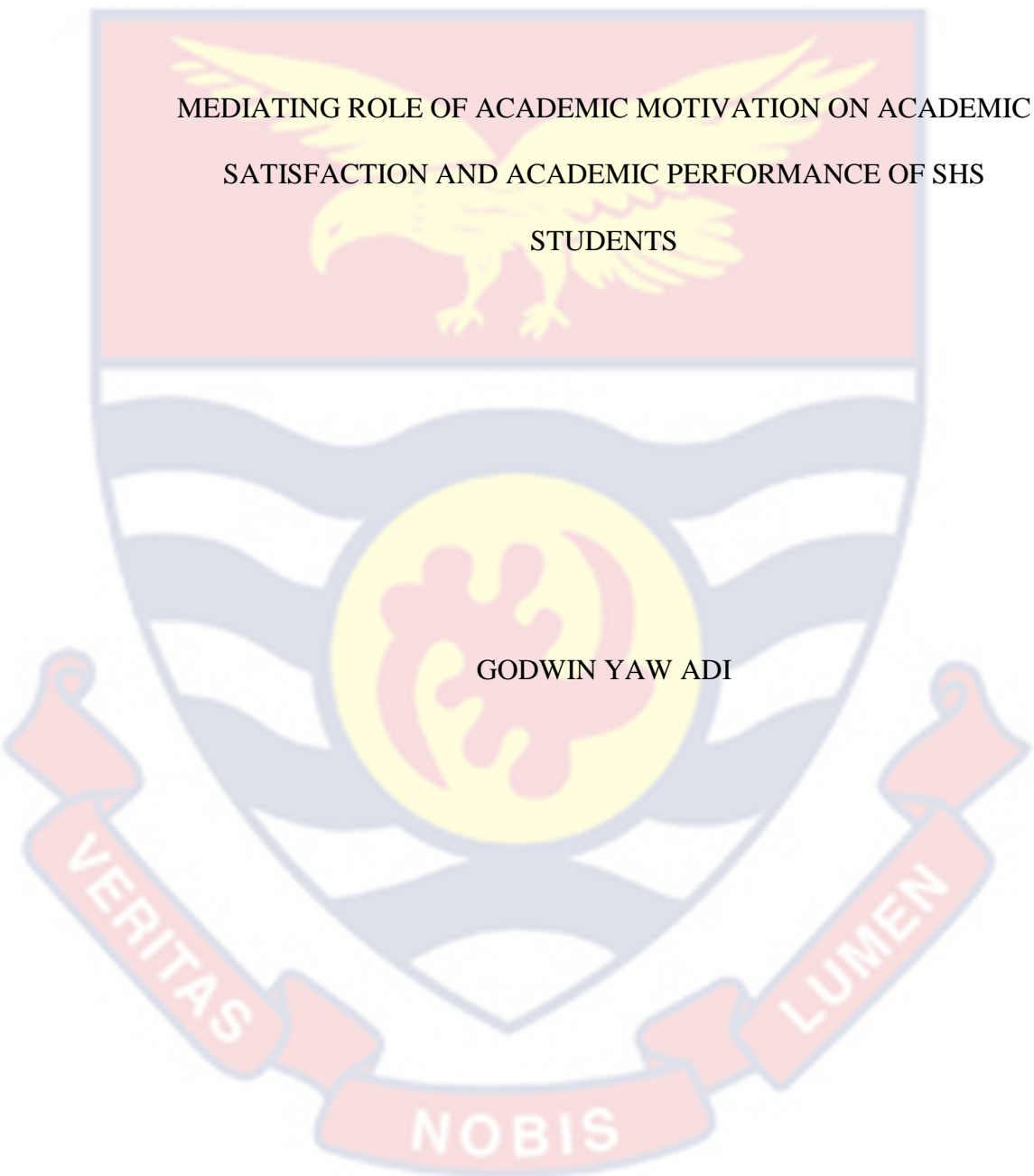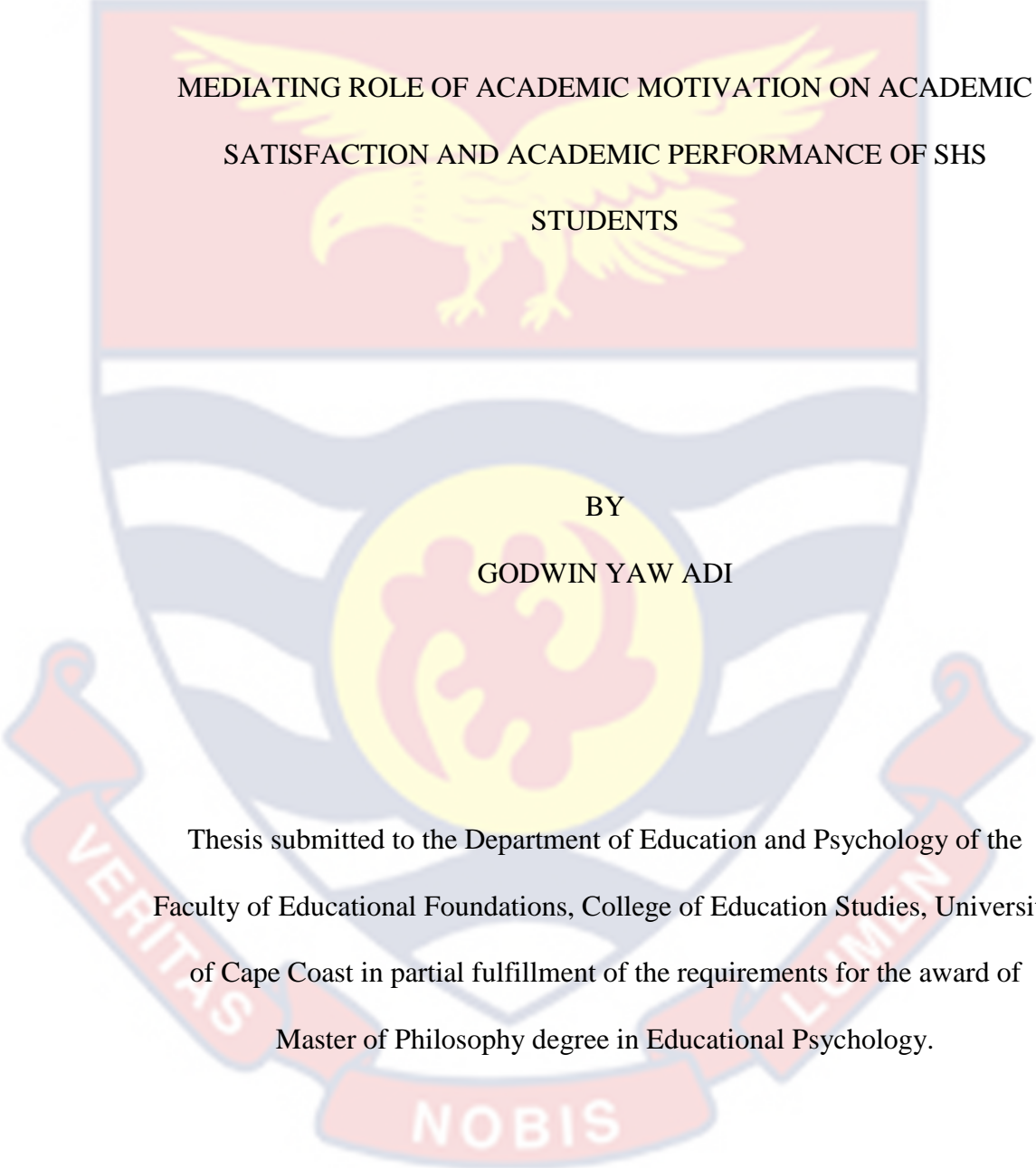UNIVERSITY OF CAPE COAST

MEDIATING ROLE OF ACADEMIC MOTIVATION ON ACADEMIC

SATISFACTION AND ACADEMIC PERFORMANCE OF SHS

STUDENTS

GODWIN YAW ADI

2024

UNIVERSITY OF CAPE COAST

MEDIATING ROLE OF ACADEMIC MOTIVATION ON ACADEMIC

SATISFACTION AND ACADEMIC PERFORMANCE OF SHS

STUDENTS

BY

GODWIN YAW ADI

Thesis submitted to the Department of Education and Psychology of the

Faculty of Educational Foundations, College of Education Studies, University

of Cape Coast in partial fulfillment of the requirements for the award of

Master of Philosophy degree in Educational Psychology.

FEBRUARY 2024

DECLARATION

Candidate's Declaration

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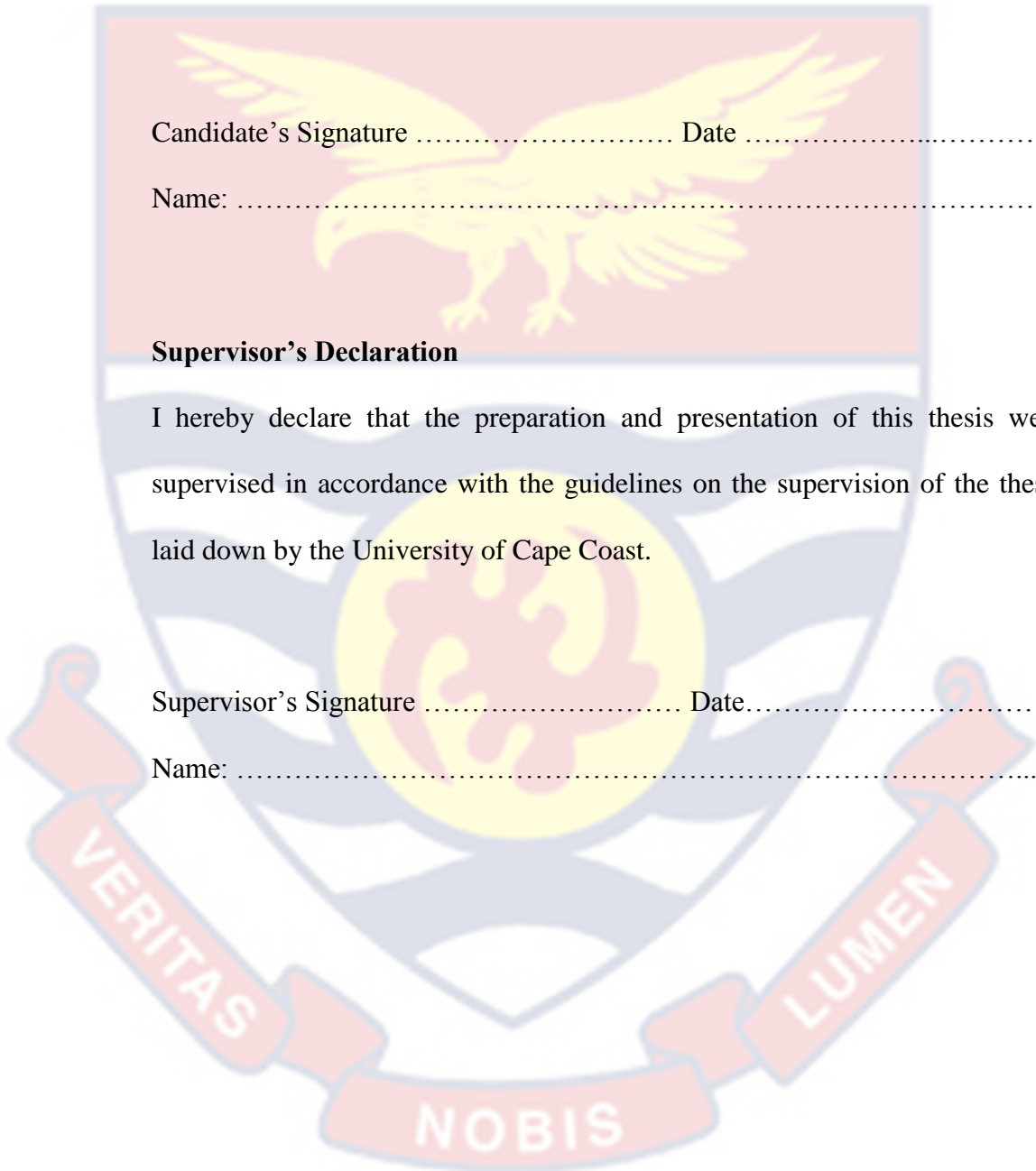
Candidate's Signature ……………….………… Date ……………...…………

Name: …………………………………………………………………….

Supervisor's Declaration

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

Supervisor's Signature …………………….… Date……………………….…

Name: ……………………………………………………………………...

ii

ABSTRACT

The study examined the extent to which academic motivation mediates academic satisfaction and academic performance of senior high school students in the Abura-Asebu-Kwamankese district in the Central Region of Ghana. A descriptive survey design was employed for the study. Three hundred and seventy-two copies of the questionnaire were administered to SHS students, however, 357 were returned. Purposive, proportionate to size, and simple random sampling procedures were employed in selecting the respondents. A questionnaire was the main instrument for collecting data. Analyses were done using Pearson Product Moment correlation coefficient (r), and Multiple Regression Analysis. Hayes Mediation Process Model 4 was also adopted for the analyses. The findings of the study revealed that students have a high level of academic motivation. However, a positive weak correlation existed between academic satisfaction and academic performance among students. The study's findings further revealed that academic motivation does not mediate the relationship between students' academic satisfaction and academic performance. It was concluded that students' academic satisfaction levels should be high to influence their academic performance. The study recommends that the Ghana Education Service in collaboration with the school management at Abura-Asebu-Kwamankese district should provide school facilities such as conducive classrooms, libraries, and Information and Communication Technology laboratories. Further, the school management should provide learning resources such as teaching-learning materials for effective academic activities. Guidance and counselling coordinators in the various schools also should be empowered to organise intervention programmes such as basic study habits to increase students' academic performance.

iii

ACKNOWLEDGEMENTS

I am highly thankful to my supervisor, Dr. Vera Arhin of the College of Distance Education (CoDE) for her patience, expert guidance, suggestions, motivation, and critique with which she guided my research work. My profound gratitude to Mr. Sampson Acquah, Ms. Delight Dokpuie, Ms. Mary Ekua Mensah, Ms. Dorcas Arthur, and Mr. Shine Tay for their assistance throughout the data collection process. I also acknowledge Mr. Kyei Anane Ampofo for his support and contribution to the success of this research work.

I am equally thankful to the headmasters, headmistresses, teachers, and the entire students of the SHSs in the Abura-Asebu-Kwamankese district (AAK) for their unwavering support, participation, and contribution to the success of this research work, and finally, I would like to thank my family and all my friends who supported me in diverse ways for the successful completion of this thesis.
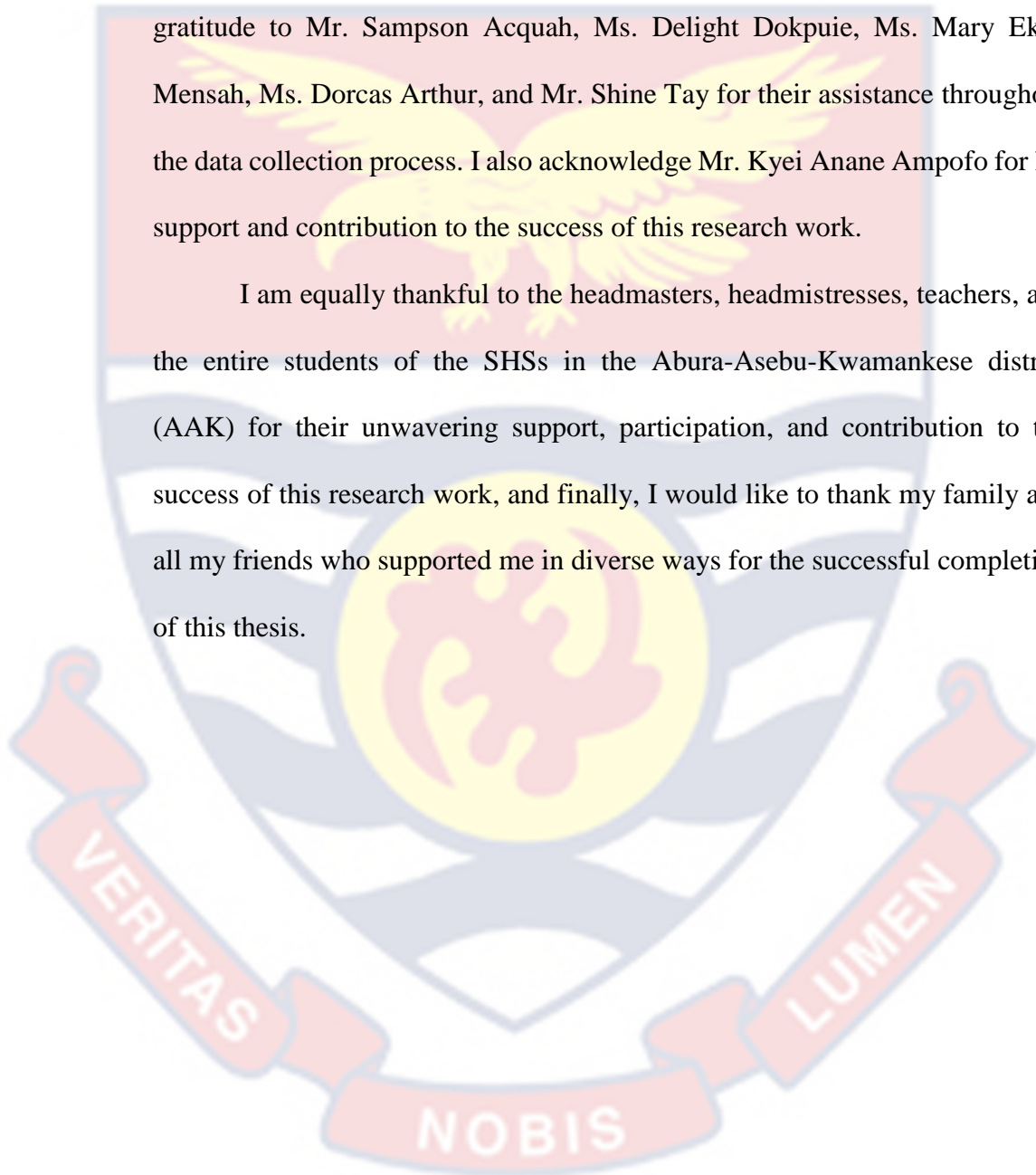
DEDICATION

To my wife, Joyce Abena Adi, and children: Peace Emefa Adzo Adi,

and Angeline Abena Xoese Adi.

v

TABLE OF CONTENTS

viii

APPENDIX E: STUDY AREA   118

ix

LIST OF TABLES

LIST OF FIGURES

xi

LIST OF ABBREVIATIONS

AP	Academic Performance
AAK	Abura-Asebu-Kwamankese
AM	Academic Motivation
AS	Academic Satisfaction
EM	Extrinsic Motivation
GES	Ghana Education Service
IM	Intrinsic Motivation
MOE	Ministry of Education
MSLQ	Motivated Strategies for Learning Questionnaire
SHS	Senior High School
SUSS	Student University Satisfaction Scale
WAEC	West African Examination Council
WASSCE	West African Senior Secondary Certificate Examination
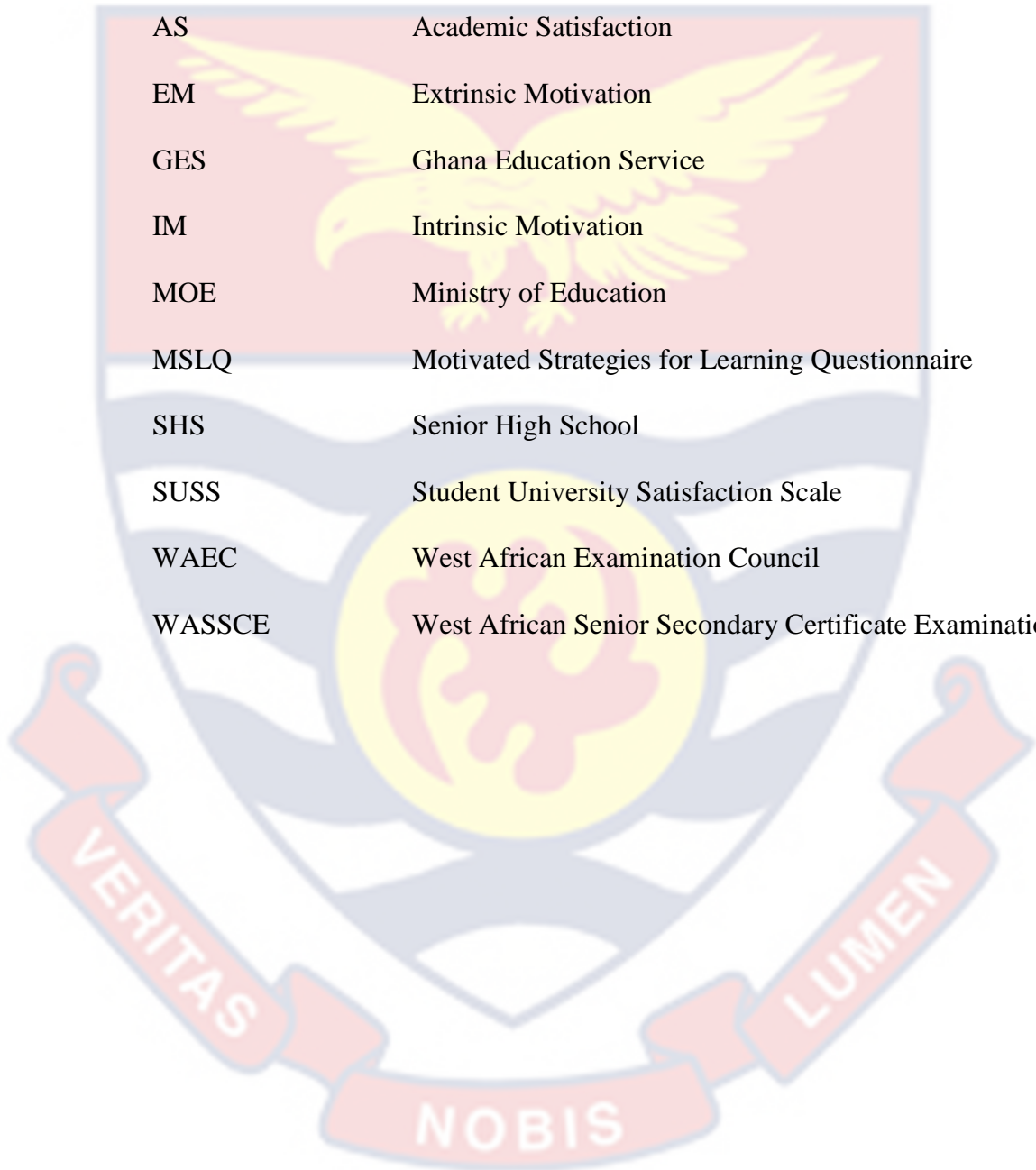
CHAPTER ONE

INTRODUCTION

Education is considered the pillar of development globally and recognised as a panacea to the socio-economic development of all societies. The right to acquire knowledge is not only having access to knowledge but also effectively accessing quality education. Given this, enhancing quality education to harness the growth and development of the individual and society is a concern to countries all over the world. This chapter considers the background of the study, the statement of the problem, the purpose of the study, study objectives, hypotheses, significance of the study, delimitation, limitations, organisation of the study, and operational definitions.

