (2005); Topper (2007); Burke, Waters and Ussery (2007); Malach-Pines and Keinan (2007) have defined stress as the perception of discrepancy between environmental demands (stressors) and a person's capabilities to fulfil these demands. It is believed that stress is one of the major problems that humans face (Bernstein, et al., 2008). It is part of life no matter how healthy, rich, happy, and puissant people might be. Stress is the emotional, physical, and mental human response to a certain stimulus.

It is considered as the adaption or coping-response that helps the body to get ready for uphill situations or circumstances. Stress may also be described as an unpleasant state of emotional and physiological excitement experienced by people in conditions that are viewed as hazardous or threatening to their well-being. Stress can be both positive (eustress) and negative (distress) depending on the stressor and how the person handles the stress (Cabaguing & Gacoscosim, 2018). When stress is perceived negatively or becomes excessive,

physical changes such as sweating, burn out, gaining weight (obesity) due to binge-eating or weight loss due to loss of appetite, worrying, muscle tension, headache, and difficulty in breathing or hyperventilation are just some of the possible symptoms that might occur. Psychological effects of stress such as irritability, social withdrawal or isolation, sense of helplessness, lack of interest in activities, and mood swings, are some of the changes that become obvious in a person's behaviour. A person suffering from stress might have difficulty in his or her daily normal functioning. For the adolescent, the negative perception of stress can affect their self-concept and self-efficacy and this can deteriorate functioning and have irreparable effects on their future. During such periods, vital organs such as sexual organs, heart rate, blood pressure, stroke volume, and respiratory rate in the body react speedily. Many hormonal responses are at peak.

Stress as a construct, is a broad concept that is often viewed in quite a number of categories such as job stress, relationship stress and academic stress. Agolla and Ongori (2009) mentioned that academic work is always accompanied with stressful activities. For this reason, they consider academic stress as part of students' life and indicated that it can influence the students' coping strategies in accordance with the demands of academic life. This study explored how the experience of academic stress influences the academic self-concept and academic self-efficacy – two indispensable constructs in an individual's academic journey – of Senior High School students in the Cape Coast Metropolis.

Conceptualisation of Academic Stress

Academic stress is a mental distress with respect to some anticipated frustration associated with academic failure or even an awareness of possibility of such failure (Sonia, 2015 cited in Umar, 2019). It refers to the unpleasant psychological situations that occur due to the educational expectations from parents, teachers, peers and family members, pressure of parents for academic achievement, present educational and examination system, burden of homework etc. Stress in school arises due to the demands on students from outside sources, such as family, school, friends, and jobs and also from within. Students experience academic stress arising from both their own expectations to excel as well as expectations arising from their parents and teachers (Ang & Huan, 2006). Stress affecting students can be categorized as academic, financial, time or health related and self-imposed (Gnawali, 2017). Gnawali defined academic stress as a mental stress that arises because of some anticipated frustration associated with parental pressure on high performances; tough class load; worry over grade competitions; sports etc. The number of people in the learning setting often leads to stress among students. Research maintains that; a certain percentage of students find it difficult to succeed in an overcrowded environment (Baker, 2001). The hustle and bustle of college can be a struggle for some students. The world has challenges such as overload, academic pressure, limited opportunities, high competition, all of which are sources of stress that generate fear, tension and anxiety in some students (Sinha, Sharma & Nepal, 2001). Academic stress, among college students in particular, has been a topic of interest for many years (Shields, 2001).

Academic stress among students have long been researched on, and researchers have identified stressors as too many assignments, competitions

with other students, failures and poor relationships with other students or lecturers (Fairbrother & Warn, 2003). In addition, the pressure to perform well in examination or test and time allocated makes academic environment very stressful (Erkutlu & Chafra, 2006). Academic stress massively affects the performance of the student and hinders academic achievement. It limits the students' capabilities and it deflates their self-esteem. Consequently, it puts an enormous amount of stress on students, which may lead to wrong decisions or lead to the use of suitable coping strategies like alcohol, drug etc. and it could be too late to recover.

There are different coping mechanisms that students use when experiencing academic stress. Others have recourse to preventative coping; alcohol/drug addiction, denial and mental disengagement; whereas others have been involved by acceptance, preparation and constructive reframing and taking the required measures to overcome academic stress. (Sree rama reddy et al., 2007) found that the majority of adolescents in both under stressed and non-stressed classes were 14–16 years of age. Stressed adolescents view academics as burdensome (Sonia, as cited in Umar, 2019).

Sources of Academic Stress

Stress is a mental or physical phenomenon formed through one's cognitive appraisal of the stimulation and is a result of one's interaction with the environment". Bernstein, Penner, Stewart and Roy (2008) define the sources of stress as every circumstance or event that threatens to disrupt individual's daily functioning and causes them to make adjustments. The existence of stress depends on the presence of the stressor. Sources or components of stress are referred to as "Stressors." Stressors are demands of an internal or external world

that upsets equilibrium, thereby affecting physical and psychological well-being and requiring intervention to restore balance (Lazarus & Cohen, 1977).

Stressors, however, vary from the degree of severity and length of stress; a stressful situation for a person might not be a stressor for another. Feng (1992) and Volpe (2000) defined stressor as anything that challenges an individual's adaptability or stimulates an individual's body or mentality. Generally, stress can be caused by environmental factors, psychological factors, biological factors, and social factors. According to Bhargava and Trivedi (2018), "stress among adolescents mainly comes from academic tests, interpersonal relations, relationship problems, life changes, and career exploration. Specifically, researchers have identified stressors in academics as too many assignments, competition with other students, extensive course loads, lack of physical exercise, long duration of exams, academic expectations, students' academic self-perceptions, pressures to perform (Bedewy & Gabriel, 2015), failures, lack of pocket money (Fairbrother & Warn, 2003), poor relationships with other students or lecturers and family or problems at home. Institutional (university) level stressors are overcrowded lecture halls, (Ongori, 2007; Awino and Agolla, 2008), semester system, and inadequate resources to perform academic work. Erkutlu and Chafra (2006) for instance opined that when these events take place, an individual becomes disorganized, disoriented and therefore less able to cope up, thus resulting in stress related health problems. The pressure to perform well in the examination or test and time allocated makes academic environment very stressful (Bhargava & Trivedi, 2018).

Students report experiencing academic stress at predictable times each semester with the greatest sources of academic stress resulting from taking and

studying for exams, grade competition, and the large amount of content to master in a small amount of time (Ezekiel, n.d). The school setting, on the other hand, also raises the burden on students. The expectation to perform well in the examination or test and the time allotted make the academic climate rather stressful (Erkutlu & Chafra, 2006).

Jain and Singhai (2018) pointed out that along with teachers, parents and institutions expect students to take part in extracurricular activities, according to existing standards for students. However, the lack of adequate counselling networks leads to more uncertainty, and even after comprehensive study trends, students are unable to select a profession for themselves. The challenging behaviour of parents and teachers leave students confused and adds to academic stress (Jain & Singhai, 2018). Mckean, Misra, West and Ton (2000) claimed that stressors were not the only cause for anxiety, tension or depression, but rather that interaction between stressors and the person's approach and attitude to these stressors generated academic stress. While academic stress is sometimes considered negative, there is always the other side of the coin. The right kind of academic stress tends to sharpen your mind by improving your memory. Minor academic stress is often necessary for productive and efficient work. It can help us face everyday difficulties and can inspire students to achieve their goals (Jain & Singhai, 2018).

Lal (2014) revealed in his study that, the common stressors leading to academic stress among students include; academics, dating or relationship, school environment, extra-curricular activities, parental pressure and peers. Other significant sources of academic stress as found by Bakhsh and Sayed (2015) include overloaded curriculum, numerous assignments, and

dissatisfaction with the class lectures. Lin, Lin, Wang and Chen (n.d) also reported that, test results, parents' expectations, course materials, teaching methods, homework, students' own expectation, choice of subjects, time management, group report, academic competition and classmates' disturbances were the main determinants of academic stress among students. Stressors like frequent examinations, excessive assignments, poor time management skills, poor social relationships and peer competition were seen to be principal reasons for academic stress in students (Fairbrother & Warn, 2003). Too much demands and expectations placed on the student by the family members, institution and by the students themselves also add on to the stressors. Ang & Huan (2006) found increased expectations as the key factor responsible for stress among students. Self-imposed and individual specific problems (Goodman, 1993 cited in Agolla & Ongori, 2009) also burden the student implicating issues such as reduced social intimacy and interaction (Rao, Moudud & Subbakrishna, 2000), and poor relationships (Fairbrother & Warn, 2003). Educational system and the institutions also play enabling roles in causing stress in the students. Overcrowded classrooms, term or semester system, grading system, inadequate resources and facilities (Awino & Agolla, 2008), loaded syllabus (Agrawal & Chahar, 2007; Sreeramareddy et al., 2007), long hours and expectations of rote-learning (Deb et al., 2015) contributed significantly in causing pressure for the students.

These inter-related stressors affect the students' performance significantly (Patterson & Kline, 2008). Sinha, Sharma, and Nepal (2001) reported that, in the academic environment, high expectations, information overload, academic pressure, unrealistic ambitions, limited opportunities, and

high competitiveness are some of the common sources of stress that create tension, fear, and anxiety in students. Misra, Mckean, West, and Russo (2000) pointed out that the requirement to meet assessment deadlines as a major source of stress. Students revealed experiencing academic stress with the greatest sources of academic stress coming from taking and studying for exams, grade competition, and the large amount of content to master in a small amount of time (Watson & Watson, 2016).

Conceptualisation of Academic Self-Concept

In broad terms, self-concept is defined as an individual's composite perception of himself or herself formed through experiences and persistently reinforced by evaluative inferences (Bong & Skaalvik, 2003). It is generally characterized as an individual's perception based on self-knowledge or experience and shaped by interaction with the environment and the attributes of his or her actions (Jaiswal & Choudhuri, 2017). Self-concept is multidimensional, and academic self is one of the main facets of self that contributes to an individual's global self-concept, along with a social, mental, and physical self-concept (Jaiswal & Choudhuri, 2017). This multidimensional model of self-concept refers to a significant distinction between general self-concept, which involves cognitive, emotional and behavioural dimensions, while academic self-concept refers to an individual's sense of academic competence (Bandura, 1993, cited in Jaiswal & Choudhuri, 2017).

Academic self-concept is perceived as a student's self-perception of particular academic realms or abilities (Trautwein, Ludtke, Koller, & Baumert, 2006). Students' self-perceptions regarding their academic abilities are central

to their school adaptation (Dramanu & Balarabe, 2013). These self-perceptions play a critical role in guiding students' efforts towards their academic work (Dramanu & Balarabe, 2013). One's self-concept (also called self-construction, self-identity, and self-perspective or self-structure) is a collection of beliefs about oneself. Generally, self-concept embodies the answer to Who am I? It is made up of one's self-schemas, and interacts with self-esteem, self-knowledge, and the social self to form the self as whole. It includes the past, present, and future selves, where future selves (or possible selves) represent individuals' ideas of what they might become, what they would like to become, or what they are afraid of becoming. Possible selves may function as incentives for certain behaviour (Wikipedia, 2019). Self-concept is also explained as the set of perceptions or reference points that the individual has about himself; the set of characteristics, attributes, qualities and deficiencies, capacities and limits, values and relationships that the individual knows to be descriptive of himself and which he perceives as data concerning his identity (Ghazvinia, 2011). It is the set of knowledge and attitudes that we have about ourselves; the perceptions that the individual assigns to him and characteristics or attributes that we use to describe ourselves. It is understood to be fundamentally a descriptive assessment and has a cognitive nuance. The importance of self-concept stems from its notable contribution to personality formation.

Conceptual definitions of academic self-concept (ASC) include both cognitive, that is awareness and understanding of the self and its attributes and affective components such as feelings of self-worth formed through the normative evaluation of perceived competence (Kornilova, Kornilov & Chumakova, 2009). In educational psychology, academic self-concept (ASC)

refers to students' self-perception in specific disciplines (for example; math self-concept, English self-concept, science self-concept) or more general academic areas like ICT, social studies etc. (Marsh, Seaton, Trautwein, Lüdtke, Hau & O'Mara, 2008). Academic self-concept is the understanding and assessment that a student has or does of his or her academic abilities (Marsh & Craven, 2002). Academic self-concept is an evaluative self-perception focused on the student's knowledge and understanding of the school environment (Marsh & Craven, 1996; Shavelson, Hubner & Stanton, 1976). Academic self-concept refers to individuals' self-concepts that are formed specifically toward an academic domain (Bong & Skaalvik, 2003). As a prominent construct in educational psychology, student's ASC has showed substantial positive relations with many desirable educational outcomes, such as academic effort (Traütwein et al., 2006), academic interest and long-term educational attainment (Marsh et al., 2005; Pinxten et al., 2010). Academic self-concept is one of the most important variables in the academic field due to its strong impact on proper cognitive functioning (Santana, Feliciano, & Jiménez, 2009). It directly or indirectly influences learning processes, academic performance and student aspirations (Ordaz-Villegas, Acle-Tomasini & Reyes-Lagunes, 2013). (Ordaz-Villegas, Acle-Tomasini & Reyes-Lagunes, 2013).

It also helps to build a range of cognitive and self-regulatory techniques that represent academic success (Campo-Arias, González, Sánchez, Rodríguez, Dallos, & Díaz-Martínez, 2005; Schunk, Printrich, & Meece, 2008; Zimmerman, 2000). Issues of academic self-concept is of practical concern. This is because academic self-concept has been found to have positive effects on subsequent academic achievement (Marsh et al., 2008; Valentine, DuBois,

& Cooper, 2004), cademic choices (e.g., advanced coursework selection; Marsh, 1991). It also influences academic interest (Marsh, Trautwein, Ludtke, Koller & Baumert, 2005), educational and occupational aspirations (Marsh, 1990), and academic emotions such as test anxiety and stress (Goetz, Preckel, Zeidner, & Schleyer, 2008) and enjoyment (Goetz, Frenzel, Hall, & Pekrun, 2008). Academic self-concept, academic interest, and academic stress are key affective-motivational constructs in educational research that have not only been shown to determine academic effort, choices, and success but are also considered to be significant learning outcomes themselves (Goetz, Cronjaeger, Frenzel, Lüdtke, & Hall, 2010; Schunk, Pintrich & Meece, 2010; Marsh and O'Mara, 2008; Marsh et al., 2005). Given their relevance for students' learning and educational careers, it is important to understand the developmental dynamics of these constructs. Academic self-concept plays an important role in identity formation and is considered important for academic success in school (Mendaglio, 2013; Marsh & Hau, 2003). It relates to students' understanding of their academic achievements and academic competence, expectations of academic success or failure, and academic self-beliefs (Marsh, 2011). Academic self-concept has been identified as being significant for academic success as it underpins educational aspirations (Davis, Rimm & Siegle, 2011), academic interest (Marsh, 2011), course selection (Marsh & Yeung, 1997a), achievement over time (Marsh & Yeung, 1997b), and life success and satisfaction up to a decade after leaving school (Field, Sarver, & Shaw, 2003).

