DEPARTMENT OF PSYCHOLOGY
UNIVERSITY OF GHANA, LEGON

ACADEMIC STRESS, ACADEMIC PERFORMANCE AND THE
PSYCHOLOGICAL WELL-BEING OF SENIOR HIGH SCHOOL REMEDIAL
STUDENTS IN THE GREATER ACCRA REGION OF GHANA

BY
BEATRICE DUNCAN-WILLIAMS
(10279129)

THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN
PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MPHIL
CLINICAL PSYCHOLOGY DEGREE

JULY, 2015
Academic Stress, Academic Performance and Psychological Well-Being

DECLARATION

I hereby declare that this research is conducted by me under the supervision of Dr. Annabella Opare-Henaku and Dr. Kingsley Nyarko. This work has never been submitted to any other institution by anyone for any award. All references cited in this work have been duly acknowledged and I take full responsibility of any shortcomings associated with this work.

........................................................
BEATRICE DUNCAN-WILLIAMS
(10279129)
(STUDENT)
........................................................

........................................................
DR. ANNABELLA OPARe-HENAKU
(PRINCIPAL SUPERVISOR)
........................................................
DATE
........................................................

........................................................
DR. KINGSLEY NYARKO
(CO-SUPERVISOR)
........................................................
DATE
DEDICATION

I dedicate this work to my parents for their love, care and support throughout my life.

I also dedicate this work to all the teachers who have made a lasting impact on my life.
ACKNOWLEDGEMENTS

I am eternally grateful to God for making me His child. My sincere gratitude also goes to my parents, Mr. and Mrs. Duncan-Williams for their prayers, love and support. I am also grateful to my siblings and Edmund Nana Kofi Frimpong for their love and understanding. I am also grateful to my supervisors Dr. Annabella Opare-Henaku and Dr. Kingsley Nyarko for their meticulous guidance and help in completing this work. I would also like to thank the head teachers, teachers and students of Premier Link Remedial School, Ideal College and Action Progressive Institute for making the collection of data possible. And to my friends, especially, Kiki, Lilian, Mike, Martin, Belief and my colleagues for their encouragement and support.

God Bless you all.
ABSTRACT

This study investigated the influence of academic stress and academic performance on the psychological well-being of Senior High School (SHS) remedial students ranging from 18 to 25 years. The moderating role of social support, agricultural coping, gender and socio-economic status in the relationship between academic stress and psychological well-being were also investigated. The moderating role of academic self-efficacy, in the relationship between academic performance and psychological well-being was also investigated. Data was collected from One hundred and eighty-two (182) SHS remedial students from two remedial schools in Accra. Questionnaires administered were the Student-Life Stress Inventory (SLSI), Depression Anxiety Stress Scale (DASS-42), the Agricultural Coping Systems Inventory (ACSI), Multidimensional Scale of Perceived Social Support (MSPSS) and the Academic Self-Efficacy Scale. Results from the analysis using the Pearson product-moment correlation coefficient indicated a positive relationship between academic stress and psychological well-being (increasing scores on the DASS-42 indicates poorer psychological well-being). Similarly, Academic performance was not related to psychological well-being. Further analysis using, Hierarchical Multiple Regression analyses showed that social support, agricultural coping, gender, and socio-economic status did not moderate the relationship between stress and psychological well-being. Lastly, an analysis using the independent t-test indicated gender differences in the psychological well-being of the students.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Content</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>DECLARATION</td>
<td>i</td>
</tr>
<tr>
<td>DEDICATION</td>
<td>ii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>iii</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>iv</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>v</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>ix</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>x</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>xi</td>
</tr>
</tbody>
</table>

## CHAPTER ONE: INTRODUCTION

Background of the study ................................................................................ 1
Poor Academic Performance ........................................................................... 2
Remedial Education ......................................................................................... 4
Academic Stress, Academic Performance and Psychological Well-Being .......... 6
Gender and Socio-economic Factors ............................................................ 10
Social Support and Africultural Coping ...................................................... 11
Academic self-efficacy and Academic Performance and Psychological Well-being ....... 12
Statement of the Problem ............................................................................. 14
Aims and objectives of the study ................................................................. 18
Relevance of the study .................................................................................. 19
CHAPTER TWO: LITERATURE REVIEW ......................................................... 20
Theoretical Framework .............................................................................. 20
The Stress and Coping Perspective ............................................................. 21
The Socio-Cultural Model of Stress, Coping and Adaptation ....................... 23
Cognitive Behaviour Theory ........................................................................ 24
Ryff’s Theory of Psychological Well-being .................................................. 25
Self-efficacy Theory ....................................................................................... 26
Review of Literature ....................................................................................... 29
Academic Stress, Psychological Well-being and Academic Performance ....... 29
The Moderating Role of Social Support ......................................................... 33
The Moderating Role of Africultural Coping ............................................... 36
Academic Self-Efficacy, Psychological Well-Being and Academic Performance ...... 40
Socio-Demographic Factors ......................................................................... 43
Rationale of the study ..................................................................................... 47
Statement of Hypotheses ............................................................................. 48
Operational Definition of Terms ................................................................. 50

CHAPTER THREE: METHODOLOGY .......................................................... 51
Introduction ................................................................................................. 51
Population .................................................................................................... 51
Sample and Sampling Technique ............................................................... 51
Inclusion Criteria ........................................................................................ 52
Exclusion criteria ........................................................................................ 52
Measures/Instruments ............................................................................... 53
Demographic data ....................................................................................... 53
Multidimensional Scale of Perceived Social Support (MSPSS) ...........................................53
Depression Anxiety Stress Scale (DASS- 42) .........................................................................54
Student-Life Stress Inventory (SLSI) ......................................................................................55
Africultural Coping Systems Inventory (ACSI) .....................................................................56
Academic Self-Efficacy Scale ..................................................................................................57
Pilot study ..................................................................................................................................58
Research design ......................................................................................................................58
Procedure for data collection ...............................................................................................58

CHAPTER FOUR: RESULTS ..................................................................................................60
Data analyses ..........................................................................................................................60
Preliminary analysis ...............................................................................................................60
Demographic Characteristics of Respondents .......................................................................62
Hypothesis Testing ..................................................................................................................65
Hypothesis One .......................................................................................................................66
Hypothesis two .........................................................................................................................67
Hypothesis Three ....................................................................................................................68
Hypothesis four .......................................................................................................................70
Hypothesis five .......................................................................................................................72
Hypothesis Six ........................................................................................................................75
Summary of study’s findings .................................................................................................76
Additional findings ................................................................................................................76
CHAPTER FIVE: DISCUSSION ................................................................. 78

Academic Stress and Psychological Well-being ...................................................... 78

Academic Performance, Academic self-efficacy and Psychological Well-being .......... 80

The Moderating Role of Social Support ................................................................... 81

The moderating role of Africultural coping ............................................................... 83

The Moderating Role of Gender, and Socio-Economic Status .................................. 85

Gender differences in Psychological well-being ....................................................... 86

Limitations of Current Study ...................................................................................... 86

Suggestion and Recommendations ............................................................................ 88

REFERENCES .................................................................................................. 90

APPENDICES ................................................................................................. 105

Appendix 1: Correlation Matrix for Social Support, Academic stress, Self-efficacy,

Students’ aggregate and Academic Self-efficacy .................................................. 105

Appendix 2: Ethical Approval .................................................................................. 106

Appendix 3: Participant Consent Form ....................................................................... 107

Appendix 4: Questionnaires ..................................................................................... 110
LIST OF FIGURES

Figure 1: Moderation Graph for hypothesis three........................................... 69
Figure 2: Moderation Graph for hypothesis four........................................... 71
Figure 3 & 4: Moderation Graph for hypothesis five................................. 74
LIST OF TABLES

Table 1: Internal Consistencies from the Pilot Study, Means, Standard Deviation Skewness Kurtosis of the various measures ................. 61

Table 2: Demographic Characteristics of the SHS remedial students in the Study ........................................................................................................ 63

Table 3: Correlation Matrix for hypotheses one and two Variables in the Study.. 66

Table 4: Multiple Regression for hypothesis three ....................................... 68

Table 5: Multiple Regression for hypothesis four ........................................ 70

Table 6: Multiple Regression for hypothesis five ....................................... 72

Table 7: Independent t table for hypothesis six ......................................... 75
**LIST OF ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>BECE</td>
<td>Basic Education Certificate Examination</td>
</tr>
<tr>
<td>GES</td>
<td>Ghana Education Service</td>
</tr>
<tr>
<td>SHS</td>
<td>Senior High School</td>
</tr>
<tr>
<td>SLSI</td>
<td>Student-life Stress Inventory</td>
</tr>
<tr>
<td>WASSCE</td>
<td>West African Senior Secondary Certificate Examination</td>
</tr>
</tbody>
</table>
Academic Stress, Academic Performance and Psychological Well-Being

CHAPTER ONE

INTRODUCTION

Background of the study

Education is very important and is considered one of the basic human rights imperative for the development of individuals and a country as a whole (Nsiah-Peprah, 2004). Yet, there are certain challenges including health related, socio-economic, psychological, demographic, and teacher related factors that affect the educational sector. These challenges can act as stressors that affect the psychological well-being and academic performance of students (Ackon, 2014; Atuahene & Owusu-Ansah, 2013; Etsey, 2005; Kamal & Bener, 2009). However, factors such as social support and agricultural coping have a positive influence on psychological well-being. Academic performance and psychological well-being have also been found to be positively related while academic self-efficacy plays a moderating role on this relationship (Chemers, Hu & Garcia, 2001). There is therefore the need to understand how these variables relate to each other and thereby improve the psychological well-being of Ghanaian Senior High School (SHS) remedial students.

There are challenges associated with acquiring an education that are peculiar to individuals in developing countries. In Ghana for instance, these challenges include inadequate teachers, teacher absenteeism and lateness, leading to incompletion of the syllabus. Other factors include large class sizes, lack of supervision, school fees not promptly paid, low frequency of in-service training for teachers, lack of infrastructure and materials and irregular staff meetings. These further diminish pupil’s motivation, enthusiasm, zeal and commitment to learn (Ackon, 2014; Etsey, 2005). Students also face stress associated with transportation difficulties and load shedding of electricity which affect their ability to revise their notes.
Furthermore, families also spend a lot of their resources in educating their wards and exert pressure on them to perform, gain employment and contribute towards the livelihood of their families. When families have adequate resources to educate their wards to the tertiary level, students are then faced with the pressure to perform in order to secure one of the limited spaces available in these tertiary institutions. This is because, these institutions have inadequate resources to offer placement to students even when they qualify. There is also pressure on students to perform and attain tertiary education in order to secure one of the limited employment opportunities (Ansong, 2013; Atuahene & Owusu-Ansah, 2013; Casely-Hayford, Arnot, Dovie & Salifu, 2010; Etsey, 2005; Porter, et al., 2011).

Considering these stressors, passing the West African Senior Secondary Certificate Examination (WASSCE) is very crucial in the lives of Ghanaian students. This is due to its association with opportunities that include furthering one’s education, higher income and securing a ‘respectable’ job. As a result, expectations from the student, family, friends, teachers and significant others may lead to increased pressure on SHS students to perform. Consequently, when students perform poorly they may associate their academic challenges with failure and inability to meet goals (Ang & Huan, 2006). These negative thoughts can also have a negative influence on the psychological well-being of students (Nolen-Hoeksema, 2001). Hence, there is the need to study the relationship between academic performance and psychological well-being among SHS remedial students in Ghana.

**Poor Academic Performance**

The Pre-tertiary Ghanaian educational system requires students to take two main national examinations. These are the BECE (Basic Education Certificate Examination) and the WASSCE that assess the academic performance of students at the Junior High School and SHS respectively.
Passing the BECE entitles a student the opportunity to progress to the SHS while passing the WASSCE offers students the opportunity to enroll into tertiary institutions. However, the educational sector in Ghana has been criticized for declining academic performance of students on the BECE and the WASSCE. For instance, Frempong (2011) explains that out of thirteen (13) districts in the Central Region of Ghana, pupil’s performance in the 2008 BECE, dropped by 4.1% to 20% in nine (9) schools. Only four (4) schools saw an improvement in performance by 1.3% to 32%. Similarly, Atuahene and Owusu-Ansah (2013) reported that pupil’s performance on the BECE in 2011 dropped in comparison to the 2010 results. However, the issue of poor academic performance has been more related with the performance of SHS students than that of JHS students.

Poor academic performance among Senior High School (SHS) students is common in Ghana. This situation is well captured in the mass media by numerous headlines on the poor academic performance of SHS students in the WASSCE. Some of these include “Saving the sinking educational system in Ghana”, “Continuous poor performance at the WASSCE; something must be wrong” and “28% pass in 2014 WASSCE one of the best - Ablakwa” (Ackon, 2014; Blege, 2014; Effah, 2014). Contrary to media reports, the Ghana Education Service (GES) has argued that the situation is exaggerated. They contend that the figures quoted in the media is the sum of students who did not qualify for tertiary education and those who failed their papers (Effah, 2014). Hence, according to GES, the situation is exaggerated by the inclusion of those who did not qualify for tertiary education. Yet, qualification into a tertiary institution is important to these students. It is the hope of many of these students to enroll in a tertiary institution as is evidenced by the huge number of applications that are turned down by these institutions yearly (Atuahene & Owusu-Ansah, 2013; Gondwe & Walenkamp, 2011).
Subsequently, some of the students who are unable to pursue tertiary education start-up businesses or seek employment. However, because of the theoretical nature of the SHS education, most of the students lack entrepreneurial skills and therefore are unsuccessful at building their businesses or require further training to gain meaningful employment (Ferrali, Ksoll & Lehrer, 2012; Gondwe & Walenkamp, 2011). As such, some of these students who do not qualify for tertiary education attend SHS remedial classes in order to have access to tuition and thereby improve their chances at passing their examinations. Some even spend as long as three years trying to gain admission into a tertiary institution (Ferrali et al., 2012; Oduro-Ofori, Peprah & Cann, 2014). Remedial schools therefore form an important aspect of the Ghanaian educational system and this warrants the need to study them and their students.

Remedial Education

Remedial education has been part of the educational system since the 17th Century. The Harvard University, America, is the first documented institution to have introduced remedial education. Then, remedial education involved tailored courses for first year students with unsatisfactory writing skills and lacking certain academic skills required for college education (Oklahoma State System of Higher Education, 2009). Similarly, Remedial education has been present in Ghana as far back as 1965. The University College of Ghana, now University of Ghana for instance provided a remedial ‘A’ level Science course for its evening Science students. During that period the government sought to encourage as many students as possible to pursue Science at the University. However, most of those who qualified had little or no prior Science education. As such, the Remedial Science education sought to fill this gap and equip them to succeed in Science at the University.
Furthermore, the research indicates that a large number of the older University entrants took their entrance examination over a period of five or six years. This prolonged duration occurred because they had to retake the papers they failed as the years went by. Some even returned to regular School to join the sixth formers in order to succeed in their examination (Peil, 1965). To date, the functions of remedial education have developed and expanded over the years. Its core functions include preparatory education for First year College students and extra tuition for College and Secondary School students to improve their grades. It also involves post-secondary school classes for students to improve upon grades (Kozeracki, 2002).

In Ghana, SHS remedial education is a coursework that is offered at the post-secondary level to boost the academic performance of underprepared or low-achieving students (Oduro-Ofori, et al., 2014). It may also include workers who seek to better their grades in order to qualify for promotions and increased salaries. In addition, they must be registered, have the ability to provide tuition and sit their students as candidates in the November/December WASSCE (Oduro-Ofori, et al., 2014). There is inadequate information on the history of SHS remedial schools in Ghana. However, according to Oduro-Ofori and others (2014) there are growing numbers of remedial schools in Ghana. These include Action Progressive Institute, Ideal College and Wesleyan Remedial Schools. These schools, like other remedial schools in the country share a desire to help students better their grades for tertiary education.

The Action Progressive Institute for instance, started with a desire to help students academically by organizing vacation classes and University entrance examination classes for SHS students hoping to be admitted into the University. Subsequently, remedial classes was introduced for students who are about to re-sit the WASSCE (Action Progressive Institute, 2014).
Ideal College was also borne out of the flaws of the SHS educational system which was accounting for mass failures over the years. It sought to help students overcome the challenges in passing the WASSCE examination (Ideal College, 2011). The Methodist University College, Ghana also has an SHS remedial school that is aimed at helping the many unqualified students to gain admission into the university (Wesleyan Remedial School, 2013).