Background to the Study

Globally, there is a demand for a high standard of education which has been explicitly stated in the Sustainable Development Goal (SDG) 4. SDG 4 has the objective of ensuring inclusive and equally effective education which enhances long-lasting learning chances for students (UNESCO, 2017). The recent World Development Report states that there is an outstanding request for the most recent and reliable quality education that can be compared globally (World Bank, 2017). A developing body of evidence also proposed that it is not only the amount of schooling but the effectiveness of schooling, tested by student academic performance, that adds to progress. Thus, what is learned in school matters more than mere school attendance (Nadir, Angrist & Patrinos, 2018; Hanushek & Woessmann, 2012).

1

The extensive access to education has intensified the quest for information on academic satisfaction which has also led to the development of SHS categorisation systems. Schools are obliged to offer quality education to students; yet, an increased rate of failure in academics is often noticed in their performance. Research has shown that failure in academics is often attributed to several factors that are related and play varied roles in the educational process (Gilar-Corbi et al., 2020; Heredia, Amaya & Barrientos, 2015). An evaluation of the literature shows that one of the main confrontations of most institutions is the way to achieve the best outcomes for learners in an increasingly more globalised and competitive environment (Chohan, 2018; Owusu & Essel, 2017; Lee, 2017; Kelly & Columbus, 2020; Narad & Abdullah, 2016; Wang & Neihart, 2015).

An effective academic system would bring forth qualified individuals and groups who can challenge the status quo internationally (Pramana, Chamidah, Suyatno, Renadi & Syaharuddin, 2021). They added that academic satisfaction is the most relevant goal for a nation's administrative work in the school system, which considers institutions to be ready to give their students equitable and comprehensive educationally related services. Kotirde and Yunos (2014) validate this by demonstrating that the concern for quality has become a key factor for changes in education and training in essential improvement plans of non-industrial nations.

Developmental and educational literature have identified effective teaching and the nature of classroom environments as some of the factors likely to affect students' learning and their academic performance (Allen et al., 2013;

2

Dicker et al., 2017; Osei-Poku, Darkwa & Opoku-Asare, 2016). Additionally, Allen et. al., (2013) suggested that access to quality education means many factors must be considered, one of them being the aspect of facilities and services provided by the school to students as customers. To make sure that student's study well in a good and comfortable environment as well, teachers should communicate knowledge more effectively, management should provide infrastructures and facilities which are appropriate according to the course of the study.

According to (Ko, 2012) satisfaction is the entirety of structures, features, and processes of an output that shows its capability to reach given needs or results of its performance. Kuh et al., (2015) also defined academic satisfaction as the effectiveness of learning and teaching methods, opportunities, and resources that help students to achieve academic success and prepare for their future. It also involves building a positive attitude towards studies, thinking and working independently, and perseverance on task completion and this may have a lasting effect on students' performance.

Though academic satisfaction has been given different definitions by various providers, all accept that the quality of any course of study outcome depends on the satisfaction of its services and procedures involved. Thangeda, Baratiseng, and Mompati (2016) suggested that a paradigm shift in the educational system is crucial for everyone to be able to conquer the demanding situations of the 21st century and to ensure intellectual self-reliance. It continues that quality second-cycle education demands to be rebuilt to produce and enhance knowledge, and groom responsible, open-minded citizens and qualified

3

experts, who can help a nation to progress economically, socially, culturally, or politically. Allam (2018) postulated that quality education does not only develop students to secure and maintain work in a competitive environment and a given era, but it also inculcates civilisation into citizens who can add to the financial and social development of their country.

Pitan (2017) proposed that educational institutions should be bothered with school resources such as school facilities, school management, co-curricular, and placement activities to produce a diverse student body with relevant skills to perform tasks, good communicative skills, critical and analytical skills, and technological skills to gain recognition and productiveness in the job market. Getting access to quality education will help students gain more knowledge and understanding of their course of study in school. It may also boost their morale to study hard to improve their performance in class.

A study conducted by Rahman (2013), showed that academic satisfaction is an influential factor that ensures and creates a positive perception of students of education which also influences their performance as academics is concerned. Dicker et al. (2017) opined that there is a broad consensus on the awareness of the essence both in teaching and learning and associations in defining academic satisfaction in collaboration with academic staff. Thus, quality indicators such as administration services, facilities, learning materials, and co-curricular activities have a substantial positive impact on well-being and academic performance (Abidin, 2015; Ahmad, Razaki, & Ahmad, 2021).

The discrepancies in students' academic performance are issues that have caught the attention of many educational researchers. Academic

4

performance is an essential goal of education and surrounds the whole education system. It equips students with future job opportunities and also allows them to venture into challenging fields. It also offers a sign of improved intellectual judgment, which can aid students in all facets of their lives. The success or decline of any educational establishment is also determined by the student's academic performance. Success in academics is the output of enormous factors that collectively support students in their knowledge and increase their opportunities to continue their education (Gibson, 2020; Inuwa, Abdullah, & Hassan, 2018; LeMay, 2017).

Regarding Díaz-Morales and Escribano (2015), academic performance is the outcome of a group of intellectual, societal, and commercial influences that lead to the effective advancement of learners. Narad and Abdullah (2016) also refer to academic performance as the intelligence gained and proved by test scores, allocated by the teacher. They added that in an educational setting, students' academic performance is the educational objective to be accomplished by a learner, educator, or an academic establishment over a given time frame and is assessed either by a standard examination or school-based assessment and the goal may vary from one person or school to another. It is the result of academic endeavour, the degree to which a learner, educator, or school has achieved their institutional objectives. It also refers to how well an educational establishment can execute providing a schooling activity, or one's performance on graded tests in academic discourse (Osei-Poku, Darkwa & Opoku-Asare, 2016).

5

When students are successful in their education, they are likely to become good citizens and also acquire knowledge that will shape their destiny, and the progress of the nation (Bhat, 2013). Academic success is crucial because of the satisfactory wages of good jobs that the learners would have and the higher standards of education to harness the technologically demanding jobs the learners would require in the future (Kapur, 2018).

On the other hand, a lack of success in academics creates the avenue for several personal and social problems and missing out on achieving the goals of the educational system (Chohan, 2018; Owusu & Essel, 2017; Lee, 2017; Wang & Neihart, 2015). A study conducted by Chohan (2018) in Pakistan showed that early encounter with failure in academics badly affects students' self-awareness and they experience frustration and shock. The study also revealed that 30 (20.4%) students who wrote the yearly examination, stopped school after failing the examination without taking the receiving certificate. These students then drop out of school. Most of those students stop school to keep away from expected insults from their colleagues and instructors in repeated classes. Attaining poor grades heightens stress and inferiority complex coupled with bad social relationships for lower-performing students as compared with their peers (Chae, Kim & Chang, 2016). Poor academic performance also impinges on future academic pursuits, such as applying to higher education, and sometimes influences career opportunities too (Owusu & Essel, 2017). Teachers' attitudes, school climate, and teaching as a whole are the factors that most influence students' performance (Ridzuan et al. 2018).

6

Further, when academic satisfaction is put in place to make sure students' success in academics is achieved, the degree to which students will be motivated to study and excel might have a role to play. Sivrikaya (2019) conducted a study to find out whether academic motivation relates to the academic performance of physical education and sports students. The result revealed that an increase in students' academic performance leads to a rise in the ratings of extrinsic motivations. Motivation is seen as a key influence on human behaviour and performance (Ozen, 2017). It explains the reason people choose a peculiar activity, persist in it, and invest a lot of effort in it, (Solak, 2014). These three elements of motivation harmonise the goals, the commencement, and the continuance of learning efforts. Motivation involves intrinsic and extrinsic factors that arouse and energise the desire in people to continually be committed to the attainment of a goal (Gbollie & Keamu, 2017).

Academic motivation refers to a student's choice (as shown in attitude, perseverance, and degree of enthusiasm) about academically related activities when the aptitude of a student is measured based on a criterion of performance or merit (Omiles et al. 2019; Olowo et al. 2020). It is required that learners who are in the educational and training domain will achieve a better standing in their career, thus, their motivation and performance in their profession will improve. Students who are highly motivated are required to put in enough effort to maximise performance in their learning process both academically and socially (Koyuncuoglu, 2021).

According to Anane (2014), intrinsically motivated students can adjust and adapt to changing situations and environments that positively influence

7

their academics. The concept of motivation is essential for both instructors and learners in realising the antecedent of success or failure in academic-related activities (Nauzeer & Jaunky, 2019; Uyulgan & Akkuzu, 2014). Academic motivation is present in the course of learning and actively attached to learning practices. It also aids the development of zeal and exuberance in bond, perseverance, and performance in learning. Researchers and professionals expressed that motivation has a critical function in the performance of learners and permits continuous performance (Alkiş, 2015; Aluçdibi & Ekici, 2012). Again, students' academic motivation and the learning environment have a significant association with students' academic performance (Akçakanat & Antalyal, 2016; Ariani, 2016; Sivrikaya, 2019).

To add to that, the management of classrooms affects the students' performance of goals. Structures, classrooms, their management, and facilities provided enhance different sequences of motivations (Saifi, Hussain, Salamat & Bakht, 2018). Mutua (2014) posited that ineffective school admission policies, inadequate teaching and learning materials, insufficient community approval, mismanagement, rampant teacher and student absenteeism, and lack of discipline in schools are the major challenges leading to low standards of performance in most schools. He recommended that teachers, parents/guardians, and all other education stakeholders should create enabling school and home environments to foster the advancement of academic motivation and consequently result in academic performance of students.

Several factors of the schools are used to aid students in excelling in their academic endeavours. However, most schools still record poor academic

8

performance of students. Research has established that academic motivation has a significant relationship with academic performance (Dramanu & Mohammed, 2017; McCoy, Wolf, & Godfrey, 2014; Nyarko, Kugbey, Amissah, Ansah-Nyarko & Dedzo, 2016). Other studies also looked at how academic performance relates to academic satisfaction (Ajayi, 2014; Bonney, Amoah, Micah, Ahiamenyo, & Lemaire, 2015; Owusu & Essel, 2015). However, it appears no study has been undertaken on the relationship between academic satisfaction, academic motivation, and academic performance. This research will bridge a research gap by attempting to determine the mediating role of academic motivation in the relationship between academic satisfaction and students' academic performance of SHS students in the AAK district.

Statement of the Problem

According to statistics from the Central Regional Education Office, Abura-Asebu-Kwamankese is one of the districts in the region where many candidates often score low grades in the West African Senior School Certificate Examination (WASSCE). Statistics from the Education Office further revealed that many candidates from the selected senior high schools in the district have been obtaining grades D7 and below in the four core subjects in WASSCE for the years 2018, 2019, and 2020. This poor academic performance limits the ability of most students to progress on the academic ladder or further their education. It also reduces their employability and future career satisfaction. Low levels of academic performance of students in standardised examinations could result in the loss of several lifelong chances either for a single student or for the entire community (Mutua, 2014).

9

As such researchers proposed that teachers, parents/guardians, and others involved in children's education should take into account psychological processes that will increase the enthusiasm of students and also provide them with the inward satisfaction needed to attain academic goals (Bonney et al. 2015; Dramanu & Aisha, 2017; McCoy et al. 2014; Nyarko, 2015).

However, it appears there is no empirical evidence on how to solve the issues of poor academic performance of SHS students in the AAK district. There is therefore an urgent need to investigate the issue and find a solution to it. It is anticipated that over time if this issue is not addressed, senior high schools in the district will lose their responsiveness to provide quality education to students. It may also have a negative effect on students' enrollment at the senior high schools in the district. Since academic motivation and academic satisfaction are variables that affect academic performance, this study sought to investigate these variables of SHS Students in the Abura-Asebu-Kwamankese District.

Purpose of the Study

The main goal of the research was to investigate the extent to which academic motivation mediates academic satisfaction and academic performance of SHS students in the AAK district.

Objectives of the Study

The study aimed to achieve the subsequent objectives:

1. Investigate the extent to which academic satisfaction relates to academic performance of SHS students.

10

2. Establish the relationship between academic satisfaction and academic motivation of SHS students.

3. Determine the relationship between academic motivation and academic performance of SHS students.

4. of Examine the extent to which academic satisfaction and academic motivation predict SHS students' academic performance.

Research Questions

The following questions were set to find answers to research objectives one, two, and three.

1. To what extent does academic satisfaction relate to academic performance of SHS students?

2. What is the relationship between academic satisfaction and academic motivation of SHS students?

3. What is the relationship between academic motivation and academic performance of SHS students?

Hypotheses

To provide an answer to research objectives four and five, the following hypotheses were formulated.

1. H_0: Academic motivation will not significantly mediate the relationship between academic satisfaction and academic performance of SHS students.

   H_1: Academic motivation will significantly mediate the relationship between academic satisfaction and academic performance of SHS students.

11

2. H_0: Academic satisfaction and academic motivation are not significant predictors of academic performance of SHS students.

H_1: Academic satisfaction and academic motivation are significant predictors of academic performance of SHS students.

Significance of the Study

The research is deemed beneficial to educationists, academic planners, headmasters, and the management of senior high schools by providing insight into factors that constitute academic satisfaction and motivational strategies and recommending appropriate changes or modifications where necessary. It may also serve as a vital tool for the Ghana Education Service and school management to design and put into effect guidelines to upgrade students' academic performance and the quality of education. This would help in adjusting students' attitudes toward studies, promoting students' study habits, and advancing teaching principles and practices.

The findings of the study would help all district stakeholders, specifically those present at the senior high level, bring out relevant programmes to improve students' academic performance. Also, the research would benefit the AAK district in assessing the causes of low academic performance in WASSCE. The study would help students to perform higher as they gradually advance through the various educational stages. They might consequently have improved personal and family life opportunities and enhanced socio-economic conditions. The district would benefit from progressed first-class education and have successful learners and citizens. This

12

would in the end bring an improvement in the range of students who pass WASSCE in the district and nationally.

In addition, teachers, parents, and students would notice the essence of providing an enabling home and school environment for acquiring the suitable kind of learning skills that enhance academic performance. The information provided by this study and different studies could also be used to design and enforce behaviour change programmes that pursue to maximise academically-related behaviours in those with low stages of motivation by practice or by way of finding methods to boost their instructional motivation.

Finally, within the area of research, the research findings would add to the current literature on the benefits of motivation in mediating academic satisfaction and academic performance of SHS students in particular, and all students in general.

Delimitations

The research was delimited to the AAK district in the Central region of Ghana. The research focused on these concepts namely academic satisfaction, academic performance, and students' academic motivation. It was also delimited to three SHSs in the AAK district. These schools include; Aburaman SHS, Abakrampa Senior High/Technical School, and Moree Senior High/Technical School.

Limitations

The use of questionnaires could potentially encourage dishonesty of students, which is one of the study's limitations. Some of the schools were not willing to give information about the academic performance of their students,

13

especially their examination results. Students were not motivated to take part in the research work, in particular completing the questionnaires. Other respondents also did not respond to all the items on the questionnaire.

Definition Terms

In this section, operational definitions are presented as used within the context of this study.

Students' Academic Satisfaction: It describes how effectively the learning opportunities available to students help them to achieve success in their academics.

Motivation: It is the process of stimulating a student's actions to achieve his/her academic goals.

Academic Motivation: A student's choice to take part in academic-related activities.

Extrinsic Motivation: A type of motivation whereby an external factor influences a student's choice to take part in academic-related activities.

External regulation: An aspect of extrinsic motivation where a student may take part in academic work to get a reward or to be commended by the teacher or colleagues.

Introjected regulation: An aspect of extrinsic motivation where a learner can take on regulations for instructional obligations but not accept the said regulations as his or her own.

Identified regulation: An aspect of extrinsic motivation where a learner may additionally partake in a selected academic behaviour or challenge because she or he sees that behaviour to be useful.

14

Intrinsic Motivation: A type of academic motivation whereby a student is influenced by his internal satisfaction to engage in educational tasks because of the enthusiasm, enjoyment, and inherent pleasure gained from doing the tasks.

Amotivation: A type of motivation whereby a student shows no interest in academic activities or feels incapable of doing or lacks the will to act.

Academic performance: The average score a learner obtains in the end-of-semester common examination.

Organisation of the Study

        The research was organised into five chapters. The first chapter considers the study background up to operational definitions. The second chapter provides an overview of existing literature in terms of the theoretical views that underpin the study, conceptual framework, and empirical issues underlining the degree to which academic motivation mediates the relationship between academic satisfaction and students' academic performance. Chapter three talks about the methodology used to undertake this study. It considers the research paradigm, the research design, the study area, and the study population followed by the sampling technique, sample size, the instrument for data collection, pre-testing of the instrument, the instrument validity and reliability, data collection procedures, and processing, ethical and logistics considerations. Chapter four provides the analyses of the data collected, the presentation of the findings, and the discussion of the findings. Finally, chapter five focused on the summary, conclusions, recommendations, and suggestions for further research.

15

CHAPTER TWO

LITERATURE REVIEW

Introduction

The chapter includes a review of the literature theoretically, conceptually, and empirically. The areas reviewed include the following:

1. Theoretical framework

    i. Walberg (1981) Theory of Educational Productivity.

    ii. Self-Determination Theory (Deci & Ryan, 1985).

2. Conceptual framework

3. Empirical review

    i. Relationship between AS and AP of SHS students.

    ii. Relationship between AS and AM of SHS students.

    iii. Relationship between AM and AP of SHS students.

    iv. The mediating role of AM in the relationship between AS and AP of SHS students.

Theoretical Framework

The following theoretical frameworks underpinned the study and are discussed as follows.

Walberg's (1981) Theory of Educational Productivity

This theory has a fundamental objective which focuses on the influences of learning that affect the academic performance of a student. Walberg investigated academic performance by employing a variety of techniques to identify perceived factors that influence a student's academic fulfilment. The theory hypothesised nine different educational productivity factors operating as

16

a complex set of interactions that account for a person's school learning. These factors are put into three basic elements which affect learning. Aptitude (ability, development, and motivation), instruction (quantity and quality), and environment are the three (home, classroom, peer group, and mass media). A body of evidence suggests that the school environment has the propensity to influence students' academic performance (Namale, Upoalkpajor, & Ayambire, 2021; Obiajulu-Anyia, 2019; Sadare, 2018).

Gaining knowledge and completing every stage of the educational ladder is the main motive of learning. The basic goal of the research was to investigate the degree to which students' academic motivation affects academic satisfaction and students' academic performance of SHS students, this theory is appropriate for the study because it considers the entire learning process (the learner's aptitude), the instruction and the learning environment) and consequently focuses on the outcome of learning (academic performance). The theory also looks at the comprehensive development of the learner and all other things that make or mar the quality of academics that the learner receives.

In conclusion, learning according to the theory of educational productivity is influenced by different factors that interact in a complex manner to either bring a positive or a negative outcome. For example, lengthy hours of instructions normally theoretical, bring about boredom and weariness in students. That is the reason curriculum builders are beginning to integrate new educational methods that lead to effective teaching and learning and promote a variety of learners. Walberg pointed to cooperative

17

learning as a valuable source of access to knowledge. Teachers need to have a look at all the elements set up with the aid of Walberg's theory to discover where the problem lies and try to find a strategy for it. Educators need to provide good remarks to their learners by pointing out the successes along with the mistakes and encouraging them to improve.

Self-Determination Theory (**Deci & Ryan, 1985**)

The theory of self-determination is a psychological framework for comprehending human motivation. Richard Ryan and Edward Deci, two psychologists, created it. The theory highlights three basic psychological needs that move people thus, autonomy, competence, and relatedness. The primary goal of SDT is to identify an extra exceptional technique for motivation by determining the type of motivation that is displayed at a particular time and taking into account the perceived forces that propel a person to behave in a certain way. Self-determination theory has noticed various kinds of motivation, each with its own set of learning implications, performance, independent skill, and state of health (Deci & Ryan, 2000).

