UNIVERSITY OF EDUCATION, WINNEBA

STUDY HABITS AND ACADEMIC PERFORMANCE AMONG PUBLIC JUNIOR HIGH SCHOOL PUPILS IN THE EKUMFI DISTRICT: INVESTIGATING THE CONTROLLING EFFECT OF LEARNING STYLES

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A DISSERTATION IN THE DEPARTMENT OF BASIC EDUCATION, FACULTY OF EDUCATIONAL STUDIES, SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES, UNIVERSITY OF EDUCATION, WINNEBA, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF PHILOSOPHY (BASIC EDUCATION) DEGREE

OCTOBER, 2016

DECLARATION

STUDENTS' DECLARATION

I, JOSEPH BENTIL, declare that this dissertation, with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole, for another degree elsewhere.

SIGNATURE: ……

DATE: ……

SUPERVISOR'S DECLARATION

I hereby declare that the preparation and presentation of this work was supervised in accordance with the guidelines for supervision of Dissertation as laid down by the University of Education, Winneba.

PRINCIPAL SUPERVISOR: PROFESSOR AUGUSTINE YAO QUASHIGAH

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DEDICATION

This dissertation is dedicated to my wonderful parents: Mr. and Mrs. Bentil and my treasured siblings (Ebenezer, Faustina, Gabriel and Abigail). I also dedicate it to my grandmother Mrs. Elizabeth Ennin.

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ABSTRACT

This study investigated study habits and academic performance among Public Junior High School Pupils in the Ekumfi District of the Central Region of Ghana whilst controlling for the controlling effect of learning styles. Study Habits Theory by Bakare (1977) and Learning Styles Theory by Fernald et al. (1921) served as the theoretical framework of the study. The mixed sequential explanatory approach was followed in the conduct of the study where both quantitative and qualitative data were collected and analysed. The multi-stage sampling with the use of stratified random sampling and convenience sampling techniques were used to select 475 pupils for the study. Structured questionnaire and semi-structured interview guide were used as instruments for data collection. With the aid of the Statistical Product for Service Solution Version 22, descriptive statistics (mean, standard deviation) and inferential statistics such as t-test, One-way ANOVA, Pearson correlation, multiple and hierarchical regression were used to analyse the quantitative data whilst the thematic approach was used to analyse the qualitative data. The study revealed that even though examination related study habit was dominant among the pupils (M=3.57, SD=0.58) than homework and assignment (M=3.55, SD=0.78), concentration (M=3.46, SD=0.64), reading and note-taking (M=3.43, SD=0.47) and time management (M=3.42, SD=0.60), it was discovered that the pupils practiced a mixture of study habits. Besides, it was established that generally study habits impacted academic performance of the pupils (44%), and that learning styles strengthened the effect of pupils' study habits on their academic performance (53.5%). Therefore, it was recommended that the Ministry of Education and the Ghana Education Service should counsel the pupils on the need to develop effective study habits in their studies, and also equip and encourage teachers to employ instructional methods and materials to suit the study habits and learning styles of the pupils so as to enhance academic performance.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Education has been recognised as a mainstay and therefore, instrumental for socio-economic advancement of a society. The United Nations Educational Scientific and Cultural Organization (UNESCO) (2001) therefore remarks that globally education is a vehicle for and indicator of development. In Ghana, Agbenyega (2007) observes that the provision and support for education are enshrined in the 1992 Republican Constitution of Ghana as a basic human right for all Ghanaians. From the perspectives of UNESCO (2001) and Agbenyega (2007), Ghana expends resources on education not for the returns that accrue to individuals and the entire country only, but also it is a statutory requirement that the nation is obliged to offer her citizens.

Accordingly, countries have evolved policy initiatives in the quest to expand education for all citizens. In 1990, for instance, Education for All (EFA) was launched in Jomtein, Thailand as an international initiative to bring the benefits of education to "every citizen in every society." After a decade of slow progress, the international community reaffirmed its commitment to EFA in Dakar, Senegal, in April and September 2000 respectively. With the adoption of the United Nations' Millennium Development Goal (MDG) on education (MDG 2), governments worldwide have prioritised the provision of primary education in policy programmes (UNESCO, 2006). Like other countries, the government of Ghana is committed to the achievement of Universal Basic Education by ensuring that by 2015 all children of school-going age will be able to complete a full course of primary schooling.