It is evidenced then, that remedial schools play important roles in Ghanaian education. The Ghana Education Service (GES) however, does not recognize remedial education because it holds the view that their presence hinders students from putting up their best (Oduro-Ofori, et. al, 2014). However, the popularity of these schools is due to factors such as increased interest in tertiary education, availability of facilities, qualified teachers and improved student-teacher relationship (Atuahene & Owusu-Ansah, 2013; Oduro-Ofori, et al, 2014). Therefore, the main aim of remedial schools is to help improve the academic performance of students who re-sit the WASSCE. Their available resources which are absent in certain SHS play a pivotal role in enhancing learning.

**Academic Stress, Academic Performance and Psychological Well-Being**

In view of the challenges associated with the educational system, it is important to study academic stress, academic performance and psychological well-being among remedial students. Stress according to Comer (2010) refers to a person’s ability to cope with situations that appear to threaten their well-being. Stress is also a natural psychological and physical reaction to the demands exerted by life (Australian Psychological Association, 2012). When faced with stressful event(s), the body responds by activating the nervous system and releasing hormones such as adrenalin and cortisol. This enables the body to quickly and effectively deal with the stressful situation.
Stress is then associated with physiological and behavioural symptoms that are due to the activation of the sympathetic nervous system. The physiological symptoms include increased heart rate, increased blood pressure, sweating, headaches, tiredness, and sleeplessness, muscle tension particularly in the neck and shoulder muscles, indigestion, constipation and diarrhoea. Behavioural symptoms on the other hand include increased consumption of alcohol, tobacco and food, loss of appetite, restlessness, sleeplessness, loss of interest and difficulty concentrating (Australian Psychological Association, 2012; Lal, 2014).

Young people experience stress related to academic work, relationships, financial difficulties, employment situations and personal factors. However, students report academic stress as a major stressor in their lives and thus the need for adequate research on the subject (Robinson-wood, 2009).

Academic stress refers to school-related challenges faced by students and their ability to overcome those challenges (Esia-Donkoh et al., 2011). It occurs when an individual has inadequate resources to adapt or cope with academic-related demands. These include fear of not getting a University placement, examination, course workload, inadequate revision time, high self-expectation, lack of interest in a particular subject, and punishment (Chiang, 1995; Lin & Yusoff, 2013). Hence, these academic related stressors may contribute to an increase in academic stress and poor psychological well-being among students. This relationship has been found to be stronger among students preparing for examinations (Kadapatti & Vijayalaxmi, 2012). It is therefore important to explore this phenomenon and examine the extent to which these stressors influence the psychological well-being of the students.
Psychological well-being can be conceptualized as a combination of positive affective states and the ability to function at an optimal effectiveness in one’s individual and social life (Deci & Ryan, 2008). For this study, depression and anxiety scores on the DASS-42 scale will be used to assess psychological well-being. This is important as research indicates that stress, depression and anxiety are some of the most common psychological symptoms associated with academic stress (Kamal & Bener, 2009; Kumar & Husain, 2008; Lin & Yusoff, 2013).

Depression is a mood disorder that is diagnosed based on the severity of a collection of symptoms. Some of these symptoms include an extreme sense of sadness, hopelessness, changes in eating and sleeping patterns, feeling of guilt, loss of enthusiasm and loss of weight (National Mental Health Association, 2000). A person can be depressed to the extent that even pleasurable activities become unpleasant and laborious (Nolen-Hoeksema, 2001). Depression is also linked with suicide. Adolescents who suffer from depression have been found to be more suicidal than those without depression (American Academy of Paediatrics, 2000). Depression also leads to substance abuse, low self-esteem and lack of regard for authority (National Mental Health Association, 2000). Depression has been found to be associated with poor academic performance, dropping out of school and suicide. Poor performing students have been found to have higher levels of depression than students with higher academic performance (Needham, Crosnoe & Muller, 2004; Yasin & Dzulkifli, 2011). Academic performance and psychological well-being have been found to influence each other. Abramson (1978) explained that when people are faced with undesirable situations, they may develop distorted styles of thinking about themselves, the future and their environment. As such, poor academic performance can be a negative life event that leads to distorted thinking and subsequently, depression.
Gender differences as a result of biological and socialisation factors have been reported in depression levels with females being more depressed than males (Caroli and Sagone, 2013; Nolen-Hoeksema, 2001).

Anxiety according to Sue, Sue and Sue (2010) is a natural physiological reaction experienced by individuals in different situations. It is defined as a fundamental human emotion that produces bodily reactions preparing us for fight or flight responses. Anxiety is one of the most common occurring forms of psychopathology that affects people of varied ages. Young people for instance, experience developmental changes associated with increased cognitive abilities, changing perceptions, and increased pressure from others. These are associated with increased levels of anxiety which can affect an individual for life. Anxiety disorders are also associated with higher prevalence of co-morbid disorders, poor academic performance, dropping of school and social problems (Hesse, 2014; Yasin & Dzulkifli, 2011). Test anxiety has also been found to have a negative effect on academic performance and positively related to depression (Akinsola & Nwajei, 2013; Xiao, 2013).

Therefore, Academic stress, has been found to be positively related with depression and anxiety. Skead and Rogers (2014) for instance, found a positive relationship between stress, anxiety and depression. Similarly, Cole et al., (2014) found that academic stress was positively associated with anxiety and depression. These studies indicate a positive relationship between stress, depression and anxiety. They further highlight the need to study these variables in students when studying academic stress. Bjorkenstam, et al. (2010) found poor academic performance to be related to psychological symptoms of depression, stress, anxiety and suicide. These symptoms continue to exist in poor performing students even after school years are over. Poor performing students have been found to be frustrated, angry, depressed and anxious (Kamal & Bener, 2009; Lin & Yusoff, 2013).
Furthermore, there have been reports on suicide attempts related to academic performance among Ghanaian students (Essel, 2014). These strong relationships between academic stress, poor academic performance and psychological well-being drives home the importance of studying poor performing students separately from the general student population.

**Gender and Socio-economic Factors**

Studies have also identified gender differences in psychological well-being. Females have been found to have poorer psychological well-being than males (Caroli and Sagone, 2013). Females have also been found to have higher depression scores than males (Nolen-Hoeksema, 2001). An adept researcher of depression, Nolen-Hoeksema (2001) explained that these differences emerge as puberty begins. Furthermore, females appear to face more life challenges than males. Females are also more likely to report and seek help for their mental health needs. As such gender differences in depression have been attributed to both biological and socialisation factors (Kessler et al., 1994; Nolen-Hoeksema, 2001).

Similarly, women have been found to have higher anxiety scores in comparison to males. Masi, Sbrana, Poli, Tomaiuolo, Favilla and Marcheschi (2000) reported gender differences in depression and anxiety scores with girls scoring higher on depression and school anxiety than boys. These findings indicate that gender differences exist in psychological well-being. There is therefore the need to understand the role of gender in moderating the relationship between academic stress and psychological well-being among SHS Remedial students.
Socio-economic status has also been found to influence student’s psychological well-being. Studies indicate that students from larger families lack privacy to study and support from parents to promote academic performance. Furthermore, larger homes imply increased number of quarrels and conflicts (Kadapatti & Vijayalaxmi, 2012). A Ghanaian study for instance found that parents of low-socio-economic status were burdened by financial constraints and did not consider their child’s academic work as their responsibility. They assumed it was the responsibility of the teacher to ensure that their child performed well at school. This was further worsened by the fact that some of these Parents were illiterate and could contribute little towards their children’s academic work. Parents of higher socioeconomic status on the other hand were more involved in their children’s academic work. Furthermore children of low socioeconomic status have to battle for basic needs such as food, water, school uniforms that negatively impact their school experience (Gyan, Mabefam & Baffoe, 2014).

It is important to understand the role of gender and socio-economic status in moderating the relationship between academic stress and psychological well-being of SHS Remedial students.

**Social Support and Africultural Coping**

Research however indicates that effective means of coping and social support helps to reduce the effects of stress on an individual (Kitzrow, 2003). Social support has also been found to reduce the effect of academic stress and thereby improve psychological well-being. There is no single definition for social support. However, it can be, defined as a range of interpersonal relationships or connections that have an impact on the individual’s functioning (WHO, 2007).
Social support is also a transactional relationship among individuals that involves emotional, instrumental, informational and appraisal support (House, Umberson, & Landis, 1988). Sources of social support include family members, friends, principals, counselors, psychologists, teachers, coaches, and classmates. Places in a community such as church and youth centers also provide sources of social support (Chandra & Batada, 2006). Social support from friends and family helps to reduce the impact on academic stress on the psychological well-being of students (Glozah, 2013; Lin & Yusoff, 2013; Kitzrow, 2003). It is therefore important to explore the protective role of social support and Africultural coping in dealing with academic stress.

Africultural coping has been conceptualized to explain how people of African descent use culture-specific coping behaviours to deal with stress. They further account for coping behaviours such as spiritual-centered, collective and cognitive-emotional coping that have been found to be effective in coping and even resisting various types of stressors. These aspects of culture and culture specific coping strategies have their roots in the African worldview. As such, they apply to both indigenous Africans and individuals of African descent (Akbar, 1981; Utsey, Adams & Bolden, 2000). Collective coping for instance was found to be the primary means of coping used by college students when faced with stress (Robinson-wood, 2009).

**Academic self-efficacy and Academic Performance and Psychological Well-being**

Furthermore, research indicates that self-efficacy is an important predictor of academic performance and psychological well-being. Bandura (1997; p.3) described self-efficacy as "the belief in one's capabilities to organize and execute courses of action required to produce given attainments". Self-efficacy accounts for behaviour outcomes such as performance, resilience, avoidance or problem specific coping (Bandura, 1997).
Chemers, Hu and Garcia, (2001) explain that efficacious students use more effective learning and time management techniques that enables them to accomplish tasks. Academic self-efficacy has also been found to be negatively related to depression and anxiety (Nie, Lau & Liau, 2011). Bandura (1997) explained that this relationship exists because efficacious students believe in their abilities and perceive examinations as surmountable. Chemers et al. (2001) found that academic self-efficacy and optimism was positively related with performance, adjustment, health, overall satisfaction and commitment to remain in school.

Hence, academic self-efficacy accounts for higher academic performance and lower levels of depression and anxiety even in the face of academic challenges.

In conclusion, the issue of poor academic performance among SHS students in Ghana is worrying. It has repercussions for students, their families and the nation as a whole. Research indicates that a positive relationship between academic stress, depression and anxiety. Social support and africultural coping have also been found to be important in reducing the influence of academic stress on psychological well-being. Academic performance and psychological well-being have also been found to be related such that poor performance is associated with poor psychological well-being. Academic self-efficacy has also been found to produce resilience that improves mood and performance. It is therefore important to study these variables and identify how they apply in the Ghanaian setting among poor performing students.
Statement of the Problem

Poor academic performance among SHS students in Ghana is worrying. However, psychological factors such as stress, depression and anxiety associated with poor performing students have received little attention. Yet, there are global reports of increasing stress among students mainly associated with academic work. This is coupled with findings on the relationship between poor academic performance, depression, anxiety, stress and suicide. As such, SHS remedial students grappling with poor academic performance may also have increased levels of stress and poor psychological well-being.

An important issue in Ghanaian education is the relatively high poor academic performance in the WASSCE at the SHS level (Ackon, 2014; Effah, 2014). The percentage of students who obtained a pass (A1-C6) in the WASSCE over the years are: 2006, - 12.5% ; 2007 - 10.5% ; 2008 - 12.9% ; 2009 - 14.5 %; 2011 -26 %; 2012 - 31 %; 2013- 19 % and in 2014, 28.1 %. It should be noted that in 2010, there was no examination due to a structural change in the SHS system of education (Ackon, 2014; Effah, 2014). From the statistics above, over the past ten years at least, as many as 69% of students did not meet the required aggregate for admission into a tertiary institution in the country. There have also been media reports on students committing suicide over poor academic performance (Essel, 2014). This important association between suicide and poor academic performance calls on the need to study academic stress and psychological well-being of poor performing students in order to provide them with a holistic support. Yet, these media reports have not been paralleled with empirical studies to ascertain the veracity and severity of the situation in Ghana.

However, available research worldwide indicates that poor academic performance is also associated with increased levels of stress, anxiety and depression and adjustment disorders (Kamal & Bener, 2009; Needham, et al., 2004).
It is therefore important to study students facing academic challenges and identify psychological factors that may be affecting their performance and psychological well-being.

Recent research indicates that the mental health needs of students are developing from just adjustment issues to pathological issues such as stress, depression, anxiety and suicide (Bjorkenstam et al, 2010; Kitzrow, 2003). There are also reports of suicidal ideation, attempts and self-harm practices such as intentionally cutting, burning and bruising among students (American College Health Association, 2009). These psychological factors have been associated with an increase in academic stress (Nguyen, Dedding, Pham & Bunders, 2013). These students are also at higher risk of suicide even when other demographic variables such as family psychiatric illness, family educational level, receipt of social welfare, being adopted or living with a parent were adjusted (Bjorkenstam et al., 2010). These reports indicate increasing levels of psychological symptoms among young people with the main stressor being academic related. As such studies involving stress and psychological well-being among students should consider academic stress. There is therefore the need to study and understand the prevalence of academic stress among the Ghanaian youth in order to meet their needs and improve their well-being. It is also important to study academic stress as it is a main source of stress to students and consequently affects their psychological well-being.

Furthermore, social support has been found to reduce the influence of stress on individuals. However, poor performing students face challenges accessing social support. Research indicates that social support is an important variable in buffering the effect of academics stress on an individual (Chandra & Batada, 2006). It will therefore be an important factor in helping poor performing students to deal with stress.
However, research indicates that students faced with academic challenges report poor social support (Kamal & Bener, 2009).

Poor performing students have been found to have lower confidence and self-esteem which inhibits them from seeking social support when they need it contrary to students of higher academic performance. This makes it difficult for them to access social support that will help them in coping with stress. Lower self-esteem and lower self-confidence in students also accounts for poorer psychological well-being (Glozah, 2013). Furthermore, individuals in a student’s social support network may also exert pressure on students to perform and this may also affect them negatively (Glozah, 2015; Porter, et al., 2011). These findings imply that students may also employ other coping strategies such as the africultural coping. It is therefore important to understand the role of social support and africultural coping in reducing the influence of stress on the psychological well-being of SHS remedial students in Ghana.

Furthermore, the role of academic self-efficacy in relation to academic performance and psychological well-being has been proven by research. However, less is known of its applicability among Ghanaian SHS remedial students. Hence, in a bid to promote its use among this population, it is important to find its relationship with academic performance and psychological well-being.

Studies also indicate that students’ perceptions of their family’s economic stress and financial constraints, affects their academic performance and leads to emotional distress (Mistry, Bener, Tan and Kim, 2009). Furthermore, low socioeconomic status may imply inadequate parental attention to the student’s academic work and psychological well-being. These can lead to reduced resources to cope with academic stress and thereby lead to poor psychological well-being (Gyan, et al. 2014).
There is therefore the need to look at the role of socio-economic factors and its influence on the relationship between academic stress and the psychological-well-being of SHS students.

Studies have also identified gender differences in psychological well-being. Females for instance have been found to have higher levels of depression than males. These have been attributed to biological and socialisation factors (Nolen-Hoeksema, 2001). In addition, Masi, Sbrana, Poli, Tomaiuolo, Favilla and Marcheschi (2000) reported gender differences in depression and anxiety scores with girls scoring higher on depression and school anxiety than boys.

These findings indicate that gender differences exist in psychological well-being. However, there is the need to understand if these differences exist among SHS Remedial students in Ghana. In addition, gender may serve as a protective factor in the relationship between academic stress and psychological well-being and this should be investigated.

These studies indicate that socio-demographic variables have an influence on the relationship between academic stress and psychological well-being. It is therefore important to look at these variables and their moderation effect on the relationship between academic stress and psychological well-being.

In conclusion, academic stress therefore, has debilitating effects on the psychological well-being of students with the impact being stronger among poor performing students. Furthermore, despite media reports on suicidal attempts among students in Ghana, not much in terms of research and mental health care has been extended to students facing academic challenges. In addition, social support, agicultural coping and academic self-efficacy have been found to play protective roles on academic performance and psychological well-being. Gender and socio-economic status have also been found to influence the relationship between academic stress and psychological well-being.
However, there is the need for adequate research to understand how the factors apply in the Ghanaian population. It is therefore important to understand the mental health needs of the youth and especially, SHS remedial students in Ghana in order to provide holistic assistance to the ever-increasing student population.