Deci and Ryan (2000) classify motivation into three types: intrinsic motivation, extrinsic motivation, and amotivation. The act of doing something just for the sake of doing it is intrinsic motivation. Thus, an individual will complete a task because of the task's inward satisfaction. A student who is intrinsically driven to study, for example, will take part in academically related tasks because he or she is focused. Intrinsic motivation is divided into three categories: intrinsic motivation to notice (the desire to learn), intrinsic motivation to accomplish (the desire to complete a task), and intrinsic

18

motivation to go through stimulation (the desire to carry out an interesting task). The most self-determined aspect of motivation is intrinsic motivation, students who are self-decided tend to excel academically because they demonstrate continuous engagement in academics and receive favourable outcomes in the form of appropriate grades (Deci & Ryan, 2000).

Extrinsic motivation is the second type. It is the act of participating in a task to receive a reward. Extrinsically motivated students act to gain a reward or avoid punishment. Deci and Ryan (1985) developed a sub-theory known as Organismic Integration Theory (OIT) to explain various aspects of extrinsic motivation. External regulation is less self-imposed, so a student may participate in academic work for a reward or to be commended by the teacher or colleagues. Introjected regulation is a kind of extrinsic motivation in which a learner accepts regulations for instructional purposes but does not accept them as his or her own. A student, for example, may do his or her homework to prevent disappointing his or her guardian.

Deci and Ryan (2000) further stated another type of extrinsic motivation known as identified regulation, which is further self-determined. For instance, a learner may participate in a specific academic behaviour or task because the person believes it is beneficial. This may include improving results in school and gaining acceptance to a challenging degree program at a university. Learners who are intrinsically inspired to learn and who express recognised regulation can be highly educational achievers in the continuous realm of learning, whereas beginners who are externally controlled are much more apparent to be low instructional achievers.

19

In self-determination theory, the third category of motivation is amotivation, which is the least self-determined. An amotivated student makes no effort to participate in academic activities. According to this study, an unmotivated student is likely to perform poorly academically.

The theory was chosen because its basic tenet is the approach to motivation which is any stimulus that triggers an individual to act. Since the study's goal is to determine the role of motivation as a mediator in the relationship between academic satisfaction and academic performance, this theory elaborates on the role of motivation and provides a clearer understanding. For instance, students who are intrinsically motivated to study, he/she is likely to do it wholeheartedly to achieve success without being propelled by any external force. He/she studies with joy because of the inner feeling. On the other hand, an extrinsically motivated student will go to school and study because he/she is being propelled by an external force. For example, a student will study hard to pass his/her exams successfully because of the certificate and societal recognition he/she will receive.

Further, an amotivated student is likely not to take studies seriously or may not even go to school because he/she has no interest in doing that. He/she is likely to say that there is no reason to study or even attend school. This theory applies to this research because it provides a thorough clarification of the significance of academic motivation in students.

Conceptual Framework

It is an illustrative diagram that assists a researcher in developing a broader understanding of the variables under investigation by depicting the

20

relationship between the variables in the research. Based on an empirical review, this study proposes a relationship between academic satisfaction, academic motivation, and academic performance. The conceptual framework is presented in Figure 1.

Figure 1
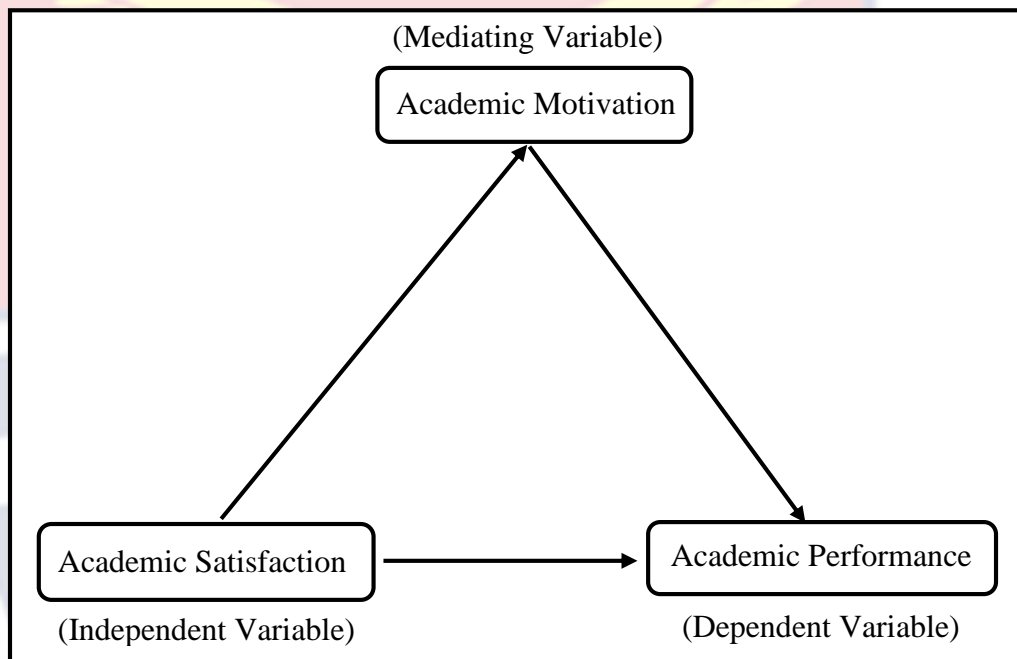
Figure 1: Mediating Role of Academic Motivation on Academic Satisfaction and Academic Performance.

The research suggested a direct relationship between academic satisfaction and academic performance, as shown in Figure 1. That is, the quality of academics received by students is likely to influence their academic performance. It was proposed once more that academic satisfaction may have an unmediated impact on students' levels of academic motivation. Academic motivation, on the other hand, may have a direct influence on their academic performance. Thus, students' academic performance is likely to be determined by their level of motivation.

21

Finally, Figure 1 suggests that academic motivation would serve as a mediator between academic satisfaction and student academic performance.

Conceptual Review

Students' Academic Satisfaction

The concept of satisfaction is more complex in education than its realisation in the industry where the end products are clearly defined. Concern about satisfaction in education has always existed and is discoverable in diverse ways. takes into account the effectiveness of academic support, assessments, and learning opportunities. Student satisfaction is seen as the favourability of a student's assessment of the diverse effects and issues related to education (Dhaque & Afrah, 2016). They added that recurring life experiences in school continuously shape students' satisfaction. In educational settings, the satisfaction of students enables school management and curriculum developers to design programs that are more responsive to the needs of the students.

Atibuni (2020) states that academic satisfaction is determined by the extent to which the student can do independent, critical, and analytic thinking to solve pertinent societal problems in any given environment based on the training received from an institution. This implies that quality secondary education is deduced from the ability or the extent to which a second-cycle institution conforms to the established standards of importance and soundness of programs, infrastructural development, student admissions, staff recruitment, and managerial processes to affect teaching and learning which may lead to the good academic performance of the students. In other words, academic

22

satisfaction is not a one-step activity rather, it is continuous and evaluated from the input, throughput, output, and performances of the institution.

In addition, a good and satisfying academic system will bring forth quality human resources who can challenge the status quo internationally (Pramana, Chamidah, Suyatno, Renadi & Syaharuddin, 2021). They added that academic satisfaction is the most relevant goal for the management of the nation's education system, which expects educational institutions to be competent and prepared to provide their students with an equal and comprehensive education service. Moreover, the goals and objectives of quality education in the second-cycle institutions are set within the curriculum of study. For this study, academic satisfaction can be related to features such as teaching and learning, learning programs and materials, educational infrastructure, student support service, academic administration and management, school environment, and extracurricular activities.

Academic satisfaction here signifies a responsibility to the seemingly continuous development of attitude, knowledge, and skills through reciprocal and interactive academic activities. This notion follows the (Cheng, 2016) argument that satisfaction only becomes possible if it is seen as a useful direction for students to increase their commitment to learning and teaching which will reflect in their academic performance. As such, the mapping of the components of satisfaction is crucial in that, academics have an in-depth comprehension of quality on which to base their academic performance and subsequent professional choices and practices. A study by (Li and Carroll, 2017) indicated that the quality of facilities in the university is an essential element of

23

student satisfaction. They used five measures to substantiate students' academic satisfaction that is the development of skills, the engagement of learners, quality of teaching, student support, and teaching-learning resources.

Academic Motivation

Virkkula (2020) postulates that comprehension of motivation demands consideration of inherited psychological needs for competence, autonomy, and relatedness. In another vein, the satisfaction of these fundamental psychological needs will have a positive impact on individual well-being and self-initiated learning. The fulfillment of needs will take place when students can make independent decisions about their learning. He added that this will also make them confident in staying in the teaching-learning environment and be exposed to the experiences that happen within it. Motivation is an impulse that fosters and triggers people to participate in certain activities and has mental and emotional as well as physiological aspects (Abu-Karsh, 2018; Akinbadewa & Sofowora, 2020; Al-Husban & Shorman, 2020; Basarmak & Hamutoglu, 2020; Hamid, Salleh, & Laxman, 2020; Kim et al., 2019; Rogayan Jr, 2019; Suren & Kandemir, 2020; Turunen, 2019). It is seen as making students have distinguishing qualities in the current school environment. It is also one of the most vital sources of influencing characteristics that determine the direction, the level of strength, and the determination of student behaviour in the teaching and learning process.

Motivation is both an appealing and an impending subject. It enriches the individual with the driving force and guidance to interact with the environment in an adaptive, open-ended, and problem-solving sort of way

24

(Reeve, 2018). It is also the process that initiates, directs, and maintains goal-directed behaviours. It is interesting due to the fact it's far at the back of nearly all an individual does. Motivation has been intensively studied in education and other fields. From this viewpoint, SDT describes motivation as a multifaceted model that constitutes three dimensions that can be managed in varied means along with a continuous movement from lower to higher levels of self-determination.

There are two different types of motivation. These are intrinsic (internal) and extrinsic (external) motivations. Intrinsic motivations are those that arise from within the person, for instance, doing a complicated activity for personal satisfaction or solving a problem. In the academic environment, this relates to the development of knowledge through learning because of the enjoyment of the individual experience. Intrinsic motivation is not only essential to enable students to complete their studies with great success but, also, to work well and take part in self-directed learning in all facets of life being social, personal, occupational, and academic (Olmedo-Moreno, Expósito-López, Romero-Díaz de la Guardia, Rodríguez, Parejo-Jiménez, 2021). In other words, individuals should be fully groomed to enable them to learn throughout life. Given this, studies have established that intrinsic motivation is related to greater academic performance (Ariani, 2016; Mutua, 2014; Nauzeer & Jaunky, 2019; Suren & Kandemir, 2020). This gives rise to institutional learning environments that are conducive and inherent to contemporaneous smart societies.

Extrinsic motivations are those that are external to the individual and often involve rewards such as money, trophies, social recognition, or praise. In

25

this case, getting to know responsibilities are performed to attain or avoid effects that can be external to the individual (receive a reward, avoid unfavourable situations, social approval, etc.). For instance, a student will engage in a learning activity to receive a grade or a certificate or avoid failure or punishment. According to the SDT, higher levels of self-determination are associated with greater intrinsic motivation while lower self-determination is concurrent with greater extrinsic motivation.

Academic motivation refers to a student's choice (as shown in attitude, perseverance, and degree of enthusiasm) about academically related activities when the aptitude of a student is measured based on a criterion of performance or merit (Omiles et al. 2019; Olowo et al. 2020; Koyuncuoglu, 2021). It is anticipated that a student who wants to move from his/her current status to a better status will have a higher motivation in academic settings. Academic motivation constitutes abstraction made by students on different features of the teaching and learning process (content, methods, etc.) as a function of their personal goals and aspirations. All of these features result in specific actions, orientations, and behaviours being engaged in towards oneself.

Academic Performance

The concept of performance has several references, which could mean activity and mastery that affect a change in the environment and compete against a set standard of valuable quality. The underperforming student is one whose actual effort as shown by his scholastic ability in school, does not correspond to his potential academic performance as indicated by his competence level (Erhuvwu & Adeyemi, 2019). They also described

26

overachievers as students whose school capability is more than the arithmetic mean formed based on their activities. The abstractions of over and underperformance imply that variables are adding to the ability which has positive effects on the performance of the learner and as a result, there could be no perfect positive statistical relationship between intelligence and capability.

Academic performance was seen to be the most crucial outcome of formal educational experiences and there is little doubt as to the important role such performances play in the life of a student and later experiences (Moore, 2019). Researchers and policymakers are always increasingly focusing on the social and emotional factors, as well as the relationships that exist among them, as determiners of student success and psychological change (Chernyshenko, Kankaras, & Drasgow, 2018; Frydenberg, Martin, & Collie, 2017).

According to Díaz-Morales and Escribano (2015), academic performance is the product of a group of psychological, social, and economic factors that lead to the effective development of students. Narad and Abdullah (2016) also refer to academic performance as the knowledge gained and indicated by marks, assigned by the teacher. They added that in an academic context, educational overall performance is the educational aim to be attained through a student, educator, or an institution over a given duration and is classified either by examinations or school-based assessment and the aim may additionally vary from an individual or the institution to any other. It is the result of education, the extent to which a student, teacher, or institution has attained their educational objectives.

27

Furthermore, the concept of academic performance itself is the total knowledge deduced from learning by the learner. The learner obtains knowledge from instructions he or she takes at school which is organised around a collection of core activities in which a teacher gives tasks to students and measures and compares the quality of their work. In addition, the academic performance of a student is influenced by various factors such as intellectual ability, environment, student attitude, interest, personal characteristics, motivation, social class, and the style and level of learning (Erhuvwu & Adeyemi, 2019). Academic performance is seen as a process in which students exhibit their capacity to pursue tasks. In other words, what a student can obtain when he or she is examined on what has been taught is usually informal education. Thus, at the end of the duration of the cautiously deliberate mode of instruction, students ultimately set up their performance.

Educational institutions want notably performing individuals to meet their objectives and to acquire competitive gain over different institutions. Achievement is vital for the individuals as well as the schools they attend. Completing tasks and performing at a competitive level can be a means of satisfaction, with feelings of mastery and pride. Low performance and not achieving the desires of an individual might be experienced as dissatisfying or even as a private failure. Thus, performance is a major, although not the only, prerequisite for future career improvement and success in a challenging environment.

28

Empirical Review

Studies were reviewed empirically under this section based on the study's specific objectives. The review focused on issues related to the relationship between academic satisfaction (AS), academic performance (AP), and student academic motivation (AM).

Relationship Between Academic Satisfaction (AS) and Academic Performance (AP)

According to Rivkin and Schiman (2015), the degree of correlation between performance and instructional period is presumed to be dependent on the instructional quality, the climate of the classroom, and how frequently students convert classroom moments into knowledge gained. The empirical investigation showed that performance increased with the instructional period, with the amount of time and the classroom climate influencing the increase. According to the findings, school events are important determinants of gains and the desirability of improved student performance.

Hanushek and Woessmann (2012) discovered that children who attend primary school in low-income countries learn significantly less following comparable time spent in school than students in high-income nations. Simultaneously, as the country's financial benefits decline, so does the impact of students' social fame on success. In contrast, the effect of school and instructor quality on educational performance in primary schools is relatively higher in low-income countries. Based on these findings, which may be representative of the global learner population, it is far more plausible to

29

conclude that the standard of the schools and instructors to which students are presented has a significant impact on their learning.

Ajayi (2014) investigated whether school assignments affect students' performance in Ghana in his study. One hundred and sixty thousand students who put in an application to 650 secondary schools across the country were tracked down using an admission system based on merit. Applying a choice of apparent method and regression discontinuity design, it was discovered that students accepted in highly chosen schools are much more presumably to live in the same school and finish early, but have the most beneficial marginal enhancements in an average accomplishment rate and exam performance. It was also discovered that there was a significant disparity in outcomes, implying that the school's quality as well as the match quality determined students' results in this situation.

Owusu (2015), on the other hand, investigated the correlation between teacher quality and pupils' performance in RME in basic schools in the Ga-South Municipality. The study involved 199 elementary schools and 532 participants, including 357 students and 175 RME teachers. It was found that RME teachers have enough information about using technology or instructional assets. Nevertheless, teachers' technological knowledge had a weak positive correlation with pupils' academic performance. Additionally, RME teachers have sufficient knowledge of teaching methods and subjects; nevertheless, a weak positive correlation exists between teachers' knowledge of content and learners' academic performance.

30

Bonney, Amoah, Micah, Ahiamenyo, and Lemaire (2015) investigated the correlation between teacher quality and students' AP among JHS students in a related study. A descriptive survey design was used, with JHS teachers and students. To carry out the study, five educational circuits in the city were chosen at random. Stratified and systematic sampling procedures were employed to select 500 participants. The research findings revealed that, while academic and professional qualifications were highly rated as components of teacher quality, they did not have a significant impact on learner performance.

Relationship Between Academic Satisfaction (AS) and Academic Motivation (AM)

Cudney and Ezzell (2017) investigated the impact of new teaching techniques as a form of academic satisfaction on students' motivation as well as knowledge retention in an undergraduate programme. Modern technology and strategies geared toward individual student studying options were integrated into the course. The research polled students at the start and close of a semester to assess the effect or influence on the students' experience. The survey determined whether implementing instruments that supported the student's particular study choice would affect his or her motivation. The Chi-Square test was employed in the analysis to evaluate how the new course tools improved the learning experience of students. According to the findings, the instruments had a positive impact on the student's motivation to study. The analysis also revealed that students' motivation for the semester changed. This means that additional research is desired to determine the sources of the motivational shifts.

31

Rezaee, Pabarja, and Mosalanejad (2019) investigated how students' instructional satisfaction with life affects learning, increasing academic awareness, and academic performance in research. A random sampling approach was employed to select 204 Jahrom University of Medical Sciences students. The research employed a cross-sectional descriptive research design. Statistical tests revealed that instructional satisfaction with life significantly improved students' learning motivation (r = .194, p = .005).

Again, teacher self-efficacy (TSE) is regarded as an exceptionally important motivating factor that influences both teachers' instructional quality and students' motivational orientations (Burić & Kim, 2020). However, discussions of those associations were frequently conceptual and founded entirely on empirical research that struggled with methodological limitations. Burić and Kim investigated the relationships between TSE, instructional quality, and student motivational orientations utilising responses from both instructors and learners and administering an advanced double latent multilevel structural equation version technique. The research involved 94 senior high school teachers and 2087 students. The results indicated a positive relationship between TSE and the three measurements of instructional quality at the class level, but not with learner motivational orientations. Learner motivational orientations were positively related to instructional quality.

Shen et al. (2015) used the job burnout design and self-determination theory to examine the relationships between teachers' burnout as an aspect of academic satisfaction and students' independent motivation in one-semester physical education classes. A questionnaire measuring relevant psychological

32

constructs was responded to by students and physical education teachers. Teachers' emotional exhaustion was found to have a negative relationship with students' perceived teacher autonomy support (TAS); thus, teachers' feelings of depersonalisation were related negatively to students' autonomous motivation development. As a result, it was concluded that status burnout of teachers is a vital environmental influence associated with students' motivational quality.

Justina (2015) investigated the factors that are thought to motivate students' academic performance. The sample was chosen using the purposeful sampling procedure. A questionnaire was employed to assess the environment, facilities, and student's interests. The data were analysed with simple percentages. According to the findings or results, the key factor that contributes to their success is the environment and facilities that are part of the educational satisfaction concept.

Relationship Between Academic Motivation (AM) and Academic Performance (AP)

Nyarko, Kugbey, Amissah, Ansah-Nyarko, and Dedzo (2016) studied the relationship between students' personality traits, motivation, and AA. The respondents were given standardised instruments that assessed personality traits as well as intrinsic and extrinsic motivations. Respondents' current CGPA was used to assess their academic performance. According to the findings, only conscientiousness predicts students' academic performance (a personality characteristic). Extrinsic motivation and AA, along with intrinsic motivation and AA, were found to have no significant relationship. It was concluded that

33

culture can influence personality traits and motivation, and thus the relationship should be explained in Ghanaian cultural settings.

Sivrikaya (2019) attempted to determine whether AM is related to the AP of physical education and sports students in a related study. The findings revealed that when students' academic performance increases, extrinsic motivation scores also increase.

In another study, Gupta and Mili (2017) attempted to determine how AM relates to the AP of Class IX students. T.R. Sharma's Academic Achievement Motivation Test and academic performance were the data collection instruments. AM and AP had a statistically significant positive correlation. Academic Motivation differed significantly between low and high performers. However, significant gender differences existed in academic motivation among low achievers.

Sikhwari (2014) studied the connection between motivation, self-concept, and academic performance. Differences in gender with self-concept, motivation, and educational attainment were examined. A random sample of level 200 students from four university schools was used. It was discovered that a significant association existed between students' self-concept, motivation, and educational success. Additionally, female students were significantly more encouraged than male students.

Samavi, Ebrahimi, and Javdan (2017) investigated the correlation between academic engagement, self-efficacy, and AM with AP. A multistage random sampling approach was employed to select 364 respondents (180 girls and 184 boys). Students' GPAs at the end of the first semester of the 2014-2015

34

academic year were used to measure their academic performance. The findings confirmed that the size of educational engagement, academic self-efficacy, and educational motivation can all predict educational performance.

Arbabisarjou, Zare, Shahrakipour, and Ghoreishinia (2016) investigated the association between academic achievement motivation and academic performance among medical students using a cross-sectional analysis. As the sample size, 200 medical sciences students (149 males and 51 females) were chosen at random. The first section examined demographic data; the second section focused on Harter's academic motivation questionnaire. The subjects' mean age was 22.74±2.22, and their GPA was 15.82±1.5. Men had higher academic motivation, while women had higher academic performance. Significant relationships existed between academic performance and intrinsic motivation and students' academic performance motivation but there was a statistically insignificant correlation between academic performance and individuals' extrinsic motivation. Academic performance motivation and academic performance have a statistically significant correlation, indicating that motivational factors play a significant role in AP.