Since independence, Ghana has formulated and implemented policies to increase access to basic education. For instance, according to Akyeampong,

Djangmah, Oduro, Seidu and Hunt (2007), the central aim of the Accelerated Development Plan (ADP) strategy was to improve access to basic education by abolishing tuition fees. For the recent decade, Ghana has implemented interventions such as the capitation grant, school feeding programme, free exercise books and uniforms to improve access to basic education. Reports indicate that students' enrolment rates in Ghana have seen steady increase as a result of these policies (Education Sector Performance Report, 2013).

However, scholars like Hanushek and Wobmann (2009) have established that it is not enrolment per se, but rather the quality of education and learning outcomes that is more strongly correlated with economic development. Intuitively, it could be concluded that increase in enrolment is a necessary but insufficient indicator of education success. As a result, Staff (2011) argues that quantitative expansion to provide education to all children of school-going age under EFA initiative should not compromise other quality indicators under any circumstance. Presumably, education success would elude countries that are exclusively preoccupied with widening access and participation to education to the neglect of other quality issues like academic performance. Corroborating this assertion, Kuh, Cruce, Shoup, Kinzie and Gonyea (2008) postulate that academic achievement is one of the key indicators of student educational success. Deductively, students' academic achievement is a measure of quality education in a country.

Moreover, academic attainment has far-reaching repercussions for students as well as nations. The social and economic development of the country is directly linked with students' academic performance. Nationally, Ali, Jusoff, Ali, Mokhtar and Salamt (2009) posit that students' academic performance plays a crucial role in producing the best quality graduates as future leaders and manpower for a country's

economic and social development. It could be construed from the above view that students of good academic standing are perceived to have demonstrated a grasp of relevant concepts, knowledge, skills, and attitudes to take leadership positions and man the various sectors of the economy. Conversely, poor academic performance of students is evident of lack of necessary capacities for socio-economic progress and personal fulfillment.

Many countries are convinced that students form the core of educational process and that without good academic performance, all innovations in education would be a failure (Achombo, 2010). In Ghana, students' academic performance is a vital determinant for selection and placement into higher education and programmes. With the Computerized School Selection and Placement System (CSSPS) which is a competitive selection into senior high schools and programmes based on students' performance in the Basic Education Certificate Examination (BECE), academic performance has become a concern for all stakeholders. Thus, contrary to the view that the school should adopt more holistic approach to focus on a much wider range of desired outcomes such as cognitive processing skills, emotional and social awareness, and moral character development (Huitt, 2006), there is consensus among practitioners that the primary focus of schools should be academic preparation for students (Tienken & Wilson, 2001).

Due to the concern among stakeholders for students' scholastic achievement, research into factors that predict students' academic performance has received considerable attention in past decades. Based on empirical evidence through extensive studies, scholars have documented numerous factors that either bolster or throttle academic performance of students. In a review of 800 meta-analyses, Hattie (2009) discovered 138 variables that significantly affect academic performance. This author

identified socioeconomic status (SES), parental involvement and home environment as three major context variables that influence academic performance. Drawing from this finding, it is instructive that stakeholders should enhance these conditions for better academic attainment else they (factors) stymie performance.

Mushtag and Khan (2012) observe that there are internal and external classroom factors that strongly affect students' academic performance. Internal classroom factors include students' competence in English, class schedules, class size, text books, class test results, learning facilities, homework, environment of the class, complexity of the course material, teachers' role in the class, technology used in class and examination systems. External classroom factors include extracurricular activities, family problems, work and finance, and social problems.

In the Ghanaian scene, studies have been conducted to investigate factors that influence academic achievement of students. Otoo (2007) observes that academic performance is related to intellectual capacity. From the work of Otoo (2007), it may be inferred that students who are naturally endowed with keen cognitive prowess would succeed in scholastic endeavours. On their part, Etsey, Amedahe and Edjah (2005) in their study of some private and public schools in Ghana revealed that academic performance is better in private schools due to more effective supervision of work. Thus, effective supervision improves the quality of teaching and learning in the classroom which lead to good academic performance.