**Aims and objectives of the study**

This study seeks:

1. To examine the relationship between academic stress and the psychological well-being of SHS remedial students.
2. To examine the relationship between academic performance and psychological well-being.
3. To examine the moderating role of academic self-efficacy on the relationship between academic performance and psychological well-being.
4. To examine the moderating role of perceived social support on the relationship between academic stress and psychological well-being.
5. To examine the moderating role of agricultural coping on the relationship between academic stress and psychological well-being.
6. To examine the moderating role of gender and socio-economic status on the relationship between academic stress and psychological well-being.
7. To examine gender differences in psychological well-being.
Relevance of the study

This research will be beneficial in mental health education directed at explaining the influence of stress on the psychological well-being of individuals, especially, students. It will also provide information on protective factors that help to reduce the influence of stress on an individual. The information provided will be helpful to psychologists, counselors and educators to design and develop specific intervention programs to identify and reduce psychological problems among SHS remedial students. This will also add up to the argument of including mental health services in the Ghanaian educational system (Assabieh, 2010).

This study will also benefit the students, their families, friends and teachers of SHS remedial students. This is because the study will provide information that will help students to face, manage, and effectively cope with academic stress and thus, improve their academic performance. It will highlight the effective use of social support reduces stress and its influence on psychological well-being (Yasin & Dzulkifli, 2011). This will also encourage families, friends and teachers to provide adequate social support to reduce the effect of stress and boost the academic performance of students.

One of the main aims of psychology is to acquire information in order to understand, explain, predict and make changes to human behaviour. This research is therefore important as it will provide empirical findings that will help to ascertain the relationship between academic stress, academic performance and psychological well-being of remedial students and their coping strategies. This will add to the available literature and thus throw more light on human behaviour.
CHAPTER TWO
LITERATURE REVIEW

This study seeks to find out the relationship between academic stress, academic performance and the psychological well-being of SHS remedial students in Accra. It also seeks to examine the role of agricultural coping, social support, and selected demographic variables on the relationship between academic stress and psychological well-being. Furthermore, it examines the moderating role of academic self-efficacy on the relationship between academic performance and psychological well-being. In this chapter, the researcher discusses relevant theories aimed at explaining these variables. These theories include the stress and coping perspective by Lakey and Cohen (2000), the socio-cultural model of stress, coping and adaptation by Aldwin (2007), the cognitive behavior theory, the psychological theory by Ryff (1989) and the self-efficacy theory by Bandura, (1997). This chapter also contains a review of related studies, rationale of the study, statement of hypotheses, hypothesized conceptual framework and operational definition of terms.

Theoretical Framework

There are various definitions and theories of stress that are based on physiological and psychological explanations. One of the oldest definitions of stress according to Lazarus (1966) is a state of psychological arousal that occurs when external demands exceed a person’s adaptive abilities. Lazarus and Folkman (1984) also constructed one of the oldest theoretical models of stress which is the transactional model of stress. This theory explains that stress sets in when an individual appraises an event as stressful and has inadequate resources to cope. However, this theory does not emphasize the role of social support in coping with stress.
The stress and coping perspective by Lakey and Cohen (2000) on the other hand, considers social support as an important factor in coping with stress, making it a more appropriate theory for this study.

**The Stress and Coping Perspective**

The Stress and coping perspective is based on the transactional model of stress and was developed by Lakey and Cohen (2000) to explain how individuals cope with stress and focuses on the buffering role of social support. According to Lakey and Cohen (2000) when faced with stress, individuals go through a three-stage-process in order to deal with the stressful situation. These are the primary appraisal stage, the secondary appraisal stage and a continuous re-evaluation and changing of the primary and secondary appraisals (reappraisal). At the primary appraisal stage, an individual determines the threatening nature of a situation. This is then followed by the second appraisal stage where a person assesses the coping resources they have to deal with the stressful situation. This is followed by a continuous re-evaluation and alternations between the primary and secondary appraisals (reappraisal). The appraisal of the situation is important as it can lead an individual to perceive a situation as stressful or normal. Hence, stress sets in when the person perceives a situation as a threat and perceives an unavailability of adequate coping resources and this can then lead to health problems (Lakey & Cohen, 2000).

The stress and coping perspective also explains that social support gained during stressful events serves as a buffer to the negative effect of the stress. There are various sources of social support which include informal sources such as family members, friends and teachers while formal sources of social support include professional mental health providers. Social support can also be perceived or actual support.
Perceived social support is the belief a person holds concerning the support they will receive especially in stressful times which leads to appraising a stressful event as less stressful and thereby, reducing its impact. As a result, it buffers the effect of stress and promotes well-being. Actual or received social support on the other hand is the actual support that is provided to an individual that helps them to cope with stress. Every stressful situation requires an individual to adapt specifically to suit that situation. In such cases, the type of received social support must meet the present needs of the individual and enable them adapt to the stressful situation. Received social support has an influence on individuals during stressful situations through the supportive actions received from others which boost one’s coping ability (Lakey & Cohen, 2000). Social support has been found to be important in dealing with academic and neighbourhood stressors (Chandra & Batada, 2006). It protects individuals from the negative effect of stress and hence, promotes health (Lakey & Cohen, 2000).

However, this stress and coping perspective like most others have been developed and are predominantly based on ethnocentric European worldview and conceptual framework. As such, they have concentrated more on the western approach to coping with stress and have neglected the aspects culture that influence coping among Africans and people of African descent. These aspects include the use of prayer, relying on God and other people in religious authority which have been found to be effective in coping and even resisting various types of stressors (Akbar, 1981; Jagers & Mock, 1993). The socio-cultural model of stress however, considers these limitations and is more appropriate for this research in comparison to the other theories. Hence, it is important to explore the socio-cultural model of stress, coping and adaption by Aldwin (2007).
The Socio-Cultural Model of Stress, Coping and Adaptation

The socio-cultural model of stress, coping and adaptation by Aldwin (2007) was developed with an emphasis on the social and cultural context in which stress and coping occurs. It explains that stress occurs in an individual’s social context which is deeply imbedded in their cultural context. Culture also determines the nature of stressors typically encountered by members of a given culture and the extent to which stressors influence an individual depends on their culture. Young people in Ghana, for instance, face the pressure of contributing to their family’s livelihood. This duty is made more difficult for young people of today because of high levels of unemployment (Porter et al., 2011). In addition, it explains that culture influences the choice of coping strategies and the institutional mechanisms used in a stressful situation. For instance, Hunt and Hunt (2001) found that religion plays a greater role in the lives of blacks than whites. African Americans had higher church attendance, stronger identity with their church, and were more likely to be members of a church-related group. In all, the study demonstrated that blacks other than whites are more religious. As such, in stressful times, blacks other than whites are likely to turn to the church for support in coping with stress. Ayalon and Young (2005) also found that African-American are also more likely to use informal sources of social support while whites are more likely to use formal sources such as seeing a professional mental health caregiver.

In conclusion, when faced with a stressful situation, an individual’s beliefs and values, defined by their culture determines if the person will appraise the situation as stressful or not. Subsequently, when the situation is deemed stressful, there are protective factors such as an individual’s coping resources, social support and resources available in their culture, that are all imbedded in one’s culture (Aldwin, 2007).
Cognitive Behaviour Theory

There are various theories that explain depression. The behavioural theory of depression for instance explains that depression occurs as stressful life events. Hence stressful situations, loss of a dear one, maintaining a job that is discriminated against can lead to depression (Lewinsohn & Amenson, 1978). However, this theory is unable to capture the role of cognitive factors in the development of depression. The cognitive behaviour theory on the other hand is able to capture the role of external stimulus and cognitive factors.

The Cognitive Behaviour theory proposes that the main differences that underline our behaviour stems from differences in how we think. Hence an individual’s behaviour is primarily a product of their thoughts. Abramson (1978) found that when faced with stressful situations, people may make attributions that are internal, stable and global, and become helpless. This theory explains that depressed people have distorted thoughts about themselves, the future and their environment. Hence, these negative thoughts lead to depression. According to Beck (1967), negative representations of thoughts can become dormant with time but activated by life stressors which can lead to depression. Research also shows that depressed persons pay more attention to sad and unfavorable information. Research shows that depression is associated with relatively low self-acceptance. As such, academic stress and poor academic performance can lead to the development of negative styles of thinking which can subsequently lead to depression.
Ryff’s Theory of Psychological Well-being

There have been numerous studies on psychological well-being however, there is no single definition of the construct. Some researchers have explained that the term is used to describe a number of constructs that define psychological functioning. For instance, Ryff (1989) viewed psychological well-being as the optimal psychological functioning and experience. According to her, an individuals’ life experiences and their interpretations of these experiences influence their well-being.

Her construct was made of six components namely, Autonomy, Environmental Mastery, Positive Relations with Others, Purpose in life, Personal Growth, and Self-Acceptance. The self-acceptance component explains that an important component of psychological well-being is a positive attitude toward oneself and one’s present and past life. As such an individual should be able to celebrate their strengths and weaknesses rather than focusing only on their positive or negative. The positive relations with others component also highlights the need for valued, satisfying relationships with others as an important component of psychological well-being. The autonomy component also expresses the need for an individual to have a sense of self-determination, independence, and freedom from norms. They should have the freedom of choice and not feel pressurized to please others or meet the societal expectations. In addition the purpose in life component also indicates that the individual should have life goals and a belief that one’s life is meaningful. The environmental mastery is also another component of psychological well-being that highlights the ability to manage life and one’s surroundings. There is also the personal growth component that portrays the need to be open to new experiences as well as having continued personal growth.
This theory demonstrates the influence societal expectations can have on an individual. This is key to this study as academic performance is considered both a family and national matter.

**Self-efficacy Theory**

The self-efficacy theory was developed by Bandura (1997; p. 3) who described it as "the belief in one's capabilities to organize and execute courses of action required to produce given attainments". The key word here is the belief, as it is important in determining an individual’s feeling, behaviour, thought and motivation. Self-efficacy is the outcome of external experiences and self-perception and is a very important aspect of social cognitive theory as it explains how social experiences influence cognitive processes and behaviour. In brief, self-efficacy refers to an individual’s belief that is based on social experiences. The theory explains that self-efficacy is gained from four sources, which are experience or performance accomplishments, vicarious learning, persuasion and emotional arousal (Bandura, 1997).

Firstly, mastery experiences explain that when a person has had a previous experience, it influences how they deal with subsequent situations or task. If a person is successful at a task, it leads to the development of strong self-efficacy. On the other hand, a person’s self-efficacy, may be weakened by previously failing a task. Secondly, vicarious learning also explains that when a person observes the consequences of another’s actions their self-efficacy develops if the person is successful. However, self-efficacy is weakened if the observed person is unsuccessful at the task. Thirdly, verbal or social persuasion from others also improves one’s self-efficacy. This is because encouragement helps to clear a self-doubt that is held by an individual. They are then able to concentrate their energy on achieving the task.
Lastly, physiological or somatic factors influence an individual’s self-efficacy. The perception an individual holds about their physiological reactions to stressful situations affects their self-efficacy.

When people are efficacious, they will attempt tasks because they believe they have the ability to accomplish it. Also, efficacious people are more likely to set challenging goals and maintain strong commitment to achieving these tasks despite the possibility of failure. This helps to reduce stress and the risk of depression (Bandura, 1994). In a student sample for instance, self-efficacy was found to have a positive correlation with well-being and a negative correlation to stress-related behaviours. The study concluded that efficacious individuals have more confidence in their ability to manage stress and are more likely to use positive styles of coping that promotes well-being (Natovova & Chylova, 2014). Furthermore, Bandura, (1997) has explained that self-efficacy is an important motivational tool that influences planning and achieving goals. Academic self-efficacy is important in academic work because it produces resilience, such that even in the face of challenges the individual sees these as surmountable rather than overwhelming (Chemers, Hu, & Garcia, 2001).

Bandura (2006) cautioned that in the study of self-efficacy, it is important to consider the task to be performed. He explained that the study of self-efficacy should not reflect generalized self-perceptions that have little relation to the task at hand. This is important because a person may have high levels of self-efficacy for a task such as academic work but this same person may not have similar levels of self-efficacy for parenting (Bandura, 1997). As such, tests that measure general efficacy have low predictive power as the task they measure is poorly defined (Bandura, 2006). Hence, it is important to use tests that measure specific task such as academic self-efficacy.
Academic Stress, Academic Performance and Psychological Well-Being

In conclusion, stress occurs when an individual appraises a situation as threatening and has inadequate resources to deal with it. Culture also defines the kinds of stress encountered by individuals while providing the resources needed to cope with the stressful situation. The aspects of culture that are African-centered include religion, collectivism and spirituality. Social support has also been found to be an important buffer to the effect of stress on an individual. Self-efficacy is also an important predictor of performance and well-being. This is because it is a motivational tool that empowers an individual to achieve even in the face of difficulties. This resilience buffers the effect of stressful situations on an individual and promotes their well-being.
Review of Literature

A number of studies have been conducted to investigate the relationship between academic stress, academic performance and the psychological well-being of students. These studies have also looked at the moderating role of personality, social support, coping and socio-demographic variables on the relationship between academic stress and psychological well-being (Kitzrow, 2003). This study however, focuses on social support and agricultural coping as moderating variables in the relationship between academic stress and the psychological well-being of SHS remedial students. In addition, it looks at the moderating role of academic self-efficacy on the relationship between academic performance and the psychological well-being of students. The role of variables such as gender and socio-economic status are also explored. The review of these literatures in terms of their contribution to this thesis is examined below.

Academic Stress, Psychological Well-being and Academic Performance

Academic stress has been found to be positively related to depression and anxiety. Furthermore, depression, anxiety and stress have also been found to be common among students with poor academic performance.

Academic stress refers to school-related challenges faced by students and their ability to overcome those challenges (Esia-Donkoh et al., 2011). Academic stress may occur due to fear of not getting a University placement, course workload, poor academic performance, high self-expectation, preparation for tests, low interest in a particular subject, missing classes and teacher’s punishment (Bulo & Sanchez, 2014; Chiang, 1995; Lin & Yusoff, 2013). A study by Baquayan (2011) also indicated that hostel rooms, equipment, books, teacher's attention, and environment are a major source of stress while duration for revision, library facilities, and food rank second as student stressors.
Academic stress can also have a negative influence on the psychological and physical well-being of individuals.

According to Salleh (2008), stressful life events precede the development of medical conditions such as peptic ulcers and ulcerative colitis. This is because chronic stress leads to an imbalance of the acid concentration in the stomach. Academic stress, has also been found to have a negative influence on the psychological well-being of students. Furthermore, the most common psychological symptoms associated with academic stress are depression and anxiety. It is therefore important to examine symptoms of depression and anxiety because they may co-exist and are strongly associated with stress.

Skead and Rogers (2014) for instance, sought to identify the correlations between stress, anxiety and depression in Law and Psychology students at the University of Western Australia. Stress was measured by Gadzella’s Student-life Stress Inventory (SLSI), (1991) while anxiety was measured by the State-Trait Anxiety Inventory (Form Y) and depression was measured by the depression subscale of the DASS-42. The results of the study revealed a strong positive correlation between stress, anxiety and depression. The researchers concluded that students who experience one of these symptoms are also more likely to experience the other two psychological symptoms. This study indicates the co-morbidity of stress, anxiety and depression.

Similarly, Cole et al. (2014) found that academic stress was positively associated with measures of psychological well-being; anxiety and depression. Furthermore, Asberg (2000) also found a positive relationship between stress and depression while Chen, and others (2013) found a significant relationship between distress and academic stress. Actually, academic stress was more than 1.5 times associated with the risk of distress. Akinsola and Nwajei (2013) also found that test anxiety, trait anxiety, and depression co-exist and are positively related.
These studies indicate a positive relationship between stress, depression and anxiety. They further highlight the need to study these variables in students when studying academic stress.

Contrary to these findings (Glozah, 2013) found no relationship between levels of academic stress and psychological well-being. This study was conducted in Ghana and sought to explore how academic stress and perceived social support influence the psychological well-being of SHS students in Ghana. Participants were made of SHS students between the ages of thirteen (13) and twenty-two (22) years. In results of the study indicates that there was no relationship between academic stress and psychological well-being because of the buffering role of social support.

Research also indicates that psychological symptoms of anxiety and depression are associated with academic performance even when confounding variables are controlled. Bjorkenstam and others (2010) for instance found that students with poorer psychological well-being had lower grades than those with higher grades. This relationship existed despite adjustments to a number of possible confounders including family psychiatric illness, low family educational level, depending on social welfare and being adopted or belonging to a single parenting home.

Furthermore Needham et al. (2004) identified emotional problems in poor performing students as both a cause and an effect of poor academic performance. Emotional problems also predicted the likelihood of failing one or more subsequent classes, absenteeism and challenges with homework. In addition 40% of the poor performing children had depression while 20% had adjustment disorder. Unfortunately, even though 60% of these children had psychological challenges, not one of them had been psychologically evaluated. This provides evidence that a large number of psychological conditions among students may go unidentified and untreated.
Similar findings were also reported by Akinsola and Nwajei (2013) who found that test anxiety, depression and academic stress were negatively associated with academic performance. It is therefore important to conduct studies among poor performing students and to encourage the need to extend psychological services to these students.