Erhuvwu and Adeyemi (2019) investigated whether achievement motivation predicts AP among Edo State senior secondary school II students. Six hundred and ninety-eight (698) students were chosen at random from a population of twenty-seven thousand, nine hundred and thirty-seven (27,937) students in Edo State's public senior high school II students. The sample size was 698, representing 2.5% of the total population of 27,937. The population was sampled using a multistage sampling technique. This entailed selecting

35

samples in stages. Edo State had 18 Local Government Areas. The findings indicated that students' academic performance in mathematics was predicted by their achievement motivation. Concerning the discoveries, it was proposed that useful counselling strategies should be used to improve achievement motivation.

Dramanu and Aisha (2017) investigated the AM and performance of Ghanaian JHS students in a related study. The AM of female and male students, along with students from urban and rural schools, was evaluated. JHS 2 students with 756 males and 714 females were chosen at random using gender and location as stratification criteria. The AM was discovered to be positively related to JHS students' academic performance. Academic motivation differed statistically significantly between students in urban and rural schools. There was also a difference in AM between female and male students. It was then proposed that teachers, parents/guardians, and others involved in children's education implement psychological methods that will increase students' enthusiasm, giving them inward satisfaction when they achieve academic goals.

Mediating Role of Academic Motivation (AM) on the Relationship Between Academic Satisfaction (AS) and Academic Performance (AP)

Fan and Williams (2018) investigated motivation as a mediator in the association between perceptions of school atmosphere as a component of academic satisfaction and performance. The structural equation model (SEM) was used in the study to investigate a framework that depicts the role of self-efficacy and intrinsic motivation in the connection of learners' opinions of the school atmosphere (instructor/student dating, order/protection/area, equity of

36

school regulations) and performance in reading and mathematics. According to the findings, the relationship between perceptions of education satisfaction and reading and mathematics performance was mediated by student self-efficacy and intrinsic motivation. Again, learners' perceptions of academic satisfaction were significantly related to both performance outcomes, and teacher/student relationships were significantly related to all motivation variables, including self-efficacy and intrinsic motivation.

According to Ibrahim (2016), when selecting a university to attend, students consider service quality. Students' discontent with the quality of service may decline their motivation to participate in online higher education, and low levels of motivation may bring about poor student performance, resulting in a high dropout rate. Ibrahim (2016) conducted quantitative research, specifically a correlational study, to find out the degree to which student motivation can mediate the relationship between assumed quality of service as an aspect of quality education and student performance among online higher education students. The study included first- and second-year college students. A greater gap between expected and actual values in service quality (academic satisfaction) variables was related to a lower level of motivation. Service quality, on the other hand, did not predict GPA. The findings supported preceding research by demonstrating that enhanced service quality (academic satisfaction) predicted a higher level of learners' motivation, resulting in higher levels of student satisfaction and retention rates.

Ma, Duan, and Liu (2020) examined if students' motivational beliefs act as a mediator in the relationship between teacher-student relationships (TSRs)

37

as an aspect of academic satisfaction and performance in a foreign language using a multiple mediation model. The research sought to investigate whether there are discrepancies in the mediating roles of intrinsic and extrinsic motivation. One thousand seven hundred and seventy-one grade eight students (583 males and 588 females) were randomly selected in China. The findings revealed that intrinsic and extrinsic motivation both mediated the positive relationship between TSRs and foreign language performance. When compared to extrinsic motivation, intrinsic motivation had a highly significant mediation influence. The results demonstrated that supportive TSRs can assist students in enhancing their foreign language skills by increasing their motivation, particularly intrinsic motivation.

Hendrawijaya (2019) investigated and assessed the direct and indirect mediation effects of learning motivation on education, socioeconomic status, learning environment, and learning infrastructure as components of educational quality on students' learning performance. An explanatory research design was employed. In the academic year 2017/2018, 206 grade XI students from State SHSs in the City of Jember were sampled. The primary data collection instruments were questionnaires, observation, and documentation. Path analysis was employed to evaluate the direct and indirect effects. The findings revealed that parents' socioeconomic status, education, and academic satisfaction (learning environment and learning facilities) had a direct influence on their children's learning motivation. Learning motivation and education, socioeconomic status, and academic satisfaction all had a direct impact on students' learning performance (learning environment and learning facilities).

38

The influence of education, socioeconomic status, and academic satisfaction on students' academic performance was mediated by learning motivation.

Academic Satisfaction (AS) and Academic Motivation (AM) Predict Academic Performance (AP)

A study by Dogan (2015) aimed to evaluate the extent to which academic performance is affected by student engagement, academic self-efficacy, and academic motivation. The results of the study, which was conducted with 578 middle and high school students, indicate that cognitive engagement, a sub-dimension of school engagement, predicts academic performance; however, emotional and behavioural engagement does not predict academic performance. A sense of academic self-efficacy and academic motivation predicted students' academic performance. In addition, the sense of self-capability and associated motivations of students, as well as the sense of the goal for their learning are significant variables that affect their academic success.

Wach et al. (2016) examined in their study how individual characteristics and academic performance), as well as various motivational constructs, were associated with different dimensions of academic satisfaction. A sample of 620 university students was used. structural equation modelling was employed for the analysis. The results show that personality and motivational variables predicted satisfaction with academic studies. There was also a relatively low predictive value of cognitive academic performance-related variables while satisfaction only related to conditions of the academic program after controlling for the prior satisfaction level.

39

Baños, Baena-Extremera, and Granero-Gallegos (2019) also researched to determine how satisfaction with high school subjects can predict school satisfaction and academic performance in Mexican students. Four hundred and fifty-seven high school students in Mexico were used for the sample. A questionnaire containing a subject satisfaction scale, an intrinsic school satisfaction scale, and one related to academic grades. Descriptive analyses, correlations, and structural regression models were adopted. The results showed that the higher the satisfaction the higher the academic performance levels in the various subjects. It was concluded that satisfaction with school subjects predicts Mexican high school student's academic performance.

A related study by Cetin (2015) was to determine whether academic motivation and academic self-regulated learning predicted the GPA of students in the Early Childhood Education Department. One hundred and sixty-six respondents were used. The "academic motivation scale" developed by Vallerand et al. (1992), and the "academic self-regulated learning scale" developed by Mango (2010) were used to gather data. The results of the study showed that GPA does not correlate with academic motivation and academic self-regulation learning. Thus, academic motivation and academic self-regulated learning did not predict students' GPAs.

Chapter Summary

The research emphasised the association between AS, AM, and AP. The literature was divided into three parts. Thus, the literature was theoretically, conceptually, and empirically reviewed. The theoretical review elaborated two theories that served as the research foundation: Walberg's (1981) theory of

40

educational productivity and self-determination theory (Deci & Ryan, 1985). The conceptual framework was highlighted in the research, along with the relationships that occurred between them. Finally, the review of empirical studies depended on the study's specific objectives.

Most of the studies examined showed a significant relationship between AS and AP. A review of the literature also revealed that academic satisfaction is strongly related to academic motivation. It was also indicated in the literature that academic motivation significantly relates to academic performance. Again, the literature demonstrated that AM has a positive significant relationship with students' AP. A few studies have also found that AM acts as a mediator in the relationship between AS and AP. Except for a few studies conducted among SHS students, the majority of the research was carried out amongst basic school students and students of higher education, particularly in countries where educational systems differ from that of Ghana.

However, it appears that there is insufficient research among SHS students in Ghana, particularly in the area of the relationship between AS, AM, and students' AP. There appears to be no study that investigates the extent to which AS and AM predict students' AP. Given this, the present study looks into the connection between academic satisfaction, academic motivation, and student's academic performance. The study looked into how academic motivation influences academic satisfaction and performance among SHS students in the AAK district. The following chapter elaborates on the research method employed to conduct the research.

41

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter includes research design, study area, population, sampling procedure, research instrument, pilot testing, instrument validity, and reliability, ethical considerations, data collection procedure, and data analysis.

Research Design

The study employed a quantitative research approach, with the positivist research paradigm as its foundation. This paradigm is established on the proposition that social genuineness is specific and objective and that the act of exploring it has no impact on it. A deductive process was used to explain social circumstances in this approach. This philosophical knowledge holds that there is a chance that the researcher will conduct the research like a scientific process of collecting and treating data objectively, where bias is less likely (Kivunja & Kuyini, 2017).

The research design employed was a descriptive survey design. This is a form of design in which researchers are especially responsive to describing the behaviours and characteristics of a huge population on a selected issue at a given time (Fraenkel, Wallen, & Hyun, 2012). In this design, researchers administer survey instruments to sampled respondents or the whole population to measure the behaviours, characteristics, and attitudes of the population.

A descriptive survey design describes the current characteristics of variables studied at a time (Amedahe & Asamoah-Gyimah, 2015). In the utilisation of the survey, data was gathered regarding the role academic

motivation plays in the interaction between academic satisfaction and academic performance of SHS students. With this, some questions were asked and later analysed statistically to find the solution to the identified problems for which the research was carried out. The use of descriptive survey design was based on the premise that it investigates possible issues and describes them as they are without manipulating the variables. There are various research layout styles. However, the design chosen is determined by the research issue, the study's questions and/or hypotheses, and the observed group, amongst other factors. The choice of this design was because the study aimed to evaluate and describe the relationship between academic satisfaction, academic motivation, and academic performance of SHS students in the AAK district.

The descriptive survey design applied to this research because it aims to collect information from senior high school students and describe them exactly as they were. Descriptive studies can be useful in determining variables that can be tested, so they can serve as forerunners to further research. Descriptive research findings may also lead the researcher to exact variables that require further investigation. Additionally, it yields rich data collected in large quantities from large populations. Survey design researchers use questionnaires to collect measurable data, which they then analyse to describe the responses and test research questions or hypotheses.

Despite the benefits of descriptive survey design, it reduces the extent to which the efficiency and fairness of the responses can be determined by the researcher. Juxtaposing the merits and demerits of the exploit of the design, it

43

was realised that the merits outweighed the demerits. Therefore, a descriptive survey design was deemed suitable to be adopted for this research.

Study Area

To fully comprehend the foundation of this study, it is prudent to look into the history of the AAK district. The Central Region has 9,826 square kilometres of land area, accounting for (4.1%) of Ghana's total land sector (GSS, 2014). The Abura-Asebu-Kwamankese district is among 22 districts in the Central Region that were formed from the former Mfantseman District Council in 1988. The District Capital is Abura Dunkwa. The district has an approximated land sector of about 380 square kilometres, 376 settlements, and an estimated population of 124,456. As a constituency district, the Assembly has eight sub-structures (One Urban, One Town, and Six Area Councils). There are 31 Electoral Areas with a total composition of 34 Assembly Members.

The people of the Abura-Asebu-Kwamankese district are mostly farmers, with some trading. Fishing provides a living for a segment of the population, primarily men. Odumkwaa festival is celebrated by the people of Abura Dunkwa during Easter, Amoakyer Afahye is celebrated by the people of Abakrampa in April, Kae Kro is celebrated at Asebu on November 25th yearly, Okyir festival is celebrated at Edumfa in October, and Abangye festival of Moree celebrated in the first week of September are among the festivals celebrated in the district.

There are 93 public elementary schools, 68 private elementary schools, four SHS, one Technical Vocational Education and Training (TVET), and one Integrated Community Centre for Employable Skills (ICCES) in the Abura-

Asebu-Kwamankese district. There is a significant influence from the private sector in uplifting education within the district. The early introduction of formal education in Abura-Asebu-Kwamankese has gone a long way in impacting the educational life and comprehensive development of the area. The people of Abura-Asebu-Kwamankese are known for their ability to combine Fante and English Languages in their speech. Abura-Asebu-Kwamankese district is a place where most people seek to have their education; especially in the second cycle of training which prepares them for the future.

Population

The study's target population was all 4,716 SHS students in the three senior high schools in the AAK district whose performance was poor in WASSCE. Table 1 depicts the target population.

Table 1

Target Population

Senior High Schools	Population			
	Form 1	Form 2	Form 3	Total
Abakrampa Senior High/Technical	729	581	446	1756
Aburaman Senior High	542	520	601	1663
Moree Community Senior High	462	428	407	1297
Total	**1733**	**1529**	**1454**	**4716**

(Source: GES, 2021)

Accessible Population

The respondents were drawn from Form 2 in all the schools. The Form 2 students were chosen because during data collection, Form 3 students were

45

writing their final exams (WASSCE) and Form 1 students were also on vacation. The detail of the accessible population is depicted in Table 2.

Table 2

Accessible Population

Senior High Schools	Population
	Form 2
Abakrampa Senior High/Technical	581
Aburaman Senior High	520
Moree Community Senior High	428
Total	**1529**

(Source: GES, 2021)

Sample and Sampling Procedure

The multistage sampling technique was adopted for the study. First, three senior high schools in the AAK district were purposively sampled. This was based on their performance in the WASSCE in the years 2018, 2019, and 2020. Then, the Krejcie and Morgan (1970) sampling size determination table was used to select 310 respondents under a 95% confidence level and a 5% margin of error from a population of 1529 for the three schools. However, Andrade (2020) postulated that the sample can be adjusted to 10% or more for a better representation and compensation for dropouts and non-returned copies of the questionnaire. As such the sample of 310 was increased by 20%. Therefore, the final sample was 372. The proportionate size was used to determine the number of students at each senior high school and then simple random sampling was used to select respondents for the study. The use of a simple random technique gave each respondent an equal and independent

46

opportunity to be chosen in the sample. The sample size was calculated and their percentages were determined using relative frequencies. Table 3 shows the sample size used for the study.

Table 3

Sample Size

Senior High Schools	Population	Relative Frequency (*rf*) (%)	*rf* x 357 (Sample)
Abakrampa Senior High/Tech.	581	38	137
Aburaman Senior High	520	34	128
Moree Community Senior High	428	28	107
Total	**1529**	**100**	**372**

(Source: Field survey, 2021)

Data Collection Instrument

The study's instrument for data collection was a questionnaire. The questionnaire was the best tool because it is a self-report measure that ensures confidentiality and anonymity, which is especially important when dealing with sensitive issues. It is also appropriate to use when studying a huge sample (Krause & Corts, 2016). The questionnaire was seen as the most applicable tool to use since the respondents are literate.

Despite these advantages, it has several disadvantages which include a low rate of response, low return rate, and lack of chance for the researcher to explain issues that need further elaboration. These problems were addressed through the use of the collective administration method. Personal contact with respondents was made and the aim and essence of the research were elaborate. Clarification was also given on all questions that respondents had difficulty

47

understanding. The respondents were again urged to give honest responses as much as possible.

To examine academic satisfaction in senior high school, the Student University Satisfaction Scale (SUSS) developed by Hussain and Bhamani (2012), an instrument used to measure university students' satisfaction with educational quality, was adapted. The original items of the SUSS were 36, which describe the academic quality of the school, facilities, and overall satisfaction. It had greater reliability with Cronbach's alpha (.91). The items were modified and reduced to 18 to fit the goal of the current study. A 3-point Likert scale, ("Never" = 1, "Sometimes" = 2, or "Always" = 3) was used to score the responses to the statements.

The Motivated Strategies for Learning Questionnaire (MSLQ) developed by Pintrich, and DeGroot (1990) was adapted. This was used to measure academic motivation in senior high school students. The 44-item instrument was developed to assess students' intrinsic, extrinsic goal orientation, amotivation, and test anxiety to measure students' motivation. Internal consistency was uniformly high for all MSLQ items (Cronbach alpha = 0.93) and each domain (0.67) (Cook, Thompson & Thomas, 2011). Originally, the items were scored on a 7-point Likert scale, from 1- 'not at all true of me' to 7- 'very true of me'. The items were modified and reduced to 34 to fit the purpose of the study. The 34-item self-report instrument was graded on a 4-point Likert scale of Strongly Disagree = 1, Disagree = 2, Agree = 3, and Strongly Agree = 4.

48

The student's academic performance was assessed using average scores from the core subjects of their semester common examination obtained from a registry provided by their teachers. The first semester scores of respondents in the core subjects were used because they were the most recent results at the time of the study. Table 4 categorises the scores based on the WASSCE Grading System.

Table 4

WASSCE Grading System

Grade	Numeric Value	Interpretation	Marks in Percentage
A1	1	Excellent	75 – 100
B2	2	Very good	70 – 74
B3	3	Good	65 – 69
C4	4	Credit	60 – 64
C5	5	Credit	55 – 59
C6	6	Credit	50 – 54
D7	7	Pass	45 – 49
E8	8	Pass	40 – 44
F9	9	Fail	0 – 39

(Source: WAEC, 2016)

The instrument comprised four main sections labeled 'A' to 'D'. Section 'A' comprised demographic information of the participants which involved the school's name, gender of the respondent, age, and class. Section 'B' consisted of 18 items that assessed the academic satisfaction of the school. Section 'C' comprised 34 items that examined the intrinsic and extrinsic goal orientations and amotivation. Finally, Section D consisted of the student's academic performance in the core subjects of their semester examinations.

49

Validity and Reliability of Instrument

Validity of the Instrument

To ensure the validity of the instrument, the questionnaire was given to an expert and my supervisor for accurate judgment to evaluate whether: (a) the items were in line with the research questions; (b) the items would elicit useful responses from the respondents; (c) correctly structured vocabulary was used; (d) the items had a good pattern of arrangement; (e) the items suited the sections into which they were placed, and (f) there was no ambiguity in the items.

Reliability of the Instrument

Pre-testing of Instrument

To measure the reliability of the instrument, it was pretested in a different school where the respondents had similar features as those in this study. The instrument was pre-tested with 75 respondents from Oguaa Senior High Technical School in the Cape Coast Metropolis in the Central Region. The determination of sample size was based on Sim and Lewis (2012) sample size for a pilot study. This aided in the improvement of the questions, arrangements, and scales following carefully scrutinising the items about the flaws, clarity, and vagueness in all parts of the questionnaire (Amedahe & Asamoah-Gyimah, 2015). Cronbach alpha was used in the estimation of the internal consistency of the sub-sections of the instrument. An alpha value of .70 and above was deemed applicable (Karagoz, 2016). Table 5 presents the details.

50

Table 5

Reliability Co-Efficient of the Pretested Instrument

Name of Scale	Number of Items	Cronbach's Alpha
Academic Satisfaction (AS)	18	.78
Intrinsic Motivation (IM)	16	.76
Extrinsic Motivation (EM)	10	.74
Amotivation (AM)	8	.75
Overall Scales	**52**	**.82**

(Source: Field survey, 2022)

Table 5 depicts the reliability coefficients of the instrument's scales following the pre-test. Academic Satisfaction received a score of .78, while Extrinsic Motivation received a score of .74. The overall scale's Cronbach Alpha value was .82. Table 6 shows the details of the reliability coefficients of the questionnaire sub-sections after the final data collection.

Table 6

Reliability Co-Efficient of the Final Instrument

Name of Scale	Number of Items	Cronbach's Alpha
Academic Satisfaction (AS)	18	.74
Intrinsic Motivation (IM)	16	.68
Extrinsic Motivation (EM)	10	.78
Amotivation	8	.73
Overall Scales	**52**	**.78**

(Source: Field survey, 2022)

Table 6 depicts the reliability coefficient of the instrument after the final data collection. The overall Cronbach Alpha value was .78 after data collection. This shows good reliability.

51

Data Collection Procedures

The Ethical Review Board at the University of Cape Coast granted permission for data collection. Education and Psychology Department provided an introductory letter that allowed for the visit to the selected schools in the AAK district. The introductory letter was sent to the selected senior high schools' headmasters and headmistresses for permission to collect data. A follow-up was made to schedule dates, which were suitable for data to be collected. A moment was spent to explain to the headmasters and the headmistresses.

The copies of the questionnaire were given to the students with the help of three research assistants who had been trained to collect data by the researcher. The research assistants helped to clarify issues to students during the administering of the copies of the questionnaire. The data on the students' academic performance was gathered from the assistant headmasters in charge of academics in each school. Three weeks were used to collect data from the three schools. At each school, data were collected on the same day.

Data Processing and Analyses

The copies of the questionnaire were cleaned to delete missing or incomplete data before running the analyses. Research question one which aimed to determine the relationship between academic satisfaction and academic performance was analysed using the Pearson Product Moment Correlation Coefficient. Research question two aimed to establish the relationship between academic satisfaction and academic motivation analysed using Pearson Product Moment Correlation Coefficient. Again, research

52

question three, aimed to determine the relationship between academic motivation and academic performance was analysed using Pearson Product Moment Correlation Coefficient. Pearson Product Moment Correlation Coefficient was used because the variables were continuous.

Data on research hypothesis one was analysed with Hayes Mediation Process Analysis (Hayes, 2018). Process Model 4, which deals with simple mediation, was used to analyse this research question. Academic motivation was used as a mediator in the relationship between academic satisfaction and academic performance in this model. Multiple Regression Analysis was used to describe the relationship among variables in research hypothesis two. This hypothesis aimed to examine the degree to which academic satisfaction and academic motivation predict academic performance.

Ethical and Logistics Considerations

Ethical clearance (CES/ERB/UCC/EDU/V6/22-81) was received from the Ethical Review Board, at the University of Cape Coast for data collection. Informed consent, anonymity, confidentiality, and plagiarism, amongst other ethical issues, were strictly observed. First and foremost, the aim and necessity of the research were explicitly explained to the respondents. Respondents were informed, that participation in the research was willing. They were also urged to give precise and honest responses if they agreed to take part in the study. The respondents were given the liberty to opt out of the study at any time they felt like doing so without coercion. The respondents were assured that the study would have no negative effects on them. The respondents were also assured of the confidentiality and anonymity of the data after their consent was sought and

that they had the freedom to opt out of the study when they wanted to. To ensure anonymity, respondents' names were excluded from the questionnaire. Data was carefully managed and stored under lock and key to prevent unauthorised access.