Etsey et al. (2005) revealed that the inability of parents to provide the basic needs of students, attend Parent Teacher Association (PTA) meetings and limited interaction with children's teachers are some of the causes of low academic performance of some public schools in Ghana. Examining reasons why many pupils in the Central Region fail in the Basic Education Certificate Examination (BECE),

Asiedu-Addo (2009) unveils that pupils from poor background just refused to learn or prepare adequately for the examination. According to Dampson, Kwaku and Mensah (2010), persistent parental courage and determination to persevere and defy all obstacles affect students' attitudes toward education, and influence performance.

The foregoing discussion suggests that the variables that impact academic performance are many and diverse. However, these factors could be categorized as psychological (intelligence), school-related (teachers' attitude and commitment, supervision, availability of resources, class size, complexity of the course material, extracurricular activities), and home-related (home environment, parents' involvement, education background, support, occupation and income level). Scrutiny of the above factors indicates that most of them are beyond the control of students. For instance, school-related factors are determined by policies which students do not control.

Nevertheless, educationists like Ackummey, Atta-Boison, Hama, Kankam, Ohene Darko, Owusu-Mensah and Quist (2001) theorize that education rests with the individual, and that nobody can learn on behalf of another person. These scholars allude to the claim that learning does not occur by chance, rather students ought to make a conscious and concerted effort to learn. Romeo (2006) sustains the argument that students cannot learn simply by being told what to do or by watching others; they have to practice studying habitually. He stressed that students' success is dependent on their effectiveness, efficiency and concentration on studying and these are affected by the learning materials they use and the way they use it. The standpoint of Romeo hints that even though learning resources are vital to students' success, it hinges on the energy expended by students to study where they apply learning resources to their studies.

Having recognized that, study is one of the ways by which students can succeed in school, it would be expected that students would apply themselves to their study task. Nevertheless, scholars like Rana and Kausar (2011) notice that some students find studying as monotonous which has implications for achieving good academic performance. In another study on study habits of female students of the University of Punjab, Iqbal and Shezadi (2002) conclude that female students of all the departments lack good study habits. Bailey and Garratt (2002) opine that each individual has a special way of grasping a particular concept which suggests that students do not employ universal study habits. In essence, study habits could be viewed as the continuous practice or repetition of study skills over time. Students with poor study habits either lack effective or organized study routines while those with good study habits have more organized routines where they focus more effectively on the work at hand (Gettinger & Seibert, 2002). Therefore, the development and application of appropriate and effective study habits of students should be a matter of concern to education stakeholders.

Research on the correlation between study habit and students' academic performance has for long received attention from scholars and educational agencies. Indeed, numerous studies have catalogued the impact of study habits on academic performance (Aluja-Fabregat & Blanch, 2004; Bashir & Mattoo, 2012). Supporting the correlation between study habits and academic performance, Gettinger and Seibert (2002) state that students who demonstrate poor study habits are most likely the ones to have low academic achievement. These authors further stress that having good study habits could reduce the failure rate within educational institutions since studying tends to increase a student's academic ability.

A study by Bakare (1977) illustrates that study habits of students cannot be ignored from their academic performance because success in academic endeavours depends largely on reading in the search for knowledge and facts. Recent meta-analysis by Credé and Kuncel (2008) has also highlighted that in addition to motivation and anxiety, study habits are the third most significant predictor of academic performance. Likewise, Nuthana and Yenagi (2009) have examined the causes of poor academic performance among university undergraduates, and poor study habit emerged as one of the major causes.

Azikiwe (1998) postulates that:

> "good study habits are good assets to learners because they (habits) assist students to attain mastery in areas of specialization and consequent excellent performance, while the opposite constitute constraints to learning and performance leading to failure" (p. 106).

The results of the above studies confirm that students' academic performance is influenced by their study habits. Understandably, appropriate study habits lead to good academic attainment and vice versa.