In reviewing this literature, it is observed that most of these studies have concentrated on college students while others sampled SHS students. However, less attention has been paid to the population of SHS remedial students and this highlights the need to do so in this study. In illustration, literature findings portray a strong association between psychological constructs such as depression, anxiety and stress and academic performance. However, most of these studies were conducted with college students. For instance, Cole et al. (2014) used four hundred thirty-one (431) Ghanaian undergraduate students. While Skead and Rogers (2014), sampled Law and Psychology students at the University of Western Australia. Similarly, Asberg (2000) also used college students.

On the other hand, (Akinsola & Nwajei, 2013) sampled four hundred and twenty (420) SHS students aged between thirteen (13) and nineteen (19) years. While Glozah (2013) sampled SHS student between the ages of thirteen (13) and twenty-two (22) years SHS students. However, none of these studies was conducted with SHS remedial students. In contributing to literature, this current study will concentrate on SHS remedial students in Ghana. This is however important to generate information on relationship between these variables among SHS remedial students.

In conclusion, this literature review indicates that academic stress, depression and anxiety are positively related. Furthermore, poor academic performance is negatively related to depression and anxiety. The strong relationship exists even when confounding variables are controlled.
This strong relationship drives home the importance of studying poor performing students separately from the general student population. There is therefore the need for further research to investigate the relationship between academic stress, psychological well-being and academic performance among SHS remedial students in Ghana.

The Moderating Role of Social Support

Research indicates that many people, including students seek social support from friends and family in dealing with stressful situations. Actual and perceived social support is important in reducing the effect of stress as it influences the appraisal and the degree to which an individual assesses a situation as stressful. As such, it influences coping strategies used by individuals and also provides emotional support which has a positive effect on stress levels among individuals (Lakey & Cohen, 2000). Social support from friends, family and teachers is therefore important to students especially in dealing with academic related stress. A study by Nahid and Sarkis (1994) for instance indicates that social support has a negative relationship with anxiety, stress, and depression.

Chandra and Batada (2006) also conducted a mixed-method research with twenty-six (26) African American teenagers on the importance of social support in dealing with stressful situations. Students reported family, peer relationship, neighborhood and school as sources of stress and social support. Data revealed social support from family members and friends rather than other sources of social support are the greatest sources of social support. Other sources of social support included principals, teachers, counselors, coaches, and classmates. It also demonstrates the importance of assessing the various roles of the different sources of social support. The study used the snowballing sampling technique and a small sample size of twenty-six (26).
This means participants are likely to have similar characteristics and experiences than if they were randomly selected and the findings non-generalizable. This current study on the other hand will use a larger sample size.

Baqutayan (2011) also conducted an experimental study on the impact of social support on stress. One hundred and twenty (120) first year students took part in a semester’s experiment that lasted for four (4) months. The experimental group was given two (2) hour training on the importance of social support in coping with academic stress for sixteen (16) weeks.

The control group however, was given no training. At the end of the study, stress levels among the experimental group had reduced in comparison to the control group. This was because in comparison to the control group, the experimental group had increased their use of social support and this had helped them in dealing with stress. They were also satisfied with their academic performance during the experiment. Social support received from family which included receiving affection, nurturance, and guidance, accounted for better adjustment. This experimental study indicates that social support helps to reduce the effect of stress. It also indicates that different sources of social support have different effects in managing stressful situations.

The differences in the influence of the various sources of social support in dealing with stress are also emphasized in the work of (Cutrona, Cole, Colangelo, Assouline and Russell, 1994). The study sought to examine the influence of social support on adjustment and academic performance. The study’s sample consisted first and second year college students. The results of the study indicated that parental support significantly predicted the Grade Point Average (GPA) of the students. This was despite the fact that most of the students were without daily parental contact. However, social support from friends and romantic partners did not predict GPA significantly.
This study indicates that parental support is important in coping with academic related stress and also accounts for improved academic performance.

Bejerano (2014) also found that social support predicts college adjustment. The study sought to examine how students adjusted to college and their usage of interpersonal and individual means of adjusting to college life. The study involved One hundred and ninety-seven (197) students who had been in the University from between one (1) to eighteen (18) months. The students completed an online survey. The sample consisted of One hundred and forty-nine (149) females and forty-eight (48) males ranging from eighteen (18) to thirty-one (31) years. They answered questions on their communication with peers, teachers and family. The results indicated that self-esteem was the strongest predictor of student’s adjustment to college. This was followed by depression, educational commitment, teacher, peer and family support. The students found that peer, family and teacher support were one of the factors that positively contributed to adapting to college life. Among the three sources of social support, teacher support was the most significant contributor to effective adaptation to college. Hence, in this study, social support was not the most important predictor of adjustment to college. However, the participants had been in college for different months and this might account for differences in their adjustment levels. This difference in months may also account for differences in interpersonal relationships and this may also have an effect on social support outcomes. In addition, unlike the other studies examined above, this study found teacher support other than parental support to be the strongest source of social support. This demonstrates mixed results on the importance of the various sources of social support to students and the need for further investigations.
In contrast to these findings, (Vasquez, 2010) in a study found that social support was unable to reduce distress. The study sought to examine whether religious coping and social support are moderators and or mediators of acculturative stress and psychological distress in a Latino community sample. The researchers recruited Two hundred and twenty-eight (228) Spanish-speaking and English-speaking participants from a health clinic. However, results indicated that both social support and religious coping did not moderate the relationship between acculturative stress and psychological distress. This study did not support the buffering model, which is contrary to the findings of other literature. This study contrary to others shows that religious coping and social support are associated with an increase in psychological distress.

In conclusion, these studies indicate that social support has a positive influence on stress and this is further associated with improved psychological well-being. However, the study by (Vasquez, 2010) did not support the moderating role of social support. There is therefore the need for further studies to find out the role of social support across various populations such as the Ghanaian SHS remedial students.

The Moderating Role of Africultural Coping

Kitzrow (2003) in a meta-analysis found coping to be important in dealing with stress. However, when studying coping strategies among people of African descent, it is important to look at aspects of the African culture that influence coping. These include the role of religious beliefs, practices and significant others in coping with stressful situations. They further account for coping behaviours such as spiritual-centered, collective and cognitive-emotional coping that have been found to be effective in coping and even resisting various types of stressors.
These aspects of culture and culture specific coping strategies have their roots in the African worldview and thus apply to both indigenous Africans and individuals of African descent (Akbar, 1981; Utsey, Adams & Bolden, 2000).

People of African descent are well-known for their strong beliefs and commitment to religion. This is a strong cultural strength that serves as a protective factor in dealing with the various forms of stress they face. African Americans use metaphysical approaches to coping based on religious and or spiritual belief systems such as prayer and meditation (Daly, Jennings, Beckett & Leashore 1995). This is further demonstrated in a study by Black (1999) which sought to explore how elderly women’s spirituality informs their ability to cope with poverty. The women perceived their relationship with God as personal, reciprocal and empowering that helps them in viewing and interpreting their life circumstances positively. The participants also reported receiving spiritual guidance concerning their choices from living and deceased family members. Even though this study consisted of elderly women, it clearly demonstrates how African-Americans are influenced by their religion in dealing with various stressors of life.

This finding is also supported by a comparative study by, Hunt and Hunt (2001) which demonstrated that religion plays a greater role in the lives of blacks than whites. The findings indicated that African Americans attend church more frequently, have a stronger identity with their church, and are more likely to be members of a church-related group. In all, the study demonstrated that blacks other than whites are more religious. However, this study looked only at the Christian religion and as such it is not known if these finding will apply to Muslims, Jews and people of other religious faith. Radzi, Ramly, Ghazali, Sipon and Othman (2014) in a related study found that among Muslim Tahfiz students, the higher one’s religious personality, the lower one’s stress, anxiety and depression level.
This study indicates that among Muslims, spirituality and religiousness also reduces the influence of stress on an individual.

Furthermore, a study also investigated the influence of religiosity and spirituality on cardiovascular and cortisol responses to a laboratory stressor among young adults. The results indicated that, participants’ increasing levels of religiosity, forgiveness and frequency of prayer was associated with lower cortisol responses. However, religiosity, frequency of prayer and church attendance was also associated with lower blood pressure in males but elevated blood pressure in females (Tataro, Luecken & Gunn, 2005). This study indicates a relationship between physiological measures of stress and indicators of individual belief systems.

Hence, these studies indicate that Africans and people of African descent are more religious than Westerners. Furthermore, Religiousness is important in reducing the influence of stress as it is associated with lower blood pressure and lower levels of depression and anxiety. The strong role of religion and spirituality in managing stress is further demonstrated when religious and non-religious African Americans are compared. A research by Jang (2004) indicated that religious African-Americans had a better sense of control and social support which helped them to deal with stress. However, non-religious African Americans were more stressed than religious African-Americans.

Collective coping also refers to the dependence on one’s group network in dealing with stress. This network may include family and other sources of social support (Utsey, Adams et al., 2000). Collective coping has also been found to be the primary means of coping used by college students when faced with stress. Robinson-Wood (2009) sought to explore love, school, and money as stressors affecting black college women and how they coped.
A sample of eighty (8) Black college women, between the ages of eighteen (18) and twenty-five (25) years were recruited from a private, predominantly White and Urban university in Northeast America. They were administered the Africultural Coping Systems Inventory (ACSI). The study found collective coping to be the most utilized africultural coping style adapted in dealing with the various stressors. This indicates that the collective coping is important in dealing with stress and is the most utilized coping style on the ACSI among African-American students. This finding is further supported by a study by Daly et al. (1995) who found that during stressful situations, African Americans, rely on group-derived ego strengths such as, family, community and social support networks.

Furthermore, some studies have reported the combined use of spiritual and collective coping. Utsey, Bolden, Lanier and Williams (2007) examined how culture-specific coping is related to resilience in African Americans from high-risk urban communities. The results indicated that culture-specific coping (spiritual and collective) was the strongest predictor of quality of life in comparison to traditional predictive factors of resilience, (family cohesiveness and adaptability). Hence, research indicate the protective role of collective coping by Africans and people of African descent in dealing with stress.

Contrary to these findings, Greer (2011) found that africultural coping did not moderate the relationship between race and gender discrimination and psychological symptoms in an African American women population. One hundred and eighty-eight (188) African-American college students from the ages of seventeen (17) to sixty-six (66) years were sampled. Most of the participants (60%) were employed on a full- or part-time basis. The findings of this study indicated that most of the participants used the cognitive emotional debriefing and this may not be effective in dealing with the race and gender discrimination.
In conclusion, the literature review indicates that africultural coping is important in reducing the influence of stressors on an individual’s well-being. It demonstrates the importance of africultural coping in dealing with stress. However, most of these researches were conducted among African-Americans and college students. There is therefore the need for more research among indigenous Africans and other student populations such as SHS remedial students in order to compare findings and contribute to literature.

**Academic Self-Efficacy, Psychological Well-Being and Academic Performance**

Bandura (1997) explained that efficacious individuals have confidence in their ability to achieve their goals and this promotes health, psychological well-being and educational outcomes. For instance, Campbell et al. (2004) found that cancer survivors with higher self-efficacy levels reported better Quality Of Life. Among the cancer survivor’s partners, higher levels of self-efficacy was associated with the ability to help patients manage symptoms. They also reported less negative mood and less caregiver strain, which improved quality of life.

This study demonstrates that self-efficacy is related to positive factors that account for improved quality of life.

Similarly, Maujean and Davis (2013) reported that self-efficacy accounted for well-being even among stroke survivors. This finding was reported in a study aimed at exploring the association between self-efficacy and three components of well-being (life satisfaction, positive affect, and negative affect). Results indicated that self-efficacy in psychosocial functioning accounted for all components of well-being and this relationship existed even after controlling for confounding variables such as demographic factors, physical functioning, and perceptions of actual performance were controlled.
These studies indicate that in health care, self-efficacy is an important predictor of the psychological well-being and quality of life among caregivers and patients even when confounding variables are controlled.

Research further indicates that efficacious students have better academic performance and better psychological well-being. Self-efficacy has been found to account for lower levels of depression and anxiety. Ehrenberg, Cox and Koopman (1991) examined the self-efficacy status of depressed and non-depressed adolescents. Results indicated that self-efficacy was negatively related to depression. The study concluded that self-efficacy had a negative relationship with adolescent depression.

Caroli and Sagone (2013) also found that self-efficacy was positively related to psychological well-being. Also students who perceived themselves as academically good had higher psychological well-being than those who rated themselves as poor. However, no differences in generalised self-efficacy were reported among high and poor performing students. This might be because the self-efficacy measure used was generalised and did not measure the task at hand, where the student’s academic self-efficacy would have been the more appropriate measure. The above literatures indicate that self-efficacy has an influence on psychological well-being, especially, psychological symptoms of stress, anxiety and depression.

Furthermore, in academic related studies, self-efficacy has been found to influence academic motivation, learning, and achievement. Efficacious students are more likely to work harder, demonstrate resilience in the face of difficulties, and this leads them to achieve more (Pajares, 1996; Schunk, 1995). Academic self-efficacy therefore, has a positive influence on academic performance.
For instance, (Chemers et al., 2001) conducted a study to assess the role of academic self-efficacy and optimism on the performance, adjustment stress, health, overall satisfaction and commitment to remain in school. Participants were sampled from first year college students in the University of California, Santa Cruz. The results indicated that academic self-efficacy and optimism was strongly related to academic performance and adjustment. It was found that aside influencing academic performance directly; it also affected academic performance indirectly by enhancing expectation and coping on classroom performance, stress, health, overall satisfaction and commitment to remain in school.

Similarly, Zajacova, Lynch, and Espenshade (2005) conducted a study with One hundred and seven (107) non-traditional, largely immigrant and minority, college freshmen at a large urban commuter institution. It sought to investigate the joint effects of academic self-efficacy and stress on the academic performance of the students. The researchers developed their own survey instrument to measure the level of academic self-efficacy and perceived stress associated with twenty-seven (27) college-related tasks. Academic performance was measured by three outcomes which were first-year college GPA, the number of accumulated credits, and college retention after the first year. The results indicated that academic self-efficacy was a more robust and consistent predictor than stress of academic success. In addition, there was a negative correlation between academic self-efficacy and stress.

Yazache (2013) also sought to investigate the relationships between self-efficacy and achievement. It involved second year Analytical Chemistry students at Debre Markos College of Teacher Education. The self-efficacy survey and an achievement test were completed by 100 students. The results indicated that, students’ level of self-efficacy was medium and self-efficacy beliefs were found to be significantly and positively related to their achievement.
Contrary to these studies, Cayubit (2014) found that academic self-efficacy had a negative influence on students’ well-being. The study sought to determine whether academic self-efficacy and study hours can serve as predictors of test anxiety among One hundred and fifty-four (154) high school students. Results of the study indicated that academic self-efficacy negatively predicted worry and emotionality, while study hours positively predicted worry and emotionality.

The literature review indicates that generally, self-efficacy has a positive impact on psychological well-being and academic performance. It has also been found to enhance motivation among students and spurs them on to achieve academic success.

**Socio-Demographic Factors**

Studies have also found academic stress to be related to socio-economic and demographic variables. Academic stress has also been found to be associated with socio-economic factors such as mother's education, sibling, family size and type of family. For instance, Kadapatti and Vijayalaxmi (2012) found that academic stress among students was negatively related to mother's education and positively related to the number of siblings the students had. However, academic stress was negatively related to family size. Students from the extended family system had more academic stress than those from nuclear families. This study indicates that various socio-demographic variables may have varying influences on academic stress.

Furthermore, in a Ghanaian study, Glozah (2013) found that socio-economic status of the students had a significant effect on academic stress, with the significant effects on academic frustrations, self-imposition and academic pressures subscales of the SLSI.
Similarly, Mistry, Bener, Tan and Kim (2009) also found that youth perceptions of their family’s economic stress and financial constraints, affects students’ academic performance and emotional distress. This relationship grew stronger as students progressed from middle to high school. There is therefore the need to look at the role of socio-economic factors and its influence on academic stress, psychological-well-being and academic performance.

Studies have also indicated gender differences in levels of stress. Chen et al. (2013) examined whether the degree of academic stress affected the level of distress among the students and whether student characteristics affected the risk of health conditions. The sample was selected from Medical students of the Inner Mongolia Medical College, China. The results of the study indicated that out of the sample of six thousand and forty-four (6044) students, 47.5% self-reported distressing body symptoms induced by academic stress. Gender differences were also recorded in the levels of distress, with female students feeling more distressed than males. Similarly, Jha, Kudachi and Goudar (2012) conducted a study with One hundred and fifty (150) medical students. The results indicated that females reported higher perceived stress than males.