Literature suggests that there are two differing perspectives of academic self-concept (Dramanu & Balarabe, 2013; Cokley, Komarraju, King, Cunningham & Muhammed, 2003). The first perspective emphasises that

academic self-concept is also hierarchical and multi-dimensional based on specific subjects like English self-concept or mathematics self-concept (Scales 2006 cited in Dramanu & Balarabe, 2013). Educational psychology and research provides compelling support for this perspective (Dramanu & Balarabe, 2013). Second, academic self-concept is perceived as unidimensional, such that academic achievement is more influenced by the general notion of academic self-concept (Cokley, 2000). Researchers with this orientation assess academic self-concept by making wide use of overall academic achievement, rather than analysing subject-specific expectations (Dramanu & Balarabe, 2013). Although both positions are beneficial, it is important to consider how students generally feel about their academic abilities (Cokley, Komarraju, King, Cunningham & Muhammad, 2003) since studies suggest a connection between general academic self-concept and overall academic achievement (Reynold, Scales, 2006).

Conceptualisation of Academic Self-Efficacy

Self-efficacy is an important element of the self-regulatory human structure. It develops based on personal experiences connected with one's own successes, but also with observing other people and reflections on their performance and accomplishments (Verešová & Foglová, 2016). Bandura (1997) defined academic self-efficacy as the belief in one's capability to organize and execute courses of actions required to produce given achievements. Self in this context is seen as a cognitive structure that provide reference mechanisms and act as a set of sub functions for perception, evaluation and regulation of behaviour (Bandura, 1997). Self-efficacy beliefs are self-perceptions of competence, influencing how people think, feel,

motivate themselves, and act (Bandura, 1997). Self-efficacy is linked with an individual's own beliefs concerning the capability to implement and organize the course of own behaviour towards actions related to work, education and then experiencing the success combined with achievement (Blatný, & Pláková, 2003). Zimmerman (2000) mentioned that self-efficacy beliefs are sensitive to subtle changes in students' performance context, to interact with self-regulated learning processes, and to mediate students' academic success. Zimmerman and Cleary (2006), reported that self-efficacy is context-specific and varies across several dimensions, such as level, generality, and strength. The level of self-efficacy refers to its dependence on the difficulty level of a particular task (such as math addition problems of increasing difficulty); while generality of self-efficacy belief refers to the transferability of one's efficacy judgments across different tasks or activities; and strength of efficacy judgment pertains to the certainty with which one can perform a specific task Zimmerman and Cleary (2006).

Students' beliefs about their academic abilities play a significant role in their motivation to achieve (Husain, 2014). Self-efficacy is formally defined as individuals' judgments of their abilities to organize and execute courses of action required to attain designated types of performances. Academic self-efficacy is an important factor that affect students' choices of learning task and behaviours, as well as their mentality and emotions on learning (Chang & Chien, 2015). Chemers, Hu, and Garcia (2001) academic self-efficacy as students' confidence in mastering academic subjects. Academic self-efficacy also refers to students' abilities to complete their study, control their own behaviours, and judge their academic achievement (Mercer, Nellis, Martínez &

Kirk, 2011; Elias & Loomis, 2000). Academic self-efficacy was the strongest single predictor of students' academic achievement and performance (Chang & Chien, 2015). Several aspects embodied in a school environment, in which an adolescent spends significant time, are of protective nature linked with experiencing and behaviour of an adolescent at later stages (Verešová & Foglová, 2018).

Academic self-efficacy, reflecting the student's personal confidence in his or her ability to perform educational duties at the anticipated stage, enhances the student's mental effort to learn (Gore, 2006). Students with a high academic self-efficiency degree make continuous efforts to resolve the academic duties assigned to them and do not give up easily (Satici & May, 2016). However, students with higher academic self-efficacy research more and use efficient learning methods to efficiently perform challenging academic duties compared to students with low self-efficacy who hardly fulfill educational criteria (Chemers & Garcia, 2001; Margolis & McCabe, 2004; Zimmerman, 2000). Studies show that students with a higher degree of self-efficacy will better control their school life (Chemers & Garcia, 2001). Students with a low degree of academic self-efficacy encounter academic disappointment more and have trouble devoting themselves to school (Bandura, 1997). Studies conducted have concluded that both students and teachers with high academic self-efficacy levels are good at in problem solving skills. With students it seems that they can use a variety of problem-solving skills and for teachers it seems that they are more willing and open to the new methods while teaching (Yazici & Sur, 2017).

Empirical Review

Influence of Academic Stress on Academic Self-Concept

Stress has strengthened its hold on students as they have to compete in this fast-moving environment at every point of their academic career (Khan & Alam, 2015). High school students seem to be particularly susceptible to this fact. Most high school students face pressures almost every day. Some of this stress may be positive and the balance of stress may be overwhelming for the student (Khan & Alam, 2015). The assertions in by the above researchers suggest that the experience of stress and anxiety impact students academically and influence the way they think and behave.

Some studies conducted have established a significant relationship between academic stress and academic self-concept. On the basis of research conducted by Khan and Alam (2015) on academic stress and the self-concept of high school students using a descriptive survey approach, an important negative relationship has been established between academic stress and academic self-concept. They suggested that parents and teachers strive to eliminate or minimize excessive academic stress from students and create a welcoming school atmosphere. In order to help students minimize their stress and improve their self-awareness, parents and educators should provide advice and guidance on improving positive self-awareness (Khan & Alam, 2015). Similarly, Huh (2015) conducted a comparative analysis of learning stress and academic self-concept among small metropolitan cities and documented a significant relationship between learning stress and academic self-concept.

The study also showed that students in the small town had higher levels of stress from learning English and lower academic self-concepts than students

in the metropolitan area. Based on the result, he suggested that school teachers minimize the stress that students feel while learning English and improve the academic self-concept of students by offering a context-appropriate learning atmosphere (Huh, 2015). Farhan and Khan (2015) also reported a significant relationship between self-esteem and academic stress in their study on the impact of stress, self-esteem and gender factor on students' academic achievement. In the same vein, Sengupta (2014) examined self- concept as a determinant of academic stress and perceived parenting. Using a sample of 302 adolescents from Kolkata (India) aged 14 – 18 years through descriptive survey; they reported a significant negative relationship between self-concept and academic stress of adolescents. They recommended that, even though good parenting plays a significant part in the process of developing the self-concept of the adolescent and keeping the adolescent's stress at bay, we must also not forget that in educating the adolescent, emphasis must be placed on life skills development in order to prepare them tackle present and future challenges and optimize their opportunities to live a healthier, happier, productive and a fulfilling life (Sengupta, 2014). On the contrary, Bryne (1996) and Marsh (1993) argued that, important academic outcomes are substantially related to academic self-concept but are relatively unrelated to self-esteem and non-academic component such as self-concept.

Influence of Academic Stress on Academic Self-Efficacy

Some number of studies conducted have report the relationship between academic stress and academic self-efficacy. A study conducted by Jenaabadi, Nastiezaie and Safarzaie, (2017) on the relationship of academic burnout and academic stress with academic self-efficacy among graduate student, through

Pearson's correlation coefficient, and simultaneous regression analysis revealed a significant negative relationship between academic stress and academic self-efficacy. Thus an increase in academic stress among the students led to a decrease in their academic self-efficacy. They recommended that, teachers and professors should attempt to increase academic self-efficacy among students through providing necessary conditions to predict or control academic stress. Likewise Vahedi1, Tabrizi, Kolahdouzan, Chavoshi, Rad, Soltani and Ghojazadeh (2014) reported significant negative relationship between academic stress and academic self-efficacy in their investigation on impact and amount of academic self-efficacy and stress on the mental and physical well-being of students. According to their findings, an increase in self-efficacy and also a decrease in stress levels would enhance the mental and physical health of the students. A student's concept of excellence and higher levels of self-efficacy is an obvious contributor to his/her performance and academic educational achievements; this reduces academic stress, which can have positive effects on mental and physical well-being. Based on the findings of their study, they recommended that, it is necessary to adopt special practical methods in order to increase self-efficacy and decrease stress even more in the adolescent academic population, which will lead to mental and physical health improvement and the subsequent national improvement of science. Similarly, Zajacova, Lynch and Espenshade (2005) through descriptive survey found a significant negative relationship between stress and self-efficacy of students in their study on self-efficacy, stress, and academic success in college. They concluded that, their findings underline the importance of academic self-efficacy both in moderating

the effect of stressors on perceived stress for college students and also in predicting academic success in college.

Self-efficacy and stress are closely connected concepts. In Lazarus' cognitive model of stress (Lazarus & Folkman, 1984), personal beliefs such as self-efficacy are critical in evaluating demands from the environment. Every external demand is evaluated as a threat or a challenge and people with high self-efficacy beliefs are more likely to evaluate the demands as a challenge (Chemers, Hu, and Garcia, 2001; Lazarus and Folkman, 1984). That is, the extent to which an individual feels confident about his or her competence to handle a given situation affects whether a given task is perceived as stressful or threatening, rather than as a challenge (Zajacova, Lynch & Espenshade, 2005). When a task is appraised as a challenge, one is more likely to select an effective coping strategy and to persist at managing the task (Zajacova, Lynch & Espenshade, 2005). Self-efficacy thus affects the perception of external demands and mediates the relation between external stressors and psychological stress (Bandura, 1995). Hackett, Betz, Casas, and Rocha-Singh (1992) also argued that stress and anxiety could depress student self-efficacy. Cognitive theories have a clear negative association between self-efficacy and perceived stress, and empirical studies support the hypothesis (Zajacova, Lynch & Espenshade, 2005). Several research on self-efficacy and stress among college students have consistently shown mild to strong negative associations (Gigliotti & Huff, 1995; Hackett et al., 1992; Solberg, Hale, Villarreal, & Kavanagh, 1993; Solberg & Villarreal, 1997; Torres & Solberg, 2001).

Gender Differences in Academic Stress

According to O'Callaghan (2014), an individual's perception of stress is influenced by how he/she appraises the situation. The exact variations that moderate the experience of stress are unclear. However, several studies have shown that gender is one of the particular variations that can affect how individuals judge circumstances (Misra, West & Russo, 2000; Day & Livingstone, 2003). O'Callaghan (2014) used Kessler (1984) differential vulnerability hypotheses and Roxburg (1996) differential exposure hypothesis to describe gender differences in stress perception. The differential vulnerability hypothesis postulates that as females experience the same stressors as males, female stressors are considered to be more stressful. While the differential exposure theory suggests that females are exposed to more stressors and thus feel more stress than males. This indicates that a growing body of evidence suggests that gender plays a role in the experience of stress by the person (Lighthall, et al. 2012).

It is clear that students have a particular cluster of negative interactions resulting in academic stress (Lindsey, et al. 2011; Taylor, 2006). Some research into academic stress and gender-related issues has shown that female students record a higher number of stressors than male students (Misra et al. 2000). A study conducted by Pozos-Radilloa et al. (2014) on academic stress as a predictor of chronic stress in Mexico reported a significant gender difference in academic stress with female students recording higher academic stress than their male counter parts. Pozos-Radilloa et al. (2014) recommended that, the accurate identification of the stressors could help reduce academic stress, which negatively affect the academic performance of the students. Therefore, the implementation of educational programs oriented towards the prevention of

stress and its negative effects may enhance the capacity of the students to withstand academic stressful situations. Similarly, a study conducted by Backovic, Zivojinovic, Maksimovic and Maksimovic (2012) on gender differences in academic stress and burnout among medical students in Serbia also reported significant gender difference in academic stress with female students recording much academic stress than male students. Backovic et al. recommended that, measures for prevention of academic distress should be targeted at optimizing the development of clinical skills and professionalism, with special concern to female students who manifested high vulnerability. Amponsah and Owolabi (2011) in a study on perceived stress levels of fresh university students in Ghana also reported that, female fresh undergraduates had significantly higher perceived stress levels than their male counterparts. They recommended that, university support staff should provide stress management programmes or seminars and training for students to enable them manage their time and everyday life demands. Reddy, Karishmarajanmenon and Anjanathattil (2018) in the same vein found female students in India recording higher scores on academic stress than males. Le, Posada and Liu (2018) revealed in a study on the moderating effects of gender on the relationship between academic stress and academic self-efficacy that, female students were high on academic stress than male students.

Glozah (2013) reported a different result in a study on the effects of academic stress and perceived social support on the psychological wellbeing of adolescents in Ghana. He revealed that male adolescents reported higher academic stress than female adolescents did. On the contrary, some researches recorded no significant gender differences in academic stress. Sharma (2014)

reported no significant gender difference in academic stress in a study on family environment and peer group influence as predictors of academic stress among adolescents in India. Nevertheless, concluded that, the role of family environment and peer group influence in the development of academic stress. Likewise, Busari (2012) in a research on identifying difference in perceptions of academic stress and reaction to stressors based on gender in Nigeria also reported no significant gender difference in academic stress. More so, Calaguas (2011) revealed no significant difference between male and female respondents in their perception of academic stressors in a study on college academic stress: differences along gender lines in Philippines. Calaguas (2011) concluded that even though generally, no significant difference was found between male and female respondents in their perception of academic stressors, however using the mean scores as basis, female respondents scored higher compared to male respondent. Therefore, this difference must be considered when planning intervention programs for college students to handle academic stress.

Summary of Literature Review

Based on the literature reviewed, it is theoretically and empirically evident that, students do experience academic stress which as a result may affect or influence their academic self-concept and academic self-efficacy. Several studies conducted have identified various sources of academic stress which has the potential to influence students' academic self-concept and academic self-efficacy. To add, empirical relationship has been established between academic stress (independent variable), academic self-concept (dependent variable) and academic self-efficacy (dependent variable). From the literature, the relationship between the independent variables and dependent variables are

often negative strong or moderate relationship. The negative relationship implies that, if students are more stressed academically, it might lead to low academic self-concept and academic self-efficacy among SHS students.

However, in the light of the issues identified from the literature, this study through research questions and hypotheses will find out or examine the validity of the issues identified.

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter describes the methods used in the conduct of the study. It comprised the research design, study area, population, sampling procedure, data collection instrument, data collection procedures, and data processing and analysis.

Research Design

The research design employed for the study is descriptive survey design. Descriptive research design is a scientific method which involves observing and describing the behaviour of subject(s) without influencing it in any way (Gall, Gall, & Borg, 2007).