Chapter Summary

The study utilised a quantitative research approach specifically the descriptive survey design. The population of the research comprised the public SHSs in AAK district in the central region of Ghana with a total number of 4,716 students. Purposive, proportionate, and random sampling techniques were employed to select students from Aburaman Senior High, Abakrampa Senior High/Technical, and Moree Community Senior School. The questionnaire was administered to 372 Form 2 students. Three hundred and fifty-seven copies of the questionnaire were filled and returned, which led to a 96% response rate. The validity and reliability of the results were ensured throughout the research. The study made use of inferential statistics such as Pearson product-moment correlation coefficient, multiple regression, and Hayes Process mediation in its analyses after the data collection. The subsequent chapter contains a presentation of the findings along with discussions of the findings.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

The study examined the mediating role of academic motivation (AM) in the relationship between academic satisfaction (AS) and academic performance (AP) of SHS students in the AAK district. The chapter covers demographic information, the findings of the research questions, and hypotheses, and a discussion of the findings.

Results

The results are put into two sections. The demographic information of the respondents was presented in the first section. Although this part was not part of the research objectives, it was included to describe the samples used for the study. The second section looked at the main findings.

Demographic Information

The respondents' demographic includes the name of the school, gender of the respondent, age, and class. These variables were not considered in the final analyses but they helped to describe the sampled respondents used for the current study. All the respondents were students in Form 2 from the three selected SHSs. Table 7 displays the details of the demographic information of the respondents.

55

Table 7

Demographic Information of the Respondents (N = 357)

Variables	Frequency	Percentage (%)
School		
Abakrampa Senior High/Tech	132	37
Aburaman Senior High	125	35
Moree Community Senior High	100	28
Gender of the Respondents		
Male	158	44.3
Female	199	55.7
Age		
13-17	148	41.5
18-23	207	58
Above 23	2	.5

(Source: Field survey, 2022)

Items in Table 7 show that (37%) of the respondents sampled were from Abakrampa Senior High/Tech. Moree Community Senior High had the minimum number of students representing (28%). Again, it was revealed from Table 7 that female respondents were the majority (55.7%). As a result, the majority of respondents were females. The respondents' age distribution revealed that the majority (58%) of the respondents were aged between 18 and 23, inclusive, with only (.5%) being older than 23.

Research Objectives and Hypothesis Testing

A preliminary analysis was undertaken to ensure that the data obtained does not violate the assumption of normality which is considered a fundamental assumption of all statistical analysis. The assumption for normality of the academic satisfaction, academic motivation, and academic performance of students was tested using the histogram with normality plot. The results are shown in Figures 2, 3, and 4.

56
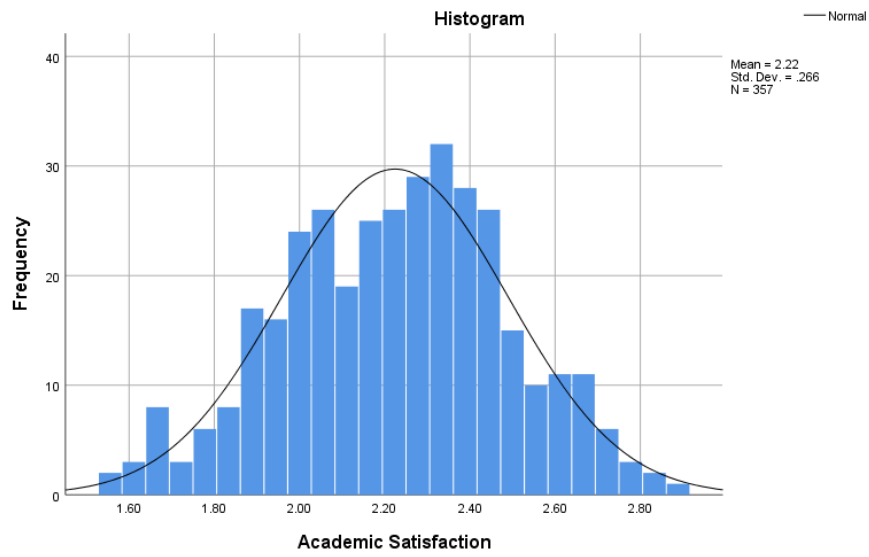
Figure 2

Figure 2: Normality Plot for Academic Satisfaction

Figure 3
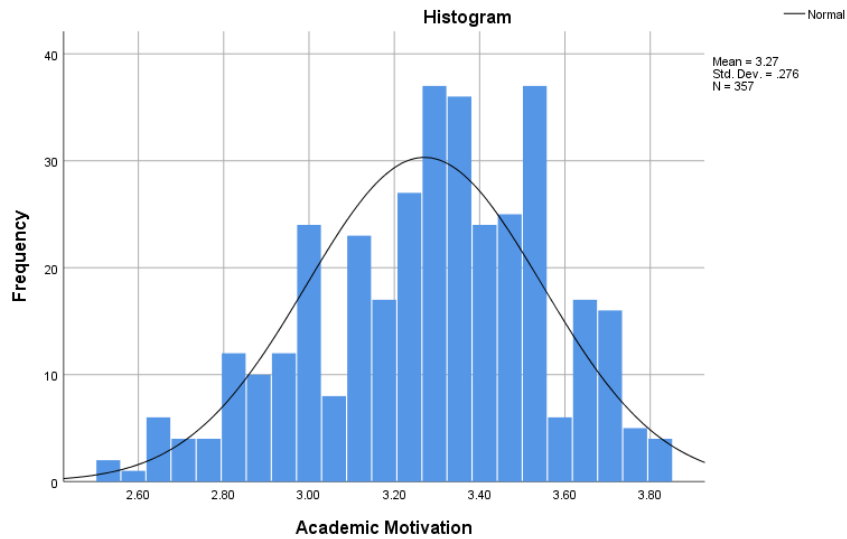
Figure 3: Normality Plot for Academic Motivation

57
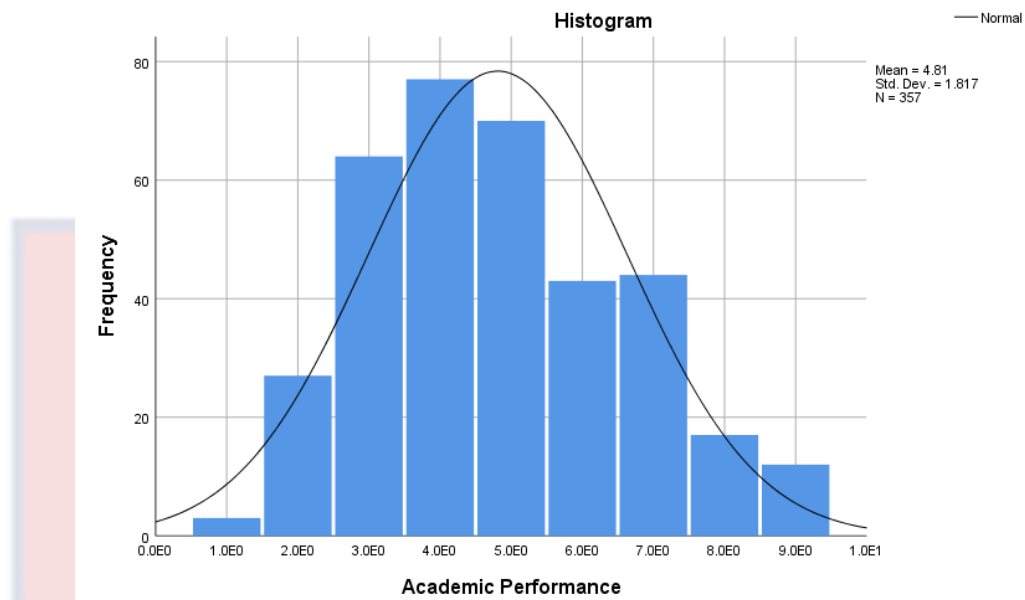
Figure 3

Figure 4: Normality Plot for Academic Performance

The plots for the three variables in Figures 2, 3, and 4 showed that the distribution of academic satisfaction, academic motivation, and academic performance is approximately bell shaped. According to Kutner, et al. (2005), for normally distributed data, the histogram should approximate the bell shape (symmetry) of a normal distribution. Therefore, the distribution of the three variables is approximately normally distributed and further statistical analysis can be conducted using these data.

Research objective one sought to establish a relationship between academic satisfaction and academic performance of SHS students. First, the descriptive statistics was used to summarise a set of data in the form of frequencies and percentages. The first task was to elicit responses from respondents regarding their knowledge of academic satisfaction in their schools. Data on academic Satisfaction was gathered using a 3-point Likert (Never = 1,

58

Sometimes = 2, and Always = 3) scale. The Mean of the 3-point Likert scale ((3+2+1) ÷3 = 2) was used to determine if students are always or never satisfied with the academic-related activities of their school. Thus, if the means of a statement is 2 and above, then respondents agreed that the academic satisfaction received from their school is always good, whereas mean scores below 2 suggest their disagreement. That means the academic satisfaction of their school is not good. The standard deviations show how their perceptions differ from one another. The descriptive statistics of academic satisfaction and academic performance are indicated in Tables 8 and 9 respectively.

Table 8

Descriptive Statistics of Students' Academic Satisfaction

Statements	M	SD
"I am satisfied with the quality of teachers in my school."	2.64	.593
"I am satisfied with the time allocation for assignment submission."	2.56	.601
"I find my teachers provide equal learning opportunities."	2.55	.598
"I find assignments are aligned to meet the objectives."	2.53	.573
"Teachers are generally student-friendly and focus on specific individual needs."	2.42	.632
"I find my teachers supportive of my professional improvement needs. "	2.40	.678
"I am satisfied with the students' counselling services in my school."	2.40	.669
"I find the academic policies of my school student-friendly."	2.21	.658
"I find the curriculum student-friendly."	2.20	.573
"Appropriate recognition for star students is observed."	2.20	.687
"I find assessment procedures fair and transparent."	2.20	.713
"I find my school's learning environment conducive."	2.18	.610
"I find a wide range of resources relevant to my studies in the school's library."	2.11	.719
"I am given remedial support in my school."	1.97	.715
"There is a wide range of opportunities for recreational activities."	1.96	.643
"I find classrooms well-equipped with educational resources."	1.91	.742
"I can access my teachers out of the class to meet my remedial needs."	1.78	.682
"I find IT labs well-equipped to meet students' needs."	1.69	.764
Mean of Means	**2.22**	**0.066**

(Source: Field survey, 2022)

59

Items in Table 8 show the mean and standard deviation of the statements measuring the students' academic satisfaction of schools sampled for the study. The mean of means (2.22, 0.066) showed that the schools have good academic satisfaction. The mean values revealed that respondents agreed with the statements. Thus "I am satisfied with the quality of teachers in my school" (M = 2.64, SD = .593), and "I am satisfied with the time allocation for assignments submission" (M = 2.56, SD = .601). These showed that students agreed that their schools are of good quality based on the aforementioned statements. However, the findings revealed that respondents lack remedial support. This was shown in the low mean recorded in, "I am given remedial support in my school" (M = 1.97, SD = .715) and "I can access my teachers out of the class to meet my remedial needs" (M =1.78, SD = .682).

Subsequently, students' academic performance was measured using students' grades in their end-of-semester exams conducted by their respective schools were used. The average score obtained by each student represented their academic performance. The scores were graded according to the West African Senior School Certificate Examination grading system. This is shown in Table 9.

60

Table 9

Academic Performance of Students Using Average Grades in Four Core Subjects

Average Grade	Frequency	Percentage (%)
A1	3	.8
B2	27	7.6
B3	64	17.9
C4	77	21.6
C5	70	19.6
C6	43	12.0
D7	44	12.3
E8	17	4.8
F9	12	3.4
Total	**357**	**100.0**

(Source: Field survey, 2022)

The items in Table 9 depict the students' academic performance using average scores in four core subjects. Students' academic performance in each subject was graded from A1 to F9. The average performance of students shown in Table 9 indicated that the highest average grade obtained by three students was A1. Again, 77 of the students had an average grade of C4. It was also shown that 12 students recorded average grade F9. Thus, 12 students failed their exams.

To investigate the extent to which academic satisfaction relates to students' academic performance, a correlational analysis was conducted. Students' academic performance used in this study was the mean of their performance. Pearson product-moment correlation coefficient (r) was used for the analysis. The use of Pearson product-moment correlation coefficient (r) was because both variables (academic satisfaction and academic performance) are continuous.

A correlation matrix analysis was conducted at a 5% level of significance to determine the relationship that exist among the variables (academic satisfaction, academic motivation, and academic performance). Table 10 presents the results of the correlations.

Table 10

Correlations (Academic Satisfaction, Academic Motivation and Academic Performance)

Correlations		Academic Satisfaction	Academic Motivation	Academic Performance
Academic Satisfaction	Pearson Correlation	1	.186	.112*
	Sig. (2-tailed)		.000	.034
	N	357	357	357
Academic Motivation	Pearson Correlation	.186	1	-.068
	Sig. (2-tailed)	.000		.197
	N	357	357	357
Academic Performance	Pearson Correlation	.112*	-.068	1
	Sig. (2-tailed)	.034	.197	
	N	357	357	357

* Correlation is significant at the 0.05 level (2-tailed).
(Source: Field survey, 2022)

The items in Table 10 revealed the correlation between Academic Satisfaction and students' Academic Performance. The correlation coefficient $(r = .112, p = .034)$ shows that there is a positive weak correlation between the two variables. Thus, academic satisfaction relates to students' academic performance. Specifically, when the academic satisfaction of a school improves, there is a likelihood of students' academic performance improving. At the end of the analyses, the findings, therefore, indicated that Academic Satisfaction relates to Academic Performance of SHS students in the AAK district.

62

The second research objective sought to establish a relationship between academic satisfaction and academic motivation of SHS students.

This objective sought to find the relationship between academic satisfaction and the academic motivation of students. The academic motivation was measured using a 4-point Likert scale (Strongly Disagree = 1, Disagree = 2, Agree = 3, Strongly Agree = 4). The mean of the 4-point Likert scale $((4+3+2+1) \div 4 = 2.5)$ was used to determine if respondents agreed or disagreed with the statements. Mean values of 2.5 and above suggest respondents' agreement, whereas mean values below 2.5 suggest their disagreement. The mean and standard deviation of the statements measuring the academic motivation of students are shown in Table 11.

Table 11

Descriptive Statistics of Students' Academic Motivation

Statement	M	SD
Intrinsic Motivation		
"I like what I am learning in this class."	3.60	.626
"Even when I do poorly on a test I try to learn from my mistakes."	3.58	.657
"I think that what we are learning in this class is interesting."	3.55	.635
"Understanding this subject is important to me."	3.55	.648
"I think I will be able to use what I learn in this class in other subjects."	3.47	.717
"Even when study materials are dull and uninteresting, I keep working until I finish."	3.33	.738
"I use what I have learned from old homework assignments and the textbook to do new assignments."	3.32	.746
"I prefer challenging classwork so I can learn new things."	3.29	.756
"I think that what I am learning in this class is useful for me to know."	3.25	.672
"It is important for me to learn what is being taught in this class."	3.17	.834
"When I study, I put important ideas into my own words."	3.13	.887
"I often choose topics I will learn something from even if they require more work."	3.06	.757

63

"I expect to do very well in this class."	3.06	.855
"I ask myself questions to make sure I know the material I have been studying."	2.91	.930
"I'm certain I can understand the ideas taught in this programme."	2.83	.861
"I always try to understand what the teacher is saying even if it doesn't make sense."	2.73	1.003
Extrinsic Motivation		
"My study skills are excellent compared with others in this class."	3.69	.591
"I think I will receive a good grade in this class."	3.63	.673
"Compared with other students in this class I expect to do well."	3.62	.670
"I know that I will be able to learn the material for this class."	3.53	.692
"When I do homework, I try to remember what the teacher said in class so I can answer the questions correctly."	3.52	.645
"I am sure I can do an excellent job on the problems and tasks assigned for this class."	3.51	.760
"When I study for a test, I try to remember as many facts as I can."	3.47	.688
"I work hard to get good grades even when I don't like a class."	3.34	.761
"Compared with other students in this class I think I know much about the subject."	3.22	.817
"When reading I try to connect the things, I am reading about with what I already know."	3.18	.956
Amotivation		
"I often find that I have been reading for class but don't know what it is all about."	3.46	.850
"I find that when the teacher is talking, I think of other things and don't really listen to what is being said."	3.39	.840
"It is hard for me to decide what the main ideas are in what I read."	3.24	.834
"When work is hard I either give up or study only the easy parts."	2.83	.984
Test Anxiety		
"I am so nervous during a test that I cannot remember facts I have learned."	2.92	.942
"I have an uneasy, upset feeling when I take an examination."	2.83	.931
"I worry a great deal about examinations."	2.81	1.050
"When I take a test, I think about how poorly I am doing."	2.73	1.019
Mean of Means	**3.26**	**0.050**

(Source: Field survey, 2022)

64

Table 11 shows the descriptive statistics of students' academic motivation. The mean of means (3.26, 0.050) showed that students agreed with most of the statements. This means most of the students have a high level of academic motivation, specifically, that of intrinsic and extrinsic motivation. The study revealed that students averagely agreed to the following statements: "My study skills are excellent compared with others in this class" (M = 3.69, SD = .591) "I think I will receive a good grade in this class" (M = 3.63, SD = .673) and "Compared with other students in this class I expect to do well" (M = 3.62, SD = .670).

However, respondents' responses on test anxiety items show that some of the respondents' experience text anxiety. This was shown in the low mean recorded, "when l take a test, l think about how poorly l am doing" (M = 2.73, SD =1.019), "I worry a great deal about examinations" (M = 2.81, SD =1.050), "I have an uneasy, upset feeling when l take an examination" (M = 2.83, SD = .931), and "l am so nervous during a test that l cannot remember facts l have learned" (M = 2.92, SD = .942).

To establish the relationship between students' knowledge of academic satisfaction and academic motivation, the Pearson product-moment correlation coefficient (r) was used (see Table 10). The use of Pearson product-moment correlation coefficient (r) was because both variables (academic satisfaction and academic motivation) are continuous.

The items in Table 10 show that there is a significant positive weak correlation between the two variables (r = .186, p < .001). Thus, as academic satisfaction improves, there is a low likelihood that students' academic

motivation will improve as well, and vice versa. At the end of the analyses, the findings, therefore, indicated that academic satisfaction positively relates to academic motivation of SHS students in the AAK district. This means that respondents who indicated that their school has high academic satisfaction are likely to have high academic motivation. That is to say that, when students are satisfied with the quality of academics they receive in school, their motivational level increases. In the same way, if students are not satisfied with the academic services provided by the school, their level of motivation will be reduced.

Research objective three sought to establish a relationship between academic motivation and academic performance of SHS students. This objective solicited responses from the respondents on the extent to which academic motivation relates to students' academic performance. The correlation between academic motivation and academic performance was computed to determine that a relationship exists between the two variables using the Pearson product-moment correlation coefficient.

Items in Table 10 show the correlation coefficient between academic motivation (AM) and academic performance (AP). The correlation between AM and AP showed a correlation coefficient of (r = -.068, p = .197). This signifies that there is no correlation between the two variables. Therefore, academic motivation does not result in high or low performance of students in academics. At the end of the analyses, the findings, therefore, indicated that AM does not relate to AP of SHS students in AAK district.

The fourth research object sought to examine the mediating role of academic motivation (AM) in the relationship between academic satisfaction

66

(AS) and academic performance (AP). To perform this task the following hypotheses were formulated:

H_0: Academic motivation will not significantly mediate the relationship between academic satisfaction and academic performance of SHS students in the AAK district.

H_1: Academic motivation will significantly mediate the relationship between academic satisfaction and academic performance of SHS students in the AAK district.

The students' knowledge of the academic satisfaction of their schools was established and the details (as shown in Table 8). The academic performance of the students (as shown in Table 9). Again, the students' knowledge of academic motivation was established, and the details (as shown in Table 11). Hayes' mediation Process model 4 analysis in SPSS version 26 was used to analyse the data. The mean scores of students on Academic Satisfaction (AS), Academic Motivation (AM), and Academic Performance (AP) were employed for the analysis. The results are presented in Tables 12 and 13 respectively. The results in Table 12 show the direct, indirect, and total effects of the independent variable on the dependent variable. Finally, the items in Table 13 show the results of the mediation analysis.

Table 12

Direct, Indirect, and the Total Effects of the Independent Variable on the

Dependent Variable

					Confidence Interval	
					Lower	Upper
	Effect	BSE	CR	p	Limit	Limit
Total effect of X on Y	.7646	.3599	2.1245	.0343	.0568	1.4724
Direct effect of X on Y	.8818	.3653	2.4143	.0163	.1635	1.6002
Indirect effect of X on Y	Effect	BSE	BootLLCI		BootULCI	
Academic Motivation	-.1172	.0825	-.3035		.0198	
Completely standardised indirect effect (C'cs)	c'_{cs}	BSE	BootLLCI		BootULCI	
Academic Motivation	-.0172	.0122	-.0451		.0029	

Completely standardised indirect effect (c'cs): Total effect = .1120; Direct

effect = .1292

Direct Effect

If the relationship between AP and AS is direct and not mediated by

Academic Motivation, the term "direct effect" is used. Table 12 shows that the

direct effect was .8818 (t = 2.4143, p =.0163). The null hypothesis is accepted

because the p-value < 0.05. As a result, there is a direct relationship between

AS and AP. This implies that without the mediator (academic motivation),

academic satisfaction independently predicted students' academic performance.

This suggests that a unit increase in academic satisfaction would lead to .8818

increase in academic performance.