However, Glozah (2013) reported higher academic stress among boys than girls especially on the academic frustrations and self-impositions subscales of the SLSS. The researcher explained that these differences were partly due to differences in the socialisation role of gender. In Ghana, males are more socialised to be providers of the home and this may account for their feelings of frustrations. Similarly, Chandra and Batada (2006) in a mixed method study also found that more boys (83%) expressed worry over the load of school work than girls (61%).
Academic Stress, Academic Performance and Psychological Well-Being

However, another study identified that there was no significant difference in stress level of male and female high school students (Lin & Yusoff, 2013). There is therefore the need for further studies on the role of gender in relation to academic stress.

Males and females have also been found to differ in psychological well-being. For instance, Caroli and Sagone (2013) administered the short version of Psychological Well-Being Scales by Ryff and Keyes (1995) to Participants aged from fourteen (14) to eighteen (18) year. They found that boys reported higher psychological well-being than girls. Similarly, Glozah (2013) also reported gender differences in psychological well-being of students. The study found that Females had higher depression and social dysfunction scores than males. In addition, Masi, Sbrana, Poli, Tomaiuolo, Favilla and Marcheschi (2000) reported gender differences in depression and anxiety scores with girls scoring higher on depression and school anxiety than boys. These findings indicate that gender differences exist in psychological well-being.

The examined studies have reported mixed findings in gender differences in stress, depression and anxiety scores and this calls on the need to further examination of the variable. In addition, socio-economic and demographic variables have also been found to account elevated stress levels. These studies indicate that socio-economic and demographic variables can have varying influence on the gender differences exist in stress levels, psychological well-being and social support.

In conclusion, the literature review indicates a positive relationship between academic stress, depression and anxiety. These have also been found to be associated with poor academic performance. However, social support and agricultural coping have been found to moderate the relationship between academic stress and psychological symptoms of depression and anxiety.
Academic self-efficacy has also been found to have a positive impact on psychological well-being and academic performance.

In addition, socio-economic and demographic variables have also been found to influence psychological well-being and academic performance. There is therefore the need to consider these variables when studying the relationship between academic stress and psychological well-being.
Rationale of the study

Quite a number of researches have been carried out on stress in Ghana. However, most of these have focused on occupational stress and stressors that affect students in Tertiary institutions (Atindanbila, 2011; Atindanbila et al., 2012; Esia-Donkoh et al., 2011; Cole et al., 2014). Hence, less attention has been paid to SHS and remedial students. Yet they form a part of young persons who are confronted with varying challenges. There is therefore the need to study the psychological well-being of these students (Atuahene et al., 2013; Gondwe & Walenkamp, 2011). Hence, there is inadequate research on Stress among remedial students and this research seeks to contribute towards filling this gap.

Researches in Ghana have also looked at how students cope with stress based on western definitions of coping. However, this may not be as relevant to Africans as they fail to capture culture-specific coping strategies. It is therefore important to use the africultural coping that has been developed to explain how people of African descent use culture-specific coping behaviours to deal with stress (Utsey, Adams & Bolden, 2000). In addition, there is also a paucity of literature on how remedial students in Ghana cope with academic stress. There is therefore the need to be study coping strategies among the increasing population of SHS remedial students in Ghana.

A large number of these researches have also focused on identifying psychological symptoms to the detriment of protective factors. However, it is important to add to the existing literature, the role of protective factors such as social support and africultural coping in dealing with stressful events.

In conclusion, this research therefore contributes to literature by studying academic stress among SHS remedial students. There is also a focus on the influence of African-centered coping that needs to be adequately explored in the African context.
It also includes the study of protective factors other than just identifying psychological symptoms and this will contribute towards the applied field of psychology.

Statement of Hypotheses

1. There will be a positive correlation between academic stress and measures of psychological well-being, (depression and anxiety) of remedial students.

2a. There will be a positive correlation between academic performance (students’ aggregate) and psychological well-being.

2b. Academic self-efficacy will moderate the relationship between academic performance (students’ aggregate) and psychological well-being.

3. Perceived social support will moderate the effect of academic stress on the psychological well-being of remedial students.

4. Africultural coping will moderate the effect of academic stress on the psychological well-being of remedial students.

5. Socio-economic status and Gender will moderate the relationship between academic stress and psychological well-being.

6. Female students are will have poorer psychological well-being than male students.
Academic Stress, Academic Performance and Psychological Well-Being

Conceptual model

Agricultural Coping
Social Support
Gender
Socio-economic status

Academic Stress

Academic Performance

Psychological Well-being

Academic self-efficacy
Operational Definition of Terms

- A Remedial student according to this research is a former Senior High School student who is re-writing a WASSCE paper or more.

- WASSCE aggregate is defined by the sum of the eight subjects (four core courses and four elective courses) taken by the student. The grades range from A1, B2, B3, C4, C5, C6, D7, E8 to F 9. To calculate the aggregate, the number attached to each grade is added up. This gives the WASSCE aggregate.

- A failed paper is one where the students scored a grade of D7, E8 or F9 according to the cut off pint for tertiary institutions by the National Council for tertiary education.

- Academic performance is defined based of the overall aggregate of a student. It is the sum of the grades the students scored in the eight subjects they studied.

- Africultural coping refers to using aspects of the African culture in coping with stress as measured by the Africultural Coping Scale Inventory developed by Utsey, Adams, and Bolden (2000).

- Psychological well-being is defined based on the depression and anxiety scores of the DASS-42 scale, by Lovibond and Lovibond, (1995).

- Social support refers to perceived care, assistance and empathy from family, friends and significant others as measured by the Multidimensional Scale of Perceived Social Support by Zimet, Dahlem, Zimet and Farley, (1988).
CHAPTER THREE

METHODOLOGY

Introduction

This chapter discusses the methodology of this study. It includes information on the population, sample, sampling technique, measures used in the study, the research design and procedure of the study.

Population

The population of this study consists of SHS remedial students in the Greater Accra Region of Ghana. The Greater Accra region was chosen because it comprises students from other parts of the country who have migrated to further their education. As such, the sample collected from this region will be from diverse backgrounds.

Sample and Sampling Technique

Participants were drawn from two remedial schools in Accra, Ghana. These are the Action Progressive Institute, Madina and Ideal College, Dansoman. These remedial schools were chosen because they have a large SHS remedial student population. Each of these schools has about (250) two hundred and fifty remedial students. Therefore, participants drawn from these institutions are more likely to be representative of the population of SHS remedial students in the Greater Accra Region. The convenience sampling technique, a non-probability sampling technique was used in selecting the respondents. This is because at each school, the researcher approached students and asked those willing to participate to fill the questionnaire.
A sample size of two hundred (200) was used in the study. One hundred (100) participants were recruited from each of the two remedial schools. The sample size is based on the minimum sample size determination offered by Field (2009). It takes into account the effect size as well as the statistical power at which effects can be detected. It relates to the minimum sample sizes and the expected performance of multiple regression analysis.

It explains that for a medium effect size and high level of statistical power, a minimum of two hundred (200) sample size is required. Based on this sample size determination therefore, the sample size of two hundred (200) is the appropriate sample size to use.

**Inclusion Criteria**

1. Remedial Students ranging from 18 to 25 years.
2. Remedial Students preparing to re-write the WASSCE.
3. Remedial students in one of the selected schools.
4. Remedial students willing to participate.

**Exclusion criteria**

1. Remedial students below the age of 18 and above the age of 25.
2. Remedial students not in one of the selected schools.
3. Remedial students unwilling to participate.
Measures/Instruments

Demographic data

A self-designed questionnaire was used to collect demographic data of the students. This was to gather information on age, gender, religion, socio-economic status, program of study and WASSCE aggregate. The WASSCE aggregate is defined by the sum the eight subjects (four core courses and four elective courses) taken by the student. The grades range from A1, B2, B3, C4, C5, C6, D7, E8 to F9. To calculate the aggregate, the number attached to each grade is added up. This gives the WASSCE aggregate.

Multidimensional Scale of Perceived Social Support (MSPSS)

Social support was assessed with the Multidimensional Scale of Perceived Social Support (MSPSS) which was developed by Zimet, Dahlem, Zimet and Farley (1988). This scale consists of 12 items measuring perceived social support from the family, friends and significant others. Each item is measured on a 7-point likert scale ranging from 1 (very strongly disagree) to 7 (very strongly agree). In non-clinical sample, internal consistencies of the subscale and total subscales are good. Cronbach’s alphas range from .85 - .91 and in clinical sample, cronbach’s alpha ranged from .92 - .94. It also has strong test-retest reliability over a 2 to 3 month interval ($r = .72$ to $.85$) (Zimet et al., 1988). For this study, a Cronbrach’s alpha of .89 was reported for the whole scale. The family, friends and others subscales reported Cronbrach’s alpha of .85, .81 and .80 respectively.

Sample items include item 3, “My family really tries to help me”, and item 6, “My friends really try to help me”. Scores on the MSPSS range from seven (7) to eighty-four (84). Higher scores represent higher levels of perceived social support and lower scores represents lower levels of perceived social support.
Depression Anxiety Stress Scale (DASS-42)

The Psychological well-being was measured using the 42-item self-report of the Depression Anxiety Stress Scale (DASS-42). However, for this study, only the depression and anxiety subscales were used in order to assess depression and anxiety. The Depression, Anxiety, Stress Scales DASS-42 was developed by researchers at the University of New South Wales, Australia, (Lovibond & Lovibond, 1995).

It was used to access emotional disturbance among people from the ages of 17 to 69. It was developed with the aim of isolating and identifying the degree of severity of the main symptoms of depression, anxiety and stress. The DASS-42 consists of three subscales. Each subscale consists of 14 items that measure stress, depression, and anxiety. The depression subscale assesses dysphoria, hopelessness, devaluation of life, self-depreciation, amotivation and anhedonia. The anxiety subscale assesses autonomic arousal, situational anxiety and subjective experience of anxiety. Each item is scored from 0 (did not apply to me at all) to 3 (applied to me very much, or most of the time) in terms of how much the item applied within the past week.

In the normative sample, reliability in terms of Cronbach's alpha for each scale was Depression scale, .91, the Anxiety scale, .84 and the Stress scale, .90 (Lovibond & Lovibond, 1995). Cronbach’s alpha in the present study was .83 for total scale and .72 for both depression and anxiety subscales. Higher scores indicate increasing levels of depression and anxiety.

Sample item measuring anxiety included “I had a felt scared without any good reason”. Sample item measuring depression included “I felt sad and depressed”.

54
Scores on the depression subscale range from zero (0) to forty-two (42). Higher scores represent higher levels of depression while lower scores represent lower levels of depression. Normal depression ranges from zero (0) to nine (9), Mild depression ranges from ten (10) to thirteen (13), Moderate depression ranges from fourteen (14) to twenty (20), Severe depression ranges from twenty-one (21) to twenty-seven (27) and Very Severe depression ranges from twenty-eight (28) to forty-two (42).

Scores on the anxiety subscale range from zero (0) to forty-two (42). Higher scores represent higher levels of anxiety while lower scores represents lower levels of anxiety. Normal anxiety ranges from zero (0) to seven (7), Mild anxiety ranges from eight (8) to nine (9), Moderate anxiety ranges from ten (10) to fourteen (14), Severe anxiety ranges from fifteen (15) to nineteen (19) and Very Severe anxiety ranges from twenty (20) to forty-two (42).

**Student-Life Stress Inventory (SLSI)**

The Student-Life Stress Inventory (SLSI) was developed by Gadzella (1994) to measure academic stress. It is a fifty-one (51) item questionnaire with two sections. The first section is made of twenty-three (23) items that measure academic stressors. This is further divided into five subscales; frustrations (7 items), conflicts (3 items), pressures (4 items), changes (3 items), and self-imposition (6) items. For this research, only the first section measuring academic stressors was used. The second section with twenty-eight (28) items measures reactions to stressors with four subscales (physiological, emotional, behavioural, and cognitive appraisal).
Gadzella (1994) reported a Cronbach’s alpha of .76 for the total SLSI. Cronbach’s alpha in the present study was .80 for the total academic stressors scale. The Cronbach’s alpha for the frustrations, conflicts, pressures, changes, and self-imposition subscales are .72, .85, .74, .72 and .75 respectively.

Each item is measured on a 5-point Likert scale response; 1 = never, 2 = seldom, 3 = occasionally, 4 = often, and 5 = most of the time. Sample items include “Rapid unpleasant changes” and “Change which disrupted my life and or goals” (Gadzella, 1994). Higher scores represent higher levels of academic stress and lower scores represents lower levels of academic stress. Scores range from twenty-three (23) to One hundred and fifteen (115).

**Africultural Coping Systems Inventory (ACSI)**

The Africultural Coping Systems Inventory (ACSI) was used in this study to measure coping. The Africultural Coping Systems Inventory (ACSI) was developed by Utsey, Adams, and Bolden (2000). It was designed to measure coping from an African-American perspective.

It is a 30-item, self-report, that focuses on culture-specific coping behaviours employed by people of Africans descent. It is measured on a 4-point, Likert scale of 0 = does not apply or did not use, 1 = used a little, 2 = used a lot, 3 = used a great deal.

The ACSI consists of four subscales: Cognitive Emotional Debriefing (11 items), Spiritual-Centered (SC) (8 items), Collective Coping (8 items) and Ritual-Centered Coping (3 items). It has strong internal consistency based on the Cronbach’s alpha ranging from .71 to .80 for the four ACSI subscales.
Academic Stress, Academic Performance and Psychological Well-Being

For this study, the ritual subscale was not used because it had a low Cronbach’s alpha in the pilot study. For this study, a Cronbach’s alpha of .89 was reported for the total scale. For the Cognitive Emotional Debriefing, Spiritual-Centered and Collective Coping subscales, Cronbach’s alpha of .81, 0.79 and .77 were reported respectively.

It contains items such as “Prayed that things would work themselves out” and “Got a group of family or friends together to help with the problem” (Utsey, Adams, & Bolden, 2000). Higher scores represent higher levels of africultural coping and lower scores represents lower levels of africultural coping. Scores range from zero (0) to ninety (90).

**Academic Self-Efficacy Scale**

The Academic Self-Efficacy Scale was developed by Chemers et al. (2001) to measure academic self-efficacy. This scale measures academic self-efficacy. The scale consists of 8 items on a 7 point Likert-type scale from 1 (Very Untrue) to 7 (Very True). It has been reported to have a Cronbach’s alpha reliability coefficient of 0.81 in an undergraduate population and a high validity. For this study, a Cronbach’s alpha of 0.88 was reported.

A sample of the item includes “I know how to schedule my time to accomplish my tasks” (Chemers et al., 2001). Higher scores represent higher levels of academic self-efficacy and lower scores represents lower levels of academic self-efficacy. Scores on the Academic Self-Efficacy Scale range from seven (7) to forty-nine (49).
Pilot study

A pilot study was conducted to determine the reliability of the scales to be used in this study. This was also to provide insight on the procedure for the administration of the questionnaires. It was conducted by administering the research questionnaires on 20 SHS remedial students at the Premier Link Remedial School. The Cronbach’s alpha (Internal Consistency) was calculated for each of scale and their subscales. The (SLSI) had a Cronbach’s alpha of .80. The Academic self-efficacy scale also has a Cronbach’s Alpha of .88 while the DASS-42 also has a Cronbach’s alpha of .83. The (ACSI) also has a Cronbach’s alpha of .89 while the (MSS) has a Cronbach’s alpha of .89 (see table 1).

Research design

Since this study sought to obtain self-report information about academic stress and psychological well-being of remedial students, the most appropriate design for this study is the cross-sectional survey design.

Procedure for data collection

Ethical clearance for this study was sought form the Ethics Committee for Humanities. Thereafter, a letter of introduction was acquired from the Department of Psychology, University of Ghana, and delivered to the heads of the selected institutions to seek permission to conduct the study. Informed consent was also sought from the participants before administering the questionnaires. Questionnaires were administered to students in their class rooms during a free period while others were administered to the students after a class. Each questionnaire took between eighteen (18) and twenty-five (25) minutes to complete. Confidentiality was assured by ensuring anonymity thus, preventing students from being identified as individuals. Answered questionnaires were also kept at a safe location.
Academic Stress, Academic Performance and Psychological Well-Being

Participation and withdrawal for this study was voluntary and there was limited or no risk to participating in this study.

The data collection at Ideal college and Action Progressive Institute lasted for a week at each of the locations. Two hundred (200) questionnaires were administered but one hundred and eighty-two (182) qualified to be used in the study. The eighteen (18) of the questionnaires were incomplete and could not be used for analysis. Completed questionnaires were then analysed.
CHAPTER FOUR

RESULTS

This chapter reports the findings of this study. In all, six hypotheses were analysed with their appropriate statistical test. The analysis was carried out with the SPSS (Statistical Package for Social Science) version 20.0. The results from the analyses are presented in their respective tables. Additional findings otherwise not included in the hypothesis but relevant to the discussion are briefly highlighted.