According to Creswell (2002), Descriptive survey design involves the identification attributes of a particular phenomenon based on observational basis or the exploration of correlation between two or more phenomena. Descriptive design is suitable for this study because this study is typically interested in examining the between students' academic stress, academic self-concept and academic self-efficacy; and descriptive survey has the methodological properties to achieve this.

It describes the characteristics of the population or phenomenon that is being studied. Descriptive research is an appropriate choice for this study because, it will help identify characteristics, frequencies, trends, correlations, and categories (McCombes, 2019). Also, it is appropriate for this study because there will be no manipulation of variables in the study. Again, the population is

large and thus, using this research design makes it convenient to gather information. Leedy and Ormrod (2005), argued that survey research involves acquiring information about one or more groups, perhaps about their characteristics, opinions, attitudes or previous experiences by asking those questions and tabulating their answers. The study is quantitative in nature and permits the use of statistics in the description of findings and makes the understanding of results simple and objective.

Study Area

The study covers students in public Senior High Schools in Cape Coast Metropolis. The Metropolis is bordered by the Gulf of Guinea to the South, Komenda/Edina/Eguafo/Abirem (KEEA) Municipal District to the West, Abura/Asebu/Kwamankese District to the East and Twifo/Heman/Lower Denkyira District to the North. The population of the Cape Coast Metropolis, according to the 2010 Population and Housing Census, is 169,894 representing 7.7% of the region's total population. Males constitute 48.7% and females represent 51.3%. Twenty three percent of the population live in rural localities. The Metropolis has a sex ratio (number of males per 100 females) of 95 (Ghana Statistical Service [GSS], 2010). The Metropolis is endowed with a number of SHS which include Academy of Christ the King, Adisadel College, Cape Coast Technical, Efutu SHS, Ghana National College, Mfantsipim School, Oguaa SHS, University Practice SHS, Wesley Girls High School, Holy Child SHS and St. Augustine's College. The metropolis is located on longitude 1° 15'W and latitude 5°06'N. It occupies an area of approximately 122 square kilometres (Ghana Statistical Service [GSS], 2010).

Population

The target population of the study was all students in the public Senior High Schools in the Cape Coast Metropolis. There were 11 Senior High Schools (Academy of Christ the King, Adisadel College, Cape Coast Technical, Efutu SHS, Ghana National College, Mfantsipim School, Oguaa SHS, University Practice SHS, Wesley Girls High School, Holy Child SHS and St. Augustine's College) in the Metropolis. The estimated population of all students in the public Senior High Schools was 21,402 (Educational Management Information System - EMIS data, 2019) made up 12,279 males and 9,123 females. The accessible population comprised 11320 form two students from five of the schools selected.

Sample and Sampling Procedure

According to Krejcie and Morgan (1970), a population of 11320 will need a sample of 370. In reference to Krejcie and Morgan (1970), a sample size of 370 students were selected from five public Senior High Schools in the Cape Coast Metropolis. According to Creswell (2012), a sample size of 350 and above is enough to ensure representativeness of sample and also sufficient to make meaningful inferences from the sample to the population.

A multi-stage sampling technique was employed to select the schools and students for the study. Stratified sampling techniques was used to put the 11 Senior High Schools in the Metropolis into three (3) strata; that is single-sex male schools, single-sex female schools and mixed schools. Out of the 11 schools, 3 were single-sex male schools, 2 were single-sex female schools and 6 were mixed schools.

Simple random sampling was used to select one school each from single sex schools and three mixed schools were selected. More schools were selected from the mixed schools because proportionately, this category of school is more than the same sex schools and for the purpose of representative population, the three mixed schools were selected. In selecting this sample, a multi-stage sampling technique was used. First, a disproportionate stratified sampling technique was used to select five schools based on single-sex male, single-sex female and mixed. Proportionate sampling techniques was used to determine the number of students to be selected from each school based on their unit size or population. Simple random sampling was then used to select respondents from each school.

Table 1: Population and Proportionate Sample Size determination

School	Category	Population	Sample
St. Augustine	Single-sex male school	959	78
Wesley Girls	Single-sex female school	739	60
Ghana National	Mixed school	1313	108
Academy of	Mixed school	738	60
Christ the King			
Cape Tech	Mixed school	782	64
Total		**4531**	**370**

Source: EMIS data (2019).

Table 1 is a description of the selected schools and their respective population. The sample size for each school was determined by proportionately

dividing each schools' population by the total population and multiplied by the sample size n=370.

Table 2: Multi-stage Sampling

Stage	Sampling Technique	Purpose
1	Stratified sampling	To categorise the 11 public Senior High Schools into three groups.
2	Simple random sampling	To select one school from each category.
3	Proportionate sampling	To determine the sample size of students to be selected from each school.
4	Simple random sampling	To select the students from each school per their sample unit.

Source: Field data (2019)

Table 2 is a description of the various sampling techniques employed and the purpose for using them.

Data Collection Instrument

The Academic Stress Scale developed by Lin and Cheng (2009) was adapted. Likewise the Academic Self-Concept Scale developed by Reynolds (1988) was adapted and the Academic Self-Efficacy Scale developed by Chemers and Garcia (2001) was adapted. All the adapted instruments were modified with the help of an expert to suit the Ghanaian context and used to collect data from students.

Academic Stress Scale (ASS) (Lin and Chen, 2009)

The academic stress inventory adapted for this research is divided into five (academic stressors), with 48 items. The 48 items is a Likert's four-point scale ranging from (4) strongly agree to strongly disagree (1) it also comprised academic stressors such as; stress from test scores (12 items), stress from teachers (8 items), stress from myself (11 items), stress from classmates (12

items) and stress from school system (5 items). The higher the points for each factor, the higher is the degree of stress produced by this factor. The Cronbach reliability values of the original test Factor 1 showed .90 (stress from teachers), factor 2 showed .89 (stress from test scores), factor 3 showed .92 (stress from peers), factor 4 showed .87 (self-inflicted stress), factor 5 showed .85 (stress from school system). The Alpha (α) value of the overall academic stress inventory was .90. Lin, Lin, Wang and Chen (2009) adapted this instrument in a study on the causes of academic stress suffered by students at universities and colleges of technology. They recorded an overall coefficient of reliability of .90. The maximum score is 192 and the minimum score is 48. The higher the score the higher the degree of stress.

Academic Self Concept Scale (ASCS) (Reynolds et al. 1980)

Academic Self-Concept Scale (ASCS) was developed by Reynolds et al. (1980). The scale measures attitudes, feelings, and perceptions related to one's intellectual or academic skills (Reynolds et al., 1980). Academic Self-Concept Scale consists of 40 Likert-type items and is keyed in the direction such that a high score indicates a positive academic self-concept. Each item on the ASCS is assessed on a four-point Likert-type scale ranging from 1 [strongly disagree] to 4 [strongly agree]. The scale has seven sub-scales: grade and effort, study habits, peer evaluation of academic ability, self-confidence in academic ability, satisfaction with college, self-doubt regarding ability, and self-evaluation of external standards (Reynolds et. al., 1980). The maximum score is 110 and minimum score is 80. Internal consistency reliability estimates investigated by Reynolds et al (1980) yielded α of .91 for the total scale of the

ASCS when tested on 427 students. Lampert (2007) also recorded alpha coefficient of .91.

Academic Self-efficacy (Chemers, Hu and Garcia, 2001)

For the present analysis, a ten-item measure has been modified. It is strongly accepted to strongly disagree on the 4-point Likert scale. Items are statements expressing their faith in their ability to perform well in academic terms. The measure was structured to reflect a range of specific skills related to academic achievement, including the scheduling of assignments, the taking of notes, the taking of tests and the research and writing of papers, and included general statements on scholarly skills. The maximum score is 40 and the minimum is 10. The coefficient alpha for this measure is .77 and .76. Conner (2011) adapted this instrument and recorded a Cronbach's alpha of .92.

Reliability of the Instrument

Leedy and Ormrod (2005), explained reliability as the consistency with which a measuring instrument yields certain result when the entity being measured has not changed. Consistency of the instrument was achieved through a number of initiatives. Reliability reveals that when procedures of the study are repeated, the exact same result are expected (Mugenda & Mugenda, 2003). A reliability test was carried out with the purpose of testing the consistency of the instrument. The questionnaire was pre-tested in University Practice SHS in the Cape Coast Metropolis for its reliability. The choice of this school was based on the fact that, it is located in the Cape Coast Metropolis where the participants share similar characteristics. The pre-testing was done by collecting data from 107 randomly selected students. The obtained reliability for academic stress scale was .81. Academic self-concept scale had a Cronbach's alpha of .93 (See

appendix C). In addition, academic self-efficacy had an Alpha (α) value of .75. The overall obtained reliability co-efficient for all the sections was .87. This indicate that, the questionnaire was reliable.

Validation of the Instrument

Validity is the consistency and accuracy of the deductions based on the results of the study (Mugenda & Mugenda, 2003). During the pilot analysis, the validation of the instrument was carried out to verify the accuracy of the data collection instrument. In order to strengthen the validity of the report, an expert evaluation and analysis questionnaire was sent to the researcher's superiors in the Department of Education and Psychology. This ensured that the face and the substance of the facts relevant to the items in the analysis of whether the items would lead to research questions and assumptions. The specifics of the research are also comprehensively covered.

Data Collection Procedure

An introductory letter was collected from the Head, Department of Education and Psychology of UCC to the Heads of institutions of the selected schools to enable the study to be conducted in the various schools. Ethical clearance was also taken from the College Ethical Review Board. This was after the supervisor had given the go ahead for data to be collected. An initial contact was made with the school authorities, the students were informed of the impending exercise and their support and cooperation solicited during the data collection process. On the appointed dates, the students were assembled in a classroom with the help of heads and some teachers of the institutions. The students were briefed on the purpose and modalities of the study and assured of confidentiality after which their consent was sought orally. They were then

given the questionnaires to respond to. Each respondent was given 20 minutes to respond to the instrument.

Data Processing and Analysis

The collected questionnaires were sorted and checked for completeness. The questionnaires were coded and entered into Statistical Product for Service Solution (SPSS) version 22.0. The entered data were screened to check for errors and missing data. Data on research question 1, was analysed using mean and standard deviation. For research question 2 and 3 data was analysed using multiple linear regression. Pearson Moment correlation coefficient was used to analyse data for research question 4 and 5. Hypothesis 1 was tested using independent samples t-test. For all the inferential analysis, underlying assumptions were tested before the main analysis. The hypotheses were tested at .05 significant level of confidence.

Ethical Considerations

Ethical consideration is a matter of necessity due to the nature of this research. In conducting research, there are ethical principles that must be considered, some of these are informed consent, assuring anonymity and confidentiality. Informed consent is the major ethical issue in conducting research. The consent of participants was first sought through a consent letter, stating the purpose of the research. The participants were constantly assured of anonymity by asking them not to write their names or anything that could reveal their identity. Confidentiality was also assured; thus, the information they provided was kept private by the researcher in order to protect the respondents' identity. Ethical clearance form was taken from the University of Cape Coast to address any ethical issues regarding this study.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter presents results of data collected from the field. It includes the interpretation of the results and discussion of findings. The purpose of the study was to examine the influence of academic stress on academic self-concept and academic self-efficacy of Senior High School (SHS) students. The analysis was based on the 100% return rate data obtained from 370 respondents used in the study. The first part of this chapter designates the demographic characteristics of the respondents which was analysed using frequencies and percentages and presented in pie and bar charts. In the second part, the research results were presented based on the research questions and hypothesis framed for the study. All the hypothesis and statistical significance were tested at 0.05 significant level of confidence.

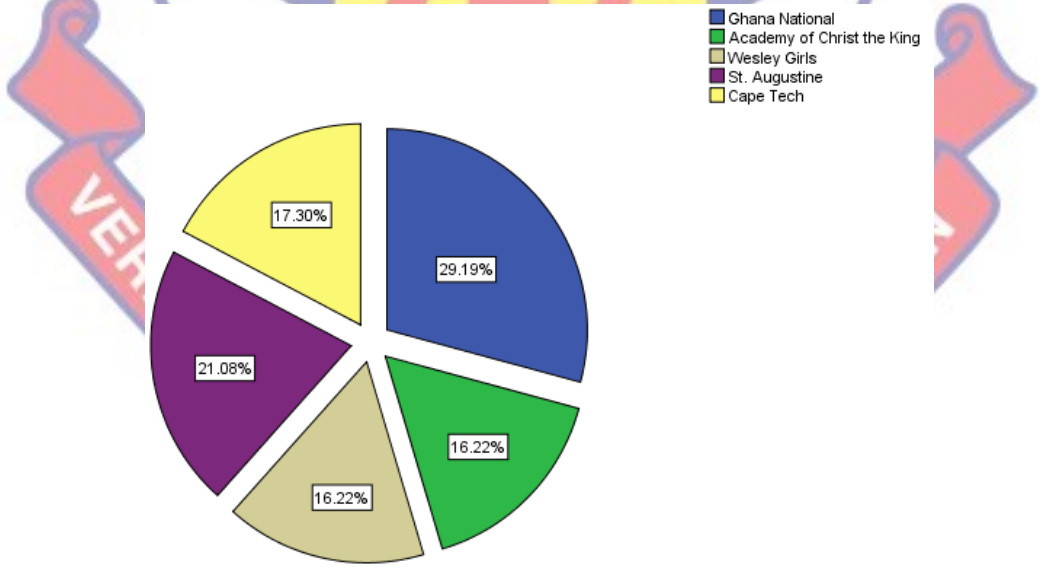


Figure 1: Demographic Results

Source: Field Data (2020)

Results in Figure 1 shows the distribution of the respondents with respect to their schools. This was achieved proportionately (see Table 1). From

the figure, 29.19% of the students are from Ghana National SHS, followed by St. Augustine (21%), Cape Tech (17.3%) and 16.22% from Wesley Girls and Academy of Christ the King respectively.

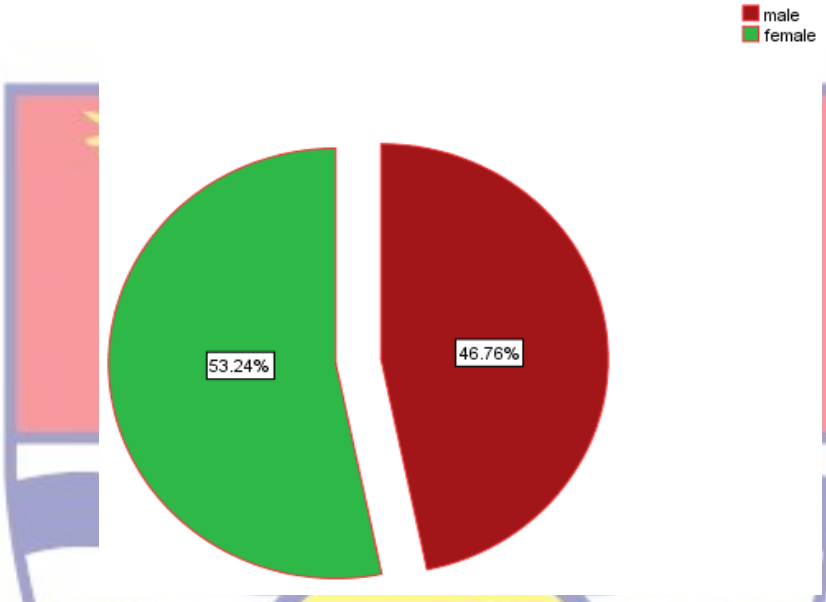


Figure 2: Sex Distribution

Source: Field data (2020)

Figure 2 shows the sex distribution of the respondents. From the Figure, 53.24% of the respondents were females while 46.76% were males. This result indicates that, the researcher ensured a quite balanced gender representation for valid and reliable interpretation.