Indirect Effect

This section of the findings investigates the null hypothesis that the indirect relationship between the independent (X) and dependent (Y) variables is zero. The items in Table 12 indicate that the indirect effect is equal to "-.1172," with a 95% bootstrap confidence interval of -.3035 (lower limit) to .0198 (upper limit). I fail to reject the null hypothesis because "zero" falls within the 95% confidence interval. To put it another way, it was determined that Academic Motivation does not mediate the relationship between Academic Satisfaction and Academic Performance; that is, "a*b" is statistically not significant at alpha .05 (p <.05).

Total Effect

This is the total effect of the model, including both indirect and direct effects. It is the product of indirect (a*b) and direct (c) effects. The total effect was .7646 (t = 2.1245, p = .0343), according to the results in Table 12. This demonstrates that a statistically significant effect existed.

69

Table 13

Mediation Analysis

Variable/effect	B	SE	T	P	95% Confidence Interval	
AS → AP	.7646	.3599	2.1245	<.05	.0568	1.4724
AS → AM	.1929	.0541	3.5634	<.05	.0864	.2993
AS → AM → AP	.8818	.3653	2.4143	>.05	-1.2999	.0843
Effects						
Direct	.8818	.3653	2.4143	.0163	.1635	1.6002
Indirect	-.1172	.0825			-.3035	.0198
Total	**.7646**	**.3599**	**2.1245**	**.0343**	**.0568**	**1.4724**

(Source: Field survey, 2022)

Items in Table 13 show the results of the Hayes Process Model. The independent variable (Academic Satisfaction) was a significant predictor of academic performance, according to regression analysis (b = .7646, t = 2.1245, p <.05). The results of the second regression analysis, which controlled for Academic Motivation (mediator), show that academic satisfaction was a significant predictor of academic performance (dependent variable) (b =.1929, t = 3.5634, p <.05). Based on 5000 bootstrap samples, there was an insignificant indirect negative relationship between AS and AP, which is mediated by AM (a*b = -.1172, with a Bootstrap confidence interval ranging from -.3035 to .0198). Therefore, at the end of the analyses, the findings indicated that Academic Motivation has no significant indirect mediation role in the relationship between Academic Satisfaction and students' Academic Performance of SHS students in the AAK district.

Research objective five sought to investigate if academic satisfaction and academic motivation predict students' academic performance. The following hypotheses were formulated to perform this task:

70

H₀: Academic satisfaction and academic motivation are not significant predictors of academic performance of SHS students.

H₁: Academic satisfaction and academic motivation are significant predictors of academic performance of SHS students.

Multiple regression analysis was conducted to find out if Academic Satisfaction and Academic Motivation predict Academic Performance. Tables 14 and 15 show the findings of the analysis.

Table 14

Model Summary and ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.	R	R-square
Regression	24.448	2	12.224	3.761	.024[b]		
Residual	1150.599	354	3.250				
Model						.144	.021
Total	**1175.048**	**356**					

(Source: Field survey, 2022)

Items in Table 14 show the results of the ANOVA test conducted to measure if the model for measuring the effect of academic satisfaction and academic motivation on students' academic performance is fit. The results indicated that the model is fit and adequate for explaining the effect of academic satisfaction and academic motivation on academic performance at the senior high school level since $(F = 3.761, df = 2, p < 0.05)$ is significant. Again, the r-square (.021) reported for the model indicates that academic satisfaction and academic motivation explained 2% of the variance of student's academic performance at the SHS level. Table 15 shows the coefficients of the regression model.

71

Table 15

Coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1 (Constant)	4.836	1.283		3.769	.000		
AM	-.608	.352	-.092	-1.727	.085	.965	1.036
AQ	.882	.365	.129	2.414	.016	.965	1.036

a. Dependent Variable: Academic Performance

(Source: Field survey, 2022)

The results from Table 15 further show that only academic satisfaction $(\beta = .882, p < 0.05)$ is a significant predictor of academic performance. Therefore, academic motivation does not predict the Academic Performance of students. This implied that students' Academic Performance is dependent on the quality of service the school offers (Academic Satisfaction) and not students' motivation. Nevertheless, there could be other factors influencing their Academic Performance since the model only explains 2% of the variance in the dependent variable. The predictive model using unstandardized coefficients is given as

$Academic\ Performance = 4.836 + .882 * Academic\ Satisfaction.$

At the end of the analyses, the findings indicated that Academic Satisfaction is the only predictor of Academic Performance of SHS students in the AAK district.

Discussion of Findings

The discussion is established on the results of the sampled respondents from the three schools for the study. The findings indicated that (37%) of the

72

students were from Abakrampa Senior High/Technical while (35%) were from Aburaman Senior High. A minimum number of students representing (28%) were sampled from Moree Community Senior High. It was also indicated that the majority (55.7%) of the respondents were females. The age distribution revealed that the majority (58%) of the students were aged between 18 and 23 inclusive. Since the study sampled Form 2 students, it was surprising as most of the students were between the ages of 18 to 23 years. This is because the majority of students enter senior high school at the ages of 14 to 15 and are expected to complete it by the age of 18. However, this was not the case for the students sampled for the study.

For research objective one, the respondent's knowledge of Academic Satisfaction was first determined. The study showed that students indicated satisfaction with the satisfaction of teachers in their school and that teachers provide equal learning opportunities. This was not surprising as teachers teach all students in any given class and give assignments to all students without excluding anyone. Again, students saw that the assignments they were given aligned with the objectives of the lessons they were taught. This is common as most teachers give assignments to students after they are done treating a particular topic. Though some give an assignment to students on topics to be treated as a way of making students study ahead, most questions given to students were based on the previous lessons taught.

The study further showed that in general teachers cordially relate with students and focus on specific individual needs. It was again revealed that the assessment procedure used in schools is fair and transparent as well and their

73

school environment is conducive for learning. Students were also given remedial support as a way of helping them understand concepts they found difficult or challenging to learn. Again, students agreed that classrooms are properly geared up with educational resources, some schools have information technology (IT) laboratories well-furnished to convey students' needs and there are a lot of resources important to their studies in the school's library. This was not surprising as most SHSs in the country are equipped with resources such as textbooks, markers/chalkboards, desks, and other resources used by Ghanaian teachers and students for academic activities. This is to say that quality second-cycle education demands to be rebuilt to produce and enhance knowledge, and groom responsible, open-minded citizens and qualified experts, who can help a nation to progress economically, socially, culturally, or politically.

Again, the government of Ghana has provided senior high schools in the country with computers and other technological gadgets to increase the introduction of IT in teaching and learning throughout the country. This has influenced students' knowledge about using IT labs to meet their needs. Also, schools have library facilities based on the programmes students are studying. This helps the school to have books for all courses offered by students thus, helping them to have access to books at the school's library. With these resources available, students consider their school environment conducive to study because they have access to learning materials and school facilities as well.

Further, the extent to which Academic Satisfaction relates to students' Academic Performance showed that a significantly weak correlation existed

74

between academic satisfaction and students' academic performance. That is, schools with better academic resources can influence students' academic performance significantly more than schools with fewer resources. In other words, schools with limited resources for academic work will produce students who will have lower grades as compared to schools with good resources for academic work. This implies that academic satisfaction is needed to bring about students' academic performance. Schools should have all that is needed to bring out the best in students. However, there may be other factors that could influence the academic performance of students. With this, a student might perform well in academics because of his/her characteristics, the way he/she perceives education, his or her study approaches, or other factors. On the other hand, a student may not do well academically because of his/her characteristics, his/her perception of academically related activities, or other factors that may not be captured in this study.

The finding corroborates with previous literature by Rivkin and Schiman (2015) where they asserted that there is a likelihood that the degree of any correlation between success and practice time relies upon excellent preparation, the school surroundings, and the rate at which learners convert classroom moments into knowledge gained. The results of the research revealed that school situations are crucial influences on the interest and zeal of increased student performance in academics. Again, Owusu (2015), investigated the correlation between teacher quality and pupils' performance in RME in basic schools in the Ga-South Municipality. It was found that RME teachers have enough information about using technology or instructional assets.

75

Additionally, RME teachers have sufficient knowledge of teaching methods and subjects. The result indicated that a weak positive correlation existed between teachers' knowledge of content and learners' academic performance.

However, the finding appears to be inconsistent with research by Bonney et al., (2015) whose research results showed that although there were high-quality teachers regarding their educational and professional qualifications (which form part of academic satisfaction), it did not reflect much in the performance of the students. However, the present study seems to report contrary findings. This might be due to the passage of time or historical influences, geographical area as well as cultural dynamics and transformation in the current society. A student's culture or geographical location might influence his/her performance in school.

For research objective two, the respondents' knowledge of Academic Motivation (AM) was first determined. The results on students' academic motivation revealed that students want to be academically good in school because it is essential to show their potential to their relatives, friends, employers, and others. They prefer to get good grades in class as they believe they'll be satisfied by getting good grades.

However, students felt like they were wasting their time in school and they agreed to the statement. This was a surprise since they believed that they needed good grades because it would help them secure good jobs later after school. Though they view going to school as a waste of time, they are aware that they need at least an SHS certificate to get a job or further their education to the tertiary level. It is believed that the academic motivation of students

76

influences their performance in school. Therefore, the school environment, the learning process, and teachers' attitudes must create an enabling environment for students to develop positive attitudes toward teaching and learning. This could be a reason why a group of researchers postulated in their study that structures, classrooms, management, and facilities provided enhance different sequences of motivations (Saifi, Hussain, Salamat & Bakht, 2018). Thus, the individual student's level of academic motivation would be based on how they perceive their school environment. This could also be a determinant of the type of motivation they would have. Thus, whether they would be intrinsically or extrinsically motivated.

The current study indicated a positive weak correlation in the relationship between AS and AM. Thus, as academic satisfaction improves, there is a low likelihood that students' motivation will improve as well, and vice versa. This supports the assertion that the academic motivation of students is influenced by the conduciveness of the school environment, availability of educational resources, student support services, availability of recreational activities, student-friendly nature of school curriculum, effective teaching methods, and the quality of teachers. This implies that the government, the school management, and the teachers as well as should make available factors and all other things that constitute academic satisfaction that would influence the student's level of academic motivation. Students are likely to be excited when they get to a school environment that is welcoming. This excitement may transcend to inward satisfaction or outward satisfaction and consequently cause them to actively take part in academic and other related activities.

77

To nurture student engagement in learning, teachers can plan learning to improve their student's natural choice to discover and master new talents and knowledge. The teaching and learning process should include different activities and reduce passive learning, to encourage students to take their studies seriously. In addition, academic motivation may stem from the student's opinion of the performance or effectiveness of teaching techniques used by teachers. For instance, a student may find it hard to work in companies, while every other student may additionally experience that working in a collection enables independent productivity. Again, academic motivation tends to guide students thinking, feelings, and actions in a subject, and may be hopeful or expecting the worst. When students are pleased with the quality of services provided by their school, they would likely be internally (intrinsic) motivated and externally (extrinsic) motivated to stay in the teaching and learning environment. Therefore, there is a need for academic satisfaction and the need for academic motivation to be realised in senior high schools.

The finding of this research appears to be in line with the assertion made by Cudney and Ezzell (2017) in their research which examined the effect of new teaching methods as a form of academic satisfaction on students' level of motivation and retention of knowledge in an undergraduate course. The results showed the instruments had a positive influence on the students' motivation to learn. The analysis of their results also suggested that students experienced different forms of motivation during the semester. Therefore, it is not surprising that most students like teachers who use different teaching methods to help them understand their lessons. They then tend to develop a likeness for those subjects.

78

Again, the finding of this study corroborates with the study by Rezaee, Pabarja, and Mosalanejad (2019) who investigated how students' instructional satisfaction with life affects learning, increasing academic awareness, and academic performance in research. A random sampling approach was employed to select 204 Jahrom University of Medical Sciences, students. The research employed a cross-sectional descriptive research design. Statistical tests revealed that instructional satisfaction with life significantly improved students' learning motivation

For research objective three, the relationship between academic motivation (AM) and academic performance (AP) of students in the AAK district showed that no correlation existed between the two variables. In implication, academic motivation does not influence students' academic performance. This means that the motivation of respondents in this study does not have a strong effect on their capacity to achieve academic targets. Thus, students could be motivated but this may not reflect in their academic performance. Again, students may achieve their academic targets without any kind of motivation.

It was not surprising that respondents indicated no correlation between their academic motivation and academic performance because as people grow, their motivation to go to school or further education reduces. Indications from the background characteristics of the students sampled for the research revealed that the majority of them were above 18 years old and in Form 2 during the period of data collection for the study. This might have influenced the correlation between AM and AP. It might also be that since the populace of

79

Abura-Asebu-Kwamankese district is predominantly farmers and fisherfolks, it could influence their (students) interest in education where they may rather think of engaging in farming and fishing activities to earn some income for their upkeep.

However, the result of this research is inconsistent with several other related studies conducted (Erhuvwu & Adeyemi, 2019; Sivrikaya, 2019; Dramanu & Aisha, 2017; Gupta & Mili, 2017; Arbabisarjou et al., 2016; Nyarko et al., 2016; Sikhwari, 2014). Dramanu and Aisha (2017) in a study investigated the academic motivation and academic performance of JHS students in Ghana. The results of their study indicated that there was a positive correlation between academic motivation and the academic performance of JHS students.

The finding is also inconsistent with a study by Gupta and Mili (2017), which investigated the association between Academic Motivation and Academic Performance of Class IX students in Assam, India. The findings of their research indicated a significant positive relationship between AM and AP. There was a significant difference in AM between high and low achievers. This could be due to the age difference, academic level of the respondents, and geographical location as well as cultural differences. Mutua (2014) observed that ineffective school admission policies, low staffing, inadequate learning resources, insufficient community support, mismanagement, rampant teacher and student absenteeism, and indiscipline in schools are the main factors leading to poor performance in most schools. Therefore, Mutua's observation might play a role in the case of the respondents in this study.

80

For research objective four, the findings showed that academic motivation (AM) does not mediate the relationship between academic satisfaction (AS) and academic performance (AP). The implication of this is that academic satisfaction is enough to predict students' academic performance without students' academic motivation. This means that a student's level of academic motivation will not predict his/her performance in academics. Since the relationship between AS and AP was not mediated by AM, students' academic performance would be influenced by the level of academic satisfaction of their school. Therefore, there is a likelihood that students in schools with high levels of academic satisfaction will perform academically better than those with a low level of academic satisfaction. Having high academic performance creates opportunities for the individual and the community at large. For example, the successful academic performance of students in their final examination (WASSCE) allows students to gain admission to the tertiary institution. This also opens their minds to making informed decisions about their lives and achieving their targeted goals.

It has also been established in Walberg's (1981) theory of educational productivity that different educational productivity factors operate as a complex set of interactions to account for an individual's academic performance. These factors were put into three basic elements (aptitude, instruction, and environment) which affect learning. This suggests that for a student to achieve academically, academic satisfaction is a requirement though there could be factors such as personality characteristics and academic motivation. This is why quality was mentioned as one of the factors in the

81

theory. Therefore, as students may be either internally (intrinsic) or externally (extrinsic) motivated, they also need academic satisfaction to be productive. This quality also comes in levels that may be low, medium (average), or high, and the level of quality of academics in a school has the propensity to determine students' academic performance. This implies that if the learning opportunities available to students are effectively used, they are likely to be motivated which in turn transcends into achieving success in their academic endeavours.

However, this study's finding appears to be inconsistent with the study by Fan and Williams (2018), who investigated the mediating effects of motivation in the linking of school climate perceptions as an aspect of academic satisfaction and performance. It was discovered that student self-efficacy and intrinsic motivation act as a moderator in the relationship between perceptions of quality education and reading and mathematics performance. The finding has also not supported that of Hendrawijaya (2019), who found that learning motivation mediates the effect of education, socioeconomic status, and academic satisfaction on students' academic performance. The contrary results of the present study may be due to the methodology employed in its conduct, the geographical or cultural differences of the respondents and the educational level of the respondents, or other factors which may not be captured in this study.

For research objective five, Multiple regression was used to investigate if academic satisfaction (AS) and academic motivation (AM) predict academic performance (AP). The results of the regression analysis indicated that the

82

regression model (independent variables) explained 2.0% of the variance in the dependent variable (academic performance) and the model is a significant predictor of performance. However, AM does not predict students' PA. This implied that in this research, only academic satisfaction is the predictor of students' academic performance. That is to say that, academic motivation according to this study is not a requirement for academic performance of students. This could be because students in this study are satisfied with the academic satisfaction of their schools which has a direct relationship with their academic performance. As such their academic performance may not be influenced by their level of academic motivation.

Referring to the correlation coefficient between student AS and AP, along with the predictive model, it could be said that an increase in the academic satisfaction of a school by one unit will increase their academic performance by .882. This is not surprising because the higher the academic satisfaction in a school, the higher the students' academic performance. For instance, it is not surprising that high-level quality schools produce students who are academically good because they have all it takes for them to achieve their academic goals.

The finding of this study supports research by Hanushek and Woessmann (2012) who discovered that children who attend primary school in low-income countries learn significantly less following comparable time spent in school than students in high-income nations. Simultaneously, as the country's financial benefits decline, so does the impact of students' social fame on success. In contrast, the effect of school and instructor quality on educational

83

performance in primary schools is relatively higher in low-income countries. Based on these findings, which may be representative of the global learner population, it was concluded that the standard of the schools and instructors to which students are presented has a significant impact on their learning.

The finding is also in line with that of Ajayi (2014) who investigated whether school assignments affect student performance in Ghana in his study. Applying a choice of apparent method and regression discontinuity design, it was discovered that students accepted in highly chosen schools are much more presumably to live in the same school and finish early, but have the most beneficial marginal enhancements in an average accomplishment rate and exam performance. It was also discovered that there was a significant disparity in outcomes, implying that the school's quality as well as the match quality determined students' results in this situation.

Chapter Summary

The study looked at the role of AM as a mediator in the relationship between AS and AP of SHS students. The study revealed that approximately three-quarters of the students sampled for the study had a level of academic satisfaction in their school is average. It was revealed that students have medium to high levels of academic motivation. It was found that there was a positive weak correlation between academic satisfaction and students' academic performance. The research revealed that the relationship between AS and AM indicated a weak correlation. It was also found that no correlation existed in the relationship between AM and AP of students.

84

Additionally, the current study found that AM does not mediate the relationship between AS and AP. Finally, the outcomes of the results showed that the regression model (independent variables) explained 2.0% of the variance in the dependent variable (academic performance) and the model is a significant predictor of performance. However, academic motivation does not predict the academic performance of students.

85

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This chapter presents a summary and the conclusions drawn from the study, recommendations, and suggestions for future research.

Summary of Findings

The study looked at the role of academic motivation (AM) as a mediator in the relationship between academic satisfaction (AS) and academic performance (AP) of AAK SHS students. It was established that academic satisfaction correlates with students' academic motivation. Again, the relationship between AM and students' AP was also determined. Finally, the research investigated the extent to which AS and AM predicted students' AP.

The research was guided by five objectives which were converted into three research questions and two hypotheses. The study made use of the descriptive survey design. The population for the research consisted of the public SHSs within the AAK district in the Central region of Ghana. Three hundred and fifty-seven respondents were sampled from Abakrampa Senior High/Technical, Aburaman Senior High, and Moree Community Senior High using purposive, proportionate, and simple random techniques.

A questionnaire made up of SUSS developed by Bhamani (2013) and the MSLQ developed by Pintrich and DeGroot, (1990); Pintrich, Smith, McKeachie, and Garcia (1991, 1993) was adapted for data collection. The questionnaire consisted of scales namely academic satisfaction, academic motivation, and student academic performance. Three hundred and fifty-seven

86

copies of the questionnaire administered were responded to and returned, which led to the achievement of a 96% response rate. The data were analysed using descriptive statistics such as frequencies, percentages, means, and standard deviations, along with inferential statistics such as Pearson Product Moment correlation coefficient, multiple linear regression, and Hayes Process model 4. The inferential analysis made use of the bootstrap approach.

Main Findings

1. The research revealed that approximately three-quarters of the students sampled indicated that the level of academic satisfaction (AS) of their school is average. Students also have medium to high levels of academic motivation (AM).

2. A positive weak correlation existed between academic satisfaction and students' academic performance (AP) of students.

3. There was also a positive weak correlation between academic satisfaction and academic motivation.

4. There was no relationship between AM and AP of students.

5. Additionally, the current study found that AM does not mediate the relationship between AS and AP.

6. Finally, the results of the regression analysis showed that the independent variable (academic satisfaction) is a significant predictor of the dependent variable (students' academic performance). However, academic motivation does not predict the academic performance of students. This means that academic satisfaction is the only predictor of students' academic performance.

87

Conclusions

It can be concluded based on the findings of this research that, the level of academic satisfaction of senior high schools is good. That is, students in SHS in AAK consider the academic satisfaction of their schools to be enough to influence their academic performance. Academic satisfaction correlated with the academic performance of students although the correlation was weak. It can also be concluded that the level of academic motivation amongst students is high since the majority rated it high. Thus, the academic motivation level of SHS students in AAK is high. Nonetheless, the motivational level did not have much influence on their academic performance since it showed a negative correlation though it was significant. This means that students in senior high schools in Abura-Asebu-Kwamankese might need something more than just motivation. This could be seen in their response to the relationship between AS and AP which showed a very weak correlation. Thus, students need a high-quality level of academics coupled with a high motivational level to influence high academic performance.

Further, the findings of this research are evidence appropriate to conclude that low academic performance of students could be attributed to the quality of academics that students receive. That is, academic satisfaction has a key function in the academic performance of students. Thus, Students, therefore, put in all the necessary efforts in the academic work and consider academically related challenges as opportunities to achieve the set goals. At the end, the objectives of study have been achieved and the topic was dealt with.