According to Kass (2013), for students to ensure academic success, it is imperative that they do away with bad study habits, and regardless of age and academic level, employing effective study habits can make all the difference. He further states that students should identify their own study preferences, what works for them on a consistent basis and act accordingly. Despite the extensive knowledge and empirical support that study habits affect academic performance, Geiser (2000) observes that students have differing ways of learning which intuitively implies that not all methods of studying will be universally effective. The issue is "which study habit is appropriate and effective to produce good academic performance"?

In their search for effective study habits, researchers have formulated their own study habit inventories. Wrenn (1933) developed his Study Habits Inventory which was later revised in 1941. The inventory focused on note taking, concentration, reading and time management skills. Furthermore, Bakare (1977) conceived that there are many factors affecting study habits and attitudes of students where individual differences, effective usage of time, note-taking, study habits training, teacher, family, proper study environment, homework, using library, reading, listening and writing were identified. Richards, Richards and Sheridan (1999) developed a study habit inventory based on three factors: distractibility, inquisitiveness and compulsiveness. Khurshid, Tanveer and Qasmi (2012) report another study habit inventory propounded by Dennis Congos which consists of 49 questions based on test preparation, concentration, time management, text book, note taking and memory.

Besides students' study habits, a review of available literature has indicated that students' learning styles have a positive sway on their academic performance. According to Kazu (2009), when students are aware of their best learning style it helps to heighten acquisition of knowledge within a specific time frame. This suggests that learning style is directly linked to student learning outcomes and that effective learning style boost academic performance whilst ineffective styles reduces performance. Other studies have demonstrated that learning styles do not only affect academic performance, but also they influence students' behaviour and attitude to learning (Dunn, Honigsfeld, Doolan, Bostrom, Russo, Tenedero, Suh & Schiering, 2009). It could be assumed that appropriate learning styles spark and sustain students' enthusiasm for learning and spur them on to learn even in the face of challenges.

It could be observed from the above discourse that there is less agreement on the exact study habits that affect students' academic performance which makes

research into this field diverse and open for further inquiry. The earlier discussion revealed that good study habits enable students to study privately in a systematic and efficient manner which invariably lead to good academic performance. There is unanimity among scholars that good study habit produces positive academic performance while inefficient study habit leads to dismal academic attainment. Moreover, learning styles have been identified as a critical determinant of academic success of students. Since students have different learning styles, the issue is "will learning styles control the effects of study habits on the academic performance of pupils?" Drawing on Okyerefo's (2005) call for stakeholders to find effective solution to improving academic performance of pupils in Ghana, this study becomes relevant.

1.2 Statement of the Problem

Empirical evidence indicates that there has been a remarkable drop in the academic performance of public basic school pupils in Ghana over the last decade (Etsey et al., 2005). For instance, a report by the Ministry of Education (2010) indicated that over 34 public Junior High Schools recorded 0% pass rate in the 2008 and 2010 Basic Education Certificate Examination (BECE). This implies that no pupil from these public schools was able to gain admission to Senior High School (SHS). In 2011 when Ekumfi District was carved out from Mfantseman Municipality and had their own centre code for writing BECE, 37% passed and 63% failed. The percentage pass increased from 37% to 57% and the failure rate also reduced from 63% to 43% in 2012.

Furthermore, in the year 2013, the percentage pass took a nosedive as it reduced from 57% to 34% causing the failure rate to increase from 43% to 66%. Similarly, in the year 2014, the pass rate increased from 34% to 73% causing the failure rate to reduce from 66% to 27%. Recently, in the year 2015, the pass rate yet

again reduced from 73% to 68% triggering the failure rate to again increasing from 27% to 32%. This trend in the BECE has been on-going for several years in the public schools, especially those in rural Ghana. Should this trend continue, Ghana may not be able to achieve the Millennium Development Goal of universal education.

Quansah's (1997) analysis of the National Criterion Reference Test (CRT) results showed poor mastery of numeracy and literacy of students, especially in the rural areas. The analysis of the results reveals that there was a steady decline in BECE performance. In Ghana, factors such as poor head teachers' supervisory practices and teachers' negative attitude to work have been attributed to the poor performance. However, these might not be the main reasons why students perform poorly in examinations.