Table 3: Age of Respondents

Age of Students	Frequency	Percent %
14	1	0.3%
15	12	3.2%
16	89	24.1%
17	205	55.4%
18	53	14.3%
19	7	1.9%
20	2	0.5%
21	1	0.3%
Total	**370**	**100**
Mean	17.0	
Std. Deviation	.834	

Source: Field data (2020)

Results from Table 3 indicates that, among the 370 students who participated in the research, majority 205 (55.4%) of them are 17 years, with a Mean of 17.0 (Std. D = .834) as the average age.

Results on Research Questions

Research Question 1

What is the main source of academic stress among students in Senior High Schools in the Cape Coast Metropolis?

According to literature, there are various sources that cause academic stress among SHS students and these sources were comprehensively captured in the Academic Stress Scale adapted from Len and Cheng (2009). However, the aim of this research question was to find out among all the sources of academic stress, the main source of academic stress among SHS students in the Cape Coast Metropolis. The data was analysed using mean and standard deviation. The result is presented in the Table below.

Table 4: The Main Source of Academic Stress

Sources of Academic Stress	Score range	Mean	Std. Deviation
1. Stress from test scores	12-48	35.85	7.518
2. Stress from teachers	8-32	23.94	5.106
3. Stress from myself (student)	11-44	29.22	6.856
4. Stress from classmates	12-48	32.74	7.711
5. Stress from school system	5-20	12.82	3.477

Source: Field data (2020)

Results from Table 4 revealed that, among all the five sources of academic stress, stress from test scores is the main source of academic stress among SHS students in the Cape Coast Metropolis because, it has the highest *Mean* of 35.85 (*SD*= 7.518) followed by stress from classmates *(M* = 32.74, *SD*= 7.711). However, the least source of academic stress among SHS students

in the Cape Coast Metropolis is stress from school system. The scores were generated from the original instruments adapted.

Research Question 2

What kind of academic stress influences the academic self-concept of SHS students in the Cape Coast Metropolis?

The purpose of this research question was to find out which of the sources of academic stress influences self-concept of SHS students in the Cape Coast Metropolis. The data was analysed through multiple linear regression. The result is presented in Table 5, 6 and 7

Table 5: Model Summary of Influence on Self-Concept

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.854[a]	.729	.728	13.161	.729	988.27	1	368	.000
2	.947[b]	.896	.895	8.164	.167	589.50	1	367	.000
3	.985[c]	.970	.970	4.370	.074	914.50	1	366	.000
4	.994[d]	.988	.988	2.788	.018	534.46	1	365	.000

Predictors: *Stress from; **a**. Classmates, **b**. test scores, **c**. myself, **d**. teachers*

Table 6: ANOVA- Influence on Academic Self-Concept

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	171189.208	1	171189.208	988.268	.000[b]
	Residual	63745.465	368	173.221		
	Total	234934.673	369			
2	Regression	210476.255	2	105238.128	1579.104	.000[c]
	Residual	24458.418	367	66.644		
	Total	234934.673	369			
3	Regression	227943.817	3	75981.272	3977.932	.000[d]
	Residual	6990.856	366	19.101		
	Total	234934.673	369			

	Regression	232097.778	4	58024.445	7465.530	.000[e]
4	Residual	2836.895	365	7.772		
	Total	234934.673	369			

Table 7: Coefficients of Influence on Self-Concept

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	43.109	2.989		14.424	.000	37.232	48.987
	Classmates	2.793	.089	.854	31.437	.000	2.619	2.968
2	(Constant)	14.445	2.198		6.573	.000	10.124	18.767
	Classmates	1.791	.069	.547	26.002	.000	1.655	1.926
	Test scores	1.715	.071	.511	24.280	.000	1.576	1.854
3	(Constant)	6.730	1.204		5.590	.000	4.362	9.097
	Classmates	1.255	.041	.384	30.694	.000	1.175	1.336
	Test scores	1.288	.040	.384	31.911	.000	1.209	1.367
	Myself	1.388	.046	.377	30.241	.000	1.298	1.478
4	(Constant)	3.127	.784		3.991	.000	1.586	4.669
	Classmates	1.120	.027	.342	41.865	.000	1.067	1.172
	Test scores	.973	.029	.290	33.397	.000	.916	1.030
	Myself	1.205	.030	.328	39.745	.000	1.146	1.265
	Teachers	1.031	.045	.209	23.118	.000	.944	1.119

Dependent Variable: Academic Self-Concept

Result from Table 5, 6 and 7 is multiple linear regression calculated to find out which of the sources of academic stress can influence students' academic self-concept. Stress from classmates significantly influenced students' academic self-concept, β = .342, t (365) = 41.865, p < .001. Stress from classmates also explained a significant proportion of variance in students' academic self-concept R^2 = .988, F (4, 365) = 7465.530, p < .001. Students' academic self-concept is equal to 3.127+ 1.120 Stress from classmates + .973 Stress from test scores + 1.205 stress from myself + 1.031 Stress from teachers.

Research Question 3

What kind of academic stress influences the academic self-efficacy of SHS students in the Cape Coast Metropolis?

The purpose of this research was to find out which of the sources of academic stress influences the self-efficacy of SHS students in the Cape Coast Metropolis. The data was analysed through multiple linear regression. The result is presented in Table 8, 9 and 10.

Table 8: Model Summary of Influence on Academic Self-Efficacy

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.397[a]	.157	.155	5.933	.157	68.675	1	368	.000
2	.437[b]	.191	.187	5.820	.034	15.317	1	367	.000
3	.449[c]	.201	.195	5.791	.010	4.799	1	366	.029

Predictors: Stress from; a. classmates, b. teachers, c. myself

Table 9: ANOVA- Influence on Academic Self-Efficacy

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2417.037	1	2417.037	68.675	.000[b]
	Residual	12951.960	368	35.196		
	Total	15368.997	369			
2	Regression	2935.938	2	1467.969	43.332	.000[c]
	Residual	12433.059	367	33.878		
	Total	15368.997	369			
3	Regression	3096.836	3	1032.279	30.786	.000[d]
	Residual	12272.161	366	33.530		
	Total	15368.997	369			

Table 10: Coefficients of Influence on Self-Efficacy

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	20.135	1.347		14.946	.000	17.486	22.784
	Stress from classmates	.332	.040	.397	8.287	.000	.253	.411
2	(Constant)	17.028	1.542		11.044	.000	13.996	20.060
	Stress from classmates	.210	.050	.251	4.201	.000	.112	.309
	Stress from teachers	.296	.076	.234	3.914	.000	.147	.445
3	(Constant)	17.739	1.568		11.314	.000	14.656	20.822
	Stress from classmates	.258	.054	.308	4.747	.000	.151	.365
	Stress from teachers	.367	.082	.290	4.479	.000	.206	.528
	Stress from myself	-.136	.062	-.144	-2.191	.029	-.258	-.014

Dependent Variable: Self-efficacy

Result from Table 8, 9 and 10 is multiple linear regression calculated to find out which of the sources of academic stress can influence students' academic self-efficacy. Stress from classmates significantly influenced students' academic self-efficacy, $\beta = .308$, t (366) = 4.747, $p < .001$. Stress from classmates also explained a significant proportion of variance in students' academic self-efficacy $R^2 = .201$, F (3, 366) = 30.786, $p < .001$. Students' academic self-efficacy is equal to 17.739+ .258 (Stress from classmates) + .367 (Stress from teachers) – .136 (stress from myself).

Research Question 4

What is the relationship between academic stress, academic self-concept and academic self-efficacy?

This research question is targeted at establishing the relationship between academic stress, academic self-concept and academic self-efficacy of students.

The result for this question was derived through Pearson Moment Correlation Coefficient. The result is in the Table below

Table 11: Correlation between Academic Stress, Self-Concept and self-efficacy

		Academic Stress	Academic self-concept	Academic self-efficacy
Academic Stress	Pearson Correlation	1	-.907**	-.397**
	Sig. (2-tailed)		.000	.000
Academic Self-concept	Pearson Correlation	-.907**	1	.341**
	Sig. (2-tailed)	.000		.000
Academic Self-efficacy	Pearson Correlation	-.397**	.341**	1
	Sig. (2-tailed)	.000	.000	

**. Correlation is significant at the 0.05 level (2-tailed).

The Pearson correlation between academic stress and academic self-concept shows that, there was a significant strong negative relationship between academic stress and academic self-concept (r = -.907, p < .00). The Pearson correlation between academic stress and academic self-efficacy shows that, there was a significant strong moderate relationship between academic stress and academic self-efficacy (r = -.397, p < .00).

Research Hypothesis

Hypothesis 1

H_1: There will be a significant difference in academic stress levels between male and female students.

The aim of this hypothesis is to find out if there was a statistically significant difference in academic stress levels among male and female students. The data was analysed using two independent samples t-test. The results are presented in Table 12 and 13 below.

Table 12: Group Statistics for Academic Stress

	Gender of students	N	Mean	Std. Deviation	Std. Error Mean
Academic stress	Male	173	137.52	19.891	1.512
	Female	197	131.98	28.931	2.061

Source: Field data (2020)

The results in Table 11 shows the mean difference in academic stress among male and female students. However, results from Table 12 will give the statistical significance the mean difference which will inform decision taking on the hypothesis.

Table 13: Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Academic stress	Equal variances assumed	13.896	.000	2.117	368	.035	5.541	2.617	.395	10.686
	Equal variances not assumed			2.167	348.667	.031	5.541	2.557	.512	10.569

Source: Field data (202

From the results in Table 12, the null hypothesis is rejected because p< .05. The result is statistically significant. It can be concluded that, male students experience more academic stress than female students. The academic stress of male students (M = 137.52, SD = 19.891) is higher than the academic stress of female students (M = 131.98, SD = 28.931; t (348.667) = 2.167, p = .031 (two tailed.

Discussion of Findings

The major aim of this study was to examine the influence of academic stress on academic self-concept and academic self-efficacy of Senior High School (SHS) students in the Cape Coast Metropolis (CCM). Through descriptive survey design, data was collected from 370 public SHS students using academic stress scale, academic self-concept scale and self-efficacy scale for data collection. The discussion is done based on the research questions and hypothesis of the study.

The Main Source of Academic Stress

Based on the results of the study, it was found that, the main source of academic stress among students in Senior High Schools in the Cape Coast Metropolis is stress from test scores. Test scores are the outcome of students' performances throughout the term. It is used to describe every students' level of proficiency in a particular test area. It also helps in identifying the strength and weakness of the students and it is ultimately used for assessment purposes; thus take an informed decision about the educational progress and future performance of students. This result implies that, all the activities and conditions students engage in before getting test scores cause stress among the students. Activities such as preparing for examination, taking the exam, parents and teachers' high expectations about their performance all accumulate academic stress at the end when students are approaching their test scores. The thought of not preparing enough before examination and the fear of not meeting parents and teachers' expectations incites stress in the students. Some studies conducted have recorded similar result as captured in this study. That is to say, the result of this study is consistent with the

report of Bhargava and Trivedi (2018), who reported that, stress among adolescents mainly comes from academic tests, followed by interpersonal relations, relationship problems, life changes, and career exploration. They added that, the pressure to perform well in the examination or test and time allocated makes academic environment very stressful for students. Likewise this result is consistent with the result of Ezekiel (2015) as he opined that, students report experiencing academic stress at predictable times each semester with the greatest sources of academic stress resulting from taking and studying for exams, grade competition, and the large amount of content to master in a small amount of time. Erkutlu and Chafra (2006) also similarly mentioned that, the pressure to perform well in the examination or test and time allocated makes academic environment very stressful for students. Nakalema and Ssenyonga (2013) stated that, students revealed experiencing academic stress with the greatest sources of academic stress coming from taking and studying for exams, grade competition, and the large amount of content to master in a small amount of time.

Sources of Academic Stress that may Influence Academic Self-Concept

More so, it was revealed in this study that, stress from; classmates, test scores, self and teachers can influence the academic self-concept of students. Academic self-concept is perceived as a student's self-perception regarding specific academic domains or abilities which form central part of their adjustment in school. However, there are various factors in the school environment that influence how students perceive their academic capabilities and domains. Typical of these factors is classmates (peers), academic performance (test scores), student

(self) and teachers. Adolescence is a period where these young ones are more mindful of how they feel belonged and accepted by peers. Motivation toward school and successful academic achievement can be connected to students' relationships and interactions with classmates, in addition to how well a student adapts or feels connected and supported in the school environment (Bacon, 2016). Therefore, any interactions between the student and his/ her peers (classmates) that makes the student doubt him/her academic capabilities or does not feel belonged may influence or affect their academic self-concept. Likewise stress from test scores or academic performance can influence the academic self-concept of students. Students' perception about their capabilities and abilities in academic domains are confirmed or verified through their test scores or academic performance in the domain. So, if a student feels stressed by test scores thus performs lower than expected, it may affect his/ her academic self-concept.

Similarly, students themselves create their own stress in ways which may affect their academic self-concept. For instance, a student who fails to prepare ahead of time before exams or test and tries to learn everything in a short moment before exams may feel self-stressed which may affect his/ her academic self-concept in that subject. To add, stress from teachers may influence students' academic self-concept as teachers' interactions with students are influenced by teacher expectations and perceptions. Ferguson (2003) stated that, students are often not adequately embraced by teachers, which may lead to several factors leading to low performance in schools, which in effect may affect their academic self-concept.

Sources of Academic Stress that may Influence Students' Academic Self-Efficacy

This study further revealed that, students' academic self-efficacy may be influenced by stress from classmates, self (student) and teachers. As Bandura (1997) defined, academic self-efficacy is the belief in one's capability to organize and execute courses of actions required to produce given achievements. This issue is not too different from the discussion made on academic stress and academic self-concept. Because any stressful actions be it from classmates (peers), the student or teachers that threatens ones' belief in his / her capability to perform tasks to produce, expected result may affect the academic self-efficacy of students.