88

Recommendations

The subsequent suggestions were made based on the findings of the study and the conclusion deduced to help in making policy and practice:

1. For academic satisfaction to be experienced in schools, the Ghana Education Service in collaboration with school management at AAK should provide school facilities and make learning resources available for effective teaching and learning. For students to achieve greatness in academics, they need quality education (good learning programmes, enough teaching learning resources, qualified teachers with varied pedagogical skills, good school environment/facilities, effective student support services, and extracurricular activities) side-by-side high level of academic motivation either intrinsically or extrinsically.

2. School environments should be made conducive enough to build upon teaching and learning. A serene teaching and learning environment will enable students to pay attention in class and also internalise whatever the teacher teaches. Schools with high levels of academic satisfaction and motivation have the potential to enable students to plan and set academic targets and strive to attain those targets.

3. The Ghana Education Service in collaboration with AAK school management should always organise seminars, webinars, and workshops for teachers on modern teaching pedagogy. This will equip teachers with the modern trends in lesson delivery coupled with the current technologically related skills. The incorporation of technology

89

in teaching and learning makes lessons interesting and students will actively participate.

4. The study recommends that, issues such as the need for remedial intervention should be put for students by the heads of the senior high schools.

5. Parents should be interested in their children's well-being and their education as such they (parents) should be actively involved in school-related activities such as Parents' Association (PA) meetings. Parents should continually monitor and guide their children to do assignments and project work given to them. When students realise that their parents are interested in their education, they tend to put in their maximum effort to achieve greatness.

6. Guidance and counselling coordinators in various schools should organise programmes for students on academic counselling and study habits. With this, students will be intrinsically or extrinsically motivated to take their studies and education as a whole seriously. Non-government organisations (NGOs) in collaboration with other social support systems should offer scholarship schemes to students with low socio-economic status to inspire their studies.

Suggestions for Further Research

Other related areas which emerged from the study and need to be further investigated are:

1. A questionnaire was the instrument used for data collection and analyses, as such the empirical analyses revealed only a significant

90

statistical relationship between the variables in the study. Future researchers can use mixed methods research design to explore other factors that could influence students' academic performance.

2. Further study could examine the mediating role of academic satisfaction in the relationship between academic motivation and students' academic performance.

3. This study could be replicated in other senior high schools (both public and private) in other regions since differences in some administrative policies could bring about differences in the results.

91
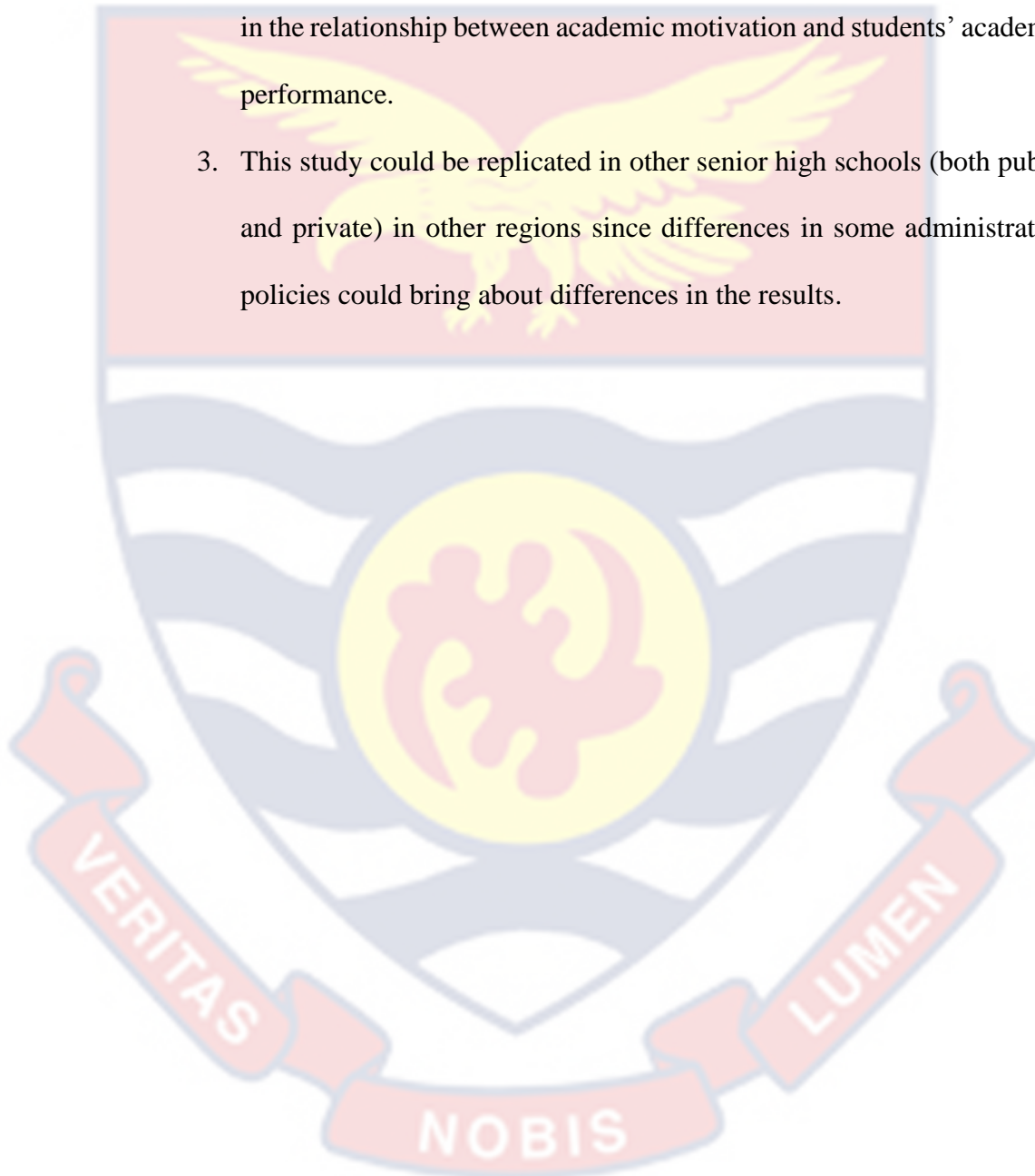
REFERENCES

Abidin, M. (2015). Higher education quality: Perception differences among internal and external stakeholders. *International Education Studies*, 8(12).

Abu-Karsh, S. (2018). New technology adoption by business faculty in teaching: Analysing faculty technology adoption patterns. *International Journal of Technology in Education and Science (IJTES), 2*(1), 17-30.

Ahmad, M. F., Razaki, N. A. M., & Ahmad, A. N. A. (2021). The impact of quality indicators towards student satisfaction in higher education. *Research in Management of Technology and Business*, *2*(1), 542-551.

Ajayi, K. F. (2014). *Does school quality improve student performance? New Evidence from Ghana*. Boston Univ., Department of Economics, Inst. for Economic Development.

Akçakanat, T., & Antalyal, O, L. (2016). Do students need academic motivation and academic anxiety for success*? Eurasian Academy of Sciences Social Sciences Journal, (1*), 27-38.

Akinbadewa, B. O., & Sofowora, O. A. (2020). The effectiveness of multimedia instructional learning packages in enhancing secondary school students" attitudes toward Biology. *International Journal on Studies in Education (IJonSE), 2*(2), 119-133. https://doi.org/10.46328/ijonse.19

92

Akinbadewa, B. O., & Sofowora, O. A. (2020). The effectiveness of multimedia instructional learning packages in enhancing secondary school students' attitudes toward Biology. *International Journal on Studies in Education*, *2*(2), 119-133.

Al-Husban, N. A. (2020). Critical thinking skills in asynchronous discussion forums: A case study. *International Journal of Technology in Education (IJTE), 3*(2), 82-91. https://doi.org/10.46328/ijte.v3i2.22

Al-Husban, N., & Shorman, S. (2020). Perceptions of Syrian student refugees towards blended learning: Implications for higher education institutions. *International Journal of Emerging Technologies in Learning (iJET)*, *15*(1), 45-60.

Alkiş, N. (2015). The influence of personality traits, motivation, and persuasion principles on academic performance. Unpublished Thesis

Allam, Z. (2018). Students' perception of quality in higher education: An empirical investigation. *Management Science Letters, 8*(5), 437-444.

Allen, J., Gregory, A., Mikami, A., Lun, J., Hamre, B., & Pianta, R. (2013). Observations of effective teacher–student interactions in secondary school classrooms: Predicting student achievement with the classroom assessment scoring system - secondary. *School psychology review, 42*(1), 76-98.

Alucdibi, F., & Ekici, G. (2012). The effect of biology teachers' classroom management profiles on the biology course motivation level of the high school students.

93

Amedahe, F. K., & Asamoah-Gyimah, K. (2015). *Introduction to educational research*. Cape Coast, Ghana: UCC Printing Press.

Anane, E. (2014). Pre-service teachers' motivational orientations and the impact of self-regulated learning on their academic achievement: A Mixed Method Study (Doctoral dissertation, Durham University). Unpublished Thesis

Andrade, C. (2020). Sample size and its importance in research. Indian journal of psychology medicine, *42*(1), 102-103.

Arbabisarjou, A., Zare, S., Shahrakipour, M., & Ghoreishinia, G. (2016). The relationship between academic achievement motivation and academic performance among medical students. *International Journal of Pharmacy and Technology*, *8*(2), 12272-12280.

Ariani, D. W. (2016). Why do I study? The mediating effect of motivation and self-regulation on student performance. *Business, Management, and Education, 14*(2), 153–178. doi:10.3846/bme.2016.329.

Baños, R., Baena-Extremera, A., & Granero-Gallegos, A. (2019). The relationships between high school subjects in terms of school satisfaction and academic performance in Mexican adolescents. *International Journal of Environmental Research and Public Health*, *16*(18), 3494.

Basarmak, U., & Hamutoglu, N. B. (2020). Developing and validating a comprehensive scale to measure perceived barriers to technology integration. *International Journal of Technology in Education and Science (IJTES), 4*(1), 53-71. https://doi.org/10.46328/ijtes.v4i1.53.

94

Basarmak, U., & Hamutoglu, N. B. (2020). Developing and Validating a Comprehensive Scale to Measure Perceived Barriers to Technology Integration. *International Journal of Technology in Education and Science*, *4*(1), 53-71.

Benek, I., & Akcay, B. (2019). Development of STEM attitude scale for secondary school students: Validity and reliability study. *International Journal of Education in Mathematics, Science and Technology (IJEMST), 7*(1), 32-52. https://doi.org/10.18404/ijemst.509258

Bhat, M. A. (2013). Academic achievement of secondary school students in relation to self-concept and parental encouragement. *International Journal of Recent Scientific Research*, *4*(6), 738- 741.

Bonney, E. A., Amoah, D. F., Micah, S. A., Ahiamenyo, C., & Lemaire, M. B. (2015). The relationship between the quality of teachers and pupils' academic performance in the STMA Junior High Schools of the Western Region of Ghana. *Journal of Education and practice*, *6*(24), 139-150.

Cetin, B. (2015). Academic motivation and self-regulated learning in predicting academic achievement in college. *Journal of International Education Research*, *11*(2), 95-106.

Chae, S. J., Kim, M., & Chang, K. H. (2016). Longitudinal analysis of the effect of academic failure tolerance on academic achievement fluctuation in medical school students. Korean J Med Education, *28*(1), 25-28.

Chernyshenko, O. S., Kankaraš, M., & Drasgow, F. (2018). Social and emotional skills for student success and well-being: Conceptual framework for the OECD study on social and emotional skills.

95

Chohan**,** B. I. (2018). The impact of academic failure on the self-concept of elementary grade students. *Bulletin of Education and Research, 40*(2), 13-25.

Cook, D. A., Thompson, W. G., & Thomas, K. G. (2011). The Motivated Strategies for Learning Questionnaire: score validity among medicine residents. *Medical education,45*(12), 1230-1240.

Cudney, E. A., & Ezzell, J. M. (2017). Evaluating the impact of teaching methods on student motivation. *Journal of STEM Education: Innovations and Research*, *18*(1).

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human Behaviour.* New York: Plenum.

Deci, E. L., & Ryan, R. M. (2000). Self-determination theory and the facilitation of intrinsic motivation, Social Development, and Well-being. *American psychologist,55*(1) 68 – 78.

Dhaqane, M. K., & Afrah, N. A. (2016). Satisfaction of students and academic performance in Benadir University. *Journal of Education and Practice*, *7*(24), 59-63.

Díaz-Morales, J. F., & Escribano, C. (2015). Social jetlag, academic achievement and cognitive performance: Understanding gender/sex differences. *Chronobiol. Int. 32*, 822–831.

Dicker, R., Garcia, M., Kelly, A., Modabber, P., O'Farrell, A., Pond, A., Pond, N., & Mulrooney, H. M. (2017). Student perceptions of quality in higher education: effect of year of study, gender and ethnicity. New Directions in the Teaching of Physical Sciences, *12*(1), ISSN (print) 2051-3615.

Dogan, U. (2015). Student engagement, academic self-efficacy, and academic motivation as predictors of   academic performance.

Dramanu, B. Y., & Mohammed, A. I. (2017). Academic motivation and performance of junior high school students in Ghana. *European Journal of Educational and Development Psychology, 5*(1), 1-11.

Erhuvwu, O. S., & Adeyemi, F. T. (2019). Achievement motivation as a predictor of academic achievement of senior secondary school student in mathematics. *European Journal of Educational and Development Psychology, 7*(3), 36-45.

Fan, W., & Williams, C. (2018). The mediating role of student motivation in the linking of perceived school climate and achievement in reading and mathematics. In *Frontiers in Education* (Vol. 3, p. 50). Frontiers.

Fraenkel, J. K., Wallen, N. E., & Hyun, H. H. (2012). *How to design and evaluate research in education* (8th ed.). The McGraw-Hill Companies, Inc.

Frydenberg, E., Martin, A. J., & Collie, R. J. (2017). Social and emotional learning in Australia and the Asia-Pacific. *Social and emotional learning in the Australasian context*.

Gbollie, C., & Keamu, H. P. (2017). Student academic performance: The role of motivation, strategies, and perceived factors hindering Liberian junior and senior high school students learning. Education Research International, 2017.

Ghana Education Service (2021). *Education sector performance report*. Retrieved from https://www.google.com/url.

97

Ghana Statistical Service. (2014). *The 2010 population and housing census: Summary report of final results.* Accra, Ghana: Ghana Statistical Service.

Gibson, B. (2020). The impact of professional development of effective teachers in low performing schools.

Gilar-Corbi, R., Pozo-Rico, T., Castejón, J. L., Sánchez, T., Sandoval-Palis, I., & Vidal, J. (2020). Academic achievement and failure in university studies: Motivational and emotional factors.

Gupta, P. K., & Mili, R. (2017). Impact of academic motivation on academic achievement: A study on high school's students. *European Journal of Education Studies*.

Hamid, M. A., Salleh, S., & Laxman, K. (2020). A study on the factors influencing students'' acceptance of learning management systems (LMS): A Brunei case study. *International Journal of Technology in Education and Science (IJTES), 4*(3), 203-217.

Hanushek, E. A., & Woessmann, L. (2012). Do better schools lead to more growth? Cognitive skills, economic outcomes, and causation. *Journal of Economic Growth*, *17*(4), 267-321.

Hayes, A. F. (2018). Introduction to mediation, moderation, and conditional process analysis. A Regression-Based Approach (2nd ed.). New York, NY: The Guilford Press.

Hendrawijaya, A. T. (2019). Mediation Effect of Motivation on Learning Achievement. *Pancaran Pendidikan*, *8*(1).

98

Heredia, D., Amaya, Y., & Barrientos, E. (2015). Student dropout predictive model using data mining techniques. *IEEE Latin America Transactions*, *13*(9), 3127-3134. https://doi.org/10.1111/j.1365-2923.2011.04077.x https://doi.org/10.46328/ijtes.v4i3.101

Hussain, N., & Bhamani, S. (2012). Development of student University Satisfaction Scale: Reliability and validity. *Interdisciplinary Journal of Contemporary Research in Business, 4*(3), 332-341.

Ibrahim, H. H. (2016). *Student learning motivation as a mediator of the relationship between service quality and student performance*. Northcentral University.

Igbinakhase, I., & Naidoo, V. (2020). Higher education quality improvement strategies through enriched.

Inuwa, U., Abdullah, Z., & Hassan, H. (2018). A mixed-method study of the effect of the demonstration method on students' achievement in financial accounting. *International Journal of Instruction*, *11*(4), 577-592.

Justina, R. (2015). Motivational factors that enhance students learning/achievement. *Journal of Teaching and Education*, *4*(02), 323-332.

Kapur, R. (2018). Problems in the Indian education system. University of Delhi DU, Department of adult, continuing education & extension.

Karagöz, Y. (2016). *SPSS and Amos 23 applied statistical analysis.* Ankara, Turkey: Nobel Publishing House.

99

Karsh, S. A. (2018). New technology adoption by business faculty in teaching: Analyzing faculty technology adoption patterns. *International Journal of Technology in Education and Science*, *2*(1), 17-30.

Kelly, A. P., & Columbus, R. (2020). College in the time of coronavirus: challenges facing American higher education. American Enterprise Institute.

Kim, H. W., Kim, W. J., Wilson, A. T., & Ko, H. K. (2019). Attitudes toward Using and Teaching Confidence Intervals: A latent profile analysis on elementary statistics instructors. *International Journal on Social and Education Sciences, 1*(2), 43-56. https://doi.org/10.46328/ijonses.19

Kivunja, C., & Kuyini, A. B. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of Higher Education, 6*(5), 26-41.

Ko. W. H. (2012). A study of the relationships among effective learning, professional competence, and learning performance in the culinary field. Journal of Hospitality, Leisure, Sport & Tourism Education, 11, 12-20. http://dx.doi.org/10.1016/j.jhlste.2012.02.010

Kotirde, I. Y., & Yunos, J. B. M. (2014). The supervisor's role for improving the quality of teaching and learning in Nigeria secondary school educational system. International Journal of Education and research, *2*(8), 53-60.

100

Koyuncuoğlu, O. (2021). An investigation of academic motivation and career decidedness among university students. International Journal of Research in Education and Science, *7*(1), 125-143. https://doi.org/10.46328/ijres.1694

Krause, M., & Corts, D. (2016). Psychological science: *Modeling scientific literacy* (2nd ed.). Pearson.

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

Kuh, G. D., Ikenberry, S. O., Jankowski, N. A., Cain, T. R., Ewell, P. T., Hutchings, P., & Kinzie, J. (2015). *Using evidence of student learning to improve higher education.* John Wiley & Sons.

Kutner, M. H., Nachtsheim, C. J., Neter, J., & Li, W. (2005). *Applied linear statistical models*. McGraw-hill.

Lee, W. W. S. (2017). Relationships among grit, academic performance, perceived academic failure, and stress in associate degree students. *Journal of adolescence*, *60*, 148-152.

LeMay IV, J. O. (2017). Academic engagement, motivation, self-regulation, and achievement of Georgia Southern University sophomore students.

Li, I. W., & Carroll, D. R. (2017). Factors influencing university student satisfaction, dropout, and academic performance. *National Centre for Student Equity in Higher Education (NCSEHE), Perth: Curtin University*, 1-56.

101

Ma, L., Duan, X., & Liu, J. (2020). The mediating role of motivation on the effects of teacher-student relationships on foreign language Achievement. *Porta Linguarum: revista internacional de didáctica de las lenguas extranjeras*, (33), 129-144.

McCoy, D. C., Wolf, S., & Godfrey, E. B. (2014). Student motivation for learning in Ghana: Relationships with caregivers' values toward education, attendance, and academic achievement. *School Psychology International*, *35*(3), 294-308.

Ministry of Education. (2021). *Education sector performance report*. Accra, Ghana: Author.

Moore, P. J. (2019). Academic achievement. *Educational Psychology*, *39*(8), 981-983.

Mutua, M. S. (2014). Academic motivation and self-regulated learning as predictors of academic achievement of students in public secondary schools in Nairobi County, Kenya. Kenyatta University.

Nadir, N., Angrist, N., & Patrinos, H. A. (2018). Global data set on education quality (1965–2015). *World Bank Policy Research Working Paper*, (8314).

Namale, M. K., Upoalkpajor, J. L. N., & Ayambire, C. A. (2021). Factors contributing to poor academic performance of students in Kongo Senior High School in the Kongo District.

Narad, A., & Abdullah, B. (2016). Academic performance of senior secondary school students: Influence of parental encouragement and school environment. *Rupkatha Journal on Interdisciplinary Studies in Humanities*,*8*(2),12-19

http://rupkatha.com/V8/n2/02_Academic_Performance.pdf

Nauzeer, S., & Jaunky, V, C. (2019). Motivation and academic performance: a SEM approach. *International journal of environmental & science education, 14* (1), 41-60.

Nyarko, K., Kugbey, N., Amissah, C. M., Ansah-Nyarko, M., & Dedzo, B. Q. (2016). The influence of the big five personality and motivation on academic achievement among university students in Ghana. *British Journal of Education, Society & Behavioural Science*, *13*(2), 1-7.

Obiajulu-Anyia, E. U. (2019). Multicultural, civic and environmental education concepts and students' learning outcomes in upper basic social studies in Delta State.

Olowo, B. F., Alabi, F. O., Okotoni, C. A., & Yusuf, M. A. (2020). Social media: Online modern tool to enhance secondary school students' academic performance. *International Journal on Studies in Education, 2*(1), 26-35. https://doi.org/10.46328/ijonse.7

Omiles, M. E., Dumlao, J. B., Rubio, Q. K. C., & Ramirez, E. J. D. (2019). Development of 21st-century skills through educational video clips. *International Journal on Studies in Education, 1*(1), 11-20. https://doi.org/10.46328/ijonse.5

Osei-Poku, P., Darkwa, F. O. M., & Opoku-Asare, N. A. (2016) Assessment of students' performance in general knowledge in art: a case study of schools at Abura-Asebu-Kwamankese district.