Even though researchers like Paaku (2008) have identified some internal and external school related factors that have contributed to this state of affairs in certain parts of the country, it seems research on the effect of students' study habits on academic performance in Ekumfi District is rare. It is against this backdrop that the study intends to ascertain if study habits significantly have any effect on the academic performance by controlling the possible effect of learning style among public junior high school students in the Ekumfi District.

1.3 Purpose of the Study

The purpose of this study was to investigate the effect of study habits on academic performance by controlling the possible effect of learning style among public junior high school pupils in the Ekumfi District.

1.4 Research Objectives

The objectives of the study were to:

1. determine the nature of study habits of public junior high school pupils in the Ekumfi District.
2. ascertain the effect of study habits on academic performance of public junior high school pupils in the Ekumfi District.
3. examine the extent to which learning styles control the influence of study habits on the academic performance of pupils in public junior high schools in the Ekumfi District.
4. explore practices that are being put in place to enhance study habits of public junior high school pupils in the Ekumfi District.

1.5 Research Questions

The study was guided by the following research questions:

1. What is the perception of participants on the nature of study habits of public junior high school pupils in the Ekumfi District?
2. What is the effect of study habits on academic performance of public junior high school pupils in the Ekumfi District?
3. To what extent do learning styles control the influence of study habits on the academic performance of pupils in public junior high schools in the Ekumfi District?
4. What practices are being put in place to enhance study habits of public junior high school pupils in the Ekumfi District?

1.6 Study Hypotheses

The following hypotheses were formulated for the study.

H_{O1}: There is no statistically significant difference in the academic performance of pupils in the circuits.

H_1: There is a statistically significant difference in the academic performance of pupils in the circuits.

$H_{O2:}$ There is no statistically significant difference in the academic performance of JHS1 and JHS2 pupils in the Ekumfi District.

$H_{2:}$ There is a statistically significant difference in the academic performance of JHS1and JHS2 pupils in the Ekumfi District.

H_{O3}: There is no statistically significant difference in the academic performance of boys and girls in the Ekumfi District.

H_3: There is a statistically significant difference in the academic performance of boys and girls in the Ekumfi District.

H_{O4}: There is no statistically significant difference in the academic performance of young and old pupils in the Ekumfi District.

H_4: There is a statistically significant difference in the academic performance of young and old pupils in the Ekumfi District.

1.7 Significance of the Study

The findings of the study would have implications for both theory and practice. Theoretically, it is hoped that the findings will help in obtaining contextual data to shed more light on the effect of study habits on academic performance, thereby expand the frontiers of knowledge in the field. This will help to either confirm or disconfirm the applicability of the study habits inventory in the context of the study in improving pupils' academic performance.

Practically, the researcher hopes that the findings will be significant to education stakeholders to determine how pupils' study habits affect their (pupils) academic performance. It is anticipated that the results of the study will assist the pupils to determine their study habits, and how it affects their academic performance. This will help them to either intensify or modify their study habits for better academic performance.

It is hoped that the findings of the study will provide information to teachers, school guidance coordinators, and parents on the effect of pupils' study habits their academic performance so that proper motivation and guidance services will be offered to the pupils. The findings of this research are intended to add to the existing literature on the influence of study habits on academic performance of junior high school students. It is envisaged that the study will contribute information to curriculum developers to design course materials to suit the study habit preference of pupils to engender good academic performance.

1.8 Delimitation of the Study

The study is delimited to study habit of public junior high school pupils in the Ekumfi District, and its effect on their academic performance. Academic performance was assessed on the examination scores for the three terms in 2015/ 2016 academic year.