Relationship between academic stress and academic self-concept

Results from this study indicated a statistically significant strong negative relationship between academic stress and academic self-concept. That is, the more a student experiences academic stress, the lesser academic self-concept of the student. This result is consistent with the work of Khan and Alam (2015) as they recorded significant relationship between academic stress and academic self-efficacy. They recommended that parents and teachers should try to remove or reduce unnecessary academic stress from students and create a supportive school environment. Certainly this research agrees with the recommendation of Khan and Alam (2015) because, taking into consideration the current SHS educational system in Ghana, it is very necessary for teachers, parents, headmasters and all other stakeholders to device strategies to limit academic stress on students and create platforms geared towards helping students cope or overcome academic stress. In

the same vein, this result is congruent with the findings of Huh (2015) as he reported that, students from small town were found to exhibit higher levels of stress from learning English and a lower academic self-concept than students from metropolitan city. To add, Sengupta (2014) also recorded similar result as they indicated a significant negative relationship between self-concept and academic stress of adolescents which corroborate with the findings of this study.

Relationship between Academic Stress and Academic Self-Efficacy

In addition, findings from this study indicated a statistically significant negative moderate relationship between academic stress and students' academic self-efficacy. In other words, an increase in academic stress among the students may lead to a decrease in their academic self-efficacy. In comparison, this result confirms the reports of other studies conducted to establish this relationship. That is, Jenaabadi, Nastiezaie and Safarzaie (2017), showed similar result as they revealed a significant negative relationship between academic stress and academic self-efficacy. This result also agreed with the work of Tabrizi, *et al.* (2014), who reported significant negative relationship between academic stress and academic self-efficacy in their investigation on impact and amount of academic self-efficacy and stress on the mental and physical well-being of students. This result is further consistent with the study of, Zajacova, Lynch and Espenshade (2005) who through descriptive survey found a significant negative relationship between stress and self-efficacy of students in their study on self-efficacy, stress, and academic success in college.

Gender Difference in Academic Stress Levels

The study revealed a statistically significant difference in academic stress levels among male and female students. From the result, it was found that male students were more stressed academically than their female counterparts. This study did not empirically determine the reasons why male students are more academically stressed than female students. However, the academic stress of male students can be attributed to the academic competition of who performs better in examination may exist among male students than female students. There can also be other reasons such as parents' higher expectation from boys than girls or it may be boys' own high goals and targets for their bright and successful career. According to literature, an individual's perception of stress is influenced by how he/she appraises the situation and gender is one of the specific individual differences that may influence how individuals appraise situations. This result also validates other studies conducted confirming gender difference in academic stress level among students. But studies conducted by Sharma (2014); Busari (2012) and Calaguas (2011) reported a dissimilar result by revealing that there is no statistically significant gender difference in academic stress level among students.

However, the result of this study is contrary to the report of O'Callaghan (2014), who argued through differential exposure hypothesis that female students are exposed to more stressors and therefore experience more stress than male students. Also, this study did not agree with the findings of Amponsah and Owolabi (2011), as they recorded that, female fresh undergraduates had significantly higher perceived stress levels than male fresh undergraduates. Similarly, Pozos-Radilloa

et al. (2014) indicated a contrary result by revealing that female students recorded higher academic stress than their male counterparts. Likewise, Backovic *et al.* (2012), also reported female students recording much academic stress than male students. On the other hand, this result is consistent with the findings of Glozah (2013), who recorded that male adolescents reported higher academic stress than female adolescents.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this study was to examine the influence of academic stress on academic self-concept and academic self-efficacy of Senior High School (SHS) students in the Cape Coast Metropolis (CCM). Five research questions and one hypothesis were formulated to guide the study. Through quantitative approach and descriptive survey research design, data was collected from 370 Senior High School students using Academic Stress Inventory (ASI), Academic Self-Concept Scale (ASCS) and Academic Self-Efficacy Scale (ASES). Statistical tools such as mean and standard deviation, frequency counts and percentage, multiple linear regression, Pearson moment correlation coefficient and two independent sample t-test was used to analyse the data for the study. The results of the analysis were presented in tables and charts coupled with interpretations to the results. This chapter presents a summary of the research findings, conclusion, recommendations and suggestions for further studies.

Summary of Research Results

The examining of the influence of academic stress on academic self-concept and academic self-efficacy of senior high school students in the Cape Coast Metropolis as per the analysis of the results, study revealed that, stress from test scores was the main source of academic stress among SHS students. Likewise from the result,

stress from classmates, test scores, myself (student) and teacher had influence on the academic self-concept of SHS students. Similarly, the study showed that, stress from classmates, teachers, and myself (student) influence the academic self-efficacy of SHS students.

Further, there was a strong significant negative relationship between academic stress and academic self-concept of SHS students. Also, there was a statistically significant moderate negative relationship between academic stress and academic self-efficacy of SHS students.

Lastly, the study revealed that, there was a significant gender difference in academic stress level among SHS students with male students being more stressed academically than their female counterparts.

Conclusions

In conclusion, as per the findings of the study, academic stress has an influence on students' academic self-concept and academic self-efficacy. Academic stress is an unpleasant psychological situation that occur due to the educational expectations from parents, teachers, peers and family members, pressure of parents for academic achievement, present educational and examination system, burden of homework among others. These unpleasant psychological situations may influence or affect the academic self-concept and academic self-efficacy of students.

Recommendations

With reference to the conclusions drawn from the findings of the study, it is recommended that head teachers, teachers and Guidance and Counselling coordinators in the senior high school should intensify their student support for students by helping students establish groups such as; skills study groups, time management groups and study monitoring groups. When students are put into these groups, it can help improve their study skills and minimize the academic stress experienced by students.

It is also recommended that teachers and Guidance and Counselling coordinators should improve guidance programmes by organizing guidance-oriented programmes that will address topics such as expectation management, anxiety, stress, negative moods and social fears. Likewise, more programmes can be organized to target the improvement of students' academic self-concept and academic self-efficacy. Through these programmes, the Guidance and Counselling coordinators can intensify their support to students by making them know the counselling outfit is always open and ready to help anyone experiencing stressful and overwhelming situations.

From the study, it showed that male students experience more academic stress than their female counter parts. Hence, it is recommended that, teachers and Guidance and Counselling coordinators should help the male students develop coping strategies to manage their academic stress.

In addition to some of the things students can do to minimize academic stress, students through guidance orientation programmes can be helped to develop

coping strategies such as; knowing how to develop 'to do lists', time management, create reward system for themselves, learn how to ask for help, healthy eating, good sleep among others. Also, regular morning exercises should be intensified in senior high schools and new forms of exercises such as yoga and breathing exercises should be introduced in schools. Taking students through such exercises would go a long way in helping them cope with and reduce their stress levels.

To conclude, head teachers and teachers should try as much as possible to minimize academic stressors and reassure students to be more confident in themselves to improve their academic prowess.

Suggestions for Further Study

In the light of the findings of the study, it is suggested that,

- A study can be conducted to find out the reasons why male students are more stressed academically than female students in the Cape Coast Metropolis SHSs.
- A study can be conducted to find more information on why students are more stressed by test scores.
- An experimental study can be conducted to find out the impact of supportive school environment in reducing academic stress among SHS students.
- The study can be replicated in other parts of the country to see if same results will be obtained to establish that academic stress influences the academic self-concept and academic self-efficacy of SHS in Ghana.

- There can also be a study to find out if there is a difference in the influence of academic stress among students in different programmes.

REFERENCES

Aboalshamat, K., Hou, X. Y., & Strodl, E. (2015). Psychological well-being status among medical and dental students in Makkah, Saudi Arabia: A cross-sectional study. *Medical Teacher, 37*(1), 75-81.

Affum-Oseir, E., Adom, E. A., & Forkuoh. K. S. (2014). Achievement motivation, academic self-concept and academic achievement among high school students. *European Journal of Research and Reflection in Educational Sciences, 2*(2), 13-21.

Afriandani, D. I., & Hernawati, N. (2019). *The effect of parental involvement and academic self-concept on academic stress of adolescents in rural and urban areas*. Department of Family and Consumer Sciences, Faculty of Human Ecology, IPB University, 76.

Agolla, J. E., & Ongori, H. (2009). An assessment of academic stress among undergraduate students: The case of University of Botswana. *Educational Research and Review, 4*(2), 063-070. http://ithuteng.ub.bw/handle/10311/837

Agrawal, R. K., & Chahar, S. S. (2007). Examining role stress among technical students in India. *Social Psychology of Education, 10*(1), 77-91.

Altunsoy, S., Cimen, O., Ekici, G., Atik, A. D., & Gökmen, A. (2010). An assessment of the factors that influence biology teacher candidates' levels of academic self-efficacy. *Procedia-Social and Behavioural Sciences, 2*(2), 237-248.

Amponsah, M., & Owolabi, H. O. (2011). Perceived stress levels of fresh university students in Ghana: A case study. *Journal of Education, Society and Behavioural Science, 1*(2), 153-169.

Ang, R. P., & Huan, V. S. (2006). Academic expectations stress inventory: Development, factor analysis, reliability, and validity. *Educational and Psychological Measurement, 66*(3), 522-539.

Ansong, D. (2013). *The relationship between household economic resources and youth academic performance in Ghana: A multilevel structural equation modelling* (Doctoral dissertation, Washington University in St. Louis).

Ashford, J. B., & LeCroy, C. W. (2010). The Social dimension for assessing social functioning. *Human Behaviour in the Social Environment: A Multidimensional Perspective*. https://www.worldcat.org/title/human-behavior-in-the-social-environment-a-multidimensional-perspective/oclc/932387413

Atuahene, F., & Owusu-Ansah, A. (2013). A descriptive assessment of higher education access, participation, equity, and disparity in Ghana. *Sage Open, 3*(3).https://journals.sagepub.com/doi/full/10.1177/2158244013497725#articleCitationDownloadContainer

Awino, J. O., & Agolla, J. E. (2008). A quest for sustainable quality assurance measurement for universities: Case study of the University of Botswana. *Educational Research and Reviews, 3*(6), 213 - 219.

Bacon, D. R. (2016). Reporting actual and perceived student learning in education research. *Journal of Marketing Education*,*38*(1), 3-6.

Backović, D. V., Ilić Živojinović, J., Maksimović, J., & Maksimović, M. (2012). Gender differences in academic stress and burnout among medical students in final years of education. *Psychiatry Danub, 24*(2.), 175-181.

Baker, F. B. (2001). The basics of item response theory. http://ericae.net/irt/baker.

Bakhsh, M. M., & Sayed, S.A. (2015). Sources of academic stress: stress management among regular and executive MBA students. *International Journal Endorsing Health Science Research, 3*(1), 17-22.

Bandura, A., & Walters, R. H. (1977). *Social learning theory* (Vol. 1). Prentice-hall.

Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology, 4*(3), 359-373.

Bandura, A. (1997). *Self-efficacy: The exercise of self-control*. W.H. Freeman.

Bandura, A. (1999). Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review, 3*(3), 193-209.

Bandura, A. (Ed.). (1995). *Self-efficacy in changing societies*. Cambridge University Press.

Banerjee, N., & Chatterjee, I. (2016). Academic stress, suicidal ideation & mental well-being among 1st semester & 3rd semester medical, engineering & general stream students. *Researchers World, 7*(3), 73-86.

Bedewy, D., & Gabriel, A. (2015). Examining perceptions of academic stress and its sources among university students: The Perception of Academic Stress Scale. *Health Psychology Open, 2*(2), 113-118.

Bekoe, R., Somuah, S., Akpalu, V. L., & Ayisi, L. A. (2015). The effects of stress on academic performance of senior high school students in Ghana. *Advances in Social Sciences Research Journal, 2*(12), 16-25.

Bekoe, R., Somuah, S., Akpalu, V. L., & Ayisi, L. A. (2015). The effects of stress on academic performance of senior high school students in Ghana. *Advances in Social Sciences Research Journal, 2*(12). https://doi.org/10.14738/assrj.212.1758

Bekoe, R., Somuah, S., Akpalu, V. L., & Ayisi, L. A. (2015). The effects of stress on academic performance of senior high school students in Ghana. *Advances in Social Sciences Research Journal, 2*(12), 183-197.

Bernstein, D.A., Penner, L.A., Stewart, A.C., & Roy, E.J. (2008). *Psychology* (8th edition). Houghton Mifflin Company,

Bernstein, P. Clarke-Stewart, & Roy (2008). Psychology. *Houghton Mifflin Company, 9*(1), 55-61.

Bhansali, R., & Trivedi, K. (2008). Is academic anxiety gender specific: A comparative study. *Journal of Social Sciences, 17*(1), 1-3.

Bhargava, D., & Trivedi, H. (2018). A study of causes of stress and stress management among youth. *IRA-International Journal of Management & Social Sciences, 11*(03), 108-117.

Bijl, J., & Shortridge-Baggett, L. (2001). Self-efficacy: Theory and measurement. *Scholarly Inquiry for Nursing Practice, 15(3)*, 189-207.

Blatný, M., & Pláková, A. (2003). Temperament, intelligence, self-concept. New perspectives on traditional topics of psychological research. *Brno: Institute of Psychology, Academy of Sciences of the Czech Republic*. https://www.researchgate.net/scientific-contributions/M-Blatny-2088707892

Boeree, C. G. (2006). Abraham Maslow. *Personality Theories*, 1-11. http://www.social-psychology.de/do/pt_maslow.pdf

Bong, M., & Skaalvik, E. M. (2003). Academic self-concept and self-efficacy: How different are they really? *Educational Psychology Review, 15*(1), 1-40.

Budu, H. I. (2014). Nursing students' experience of stress during their education: A study in the Central Region, Ghana (Doctoral dissertation, University of Cape Coast). https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Budu%2C+2014+stress&oq=Budu%2C+2014+st

Burke, R., Waters, J. A., & Ussery, W. (2007). Police stress: History, contributing factors, symptoms, and interventions. *Policing: An International Journal of Polsoice Strategies and Management, 30*(2) 169-188.

Busari, A. O. (2012). Identifying difference in perceptions of academic stress and reaction to stressors based on gender among first year university students. *International Journal of Humanities and Social Science, 2*(14), 138-146.

Busari, A. O. (2014). Academic stress among undergraduate students: Measuring the effects of stress inoculation techniques. *Mediterranean Journal of Social Sciences, 5*(27), 599-680.

Byrne, B. M. (1996). *Academic self-concept: Its structure, measurement, and relation to academic achievement. In B. A. Bracken (Ed.), Handbook of self-concept: Developmental, Social, and Clinical Considerations* (p. 287–316). John Wiley & Sons.

Cabaguing, A. M., & Gacoscosim, G. J. V. (2018). Exploring students' academic stressors: The case of Samar State University, Samar, Philippines. *International Journal of Multidisciplinary Approach and Studies, 5*(4), 29-41.