Data analyses

Preliminary analysis

Preliminary analysis was conducted. This involved the calculation of the mean and standard deviation of study variables. Furthermore, the normality of these variables were analysed by checking for skewness, kurtosis and outliers. The analysis revealed that all the variables were normally distributed. Tabachnick and Fidell (2013) explain that when the value of skewness and kurtosis ranges between +/- 1.5, it is normally distributed. A few outliers were also identified and were transformed by using the procedure recommended by Tabachnick and Fidell (2013) in order to control deviant scores and yet maintain the true characteristics of the scores. Descriptive analyses of demographic variables were also carried out and are described in this chapter. For the regression analysis, in order to deal with multicollinearity, the continuous independent (academic stress) and moderating variables (social support and agricultural coping) were centered before the analysis was conducted. Furthermore, categorical moderating variables, (gender and socio-economic status) were dummy coded before running the regression analysis.
**Table 1**

Cronbach’s alpha ($\alpha$), Means, Standard Deviation, Skewness and Kurtosis of the various Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>$N$</th>
<th>Cronbach’s $\alpha$</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Self-efficacy</td>
<td>182</td>
<td>.88</td>
<td>41.22</td>
<td>10.94</td>
<td>-.75</td>
<td>.09</td>
</tr>
<tr>
<td>SLSI</td>
<td>182</td>
<td>.80</td>
<td>64.06</td>
<td>14.56</td>
<td>.03</td>
<td>-.46</td>
</tr>
<tr>
<td>SLSI Subscales</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frustration</td>
<td>182</td>
<td>.72</td>
<td>17.78</td>
<td>5.12</td>
<td>.12</td>
<td>-.50</td>
</tr>
<tr>
<td>Conflict</td>
<td>182</td>
<td>.85</td>
<td>6.62</td>
<td>3.08</td>
<td>.64</td>
<td>-.31</td>
</tr>
<tr>
<td>Pressure</td>
<td>182</td>
<td>.74</td>
<td>11.29</td>
<td>4.12</td>
<td>.21</td>
<td>-.54</td>
</tr>
<tr>
<td>Changes</td>
<td>182</td>
<td>.72</td>
<td>7.50</td>
<td>3.08</td>
<td>.43</td>
<td>-.40</td>
</tr>
<tr>
<td>Self-imposed</td>
<td>182</td>
<td>.75</td>
<td>20.98</td>
<td>5.24</td>
<td>-.10</td>
<td>-.63</td>
</tr>
<tr>
<td>Social Support</td>
<td>182</td>
<td>.89</td>
<td>52.83</td>
<td>17.02</td>
<td>-.59</td>
<td>-.23</td>
</tr>
<tr>
<td>MSS Subscales</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>182</td>
<td>.85</td>
<td>18.55</td>
<td>7.46</td>
<td>-.48</td>
<td>-1.03</td>
</tr>
<tr>
<td>Friends</td>
<td>182</td>
<td>.81</td>
<td>14.91</td>
<td>6.11</td>
<td>.05</td>
<td>-.72</td>
</tr>
<tr>
<td>Others</td>
<td>182</td>
<td>.80</td>
<td>19.39</td>
<td>6.98</td>
<td>-.58</td>
<td>-.68</td>
</tr>
<tr>
<td>DASS</td>
<td>182</td>
<td>.83</td>
<td>26.25</td>
<td>13.68</td>
<td>.49</td>
<td>-.57</td>
</tr>
<tr>
<td>DASS Subscales</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>182</td>
<td>.72</td>
<td>14.02</td>
<td>7.60</td>
<td>.42</td>
<td>-.42</td>
</tr>
<tr>
<td>Anxiety</td>
<td>182</td>
<td>.72</td>
<td>12.23</td>
<td>7.15</td>
<td>.65</td>
<td>-.26</td>
</tr>
<tr>
<td>Africultural coping</td>
<td>182</td>
<td>.89</td>
<td>36.54</td>
<td>12.33</td>
<td>.51</td>
<td>-.20</td>
</tr>
<tr>
<td>Subscales</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive</td>
<td>182</td>
<td>.81</td>
<td>14.66</td>
<td>5.80</td>
<td>.13</td>
<td>-.21</td>
</tr>
<tr>
<td>Emotional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spiritual</td>
<td>182</td>
<td>.79</td>
<td>11.89</td>
<td>4.97</td>
<td>.43</td>
<td>-.33</td>
</tr>
<tr>
<td>Collective</td>
<td>182</td>
<td>.77</td>
<td>9.94</td>
<td>4.70</td>
<td>.20</td>
<td>-.40</td>
</tr>
</tbody>
</table>
Demographic Characteristics of Respondents

First, a summary of the background characteristics of all respondents are presented. There were one hundred and eighty-two (182) SHS remedial students in all. These included one hundred and seven (107) females and seventy-five (75) males. A large number of the participants, one hundred and sixty-three (163), were Christians while nineteen (19) were Muslims. In terms of age, twenty-seven (27) of the students were 18 years, forty-four (44) were 19, thirty-three (33) were 20 years, fifteen (15) were 21 years, seventeen (17) were 22 years, sixteen (16) were 23 years, four (4) were 24 years and ten (10) were 25 years. In terms of the programme of study, forty-eight (48) studied General Arts, thirty-two (32) studied Business, three (3) studied Agricultural Science, twenty-three (23) studied Home Economics, six (6) studied Visual Arts, sixty-seven (67) studied General Science and three (3) did not provide their programme of study. In terms of socio-economic status, thirty-two (32) were from Low income background while sixty-one (61) were from a Low Middle income, forty-seven (47) were from the High Middle income background and twenty-four (24) were from a High income background and eighteen (18) did not provide their socio-economic status. In terms of students’ aggregate, forty-three (43) had aggregate 20-29, forty-eight (48) had aggregate 30-39, thirty-nine (39) had aggregate 40-49, ten (10) had aggregate 50-60 and forty-two (42) did not provide their aggregate.
Table 2

Demographic Characteristics of the SHS remedial students in the Study

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N (%)</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>75 (1.2%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>107 (58.8%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Religion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christian</td>
<td>163 (89.6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muslim</td>
<td>19 (10.4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>0 (0%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Program</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Arts</td>
<td>48 (26.4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>32 (17.6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural Science</td>
<td>3 (1.6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home Economics</td>
<td>23 (12.6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visual Arts</td>
<td>6 (3.3%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Science</td>
<td>67 (36.8%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>3 (1.6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td>20.39</td>
<td>2.01</td>
</tr>
<tr>
<td>Age Categories</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-21</td>
<td>120 (65.9%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22-25</td>
<td>45 (24.7%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>17 (9.3%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Socio-economic Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low income</td>
<td>32 (17.6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Middle income</td>
<td>61 (33.5%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Middle income</td>
<td>47 (25.8%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High income</td>
<td>24 (13.2%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>18 (9.9%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggregate Categories</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>----------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-29</td>
<td>43 (23.6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30-39</td>
<td>48 (26.4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40-49</td>
<td>39 (21.4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-60</td>
<td>10 (5.5%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>42 (23.1%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Aggregate 35.45 9.27
Hypothesis Testing

Six hypotheses were tested. Hypothesis one and two were tested with the Pearson product-moment correlation coefficient. For the first hypothesis, the Pearson product-moment correlation coefficient was used in order to examine the direction and the strength of the relationship between academic stress and psychological well-being (Depression and anxiety scores). For the second hypothesis, the Pearson product-moment correlation coefficient was also used because in order to examine the direction and the strength of the relationship between academic performance (students’ aggregate) and psychological well-being.

Hypotheses three, four and five were analysed with the Hierarchical Multiple Regression. This statistical test was used to analyse hypothesis three in order to find the moderation effect of social support on the relationship between academic stress and psychological well-being. Hierarchical Multiple Regression analyses was also used for hypothesis four in order to find the moderation effect of africultural coping on the relationship between academic stress and psychological well-being. Hierarchical Multiple Regression analyses was also used for hypothesis five in order to find the moderation effect of the participant’s demographic variables (sex, and socio-economic status) on the relationship between academic stress and psychological well-being.

Lastly, the independent t-test was used to analyse hypothesis six in order to examine the difference between two groups, (male and female) one a dependent variable, psychological well-being.
Hypothesis One

Hypothesis one stated there is likely to be a positive relationship between academic stress and the psychological well-being (Depression and anxiety scores) of remedial students (see table 3 below).

Table 3

*Correlation Matrices of Depression, Anxiety, Psychological well-being, Academic stress, Academic self-efficacy and Aggregate*

<table>
<thead>
<tr>
<th>VAR</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dep</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anx</td>
<td>.73**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DASS</td>
<td>.93**</td>
<td>.93**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSI</td>
<td>.32**</td>
<td>.19*</td>
<td>.27**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGG</td>
<td>-.02</td>
<td>.04</td>
<td>-.01</td>
<td>-.03</td>
<td></td>
</tr>
</tbody>
</table>

Note: VAR- Variable, 1.Dep-Depression, 2.Anx-Anxiety, 3.DASS-Psychological well-being, 4.SSI-Academic stress, 5.AGG-Aggregate *p< .05, **p< .01

From the correlation matrix above, the results indicate that a positive relationship exists between academic stress and Psychological well-being (depression and anxiety scores), \( r (182) = .27, p<.01 \). Further analysis revealed a significant relationship between academic stress and specific psychological well-being variables, that is depression;

\[ r (182) = .32, p <.01 \text{ and Anxiety}; \ r (182) = .19, p<.05. \]

Therefore, the hypothesis that there is likely to be a positive relationship between academic stress and the psychological well-being of remedial students is supported. It should be noted that increasing scores on the DASS indicates poorer psychological well-being.
Hypothesis two

Hypothesis two (a) stated that there is likely to be a positive relationship between academic performance (students’ aggregate) and psychological well-being.

From the correlation matrix above, the results indicate that no significant relationship exists between academic performance (students’ aggregate) and Psychological well-being, $r (140) = -.01, p >.01$.

Therefore, the hypothesis that there is likely to be a positive relationship between academic performance (students’ aggregate) and the psychological well-being of remedial students is not supported. Therefore, there was no need for further moderation analysis as suggested by Barron and Kenny (1996) that in testing for moderation effect, the predictor and criterion variables should be related significantly.
Hypothesis Three

Hypothesis three stated that social support is likely to moderate the relationship between academic stress and psychological well-being (see table 4 below).

Table 4

Summary of hierarchical multiple regression for the moderating role of social support in the relationship between academic stress and psychological well-being.

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>SEB</th>
<th>B</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>26.25</td>
<td>.96</td>
<td>27.13</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>SLSI</td>
<td>.29</td>
<td>.07</td>
<td>.31</td>
<td>4.35</td>
<td>.00</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>26.25</td>
<td>.97</td>
<td>27.06</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>SLSI</td>
<td>.31</td>
<td>.07</td>
<td>.31</td>
<td>4.38</td>
<td>.00</td>
</tr>
<tr>
<td>Social Support</td>
<td>-.02</td>
<td>.06</td>
<td>-.03</td>
<td>-.26</td>
<td>.80</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>26.29</td>
<td>.97</td>
<td>26.91</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>SLSI</td>
<td>.29</td>
<td>.07</td>
<td>.31</td>
<td>4.17</td>
<td>.00</td>
</tr>
<tr>
<td>Social Support</td>
<td>-.02</td>
<td>.06</td>
<td>-.03</td>
<td>-.35</td>
<td>.73</td>
</tr>
<tr>
<td>SLSI*</td>
<td>-.00</td>
<td>.01</td>
<td>-.08</td>
<td>-.22</td>
<td>.83</td>
</tr>
</tbody>
</table>

Dependent Variable: Psychological well-being. $R^2 = .10, .10, .10$ and $\Delta R = .10, .00, .00$, for step 1, 2 & 3 respectively.
Hierarchical regression analysis was conducted to analyse the moderating role of social support in the relationship between academic stress and psychological well-being. Following the appropriate procedure by Baron and Kenny, (1986), the independent (academic stress) and moderator variable (social support) were centered before analysis was carried out. This was followed by calculating the product term from the centered variables.

Academic stress was positively related to measures of psychological well-being (Depression and anxiety), $\beta = .31, t(182)=4.17, p = .00$. Social support was unrelated to psychological well-being after controlling for academic stress $\beta = -.03, t(182)=-.35, p = .73$). The relationship between academic stress and psychological well-being was not moderated by social support $\beta = -.08, t(182)=-.22, p = .83$).

Social support did not significantly predict psychological well-being. Hence, social support did not influence the relationship between academic stress and psychological well-being. Therefore the hypothesis that social support is likely to moderate the relationship between academic stress and psychological well-being was not supported (See figure 1).

Figure 1

The moderating role of social support on the relationship between academic stress and psychological well-being.
Hypothesis four

Hypothesis four stated that africultural coping is likely to moderate the relationship between academic stress and psychological well-being (see table 5 below).

Table 5

Summary of hierarchical multiple regression for the moderating role of africultural coping in the relationship between academic stress and psychological well-being.

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>26.25</td>
<td>.97</td>
<td>27.13</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>SLSI</td>
<td>.30</td>
<td>.07</td>
<td>.31</td>
<td>4.34</td>
<td>.00</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>26.25</td>
<td>.97</td>
<td>27.07</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>SLSI</td>
<td>.29</td>
<td>.07</td>
<td>.31</td>
<td>4.27</td>
<td>.00</td>
</tr>
<tr>
<td>ASCI</td>
<td>.03</td>
<td>.08</td>
<td>.03</td>
<td>.37</td>
<td>.71</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>26.42</td>
<td>.97</td>
<td>27.24</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>SLSI</td>
<td>.29</td>
<td>.07</td>
<td>.31</td>
<td>4.27</td>
<td>.00</td>
</tr>
<tr>
<td>ASCI</td>
<td>.04</td>
<td>.08</td>
<td>.04</td>
<td>.54</td>
<td>.59</td>
</tr>
<tr>
<td>SLSI* ASCI</td>
<td>-.01</td>
<td>.01</td>
<td>-.12</td>
<td>-1.70</td>
<td>.09</td>
</tr>
</tbody>
</table>

Dependent Variable: Psychological well-being. $R = .31, .31, .33, and \Delta R^2 = .10, .00, .02,$ for step 1, 2 and 3 respectively.
Hierarchical regression analysis was conducted to analyse the moderating role of africultural coping in the relationship between academic stress and psychological well-being. Following the appropriate procedure by Baron and Kenny, (1986), the independent (academic stress) and moderator variable (africultural coping) were centered before analysis was carried out. This was followed by calculating the product term from the centered variables.

Academic stress was positively related to measures of psychological well-being (Depression and anxiety), $\beta = .31, t(182)=4.27, p=.00)$. Africultural coping was unrelated to psychological well-being after controlling for academic stress $\beta = .04, t(182)=.54, p = .59)$. The relationship between academic stress and psychological well-being was not moderated by africultural coping $\beta = -.12 t(182)= -1.70 , p = .09)$. Therefore, africultural coping did not significantly predict psychological well-being.

Hence, the africultural coping did not influence the relationship between academic stress and psychological well-being. Therefore the hypothesis that africultural coping is likely to moderate the relationship between academic stress and psychological well-being was not supported (See figure 2)

Figure 2
The moderating role of social support on the relationship between academic stress and psychological well-being.
Hypothesis five

Hypothesis five stated that sex, and socio-economic status are likely to moderate the relationship between academic stress and psychological well-being (see table 6 below).

Table 6

Summary of Hierarchical multiple regression analysis of the moderation role of sex, and socio-economic status on the relationship between academic stress and psychological well-being.

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>SEB</th>
<th>B</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>26.25</td>
<td>.97</td>
<td>27.42</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>SLSI</td>
<td>.29</td>
<td>.07</td>
<td>.31</td>
<td>4.45</td>
<td>.00</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>24.25</td>
<td>2.01</td>
<td>12.07</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>SLSI</td>
<td>.30</td>
<td>.07</td>
<td>.32</td>
<td>4.57</td>
<td>.00</td>
</tr>
<tr>
<td>Sex</td>
<td>5.29</td>
<td>1.95</td>
<td>.19</td>
<td>2.72</td>
<td>.01</td>
</tr>
<tr>
<td>SES</td>
<td>- .80</td>
<td>1.05</td>
<td>-.05</td>
<td>-.76</td>
<td>.45</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>24.35</td>
<td>2.02</td>
<td>12.06</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>SLSI</td>
<td>.28</td>
<td>.13</td>
<td>.30</td>
<td>2.10</td>
<td>.04</td>
</tr>
<tr>
<td>Sex</td>
<td>5.42</td>
<td>1.96</td>
<td>.20</td>
<td>2.77</td>
<td>.01</td>
</tr>
<tr>
<td>SES</td>
<td>-.90</td>
<td>1.06</td>
<td>-.06</td>
<td>-.85</td>
<td>.40</td>
</tr>
<tr>
<td>SLSI*Sex</td>
<td>.15</td>
<td>.15</td>
<td>.13</td>
<td>1.03</td>
<td>.30</td>
</tr>
<tr>
<td>SLSI*SES</td>
<td>-.06</td>
<td>.07</td>
<td>-.11</td>
<td>-.87</td>
<td>.39</td>
</tr>
</tbody>
</table>

Dependent Variable: Psychological well-being. $R^2 = .31, .37, .37$ and $\Delta R^2 = .10, .04, .01$, for step 1, 2 and 3 respectively.
Hierarchical regression analysis was conducted to analyse the moderating role of gender and socio-economic status in the relationship between academic stress and psychological well-being. Following the appropriate procedure by Baron and Kenny, (1986), the independent (academic stress) and moderator variable (African cultural coping) were centered before analysis was carried out. This was followed by calculating the product term from the centered variables (Baron & Kenny, 1986).