Owusu, C. A. (2015). *Teacher quality as a determinant of pupils' academic performance in religious and moral education: a survey* (Doctoral dissertation, University of Cape Coast).

Owusu, P., & Essel, G. (2017). Causes of students' stress, its effects on their academic success, and stress management by students.

Özen, S. O. (2017). The effect of motivation on student achievement. In The factors affecting student achievement (pp. 35-56). Springer, Cham.

Pallant, J. (2016). SPSS survival manual: A step-by-step guide to data analysis using SPSS program (6th ed.). London, UK: McGraw-Hill Education.

Pintrich, R. P., & DeGroot, V. E. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology, 82*(1), 33-40.

Pitan, O. S. (2017). Graduate employees' generic skills and training needs. Higher education, skills, and work-based learning.

Pramana, C., Chamidah, D., Suyatno, S., Renadi, F., & Syaharuddin, S. (2021). Strategies to improved education quality in Indonesia: A Review. *Turkish Online Journal of Qualitative Inquiry (TOJQI), 12*(3), 1977-1994.

Rahman, M. M. (2013). Quality higher education and students' perception: A study on private universities of Bangladesh. *Global Disclosure of Economics and Business*, *2*(1), 9-19.

104

Reeve, J. (2018). *Understanding motivation and emotion*. John Wiley & Sons. Korea University.

Rezaee, R., Pabarja, E., & Mosalanejad, L. (2019). Students' academic quality of life and learning motivation in Iran Medical University-pilot from south Iran. Pakistan Journal of Medical and Health Sciences, *13*(2), 570-576.

Ridzuan, A., Khairornizam, M., Yunus, M., Hakimi, M., Abdullah, T., Hilmi, M., & Ramlan, N. (2018). The relationship between students' satisfaction and their academic performance among public relations degree students in UiTM Alor Gajah Melaka: *International Journal of Academic Research in Business and Social Sciences*, *8*(10), 874-882.

Rivkin, S. G., & Schiman, J. C. (2015). Instruction time, classroom quality, and academic achievement. *The Economic Journal*, *125*(588), F425-F448.

Rogayan Jr, D. V. (2019). Biology learning station strategy (BLISS): Its effects on science achievement and attitude towards biology. *International Journal on Social and Education Sciences, 1*(2), 78-89.

Sadare, O. F. (2018). *Exploring how location and gender influence the performance of students in physics (a case study of Akure South Local Government Area, Ondo State Nigeria)* (Doctoral dissertation).

Saifi, I. L., Hussain, M., Salamat, L., & Bakht, M. I. (2018). Impact of classroom management on students' achievement at university level. *Asian Innovative Journal of Social Sciences & Humanities, 2*(2), 13-27.

105

Samavi, S. A., Ebrahimi, K., & Javdan, M. (2017). Relationship between academic engagements, self-efficacy and academic motivation with academic achievement among high school students in Bandar Abbas. *Biquarterly Journal of Cognitive Strategies in Learning*, *4*(7), 71-92.

Shen, B., McCaughtry, N., Martin, J., Garn, A., Kulik, N., & Fahlman, M. (2015). The relationship between teacher burnout and student motivation. *British Journal of Educational Psychology*, *85*(4), 519-532.

Sikhwari, T. D. (2014). A study of the relationship between motivation, self-concept, and academic achievement of students at a university in Limpopo Province, South Africa. *International Journal of Educational Sciences*, *6*(1), 19-25.

Sim, J., & Lewis, M. (2012). The size of a pilot study for a clinical trial should be calculated in relation to considerations of precision and efficiency. *Journal of Clinical Epidemiology*, *65*(3), 301-308.

Sivrikaya, A. H. (2019). The Relationship between academic motivation and academic achievement of the students. *Asian Journal of Education and Training*, *5*(2), 309-315.

Solak, E., & Bayar, A. (2014). The factors influencing the motivational strategy use of non-native English teachers. *Online submission, 2*(2), 1-12.

Suren, N., & Kandemir, M. A. (2020). The effects of mathematics anxiety and motivation on student's mathematics achievement. *International Journal of Education in Mathematics, Science and Technology, 8*(3), 190-218. https://doi.org/10.46328/ijemst.v8i3.926

106

Thangeda, A., Baratiseng, B., & Mompati, T. (2016). Education for sustainability: quality education is a necessity in modern day. How far do the educational institutions facilitate quality education? Journal of Education and Practice, 7(2), 9-17.

The Anthropologist, *20*(3), 553-561.

Turunen, I. (2019). Computer-assisted use of the reading-through-writing method in relation to technical literacy and reading motivation. *International Journal of Technology in Education (IJTE), 2*(1), 42-59.

UNESCO (2017). Exploring commonalities and differences in regional and international assessments. UIS Information Paper. Paris.

Uyulgan, M. A., & Akkuzu, N. (2014). An overview of student teachers' academic intrinsic motivation. *Educational sciences: theory and practice, 14*(1), 24-32.

Virkkula, E. (2020). Evaluating motivational characteristics in vocational music education within the perspective of self-determination theory. *Empir. Res. Vocat. Educ. Train.*, *12*, 1–15.

Wach, F. S., Karbach, J., Ruffing, S., Brünken, R., & Spinath, F. M. (2016). University students' satisfaction with their academic studies: Personality and motivation matter. *Frontiers in Psychology*, *7*, 55.

Walberg, H. J. (1981). A psychological theory of educational productivity. In F. H. Farley, & N. Gordon (Eds.), *Psychology and education: The state of the union,* 81-108. Berkeley, CA: McCutchan.

Wang, C. W., & Neihart, M. (2015). Academic self-concept and academic self-

efficacy: Self-beliefs enable academic achievement of twice-exceptional

students. *Roeper Review*, *37*(2), 63-73.

West African Examination Council (2016). WASSCE grading system in Ghana.

https://www.successafrica.info/wassce-grading-system-in-Ghana/

APPENDICES

APPENDIX A

INTRODUCTORY LETTER

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
FACULTY OF EDUCATIONAL FOUNDATIONS
DEPARTMENT OF EDUCATION AND PSYCHOLOGY

Telephone: 0332091697
Email: dep@ucc.edu.gh

UNIVERSITY POST OFFICE
CAPE COAST, GHANA

Our Ref:

4th July, 2022

Your Ref:

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

THESIS WORK
LETTER OF INTRODUCTION: MR. GODWIN YAW ADI

We introduce to you Mr. Adi, a student from the University of Cape Coast, Department of Education and Psychology. He is pursuing Master of Philosophy degree in Educational Psychology and is currently at the thesis stage.

Mr. Adi, is researching on the topic:

"ACADEMIC QUALITY, MOTIVATION AND ACHIEVEMENT AMONG SENIOR HIGH SCHOOL STUDENTS IN ABURA-ASEBU-KWAMANKESE DISTRICT"

We would grateful if he is given all the needed assistance toward this necessary academic exercise. Please any information provided will be treated as strictly confidential.

Thank you.

Yours faithfully,

Gloria Sagoe
Chief Administrative Assistant
For: HEAD

109

APPENDIX B

ETHICAL CLEARANCE

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
ETHICAL REVIEW BOARD

UNIVERSITY POST OFFICE
CAPE COAST, GHANA

Our Ref: CES/ERB/UCC./edu/v6/22-81   Date: 14th September 2022

Your Ref: ....

Dear Sir/Madam,

ETHICAL REQUIREMENTS CLEARANCE FOR RESEARCH STUDY

Chairman, CES-ERB
Prof. J. A. Omotosho
jomotosho@ucc.edu.gh
0243784739

Vice-Chairman, CES-ERB
Prof. K. Edjah
kedjah@ucc.edu.gh
0244742357

Secretary, CES-ERB
Prof. Linda Dzama Forde
lforde@ucc.edu.gh
0244786680

The bearer, Godwin Yao Ado, Reg. No. EF/PPE/20/0016 is a
M.Phil. / Ph.D. student in the Department of ...Education...
...and Psychology... in the College of Education Studies
University of Cape Coast, Cape Coast, Ghana. He / She wishes to
undertake a research study on the topic:

Academic quality, motivation, and achievement
among Senior High School students in
Abura, Asebu, Kwamankese District

The Ethical Review Board (ERB) of the College of Education Studies
(CES) has assessed his/her proposal and confirm that the proposal
satisfies the College's ethical requirements for the conduct of the
study.

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

Thank you.
Yours faithfully,

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

110

APPENDIX C

QUESTIONNAIRE FOR STUDENTS

UNIVERSITY OF CAPE COAST

FACULTY OF EDUCATIONAL FOUNDATIONS

DEPARTMENT OF EDUCATION AND PSYCHOLOGY

Dear Respondent,

This research is a study on the mediating role of academic motivation on academic satisfaction and academic performance of senior high school students in the Abura-Asebu-Kwamankese (AAK) district. The response you provide will help in a long way to provide measures that will enhance students' academic achievement in AAK. You will not be penalized for any answer you provide. You are assured of confidentiality.

DIRECTIONS: Please tick [√] where appropriate.

SECTION A: Demographic Information

S/N	Variables	Responses
1	Name of the School:	
2	Gender	1. Male ☐ 2. Female ☐
3	Class:	1. SHS 1 ☐ 2. SHS 2 ☐ 3. SHS 3 ☐

SECTION B: ACADEMIC SATISFACTION

The following items describe the academic quality of the school, facilities and overall satisfaction in the school. Use the scale below to respond to the items. For each of the statements below, please indicate the extent of your agreement or disagreement by ticking in the appropriate space provided, where Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD).

	Statement	SA	A	D	SD
4	I find my school's learning environment conducive.				
5	I find classrooms well equipped with educational resources.				

111

6	I find IT labs well equipped to meet students' needs.				
7	I find a wide range of resources relevant to my studies in the school's library.				
8	I find the curriculum student-friendly.				
9	I find assignments are aligned to meet the objectives.				
10	I am satisfied with the time allocation for assignments submission.				
11	I find assessment procedures fair and transparent.				
12	Appropriate recognition for star students is observed.				
13	I am satisfied with the quality of teachers in my school.				
14	Teachers are generally student-friendly and focus on specific individual needs.				
15	I find my teachers provide equal opportunities for learning.				
16	I find my teachers supportive of my professional needs for improvement.				
17	I can access my teachers out of the class to meet my remedial needs.				
18	There is a wide range of opportunities for recreational activities.				
19	I am satisfied with the students' counseling services in my school.				
20	I am given remedial support in my school.				
21	I find the academic policies of my school student-friendly.				
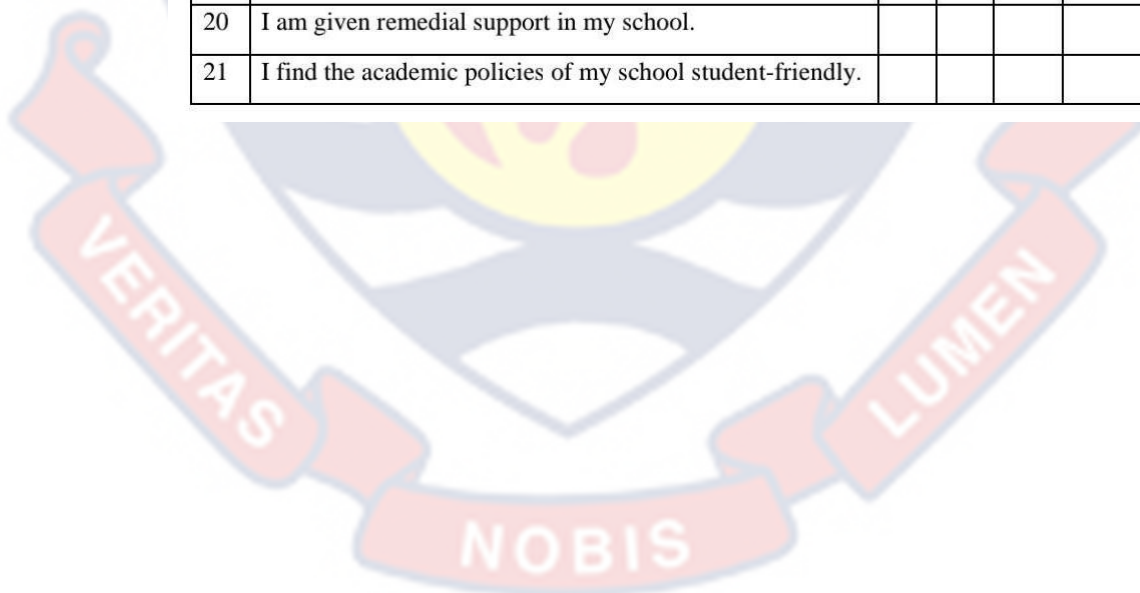
SECTION C: ACADEMIC MOTIVATION

The following questions ask about your motivation for and attitudes about this programme. Remember there are no "right" or "wrong" answers; just answer as accurately as possible. Use the scale below to respond to the items. For each of the statements below, please indicate the extent of your agreement or disagreement by ticking in the appropriate space provided, where Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD).

	Statement	SA	A	D	SD
22	I prefer classwork that is challenging so I can learn new things.				
23	I often choose topics I will learn something from even if they require more work.				
24	Even when I do poorly on a test I try to learn from my mistakes.				
25	I use what I have learned from old homework assignments and the textbook to do new assignments				
26	I ask myself questions to make sure I know the material I have been studying				
27	I always try to understand what the teacher is saying even if it doesn't make sense.				
28	When I study, I put important ideas into my own words				
29	Even when study materials are dull and uninteresting, I keep working until I finish				
30	I'm certain I can understand the ideas taught in this programme.				
31	I expect to do very well in this class				
32	I like what I am learning in this class				
33	I think I will be able to use what I learn in this class in other subjects.				
34	I think that what I am learning in this class is useful for me to know.				
35	I think that what we are learning in this class is interesting.				
36	Understanding this subject is important to me.				

113

37	It is important for me to learn what is being taught in this class.				
38	I think I will receive a good grade in this class				
39	Compared with other students in this class I expect to do well				
40	My study skills are excellent compared with others in this class				
41	When I do homework, I try to remember what the teacher said in class so I can answer the questions correctly.				
42	I work hard to get a good grade even when I don't like a class.				
43	When I study for a test, I try to remember as many facts as I can				
44	I know that I will be able to learn the material for this class				
45	I am sure I can do an excellent job on the problems and tasks assigned for this class				
46	Compared with other students in this class I think I know much about the subject				
47	When reading I try to connect the things, I am reading about with what I already know				
48	I often find that I have been reading for class but don't know what it is all about.				
49	It is hard for me to decide what the main ideas are in what I read				
50	I find that when the teacher is talking, I think of other things and don't really listen to what is being said				
51	When work is hard I either give up or study only the easy parts				
52	I am so nervous during examination that I cannot remember facts I have learned.				
53	I have an uneasy, upset feeling when I take an examination.				
54	I worry a great deal about examinations.				
55	When I take a test, I think about how poorly I am doing				

114

SECTION D: ACADEMIC PERFORMANCE

The Academic performance of students is determined using their previous semester examination results in the core subjects (English language, Mathematics, Integrated Science, and Social Studies).

Examination Results in the Core Subjects for the Previous Semester				
	English Language	Mathematics	Integrated Science	Social Studies
Grade				

115
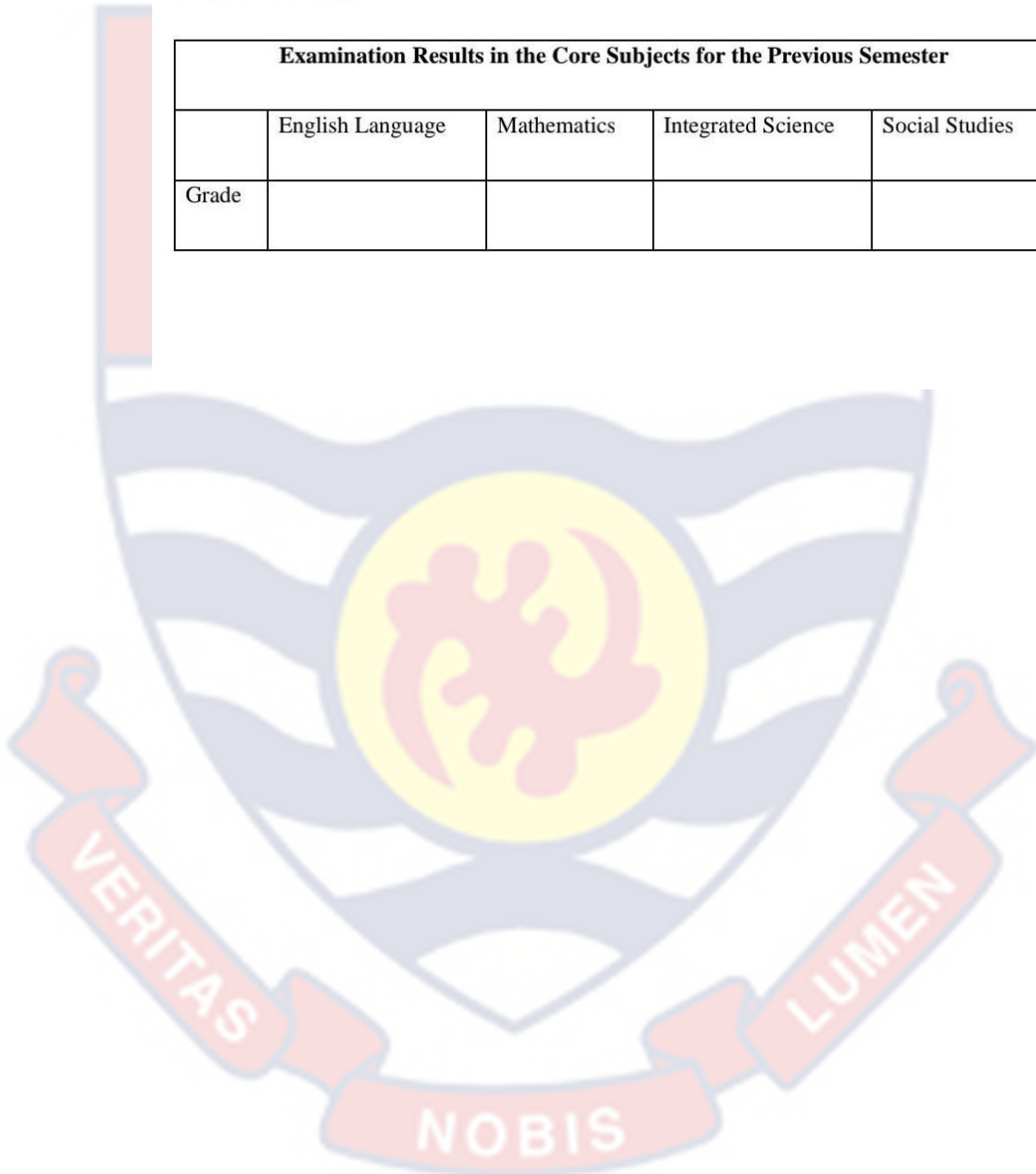
APPENDIX D

MEDIATION ANALYSIS

Effect of Academic Satisfaction on Academic Performance

```
OUTCOME VARIABLE:
 AP

Model Summary
          R        R-sq       MSE          F        df1        df2          p
      .1120       .0126     3.2684     4.5135     1.0000   355.0000      .0343

Model
              coeff        se          t          p       LLCI       ULCI
constant     3.1090     .8062     3.8566      .0001     1.5235     4.6944
AS            .7646     .3599     2.1245      .0343      .0568     1.4724

Standardized coefficients
        coeff
AS      .1120
```

Effect of Academic Satisfaction on Academic Motivation

```
OUTCOME VARIABLE:
 AM

Model Summary
          R        R-sq       MSE          F        df1        df2          p
      .1858       .0345      .0739    12.6980     1.0000   355.0000      .0004

Model
              coeff        se          t          p       LLCI       ULCI
constant     2.8414     .1212    23.4352      .0000     2.6029     3.0798
AS            .1929     .0541     3.5634      .0004      .0864      .2993

Standardized coefficients
        coeff
AS      .1858
```

116

Effect of Academic Motivation on the Relationship Between Academic Satisfaction and Academic Performance

```
OUTCOME VARIABLE:
 AP

Model Summary
          R        R-sq        MSE          F        df1         df2          p
      .1442       .0208      3.2503     3.7609     2.0000    354.0000      .0242

Model
             coeff          se           t           p        LLCI        ULCI
constant    4.8360      1.2830      3.7693       .0002      2.3127      7.3592
AS           .8818       .3653      2.4143       .0163       .1635      1.6002
AM          -.6078       .3519     -1.7272       .0850     -1.2999       .0843

Standardized coefficients
          coeff
AS        .1292
AM       -.0924
```

Direct, Indirect, and the Total Effects of the Independent Variable on the Dependent Variable

```
Total effect of X on Y
     Effect          se           t           p        LLCI        ULCI        c_cs
      .7646       .3599      2.1245       .0343       .0568      1.4724       .1120

Direct effect of X on Y
     Effect          se           t           p        LLCI        ULCI       c'_cs
      .8818       .3653      2.4143       .0163       .1635      1.6002       .1292

Indirect effect(s) of X on Y:
        Effect      BootSE    BootLLCI    BootULCI
AM      -.1172       .0817      -.3059       .0163

Completely standardized indirect effect(s) of X on Y:
        Effect      BootSE    BootLLCI    BootULCI
AM      -.0172       .0120      -.0451       .0023
```

APPENDIX E

STUDY AREA