Calaguas, G. M. (2011). College academic stress: Differences along gender lines. *Journal of Social and Development Sciences, 1*(5), 194-201.

Campo-Arias, A., González, S., Sánchez, Z., Rodríguez, D., Dallos, C., & Díaz-Martínez, L. (2005). Performance perception academic and depressive symptoms in vocational media students from Bucaramanga, Colombia. *Files of Paediatrics of Uruguay, 76* (1), 21-26.

Casely-Hayford, L., Arnot, M., Dovie, D., & Salifu, E. (2010). The education-outcomes gap for youth in Ghana: Addressing raised expectations. *Policy*

Brief, 12. https://www.educ.cam.ac.uk/people/staff/arnot/Education-Outcomes-Gap-for-Youth.pdf

Chang, D., & cheng Chien, W. (2015, April). Determining the relationship between academic self-efficacy and student engagement by meta-analysis. In *2015 International Conference on Education Reform and Modern Management*. Atlantis Press.

Chemers, M. M., Hu, L. T., & Garcia, B. F. (2001). Academic self-efficacy and first year college student performance and adjustment. *Journal of Educational psychology, 93*(1), 55 - 64.

Cleary, T. J., Zimmerman, B. J., & Keating, T. (2006). Training physical education students to self-regulate during basketball free throw practice. *Research Quarterly for Exercise and Sport, 77*(2), 251-262.

Cokley, K. (2000). An investigation of academic self-concept and its relationship to academic achievement in African American college students. *Journal of Black Psychology, 26*(2), 148-164.

Cokley, K., Komarraju, M., King, A., Cunningham, D., & Muhammad, G. (2003). Ethnic differences in the measurement of academic self-concept in a sample of African American and European American college students. *Educational and Psychological Measurement, 63*(4), 707-722.

Coppel, D. (1980). The relationship of perceived social support and self-efficacy to major and minor stresses (Unpublished doctoral dissertation). University of Washington, Seattle.

Crego, A., Carrillo-Diaz, M., Armfield, J. M., & Romero, M. (2016). Stress and academic performance in dental students: The role of coping strategies and examination-related self-efficacy. *Journal of Dental Education, 80* (2), 165-172.

Creswell, J. W. (2012). *Research design: Qualitative, quantitative and mixed methods approaches*. SAGE Publications, Inc. University of Nebraska-Lincoln. http://fe.unj.ac.id/wp-content/uploads/2019/08/ Research-Design_Qualitative-Quantitative-and-Mixed-Methods-Approaches.pdf

Crothers, L. M., Hughes, T. L., & Morine, K. a.(2008). *Theory and cases in school-based consultation. A resource for school psychologists, school counsellors, special educators and other mental health professionals.* https://www.amazon.com/Theory-Cases-School-Based-Consultation-Psychologists/dp/1138134856

Davis, G. A., Rimm, S. B., & Siegle, D. (2011). *Education of the gifted and talented (6th ed.)*. Pearson.

Day, A. L., & Livingstone, H. A. (2003). Gender differences in perceptions of stressors and utilization of social support among university students. *Canadian Journal of Behavioural Science/Revue Canadienne Des Sciences Du Comportement, 35*(2), 73 -89.

Deb, S., Strodl, E., & Sun, J. (2015). Academic stress, parental pressure, anxiety and mental health among Indian high school students. *International Journal of Psychology and Behavioural Sciences, 5*(1), 26-34.

Dhakal, S. (2013). An assessment of academic stress among students of bachelor's level. *Psychological Studies-Journal of Central Department of Psychology, 2*(2), 12-15.

Dramanu, B. Y., & Balarabe, M. (2013). Relationship between academic self-concept and academic performance of junior high school students in Ghana. *European Scientific Journal, 9*(34), 93 - 104.

Duncan-Williams, B. (2015). *Academic stress, academic performance and the psychological well-being of senior high school remedial students in the Greater Accra Region of Ghana* (Doctoral dissertation, University Of Ghana).

Dusek, J. B., & McIntyre, J. G. (2003). *Self-concept and self-esteem development*. In G. R. Adams & M. D. Berzonsky (Eds.), *Blackwell Handbooks of Developmental Psychology. Blackwell Handbook of Adolescence* (p. 290–309). Blackwell Publishing.

Elias, S. M., & Loomis, R. J. (2000). Using an academic self-efficacy scale to address university major persistence. *Journal of College Student Development, 41*(4), 450–454

Elias, S. M., & MacDonald, S. (2007). Using past performance, proxy efficacy, and academic self-efficacy to predict college performance. *Journal of Applied Social Psychology, 37*(11), 2518-2531.

Ellison, K. W. (2004). *Stress and the Police Officer*. Charles C Thomas Publisher. http://www.ncjrs.gov/App/publications/abstract.aspx?ID=91576

Erkutlu, H. V., & Chafra, J. (2006). Relationship between leadership power bases and job stress of subordinates: example from boutique hotels. *Management Research News*, 29(5), 285-297. Retrieved from: https://doi.org/10.1108/01409170610674419

Etsey, K. (2005, November). Causes of low academic performance of primary school pupils in the Shama Sub-Metro of Shama Ahanta East Metropolitan Assembly (SAEMA) in Ghana. In *Proceedings of the Regional Conference on Education in West Africa*. https://www.saga.cornell.edu/saga/educconf/etsey.pdf

Ezekiel, O. C. (2015). Impact of academic stress on academic performance among university students (Study of Enugu State University of Science and Technology Enugu, Nigeria). https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Ezekiel+%282015%29+academic+stress&btnG=

Fairbrother, K., & Warn, J. (2003), Workplace dimensions, stress and job satisfaction. *Journal of Managerial Psychology*, *18*(1), 8-21.

Farhan, S., & Khan, I. (2015). Impact of stress, self-esteem and gender factor on students' academic achievement. *International Journal on New Trends in Education and their Implications*, *6*(2), 143-156.

Feng, G. F. (1992). Management of stress and loss. Taipei: Psychological Publishing Co., Ltd.

Field, S., Sarver, M. D., & Shaw, S. F. (2003). Self-determination: A key to success in postsecondary education for students with learning disabilities. *Remedial and Special Education, 24*(6), 339-349.

Fitzgerald, S. T. (1991). Self-efficacy theory: implications for the occupational health nurse. *American Association of Occupational Health Nurses Journal, 39*(12), 552-557.

Ferguson, R. F. (2003). Teachers' perceptions and expectations and the Black-White test score gap. *Urban education, 38*(4), 460-507.

Gall, M. D., Gall, J. P., & Borg, W. R. (2007). Collecting research data with questionnaires and interviews. *Educational Research: An Introduction, 12*(10), 227-261.

Ghazvini, S. D. (2011). Relationships between academic self-concept and academic performance in high school students. *Procedia-Social and Behavioural Sciences, 15(4)*, 1034-1039.

Gigliotti, R. J., & Huff, H. K. (1995). Role-related conflicts, strains and stresses of older-adult college students. *Sociological Focus, 28*(3), 329-342.

Glozah, F. N. (2013). Effects of academic stress and perceived social support on the psychological wellbeing of adolescents in Ghana. *Open Journal of Medical Psychology, 2(4)*, 143 - 150.

Gnawali, D. (2017). Academic stress at schools: Causes and management. *The Himalayan Times*. https://thehimalayantimes.com/opinion/ academic-stress-schools-causes-management/

Goddard, R. D. (2001). Collective efficacy: A neglected construct in the study of schools and student achievement. *Journal of Educational Psychology, 93*(3), 467-474.

Goetz, T., Cronjaeger, H., Frenzel, A. C., Lüdtke, O., & Hall, N. C. (2010). Academic self-concept and emotion relations: Domain specificity and age effects. *Contemporary Educational Psychology, 35*(1), 44–58.

Goetz, T., Frenzel, A. C., Hall, N. C., & Pekrun, R. (2008). Antecedents of academic emotions: Testing the internal/external frame of reference model for academic enjoyment. *Contemporary Educational Psychology, 33*(1), 9-33.

Goetz, T., Preckel, F., Zeidner, M., & Schleyer, E. (2008). Big fish in big ponds: A multilevel analysis of test anxiety and achievement in special gifted classes. *Anxiety, Stress, and Coping, 21*(2), 185-198.

Goff, A. M. (2011). Stressors, academic performance, and learned resourcefulness in baccalaureate nursing students. *International Journal of Nursing Education Scholarship, 8*(1), 1-143.

Gore Jr, P. A. (2006). Academic self-efficacy as a predictor of college outcomes: Two incremental validity studies. *Journal of Career Assessment, 14*(1), 92-115.

Gotz, T., Cronjager, H., Frenzel, A. C., Ludtke, O., & Hall, N. C. (2010). Academic self-concept and emotion relations: Domain specificity and age effects. *Contemporary Educational Psychology, 35*(1), 44-58.

Grice, J. W. (2007). Person-centered structural analyses. In R. Robins, C. Fraley, and R. Krueger (Eds.) *Handbook of research methods in personality psychology (pp.557-572)*. Guilford Press.

Hackett, G., Betz, N. E., Casas, J. M., & Rocha-Singh, I. A. (1992). Gender, ethnicity, and social cognitive factors predicting the academic achievement of students in engineering. *Journal of Counselling Psychology, 39*(4), 527 - 548.

Hamdan-Mansour, A. M., & Dawani, H. A. (2008). Social support and stress among university students in Jordan. *International Journal of Mental Health and Addiction, 6*(3), 442-450.

Harter, S. (2006). *Developmental and Individual Difference Perspectives on Self-Esteem.* In D. K. Mroczek & T. D. Little (Eds.), *Handbook of Personality Development* (p. 311–334). Lawrence Erlbaum Associates Publishers.

Hassan, A. E. H., Alasmari, A., & Ahmed, E. Y. E. (2015). Influences of self-efficacy as predictors of academic achievement. *International Journal of Education and Research, 3*(3), 275-284.

Huh, K. (2015). A comparative study on learning stress and academic self-concept: A small town vs. a metropolitan city. *Indian Journal of Science and Technology, 16*(2), 4-12.

Husain, U. K. (2014, December). Relationship between self-efficacy and academic motivation. In *International Conference on Economics, Education and Humanities (ICEEH'14)* (pp. 10-11). http://icehm.org/upload/8296ED1214132.pdf

Iroegbu, M. N. (2015). Self-efficacy and work performance: A theoretical framework of Albert Bandura's model, review of findings, implications and directions for future research. *Psychology and Behavioural Sciences, 4*(4), 170-173.

Ismail, N. A. H., & Tekke, M. (2015). Rediscovering Rogers's self-theory and personality. *Journal of Educational, Health and Community Psychology, 4*(3), 28-36.

Jain, G., & Singhai, M. (2018). Academic stress amongst students: A review of literature. *Editorial Board, 58*(2), 23-28.

Jaiswal, S. K., & Choudhuri, R. (2017). A review of the relationship between parental involvement and student's academic performance. *The International Journal of Indian Psychology, 4*(3), 110-123.

Jenaabadi, H., Nastiezaie, N., & Safarzaie, H. (2017). The relationship of academic burnout and academic stress with academic self-efficacy among graduate students. *New Educational Review, 49*(3), 65-76.

Jones, R. W. (1993). Gender-specific differences in the perceived antecedents of academic stress. *Psychological Reports, 72*(3), 739-743.

Kamal, M., & Bener, A. (2009). Factors contributing to school failure among school children in very fast developing Arabian Society. *Oman Medical Journal, 24*(3), 212-219.

Kessler, R. C., & McLeod, J. D. (1984). Sex differences in vulnerability to undesirable life events. *American Sociological Review, 49(5),* 620-631.

Khan, A., & Alam, S. (2015). Self-concept in relation to achievement motivation of high school students. *The International Journal of Indian Psychology, 2*(4), 62-71.

Kornilova, T. V., Kornilov, S. A., & Chumakova, M. A. (2009). Subjective evaluations of intelligence and academic self-concept predict academic achievement: Evidence from a selective student population. *Learning and Individual Differences, 19*(4), 596-608.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30*(3), 607-610.

Kumar, P., & Singh, V. (2017). Application of super brain yoga for academic anxiety management in adolescence. *International Journal of Science and Consciousness, 5(2),* 133-138

Kunal, K., Brijesh, K., & Pardeep, K. (2013). Stress in male and female handball players-a comparative study. *International Journal of Behavioural Social and Movement Sciences, 2*(1), 263-267.

Lal, K. (2014). Academic stress among adolescent in relation to intelligence and demographic factors. *American International Journal of Research in Humanities, Arts and Social Sciences, 5*(1), 123-129.

Lampert, J. N. (2007). *The relationship of self-efficacy and self-concept to academic performance in a college sample: Testing competing models and measures* (Doctoral dissertation, Pacific University). Retrieved from http://list.shaanan.ac.il/fl/files/589.pdf

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing Company.

Lazarus, R. S. & Cohen, J. B. (1977*). Environmental stress*. In I. Altman and J.F. Wohlwill (eds.), Human Behaviour and Environment. (Vol 2) Plenum.

Ye, L., Posada, A., & Liu, Y. (2018). The moderating effects of gender on the relationship between academic stress and academic self-efficacy. *International Journal of Stress Management*, *25*(1), 56-61.

Leedy, P. D., & Ormrod, J. E. (2005). *Practical research*. Pearson Custom.

Levin, J. D., Culkin, J., & Perrotto, R. S. (2001). *Introduction to chemical dependency counseling*. New Jersey, London: Jason Aronson Inc.

Lighthall, N. R., Sakaki, M., Vasunilashorn, S., Nga, L., Somayajula, S., Chen, E. Y., ... & Mather, M. (2012). Gender differences in reward-related decision processing under stress. *Social Cognitive and Affective Neuroscience, 7*(4), 476-484.

Lin, H. J., & Yusoff, M. S. B. (2013). Psychological distress, sources of stress and coping strategy in high school students. *International Medical Journal, 20*(6), 672-676.

Lin, Y. M., & Chen, F. S. (2009). Academic stress inventory of students at universities and colleges of technology. *World Transactions on Engineering and Technology Education*, *7*(2), 157-162.

Lin, Y. M., Lin, S. C., Wang, M. Y., & Chen, F. S. (2009). What causes the academic stress suffered by students at universities and colleges of technology? *World Transactions on Engineering and Technology Education*, *7*(1), 77-81.

Lindsey, R., Reed, S., Lyons, R., Hendricks, D., Mead, A., & Butler, K. L. (2011). Sources of stress among gender and classification for African American college students. *College Student Journal*, *4*(4), 239-242.

Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist, 57*(9), 705-715.

MacGeorge, E. L., Samter, W., & Gillihan, S. J. (2005). Academic stress, supportive communication, and health. *Communication Education*, *54*(4), 365-372.