Academic stress was positively related to measures of psychological well-being (Depression and anxiety), $\beta = .30, t(182)=2.10, p = .04$. Gender was related to psychological well-being after controlling for academic stress $\beta = .20, t(182)=2.77, p = .01$. Socio-economic status was unrelated to psychological well-being after controlling for academic stress $\beta = -.06, t(182)=-.85, p = .40$.

The relationship between academic stress and psychological well-being was not moderated by Gender $\beta = .09, t(182)=.64, p = .52$. The relationship between academic stress and psychological well-being was not moderated by Socio-economic status $\beta = -.11, t(182)=-.87, p = .39$.

Hence, sex and socio-economic status did not significantly predict psychological well-being. Sex, and socio-economic status did not influence the relationship between academic stress and psychological well-being. Therefore the hypothesis that sex and socio-economic status will moderate the relationship between academic stress and psychological well-being was not supported (See figure 3 and 4).
Figure 3
The moderating role of Gender on the relationship between academic stress and psychological well-being.

![Moderating Role of Gender](image)

Figure 4
The moderating role of socio-economic status on the relationship between academic stress and psychological well-being.

![Moderation role of Socio-economic status](image)
Hypothesis Six

Hypothesis six stated that female remedial students are more likely to have poorer psychological well-being than male remedial students (see table 7 below).

Table 7

A summary of independent t-test analysis on DASS scores of female and male remedial students.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>S</th>
<th>df</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female DASS score</td>
<td>107</td>
<td>27.84</td>
<td>15.38</td>
<td>180</td>
<td>2.32</td>
<td>.01</td>
</tr>
<tr>
<td>Male DASS scores</td>
<td>75</td>
<td>22.95</td>
<td>11.85</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < 0.05

Results indicate, there is a significant difference in psychological well-being scores among the females (M =27.84, SD=15.38) and males (M=22.95, SD=11.85); (180) = 2.32, p = .01. Therefore, the hypothesis that female remedial students are more likely to have poorer psychological well-being than male remedial students was supported.

It should be noted that increasing scores on the DASS indicates poorer psychological well-being.
Summary of study’s findings

The study found that academic stress is positively related to symptoms of depression and anxiety. This implies that increasing levels of academic stress is related to poorer psychological well-being. The study also found that academic performance (students’ aggregate) is not significantly related to psychological well-being. Social support, aficultural coping, sex and socio-economic status did not moderate the relationship between academic stress and psychological well-being. Gender differences were found in psychological well-being. Females had poorer psychological well-being than males.

Additional findings

Below is a statement of additional findings relevant to the discussion of research findings.

The findings are presented in a correlation Matrix (see Appendix 1)

1. A significant positive relationship exists between social support subscale, others and academic stress.

2. A significant relationships exists between social support and academic stress subscale, Self-imposed.

3. A significant relationships exists between social support and academic stress subscales, Pressure.

4. A significant negative relationship exists between academic self-efficacy and academic performance (students’ aggregate).
The model demonstrates the academic stress is predictive of psychological well-being. Africultural coping, social support, socio-economic status and gender did not moderate the relationship between academic stress and psychological well-being. Academic performance (students’ aggregate) did not have a significant relationship with psychological well-being as such, academic self-efficacy did not play a moderating role.
CHAPTER FIVE
DISCUSSION

The aim of this study was to find the influence of academic stress on the psychological well-being of SHS remedial students in Ghana. Furthermore, the relationship between academic performance (students’ aggregate) and psychological well-being was also investigated. The moderating role of social support, africultural coping, gender, and socioeconomic status on the relationship between academic stress and psychological well-being were also investigated. Gender differences in psychological well-being were also discussed. The study found that academic stress is positively related to measures of psychological well-being, (depression and anxiety). There was no relationship between academic performance (students’ aggregate) and Psychological well-being. Social support, africultural coping, gender and socioeconomic variables did not moderate the relationship between academic stress and psychological well-being. Lastly, females had poorer psychological well-being than males. The study’s findings are further discussed in this chapter. The implications of the findings, recommendations for future studies, application of research findings and limitations of the study are also discussed.

Academic Stress and Psychological Well-being

The first hypothesis stated that there is likely to be a positive relationship between academic stress and the psychological well-being measures, depression and anxiety of SHS remedial students. This hypothesis was supported with academic stress being positively related to depression and anxiety scores. This implies that as academic stress increases, depression and anxiety also increase.
This finding is consistent with previous literature. Skead and Rogers (2014), for instance, found a strong positive correlation between stress, anxiety and depression. Similarly, Cole and others (2014) found that among Ghanaian students, academic stress was positively associated with measures of psychological well-being (anxiety and depression). Chen and others (2013) also found a positive relationship between distress and academic stress.

This relationships may exist because stress is associated with negative behavioural patterns such as poor eating habits, sleeplessness, consumption of alcohol and difficulty concentrating (Ahmed, Al-Radhwan, Al-Azmi, Al-Beajan, 2014; Australian Psychological Association, 2012). Academic stress is also characterized by worrying about grades and a negative appraisal of the situation (Nguyen, Dedding, Pham & Bunders, 2013). These negative behaviour patterns are also associated with depression and anxiety and may help account for the positive relationship between academic stress and psychological well-being. Furthermore, these stressors threaten a person’s ability to cope and can then affect an individual’s well-being negatively (Comer, 2010). Furthermore, stressful life events such as poor academic performance, have been found to precede the development of anxiety and also leads to a decrease in self-esteem and an increase in depression (Joiner, Katz, and Lew 1999 & Mazure 1998).

Hence, the relationship between academic stress and psychological well-being may exist because they are characterised by negative behaviour patterns. Also, this relationship may be present in an SHS remedial student population because of the negative effect of the incidence of having to re-write the WASSCE. However, the strength of this relationship may grow weaker because of protective factors such as social support and coping abilities (Glozah, 2013; Lazarus and Folkman, 1984).
Academic Performance, Academic self-efficacy and Psychological Well-being

Hypothesis two (a) stated that there is likely to be a positive relationship between academic performance (students’ aggregate) and psychological well-being while hypothesis two (b) stated that academic self-efficacy will likely moderate the relationship between academic performance (students’ aggregate) and psychological well-being. Hypothesis two (a) was not supported and as such, no moderation analysis was conducted. Therefore, this implies that academic performance (students’ aggregate) is not related to psychological well-being.

This finding is contrary to literature. Research indicates that young adulthood is a period of building intimate relationships and a career. Hence, when faced with various impediments in their desire to accomplish tasks such as passing an examination, frustration sets in and this can affect the psychological well-being of young adults (Roisman, Masten, Coatsworth, & Tellegen, 2004). Consequently, when students perform poorly on the WASSCE, they may associate their academic challenges with failure and inability to meet goals (Porter, et al. 2011). These negative thoughts can also have a negative influence on psychological well-being of students (Nolen-Hoeksema, 2001).

However, the cognitive behaviour theory can be used to explain the lack of association between academic performance (students’ aggregate) and Psychological well-being. The cognitive behaviour theory explains that a negative life event can lead to poor psychological well-being when the individual engages in a distorted style of thinking. According to Beck (1967) for instance, depression occurs when a person holds negative representations of a situation such that focus is paid on sad and unfavorable information. As such, academic performance might not be related to psychological well-being because students may not be engaging in negative thought patterns.
There is therefore the need to investigate the role of various thought patterns on the relationship between academic performance and psychological well-being.

Furthermore, Ryff (1989) explained that an important component of Psychological wellbeing is self-acceptance. As such the students may have a positive attitude and are accepting of their strengths and weaknesses rather than focusing only on their inability to pass the WASSCE. This reinforces the Cognitive behavior theory that highlights the importance of positive thoughts and attitudes that promote psychological well-being.

The Moderating Role of Social Support

Hypothesis three stated that perceived social support is likely to moderate the effect of academic stress on the psychological well-being of remedial students. This hypothesis was not supported. This implies that when SHS remedial students are faced with stress, social support does not moderate or buffer the effect of the stress on their psychological well-being. This implies that among poor performing students such as SHS remedial students, social support does not buffer the impact of stress on the psychological well-being. Further analysis revealed that there is no significant relationship between academic stress and social support. However, academic stress is positively related to the social support subscale, others. In addition, a positive relationship exists between social support and the academic stress subscale, self-imposed. A positive relationship also exists between social support and academic stress subscale, pressure.

This finding was unexpected and is inconsistent with previous literature. In a Ghanaian study for instance, perceived social support buffered the relationship between academic stress and psychological well-being. As such, academic stress did not have a negative impact on the psychological well-being of the students because of the buffering role of social support (Glozah, 2013).
Halamanadris and Power (1999) also found that student’s ability to adjust to college life was largely dependent on their perceived social support.

Contrary to these findings, a study (Vasquez, 2010) found that social support was unable to reduce distress. The referenced study sought to examine whether social support will moderators and or mediate the relationship between acculturative stress and psychological distress in a Latino community sample. The results indicated that social support did not moderate the relationship between acculturative stress and psychological distress.

The reason for this current study’s finding may be because social support provided may not be directed at addressing the academic needs of the students. Furthermore, although the MSPSS is multidimensional, it may be limited in measuring social support directly related to academic issues. This is important as research indicates that every stressful situation requires social support tailored to meet those specific needs. Furthermore, if family, friends and others do not have the skills and experience needed to alleviate academic stress their support will have less influence in improving psychological well-being (Lakey & Cohen, 2000; Vasquez, 2010). Families also spend a lot of their resources in educating their wards and exert pressure on them to perform, gain employment and contribute towards the livelihood of their families. Furthermore, young adults also face peer pressure to match up to status attained by their peers (Porter, et al. 2011; Casely-Hayford, Arnot, Dovie & Salifu 2010).

Furthermore studies indicate that among African-American and African populations, in providing social support, families exert their will on their children. This restricts the activities of the children and influences them negatively. Also, the collectivist nature of these populations make family members share the concern of others.
As such, when a family member faces a challenge, this becomes a burden shared by other family members and this may also affect the well-being of other members of the family (Glozah, 2015; Chandra & Batada, 2006). As such, having social support can serve as a double edged sword, providing students with support and also exerting pressure on students.

Hence, there is the need for exploratory studies that seeks to understand the forms and content of social support directed at alleviating academic stress especially among poor performing students in Ghana. This will help explain this finding better.

The moderating role of Africultural coping

Hypothesis four stated that africultural coping style is likely to moderate the effect of academic stress on the psychological well-being of remedial students. Contrary to the study’s hypothesis, africultural coping did not moderate the relationship between academic stress and psychological well-being.

This finding seems to contradict that of other studies that have found africultural coping to be associated with reduction in the influence of stressors on an individual’s well-being. Utsey, Bolden, Lanier and Williams (2007) for instance found that culture-specific coping (spiritual and collective) was the strongest predictor of quality of life in comparison to traditional predictive factors of resilience, (family cohesiveness and adaptability). This finding is further supported by a study by Daly et al. (1995) who found that during stressful situations, African Americans, rely on group-derived ego strengths such as, family, community and social support networks. Robinson-Wood (2009) also found collective coping to be the primary means of coping used by college students when faced with stress.
However, consistent with the findings of this study, Greer (2011) also found that africultural coping did not moderate the relationship between race and gender discrimination and psychological symptoms in an African American women population. The study found that most of the participants used the cognitive emotional debriefing and this is less effective in dealing with the race and gender discrimination. Similarly, findings from this study indicates that overall, participants scored highest on the cognitive emotional coping strategy, followed by spiritual and the collective coping. This may help account for the inability of the africultural coping to moderate the relationship between academic stress and psychological well-being. The cognitive-emotional debriefing coping is also an africultural coping technique where an individual thinks of ways of managing their emotions in relation to their perception of an environmental stress (Utsey, Ponterotto, Reynolds, & Cancelli, 2000). In using this coping style, an individual distracts themselves from the stressful situation in order to reduce the emotions associated with the situation. This has been found to be a less effective means of coping with stress.

It is therefore important to conduct exploratory studies in order to understand coping strategies used by SHS remedial students in Ghana. This will help explain the lack of moderation in the relationship between academic stress and psychological well-being by the africultural coping. This finding can also be due to the inability of the Africultural Coping Systems Inventory to assess the most effective coping strategies used by the students.
The Moderating Role of Gender, and Socio-Economic Status

Furthermore, the fifth hypothesis stated that demographic variables (gender, and socio-economic status) will moderate the relationship between academic stress and psychological well-being. This hypothesis was not supported and is consistent with other literature. For instance, studies indicate that psychological issues account more for psychological well-being than socio demographic variables. In a study by Bjorkenstam, and others (2010), students with lower grades reported poorer psychological well-being than those with higher grades. This relationship existed despite adjustments to a range of possible confounders including family psychiatric illness, low family educational level, receipt of social welfare, being adopted or living in a lone parent household. (Lin & Yusoff, 2013) also indicated there was also no significant influence of gender, race, religion, stream of study, parent’s education level and occupation, parent relationship status, household income, and involvement in co-curricular activities towards stress level of high school students.

However, Kamal and Bener (2009) found psychological factors such as examination phobia, anxiety, anger, fear and learning disability accounted more for students’ well-being than socio-demographic variables. However, the findings is inconsistent with literature that have found academic stress to be related to socio-economic and demographic variables.

Glozah (2013) found that socio-economic status of the students had a significant effect on academic stress, with the significant effects on academic frustrations, self-imposition and academic pressures subscales of the SLSI. Mistry, Bener, Tan and Kim (2009) also found that youth perceptions of their family’s economic stress and financial constraints, affects students’ academic performance and emotional distress. This relationship grew stronger as students progressed from middle to high school.
Gender differences in Psychological well-being

Hypothesis five also stated that female students are more likely to have poorer psychological well-being than male students. This hypothesis was supported with females having poorer psychological well-being. This finding is consistent with previous literature. Glozah, (2013) found that females had higher depression and social dysfunction scores than males. In addition, Masi, Sbrana, Poli, Tomaiuolo, Favilla and Marcheschi (2000) found girls scoring higher on depression and school anxiety than boys. Furthermore, Caroli and Sagone (2013) found that girls reported lower psychological well-being than boys.

Gender differences in depression and anxiety have been attributed to biological and socialisation factors. Research indicates that humans are born with similar depression and anxiety readings. However, by adolescence differences become apparent with females scoring higher on anxiety and depression. This is partly because females have been found to engage in rumination more than males. Rumination has also been found to prolong and worsen affective symptoms.

Furthermore females have been found to be more expressive of their emotions than males and this may also account for gender differences in psychological well-being (Kessler et al., 1994; Nolen-Hoeksema, 2001).

Limitations of Current Study

Limitations of this study center around its purely quantitative nature, its inability to control for extraneous variables and challenges in data collection. This study employed a purely quantitative method approach. This is restrictive and does not allow participants to provide information that is not captured by the questionnaire.
Furthermore, the purely quantitative nature of the research limited the researcher’s ability to capture sources of academic stress, and coping strategies that may be peculiar to this population that were not captured by the questionnaires. This is especially important as the questionnaires like most others are not developed in western countries and may be limited in their ability to capture aspects of the African culture.

Another limitation of this study lies in the study’s design. The cross-sectional nature of the study limits the researcher’s control for extraneous variables. As such other factors such as biological and social conditions may contribute or account for the relationship between academic stress and psychological well-being. However, since biological, social and psychological factors are interrelated, it will be almost impossible to study them separately without considering the influence of the other. Furthermore, the study did not control for extraneous variables that could have influenced the finding of the study. In addition, the WASSCE score is only a single and static indicator of academic performance which may not paint a true picture of the student’s academic performance.