Malach-Pines, A., & Keinan, G. (2007). Stress and burnout in Israeli police officers during a Palestinian uprising (Intifada). *International Journal of Stress Management, 14*(2), 160-171.

Mallinckrodt, B., & Wei, M. (2005). Attachment, social competencies, social support, and psychological distress. *Journal of Counselling Psychology, 52* (3), 358-365.

Margolis, H., & McCabe, P. P. (2004). Resolving struggling readers' homework difficulties: A social cognitive perspective. *Reading Psychology, 25*(4), 225-260.

Margolis, H., & McCabe, P. P. (2006). Improving self-efficacy and motivation: What to do, what to say. *Intervention in School and Clinic, 41*(4), 218-227.

Marsh, H. W. (1990). The structure of academic self-concept: The Marsh/Shavelson model. *Journal of Educational Psychology, 82*(4), 623–636.

Marsh, H. (1993). The multidimensional structure of academic self-concept: invariance over gender and age. *American Educational Research Journal, 30*(4), 841-860.

Marsh, H. W., & Craven, R. G. (2002). The pivotal role of frames of reference in academic self-concept formation: The" big fish-little pond" effect. https://eric.ed.gov/?id=ED471684

Marsh, H. W., & Craven, R. (1996). Academic self-concept: Beyond the dustbowl. *In Handbook of classroom assessment* (pp. 131-198). Academic Press.

Marsh, H. W., & Hau, K.-T. (2003). Big-Fish--Little-Pond effect on academic self-concept: A cross-cultural (26-country) test of the negative effects of academically selective schools. *American Psychologist, 58*(5), 364–376.

Marsh, H. W., & Martin, A. J. (2011). Academic self-concept and academic achievement: Relations and causal ordering. *British Journal of Educational Psychology, 81*(1), 59-77.

Marsh, H. W., & O'Mara, A. (2008). Reciprocal effects between academic self-concept, self-esteem, achievement, and attainment over seven adolescent years: Unidimensional and multidimensional perspectives of self-concept. *Personality and Social Psychology Bulletin, 34*(4), 542-552.

Marsh, H. W., & Yeung, A. S. (1997). Causal effects of academic self-concept on academic achievement: Structural equation models of longitudinal data. *Journal of Educational Psychology, 89*(1), 41-60.

Marsh, H. W., Ellis, L. A., & Craven, R. G. (2002). How do preschool children feel about themselves? Unraveling measurement and multidimensional self-concept structure. *Developmental Psychology, 38*(3), 376-381.

Marsh, H. W., Seaton, M., Trautwein, U., Lüdtke, O., Hau, K. T., O'Mara, A. J., & Craven, R. G. (2008). The big-fish–little-pond-effect stands up to critical scrutiny: Implications for theory, methodology, and future research. *Educational Psychology Review, 20*(3), 319-350.

Marsh, H. W., Trautwein, U., Lüdtke, O., Köller, O., & Baumert, J. (2005). Academic self-concept, interest, grades, and standardized test scores:

Reciprocal effects models of causal ordering. *Child Development, 76*(2), 397-416.

Masih, P. P., & Gulrez, N. K. (2006). Age and gender differences on stress. *Recent Trends in Human Stress Management, 2(14),* 97-104.

McCombes, S. (2019). Descriptive research. https://www.scribbr.com/methodology/descriptive-research.

McLeod, S. (2007). Maslow's hierarchy of needs. *Simply Psychology, 1(5),* 1-8.

McLeod, S. (2014). *Carl Rogers*. Simply Psychology. https://www.simplypsychology.org/carl-rogers.html

Mendaglio, S. (2013). Gifted students' transition to university. *Gifted Education International, 29*(1), 3-12.

Mercer, S. H., Nellis, L. M., Martínez, R. S., & Kirk, M. (2011). Supporting the students most in need: Academic self-efficacy and perceived teacher support in relation to within-year academic growth. *Journal of School Psychology, 49*(3), 323-338.

Mercer, S. H., Nellis, L. M., Martínez, R. S., & Kirk, M. (2011). Supporting the students most in need: Academic self-efficacy and perceived teacher support in relation to within-year academic growth. *Journal of School Psychology, 49*(3), 323-338.

Misra, R., McKean, M., West, S., & Russo, T. (2000). Academic stress of college students: Comparison of student and faculty perceptions. *College Student Journal, 34*(2), 236-245.

Mitra, D., & Sengupta, D. (2011). Self-concept: A determinant of academic stress and perceived parenting. https://docplayer.net/36084170-Self-concept-a-determinant-of-academic-stress-and-perceived-parenting-mom-mitra-de-u-debjani-sengupta.html

Mohamadi, F. S., Asadzadeh, H., Ahadi, H., & Jomehri, F. (2011). Testing Bandura's Theory in school. *Procedia-Social and Behavioural Sciences, 12(*2011), 426-435.

Mugenda, O., & Mugenda A. G. (2003), Research Methods: quantitative and Qualitative approaches. *Nairobi: ACTS.* https://scholar.google.com/citations?user=FovF9ccAAAAJ&hl=en&oi=sra

Multon, K. D., Brown, S. D., & Lent, R. W. (1991). Relation of self-efficacy beliefs to academic outcomes: A meta-analytic investigation. *Journal of Counselling Psychology, 38*(1), 30-41.

Nakalema, G., & Ssenyonga, J. (2013). Academic stress: Its causes and results at a Ugandan University. *African Journal of Teacher Education, 3*(3), 1-21.

Nandamuri, P., & Gowthami, C. (2011). Sources of academic stress–A study on management students. *Journal of Management and Science, 1*(2), 31-42.

Nasrollahi, A., & Barjasteh, H. (2013). Iranian Students' Self Efficacy and Their Language Achievements. *Theory and Practice in Language Studies, 3*(10), 1837-1843.

Nevid, J. S., & Rathus, S. A. (2009). *Psychology and the Challenges of Life*. John Wiley and Sons.

O'Callaghan, P. (2014). *The relationship of stress to gender, age, academic motivation, student expectations and self-esteem among students*. Dublin Business School (BA Hons in Psychology). https://esource. dbs.ie/bitstream/handle/10788/2235/ba_ocallaghan_p_2014.pdf?sequence =1&isAllowed=y

Ongori, H. (2007). A review of the literature on employee turnover. *African Journal of Business Management, 1*(3), 49-54.

Ongori, H., & Agolla, J. E. (2008). Occupational stress in organizations and its effects on organizational performance. *Journal of Management Research, 8*(3), 123-135.

Ordaz-Villegas, G., Acle-Tomasini, G., & Reyes-Lagunes, L. I. (2013). Development of an academic self-concept for adolescents (ASCA) scale. *Journal of Behaviour, Health and Social Issues, 5*(2), 117-130.

Patterson, C. H. (1977). Insights about persons: Psychological foundations of humanistic and affective education. https://eric.ed.gov/ ?id=ED133887

Patterson, P., & Kline, T. J. B. (2008). Report on post-secondary institutions as healthy settings: The pivotal role of student services. *Health and Learning Knowledge Centre*. http://www.ccl-cca.ca/pdfs/HLKC/WG 5CCLReport_FINAL_ENG.pdf

Pinxten, M., De Fraine, B., Van Damme, J., & D'Haenens, E. (2010). Causal ordering of academic self-concept and achievement: Effects of type of achievement measure. *British Journal of Educational Psychology, 80*(4), 689-709.

Pozos-Radilloa, B. E., de Lourdes Preciado-Serranoa, M., & Acosta-Fernándeza, M. (2014). Educational psychology. *Director, 20*(1), 54-66.

Proctor, C., Tweed, R., & Morris, D. (2016). The Rogerian fully functioning person: A positive psychology perspective. *Journal of Humanistic Psychology, 56*(5), 503-529.

Rao, K., Moudud, S., & Subbakrishna, D. K. (2000). Appraisal of stress and coping behaviour in college students. *Journal of the Indian Academy of Applied Psychology, 26*(1-2), 5-13.

Reddy, K. J., Menon, K. R., & Thattil, A. (2018). Academic stress and its sources among University students. *Biomedical and Pharmacology Journal, 11*(1), 531-537.

Redmond, B. F. (2010). Self-Efficacy Theory: Do I think that I can succeed in my work? Work Attitudes and Motivation. *Journal of Information and Knowledge Management, 6*(1), 36-41.

Redmond, B. F., & Slaugenhoup, E. L. (2016, October). Self-Efficacy and social cognitive theories. March 8, 2020, http://wikispaces.psu. edu/display/PSYCH/7,tSelf-Efficacy

Rees, C. J., & Redfern, D. (2000). Recognising the perceived causes of stress–a training and development perspective. *Industrial and Commercial Training, 32*(4), 120-127.

Reynolds, W. M. (1988). Measurement of academic self-concept in college students. *Journal of personality assessment, 52*(2), 223-240.

Reynolds, W. M., Ramirez, M. P., Magrina, A., & Allen, J. E. (1980). Initial development and validation of the academic self-concept scale. *Educational and Psychological Measurement, 40*(1), 1013-1016.

Rice, V. H. (2012). *Theories of stress and its relationship to health*. In V. H. Rice (Ed.), *Handbook of stress, coping, and health: Implications for nursing research, theory, and practice* (p. 22–42). Sage Publications, Inc.

Robinson-Wood, T. L. (2009). Love, School, and Money: Stress and Cultural Coping Among Ethnically Diverse Black College Women: A Mixed-Method Analysis. *Western Journal of Black Studies, 33*(2), 76-88.

Rogers, C. R. (1954). Toward a theory of creativity. ETC: *A Review of General Semantics, 11*(4), 249-260.

Rogers, C. R. (1959). *A theory of therapy, personality, and interpersonal relationships: As developed in the client-centered framework* (Vol. 3, pp. 184-256). McGraw-Hill.

Rogers, C. R. (1961). The process equation of psychotherapy. *American Journal of Psychotherapy*, *15*(1), 27-45.

Roxburgh, S. (1996). Gender differences in work and well-being: Effects of exposure and vulnerability. *Journal of Health and Social Behaviour*, *7*(2), 265-277.

Rudolph, K. D., Kurlakowsky, K. D., & Conley, C. S. (2001). Developmental and social–contextual origins of depressive control-related beliefs and behavior. *Cognitive Therapy and Research, 25*(4), 447-475.

Saini, S., & Punia, V. (2013). Academic stress in relation to self-efficacy and mindfulness among senior secondary school students. *Indian Journal of Health and Wellbeing*, *4*(1), 194-206.

Salami, S. D (2001). Psychological correlates of career indecision among secondary school adolescents. *Nigerian Journal of Applied Psychology*, *6*(2), 116-125.

Santana Vega, L. E., Feliciano Garcia, L. A., & Jimenez Llanos, A. B. (2009). Academic self-concept and decision making of secondary school students. *REOP - Spanish Journal of Orientation and Psychopedagogy*, *20*(1), 61-75.

Sarita, S. (2015). Academic stress among students: Role and responsibilities of parents. *International Journal of Applied Research*, *1*(10), 385-388.

Satici, S. A., & Can, G. (2016). Investigating Academic Self-Efficacy of University Students in Terms of Socio-Demographic Variables. *Universal Journal of Educational Research, 4*(8), 1874-1880.

Schneewind, K. A., & Pfeiffer, P. (1995). Impact of family processes on control beliefs. *Self-Efficacy in Changing Societies, 2*(4), 114-148.

Schultz, D. P., & Schultz, S. E. (2005). *Theories of personality*. Belmont, CA: Wadsworth. https://rameliaz.github.io/files/course-materials/Theories%20of%20Personality.pdf

Schunk, D. H. (1981). Modelling and attributional effects on children's achievement: A self-efficacy analysis. *Journal of Educational Psychology, 73*(1), 93-102.

Schunk, D., Pintrich, P., & Meece, J. (2010). *Motivation in education: Theory, research, and application*. Pearson.

Seaton, M., Marsh, H. W., & Craven, R. G. (2009). Earning its place as a pan-human theory: Universality of the big-fish-little-pond effect across 41 culturally and economically diverse countries. *Journal of Educational Psychology, 101*(2), 403-411.

Selye, H. (1974). Stress sans distress. Lippincott. Retrieved from: https://www.worldcat.org/title/stress-without-distress/oclc/490049981

Selye, H. (1976). *Stress without distress*. In Psychopathology of human adaptation (pp. 137-146). Springer, , MA.

Sengupta, D. (2014). Self-Concept: A Determinant of Academic Stress and Perceived Parenting. https://www.semanticscholar.org/paper/Self-Concept-%3A-A-Determinant-of-Academic-Stress-and-Sengupta/4662473067d09f952ccbf112a95cd823d7429ec3?p2df

Sharma, H. L., & Nasa, G. (2014). Academic self-efficacy: A reliable predictor of educational performances. *British Journal of Education, 2*(3), 57-64.

Sharma, V. (2014). Family Environment and Peer Group Influence as Predictors of Academic Stress among Adolescents. *Education, 3*(3), 26-38.

Shavelson, R. J., Hubner, J. J., & Stanton, G. C. (1976). Self-concept: Validation of construct interpretations. *Review of Educational Research, 46*(3), 407-441.

Shields, N. (2001). Stress, active coping, and academic performance among persisting and non-persisting college students. *Journal of Applied Behavioural Research, 6*(2), 65-81.

Siegel, A., & Sapru, H. N. (2006). *Essential neuroscience*. Lippincott Williams & Wilkins.

Sinha, U.K., Sharma, V., & Nepal, M.K. (2001). Development of the Scale for Assessing Academic Stress: A preliminary report. *Journal of Institute of Medicine, 23*(1), 96-102.

Snyder, C. R., & Lopez, S. (2007). *Handbook of Positive Psychology*. University Press.

Solberg, V. S., & Viliarreal, P. (1997). Examination of self-efficacy, social support, and stress as predictors of psychological and physical distress among Hispanic college students. *Hispanic Journal of Behavioural Sciences, 19*(2), 182-201.

Solberg, V. S., Hale, J. B., Villarreal, P., & Kavanagh, J. (1993). Development of the college stress inventory for use with Hispanic populations: a confinnatory analytic approach. *Hispanic Journal of Behavioural Sciences, 15*(4), 490-497.

Sree rama reddy, C. T., Shankar, P. R., Binu, V. S., Mukhopadhyay, C., Ray, B., & Menezes, R. G. (2007). Psychological morbidity, sources of stress and coping strategies among undergraduate medical students of Nepal. *BMC Medical education, 7*(1), 26-33.

Strecher, V. J., McEvoy DeVellis, B., Becker, M. H., & Rosenstock, I. M. (1986). The role of self-efficacy in achieving health behaviour change. *Health Education Quarterly, 13*(1), 73-92.

Sun, J., Dunne, M. P., & Hou, X. Y. (2012). Academic stress among adolescents in China. *Australasian Epidemiologist, 19*(1), 9-16.