Furthermore, there were challenges with acquiring the students’ WASSCE aggregate. Some of the student’s expressed their unwillingness to provide this information. Furthermore, some of the students were disgruntled about the amount of questions being asked and time they had to spend answering the questionnaires. Some of these students did not take part in the research. In addition, some of the students who agreed to take part in the research got tired during the course of filling the questionnaires and turned in their questionnaires. Others continued and their tiredness could have led to errors in filling the questionnaire. In addition, the lack of incentives for completing the survey may have hindered the response rate.
Suggestion and Recommendations

It is recommended that future studies conduct qualitative studies in order to explore stressors of SHS remedial students and their coping strategies. This will provide a better understanding of the protective and risk factors associated with stress and psychological well-being among the remedial students population. Furthermore, future research should use probability sampling to ensure the sample is a representative sample of the population.

Furthermore, studies should also consider SHS students rewriting the WASSCE who are not attending any school but studying by themselves. This will allow for a comparison of those receiving tuition and those learning on their own on academic stress and psychological well-being. Furthermore, there is the need to study poor performing students at all levels of education in Ghana as education and the need to perform has received a lot of attention in recent years (Porter, et al. 2011).

Further studies should also seek the consent of students and acquire their WASSCE results from the school’s administration rather than relying on the student’s self-report. This will help to reduce participant bias. It is also recommended that tokens should be provided to participants in order to encourage participation.

It is also recommended that remedial schools in Ghana acquire the services of Counsellors, Clinical and Counselling Psychologists who will help meet the mental health needs of the students. Furthermore, it is recommended that mental health providers be prudent in suggesting the use of social support to alleviate the influence of academic stress on the psychological well-being of remedial students. To do so, there is the need to provide education on skills and techniques that is targeted at alleviating academic stress especially among poor performing students.
The findings of this study also indicates that academic self-efficacy is related to improved academic performance. As such it is important to develop academic self-efficacy among students in order to help improve their academic performance. This can be achieved by providing role models from whom students can learn form, providing exercises within students’ capabilities in order to help them acquire a sense of competence.

Conclusion

This study sought to investigate the relationship between academic stress and psychological well-being of SHS remedial students. Furthermore, the relationship between academic self-efficacy and academic performance (students’ aggregate) was also investigated. It also sought to find the moderating role of africultural coping, social support, gender, socioeconomic status in the relationship between academic stress and the psychological well-being of students in Accra.

The study found that academic stress is positively related to measures of psychological well-being, (depression and anxiety). However, academic self-efficacy did not moderate the relationship between academic stress and academic performance (students’ aggregate). Social support, africultural coping, gender and socioeconomic variables did not moderate the relationship between academic stress and psychological well-being. Lastly, females had poorer psychological well-being than males.
REFERENCES


Academic Stress, Academic Performance and Psychological Well-Being


Academic Stress, Academic Performance and Psychological Well-Being


Academic Stress, Academic Performance and Psychological Well-Being


Academic Stress, Academic Performance and Psychological Well-Being


Academic Stress, Academic Performance and Psychological Well-Being


Academic Stress, Academic Performance and Psychological Well-Being


Academic Stress, Academic Performance and Psychological Well-Being


### APPENDICES

**Appendix 1.**

*Correlation Matrix for Social Support, Academic stress, Self-efficacy, Students’ aggregate and Academic Self-efficacy*

<table>
<thead>
<tr>
<th>VA</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fam</td>
<td>1.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Frn</td>
<td>.48**</td>
<td>1.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Oth</td>
<td>.64**</td>
<td>.51**</td>
<td>1.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mds</td>
<td>.85**</td>
<td>.77**</td>
<td>.86**</td>
<td>1.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fra</td>
<td>-.12</td>
<td>.02</td>
<td>.00</td>
<td>-.03</td>
<td>1.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Con</td>
<td>-.11</td>
<td>.08</td>
<td>.08</td>
<td>.02</td>
<td>.32**</td>
<td>1.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pres</td>
<td>.10</td>
<td>.06</td>
<td>.20**</td>
<td>.15*</td>
<td>.41**</td>
<td>.31**</td>
<td>1.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cha</td>
<td>-.08</td>
<td>-.00</td>
<td>.08</td>
<td>.03</td>
<td>.51**</td>
<td>.40**</td>
<td>.40**</td>
<td>1.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SI</td>
<td>.19*</td>
<td>.16*</td>
<td>.20**</td>
<td>.23**</td>
<td>.36**</td>
<td>.09</td>
<td>.37**</td>
<td>.20**</td>
<td>1.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>AS</td>
<td>.02</td>
<td>.10</td>
<td>.16*</td>
<td>.10</td>
<td>.78**</td>
<td>.51**</td>
<td>.72**</td>
<td>.63**</td>
<td>.65**</td>
<td>1.00</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SE</td>
<td>.35**</td>
<td>.20**</td>
<td>.43**</td>
<td>.41**</td>
<td>.05</td>
<td>.04</td>
<td>.15*</td>
<td>.04</td>
<td>.27**</td>
<td>.17</td>
<td>1.00</td>
<td>-</td>
</tr>
<tr>
<td>Agg</td>
<td>.03</td>
<td>-.05</td>
<td>-.07</td>
<td>-.06</td>
<td>-.09</td>
<td>-.03</td>
<td>-.07</td>
<td>-.01</td>
<td>.01</td>
<td>-.03</td>
<td>-.19*</td>
<td>1.00</td>
</tr>
<tr>
<td>AC</td>
<td>.27**</td>
<td>.05</td>
<td>.17*</td>
<td>.03</td>
<td>.07</td>
<td>.09</td>
<td>.15*</td>
<td>.05</td>
<td>.11</td>
<td>.10</td>
<td>.23**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*Note: **= Significant at .01 alpha level, *= Significant at .05 alpha level.*

Appendix 2: Ethical Approval
Appendix 3: Participant Consent Form

UNIVERSITY OF GHANA
OFFICE OF RESEARCH, INNOVATION AND DEVELOPMENT
Ethics Committee for Humanities (ECH)

PROTOCOL CONSENT FORM

Section A- BACKGROUND INFORMATION

<table>
<thead>
<tr>
<th>Title of Study:</th>
<th>Title of Study: The Influence of Academic Stress and Academic Self-efficacy on The Psychological Wellbeing Of Senior High School Remedial Students in the Greater Accra region of Ghana.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator:</td>
<td>Beatrice Duncan-Williams</td>
</tr>
<tr>
<td>Certified Protocol Number</td>
<td></td>
</tr>
</tbody>
</table>

Section B– CONSENT TO PARTICIPATE IN RESEARCH

**General Information about Research**

You are invited to take part in a research that seeks to understand the influence of academic stress and academic self-efficacy on the psychological wellbeing of remedial students.

Participants in this study will have to answer five questionnaires that will be administered to students in their class room where it is quiet. They will also have ample time to respond to the questionnaire with minimal interference. This will take a maximum of an hour. Basic materials that are needed to complete the questionnaires such as pencils, sharpeners and erasers will be provided. All questionnaires will be collected after they are completed and sent to a central location. The researcher will be available to respond to any questions related to completing the questionnaires.
Benefits/Risk of the study

There will be no direct benefit or risk for taking part in this study. However, this study is important in understanding the role of academic stress on the psychological wellbeing of SHS Remedial students. It also emphasizes the role of protective factors such as agricultural coping, social support and academic self-efficacy in reducing the effect of the academic stress on the psychological wellbeing of students and in improving academic performance. Remedial students will therefore benefit from this information which will help improve their psychological wellbeing and academic performance.

Confidentiality

Confidentiality will be assured through anonymity, thus preventing participants from being identified as individuals. Answered questionnaires will also be kept at a safe location. This work is purely for academic purposes as such, data collected, may be used as part of publications and papers related to psychological wellbeing of students without identifying individual students.

This research will be conducted by the researcher who will have direct contact with the completed questionnaires.

Compensation

There is no compensation for taking part in this research. However, your participation will be very much appreciated.

Withdrawal from Study

Participation and withdrawal from this research is voluntary and comes with no penalties.

Contact for Additional Information

If you have any questions about the research, you can contact Beatrice Duncan-Williams
Email: beatrice.duncan@aiesec.net, phone: 0265227111
"I have read or have had someone read all of the above, asked questions, received answers regarding participation in this study, and am willing to give consent for me, my child/ward to participate in this study. I will not have waived any of my rights by signing this consent form. Upon signing this consent form, I will receive a copy for my personal records."

________________________________________________
Name of Volunteer

________________________________________________
Signature or mark of volunteer    Date

If volunteers cannot read the form themselves, a witness must sign here:

I was present while the benefits, risks and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the research.

________________________________________________
Name of witness

________________________________________________
Signature of witness    Date

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual.

________________________________________________
Name of Person who Obtained Consent

________________________________________________
Signature of Person Who Obtained Consent    Date
Appendix 4: Questionnaires

Appendix 4
Please answer the following questions. Tick the box where applicable.

1. SEX
   Male ☐   Female ☐

2. AGE…………………

3. RELIGION
   Christian ☐   Muslim ☐   Traditionalist ☐
   Other…………………

4. MONTHLY HOUSEHOLD INCOME
   700 Gh and below ☐
   800- 1200Gh ☐   1300- 1700Gh ☐   1800 Gh and above ☐

5. PROGRAMME OF STUDY
   General Arts ☐   Business ☐
   Agricultural Science ☐
   Economics ☐
   Home Economics ☐
   Visual Arts ☐
   General Science ☐

6. This is my 1st ☐ 2nd ☐ 3rd ☐ 4th and above ☐ time re-writing WASSCE

7. WASSCE AGGREGATE ……………
## Agricultural Coping Systems Inventory

*Instructions:* The statements below are intended to represent some of the ways people cope with stressful situations in their daily lives. Now keeping this situation in mind, please indicate the extent to which you used each of the strategies described below to help you cope with the stress you experienced. Please read each statement carefully, and use the scale below to indicate what best describes your experience.

<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Prayed that things would work themselves out</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>2</td>
<td>Got a group of family or friends together to help with the problem</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>3</td>
<td>Remembered what a parent (or other relative) once said about dealing with these kinds of situations</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>4</td>
<td>Tried to forget about the situation</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>5</td>
<td>Shared my feelings with a friend or relative</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>6</td>
<td>Went to church (or other religious meeting) to get help from the group</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>7</td>
<td>Thought of all the struggles Black people have had to endure and this gave me strength to deal with the situation</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>8</td>
<td>To keep me from thinking about the situation I found other things to keep me busy</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>9</td>
<td>Sought advice about how to handle the situation from an older person in my family or community</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>10</td>
<td>Read a scripture from the Bible (or similar book) for comfort and/or guidance</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>11</td>
<td>Asked for suggestions on how to deal with the situation during a meeting of my organization or club</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>12</td>
<td>Tried to convince myself that it wasn’t that bad</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>13</td>
<td>Asked someone to pray for me</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>14</td>
<td>Spent more time than usual doing group activities</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>15</td>
<td>Hoped that things would get better with time</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>16</td>
<td>Read passage from a daily meditation book</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>17</td>
<td>Spent more time than usual doing things with friends and family</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>18</td>
<td>Tried to remove myself from the situation</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>19</td>
<td>Sought out people I thought would make me laugh</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>20</td>
<td>Got dressed up in my best clothing</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>21</td>
<td>Attended a social event (dance, party, movie) to reduce stress caused</td>
<td>0 1 2 3</td>
</tr>
</tbody>
</table>
### Academic Stress, Academic Performance and Psychological Well-Being

<table>
<thead>
<tr>
<th></th>
<th>by the situation</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>Asked for blessings from a spiritual or religious person</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>23</td>
<td>Helped others with their problems</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>24</td>
<td>Lit a candle for strength or guidance in dealing with the problem</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>25</td>
<td>Sought emotional support from family and friends</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>26</td>
<td>Burned incense for strength or guidance in dealing with the problem</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>27</td>
<td>Sung a song to myself to help reduce the stress</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>28</td>
<td>Used a cross or other object for its special powers in dealing with the problem</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>29</td>
<td>Found myself watching more comedy shows on TV</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>30</td>
<td>Left matters in God’s hands</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Please read each statement and tick a number 0, 1, 2 or 3 which indicates how much the statement applied to you over the past week. There is no right or wrong answer. Do not spend too much time on any statement. The rating scale is as follows:

0 - Not at all
1- To some degree, or some of the time
2- To a considerable degree, or a good part of time
3- Very much, or most of the time

<table>
<thead>
<tr>
<th>Statement</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>I was aware of dryness of my mouth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I couldn't seem to experience any positive feeling at all</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I experienced breathing difficulty (eg, excessively rapid breathing,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>breathlessness in the absence of physical exertion)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I just couldn't seem to do much</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I had a feeling of shakiness (eg, legs going to give way)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I found myself in situations that made me so anxious I was most relieved</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>when they ended</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt that I had nothing to look forward to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt sad and depressed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I had a feeling of faintness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt that I had lost interest in just about everything</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt I wasn't worth much as a person</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I perspired noticeably (eg, hands sweaty) in the absence of High</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>temperatures or physical exertion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt scared without any good reason</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt that life wasn't worthwhile</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I had difficulty in swallowing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I couldn't seem to get any enjoyment out of the things I did</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was aware of the action of my heart in the absence of physical exertion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(eg, sense of heart rate increase, heart missing a beat)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt down-hearted and sad</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt I was close to panic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feared that I would be “overloaded” by some trivial but unfamiliar task</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was unable to become enthusiastic about anything</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt I was pretty worthless</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt terrified</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I could see nothing in the future to be hopeful about</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt that life was meaningless</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was worried about situations in which I might panic and Make a fool of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>myself</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I experienced trembling (eg, in the hands)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I found it difficult to work up the initiative to do things</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Student -life Stress Inventory (SLSI)

Please read each statement and tick a number 1 = never, 2 = seldom/ a little, 3 = occasionally, 4 = often, 5 = most of the time, 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.

(1 = never), (2 = a little / seldom), (3 = occasionally), (4 = often), (5 = most of the time)

<table>
<thead>
<tr>
<th>A. I have experienced frustration (frustration)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. As a student I have experienced frustration due to delays in reaching my goal</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I have experienced daily hassles or difficulties which affected me in reaching my goals.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I have experienced lack of sources (money for auto, books, etc.).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. I have experienced failures in accomplishing the goals that I set.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. I have not been accepted socially (became a social outcast).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I have experienced dating frustrations.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. I feel I was denied opportunities in spite of my qualifications.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. I have experienced conflicts which were (conflicts):</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Produced by two or more desirable alternatives or choices.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Produced by two or more undesirable alternatives or choices.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Produced when a goal had both positive and negative alternatives.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. I experienced pressures (pressure):</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. As a result of competition (on grades, work, relationships with spouse and/ or friends).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Due to deadlines (paper due, payments to be made, etc.).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Due to an overload (attempting too many things at one time).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. Due to interpersonal relationships (family and/ or friends, expectations, work responsibilities).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D. I have experienced (changes):</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. Rapid unpleasant changes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. Too many changes occurring at the same time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. Change which disrupted my life and/ or goals.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E. As a person (self-imposed)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>18. I like to compete and win.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. I like to be noticed and be loved by all.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. I worry a lot about everything and everybody</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21. I have a tendency to procrastinate (put off things that have to be done).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22. I feel I must find a perfect solution to the problems I undertake.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23. I worry and get anxious about taking tests.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Academic Stress, Academic Performance and Psychological Well-Being

(MULTIDIMENSIONAL SCALE OF PERCEIVED SOCIAL SUPPORT)

**Instruction:** Please answer each of the following statements by ticking one of the numbers (1-7) which reflect **how very strongly you disagree (1) or very strongly you agree (7)** with the statements about your social support. There are no wrong answers. For each statement below, decide whether you

1: Very strongly disagree, 2: Strongly disagree, 3: Mildly disagree, 4: Neutral, 5: Mildly agree, 6: Strongly agree 7: Very strongly agree.

### Multidimensional scale of perceived social support

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. There is a special person who is around when I am in need.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. There is a special person with whom I can share my joys and sorrows.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. My family really tries to help me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I get the emotional help and support I need from my family.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I have a special person who is a real source of comfort to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. My friends really try to help me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I can count on my friends when things go wrong.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I can talk about my problems with my family.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I have friends with whom I can share my joys and sorrows.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. There is a special person in my life who cares about my feelings.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. My family is willing to help me make decisions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. I can talk about my problems with my friends.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Academic Self-Efficacy

Please read each statement and tick a number [never] 1 2 3 4 5 6 7 [very often] 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.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>I know how to schedule my time to accomplish tasks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I know how to take notes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I know how to study to perform well on tests</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am good at researching and writing papers and doing my assignments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am a very good student</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I usually do very well in school and at academic tasks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I find my academic work interesting &amp; absorbing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am very capable of succeeding academically</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>