Taylor, S. E. (2006). Tend and befriend: Bio-behavioural bases of affiliation under stress. *Current Directions in Psychological Science, 15*(6), 273-277.

Topper, E. F. (2007). Stress in the library workplace. *New Library World*.

Torres, J. B., & Solberg, V. S. (2001). Role of self-efficacy, stress, social integration, and family support in Latino college student persistence and health. *Journal of Vocational Behaviour, 59*(1), 53-63.

Trautwein, U., Lüdtke, O., Köller, O., & Baumert, J. (2006). Self-esteem, academic self-concept, and achievement: How the learning environment moderates the dynamics of self-concept. *Journal of Personality and Social Psychology*, *90*(2), 334-340.

Tschannen-Moran, M., & Hoy, A. W. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education*, *23*(6), 944-956.

Turnage, B. F. (2004). African-American mother-daughter relationships mediating daughter's self-esteem. *Child and Adolescent Social Work Journal*, *21*(2), 155-173.

Umar, U. S. (2019). Impact of Academic Stress and Coping Strategies among Senior Secondary School Students in Kaduna State, Nigeria. *International Journal of Innovative Social and Science Education Research*, 7(1), 40-44.

Tabrizi, N., Vahedi, L., Kolahdouzan, K., Chavoshi, M., Rad, B., Soltani, S., & Ghojazadeh, M. (2014). Impact and amount of academic self-efficacy and stress on the mental and physical well-being of students competing in the 4th Olympiad of Iranian universities of medical sciences. *Research and Development in Medical Education, 3*(2), 99-104.

Valentine, J. C., DuBois, D. L., & Cooper, H. (2004). The relation between self-beliefs and academic achievement: A meta-analytic review. *Educational Psychologist, 39*(2), 111-133.

Veresova, M., & Foglova, L. (2016). Academic self-efficacy, heteronomous and autonomous evaluation of academic achievement of adolescents. *The European Proceedings of Social and Behavioural Sciences, 16*(1), 877-885.

Verešová, M., & Foglová, L. (2016). Academic self–Efficacy, heteronomous and autonomous evaluation of academic achievement of adolescents. *The European Proceedings of Social and Behavioural Sciences, 16*(1), 877-885.

Verešová, M., & Foglová, L. (2018). Academic self-efficacy, approach to learning and academic achievement. *Health and Academic Achievement*, 177. https://www.intechopen.com/books/health-and-academic-achievement/academic-self-efficacy-approach-to-learning-and-academic-achievement

Verma, S., Sharma, D., & Larson, R. W. (2002). School stress in India: Effects on time and daily emotions. *International Journal of Behavioural Development, 26*(6), 500-508.

Vermunt, R., & Steensma, H. (2005). How can justice be used to manage stress in organizations. *Handbook of Organizational Justice, 1*(1) 383-410.

Vinney, M. (2019). Assessing the Whole Child. A Broad and Balanced Curriculum in Primary Schools: Educating the whole child, 188. https://books.google.com.gh/books?hl=en&lr=&id=g8qcDwAAQBAJ

Volpe, J. F. (2000). A guide to effective stress management. *Career and Technical Education, 48*(10), 183-188.

Vujanovic, A. A., Zvolensky, M. J., & Bernstein, A. (2008). Incremental associations between facets of anxiety sensitivity and posttraumatic stress and panic symptoms among trauma-exposed adults. *Cognitive Behaviour Therapy, 37*(2), 76-89.

Watson, J. C., & Watson, A. A. (2016). Coping Self-Efficacy and Academic Stress Among Hispanic First-Year College Students: The Moderating Role of Emotional Intelligence. *Journal of College Counselling, 19*(3), 218-230.

Womble, L. P. (2003). Impact of stress factors on college students' academic performance. *Undergraduate AusJournal of Psychology, 16*(1), 16-23.

Wikipedia (2019). Self-Determination Theory. https://en.wikipedia.org/wiki/Self-determination_theory

Yazici, Y., & Sur, E. (2017). Examination of academic self-efficacy: A survey on pre-service and in-service English language teachers. *European Journal of Education Studies, 3*(11), 20-26.

Ye, L., Posada, A., & Liu, Y. (2018). The moderating effects of gender on the relationship between academic stress and academic self-efficacy. *International Journal of Stress Management, 25*(1), 56-64.

Zajacova, A., Lynch, S. M., & Espenshade, T. J. (2005). Self-efficacy, stress, and academic success in college. *Research in Higher Education, 46*(6), 677-706.

Zimmerman, B. (2000). Self-efficacy: an essential motive to learn. *Contemporary Educational Psychology, 25*(1), 82–91.

Zimmerman, B. J. (1989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology, 81*(3), 329-336.

APPENDIX A

Demographic Information

Please provide response to the following for your demographic data.

Age……...

Gender: Male/Female

Academic Stress Inventory

Please read each statement and tick √ the most appropriate response in the spaces, which indicates how much you believe you can perform certain academic tasks. There is no right or wrong answer. Do not spend too much time on any statement. Choose from the scale provided: ***1 (Strongly Disagree), 2 (Disagree), 3 (Agree), 4 (Strongly Agree)***

Item content	Strongly Disagree	Disagree	Agree	Strongly Agree
1. I do not get enough sleep at night because I worry about school tests.				
2. I stay up late at night to study for term exams to cover more topics				
3. I feel that the tests and class content of some subjects are too much, which makes me unable to prepare adequately for exams				
4. I feel most of the exams are difficult than expected				
5. I get frustrated when what I studied did not appeared in exams or class test.				
6. I feel uncomfortable with unaware class test or exams				
7. I worry I will fail my exams or class test				
8. I feel that there is vast difference between my current results and last term results.				
9. I get stressed when my results keep reducing.				
10. I worry that my parents are always expecting good results.				
11. I feel that my parents think that I am not serious with my studies				
12. I worry that my academic results will not meet my parents' expectations.				
13. Some teachers provide too much information this causes me to be unable				

to finish studying before exams or class test.				
14. In some courses, I have to spend a lot of time looking for information to study for exams or class test.				
15. I get frustrated when the information the teacher provided in class is different from what came in the exams or class test.				
16. I get worried about how some teachers teach				
17. I get worried when I find it difficult to understand some teachers when they are teaching.				
18. I feel worried when I don't get some teachers' style of teaching.				
19. I feel some homework given by teachers are too difficult.				
20. I get worried when I am loaded with many home assignments with little time to do them.				
21. I feel frustrated when my level learning level is not as good I expected.				
22. I feel nervous when I need to make a speech or give a presentation.				
23. I get worried when my results don't go as expected.				
24. I feel I choose the wrong course or subject				
25. The subject I choose is too much than expected.				
26. I feel my elective combinations will affect my performance.				
27. I get worried when there is little teacher support for the subject I choose.				
28. I feel that it is very difficult for me to find a balance between my academic work and activities on campus.				
29. I feel prep time is too much				
30. Wake up time is too early				
31. I find it difficult to find a balance between my academic work and home duties or dormitory duties.				
32. I worry that I will not be able to find a suitable group member for group work.				

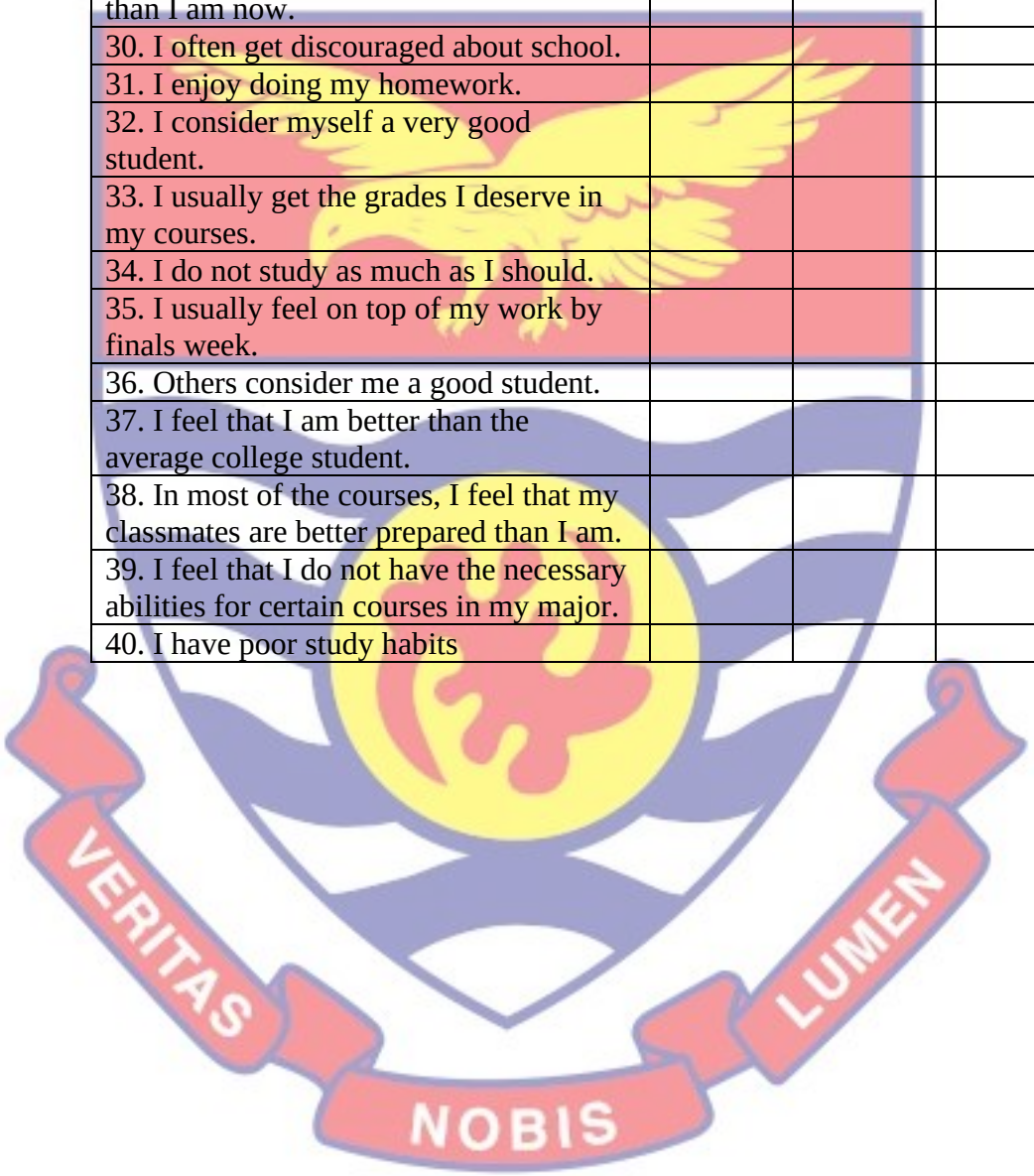
33. I get worried with lazy classmates in my group.				
34. I feel I must be in the best group.				
35. I worry that my classmates will laugh at my inability to perform well during group presentation.				
36. I am very worried that my academic results are not as good as that of my classmates.				
37. I feel I must perform better than some of my class mates.				
38. I get worried when some of my class mates perform better than me.				
39. I am not comfortable with lazy classmates.				
40. I feel worried when my peers are not serious with academics.				
41. I get worried my girlfriend of boyfriend does not talk to me.				
42. I feel worried when most of my classmates do not want me as a friend.				
43. I get worried when am not able to get acquainted with the boy or girl I like.				
44. I feel the term is too short to cover the some of the loaded curriculum.				
45. I feel uncomfortable with the new free education system				
46. The classrooms are not big enough for us.				
47. I am worried about the number of students in my class.				
48. I feel the school authority do not have interest of students at heart.				

Academic Self-Concept Scale

Please read each statement and tick √ a number the most appropriate response from **strongly disagree to strongly agree** which indicates how much you believe you can perform certain academic tasks. There is no right or wrong answer. . Rate each item as it pertains to you personally. Base your ratings on how you feel most of the time. Choose from the scale provided: ***1 (Strongly Disagree), 2 (Disagree), 3 (Agree), 4 (Strongly Agree)***

Item content	Strongly Disagree	Disagree	Agree	Strongly Agree
1. Being a student is a very rewarding experience.				
2. If I try hard enough, I will be able to get good grades.				
3. Most of the time my efforts in school are rewarded.				
4. No matter how hard I try I do not do well in school.				
5. I often expect to do poorly on exams.				
6. All in all, I feel I am a capable student.				
7. I do well in my courses given the amount of time I dedicate to studying.				
8. My parents are not satisfied with my grades in college.				
9. Others see me as intelligent.				
10. Most courses are very easy for me.				
11. I sometimes feel like dropping out of school.				
12. Most of my classmates do better in school than I do.				
13. Most of my instructors think that I am a good student.				
14. At times I feel college is too difficult for me.				
15. All in all, I am proud of my grades in college.				
16. Most of the time while taking a test I feel confident.				
17. I feel capable of helping others with their class work.				
18. I feel teachers' standards are too high for me.				
19. It is hard for me to keep up with my class work.				
20. I am satisfied with the class assignments that I turn in.				
21. At times I feel like a failure.				
22. At times I feel like a failure.				
23. Most exams are easy for me.				
24. I have doubts that I will do well in my major				
25. For me, studying hard pays off.				

26. I have a hard time getting through school.				
27. I am good at scheduling my study time.				
28. I have a fairly clear sense of my academic goals.				
29. I'd like to be a much better student than I am now.				
30. I often get discouraged about school.				
31. I enjoy doing my homework.				
32. I consider myself a very good student.				
33. I usually get the grades I deserve in my courses.				
34. I do not study as much as I should.				
35. I usually feel on top of my work by finals week.				
36. Others consider me a good student.				
37. I feel that I am better than the average college student.				
38. In most of the courses, I feel that my classmates are better prepared than I am.				
39. I feel that I do not have the necessary abilities for certain courses in my major.				
40. I have poor study habits				



Academic Self-Efficacy Scale

Please read each statement and tick √ a number the most appropriate response from strongly disagree to strongly agree which indicates how much you believe you can perform certain academic tasks. There is no right or wrong answer. Choose from the scale provided: ***1 (Strongly Disagree), 2 (Disagree), 3 (Agree), 4 (Strongly Agree)***

Item Content	Strongly Disagree	Disagree	Agree	Strongly Agree
1. I know how to schedule my time to achieve my academic tasks.				
2. I know how to take notes.				
3. I know how to study to perform well on tests.				
4. I am good at studying and doing my assignments.				
5. I am an academically good student.				
6. I usually do very well in school and at academic tasks.				
7. I find my academic work interesting.				
8. I am capable of succeeding academically.				
9. I can manage my time to make go use of my academic activities and other social activities as well.				
10. I have the ability to strategize and study difficult subjects.				