1.9 Organisation of the Study

The study is organised into five chapters. Following this chapter, Chapter Two contains review of related literature. Chapter Three describes the methodology applied in the study, explaining the research design, the population, the sample and sampling procedure, the instruments used in data collection and their validity and reliability, and the methods used in analysing the data. Chapter Four presents the

findings of the study, and finally, Chapter Five presents the summary of the findings, conclusion, recommendations, and suggestions for further studies.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

This chapter reviews literature related to the study. It covers empirical review of previous studies to gather views on work done in the area, identify gaps in earlier studies so as to contextualize this study. The review of literature will also delve into the theoretical and conceptual frameworks of the study. The review of literature is organised under the following sub-headings:

2.1 Meaning of Study Habits

Practitioners and scholars have offered various definitions of study habits. Credé and Kuncel (2008) explicate that study habits typically denote the degree to which the student engages in regular acts of studying that are characterized by appropriate studying routines occurring in an environment that is conducive to studying. From the viewpoint of Crede and Kuncel (2008), two strands emerge as indicative of study habits. Firstly, there is a suitable and systematic procedure for studying. This indicates that study habit is not a sporadic event, but a consistent pattern that students usually adopt in their study. Intuitively, a study procedure which a student uses once does not constitute his/ her study habit.

Secondly, the study is done in a favourable setting. In line with this reasoning, it could be established that not all environment is appropriate for study. Therefore, the formation of study habits entails an identification of appropriate environment that supports studying. However, the above authors could not prescribe appropriate studying routines and conducive environment for study habits. Furthermore, Crede and Kuncel (2008) add that review of material, self-testing and rehearsal of learned

material are constituents of study habit. The views of these scholars suggest that study habit demands personal commitment of students to grasp concepts, revise, and personally assess one's proficiency to ascertain the extent of consolidation of subject matter.

On their part, Khurshid, Tanveer and Qasmi (2012) conceptualize study habits as the propensity of a student to use his/her constant attention to acquire knowledge through systematic routines. Comparing the perspectives of Khurshid et al. (2012) and Credé et al. (2008), it could be observed that these scholars concur that study habits encompass a methodical process. However, there is a point of divergence. However, whiles Credé et al. (2008) highlight a conducive environment, Khurshid et al. (2012) contend that uninterrupted concentration is key in study habits. Though theoretically dissimilar, these two elements are practically connected. A conducive environment could sustain a high degree of attentiveness, and vice versa.

Other practitioners notice that the head, heart, and hands are crucial in study habit delineation. In pursuant of this line of thought, Cardelle-Elawar and Nevin (2003) expound that study habit refers to the conscious and purposeful use of one's cognitive skills, feelings, and actions to maximize the learning of knowledge and skills for a given task and set of conditions. Cardelle-Elawar and Nevein (2003) consider study habit as the application of an individual's intelligence, emotions, and activities towards the acquisition of knowledge and skills to accomplish an assignment. Logically, effective study habit is contingent on keen intellectual competence, stable emotions, and relevant activities deliberately directed to construct knowledge and develop skills so as to attain a goal. Wood and Neal (2007) conclude that study habits are approaches applied to learning.

The definitions from the above scholars suggest that study habit is considered as a multidimensional construct which encompasses different facets. Major ideas from practitioners include 1) planned and systematic acts of studying; 2) appropriate studying routines; 3) conducive study environment; 4) review of material and rehearsal of lessons; 5) self-assessment; 6) uninterrupted attention; and 7) the use of cognitive skills, feelings, and actions. In the context of this study, study habit is considered as the characteristic manner through which an individual applies the resources at his/ her disposal to acquire knowledge and skills. This process is planned, purposeful, and takes place in a setting devoid of distractions.

2.2 Importance of Study Habits

There is consensus among scholars that the development of good study habit is critical to an individual's education success. To this end, Fielden (2004) posits that good study habits help a student in critical reflection in skills outcomes such as selecting, analyzing, critiquing, and synthesizing. Understandably, good study habits assist students to apply their thought processes to identify relevant bodies of knowledge and evaluation of same. Conversely, poor study habits impede students' capacity to engage in constructive intellectual exercise. Nneji (2002) illustrates that study habits are learning tendencies that enable students to work privately. Beyond the classroom, students are expected to engage in personal studies, revise previous lessons, and do assignments. The execution of these tasks demands good study habits.

There is plethora of evidence in literature that endorses the claim that good study habits are imperative for good academic achievement. For instance Rana and Kausar (2011) argue that even though it is worthwhile to recognize one's learning style, being able to master one's study habits could tremendously reduce the problems of underachievement that is still on the rise among students. It could be construed

from the preceding claim that students who are able to cultivate appropriate study habits overcome the challenge of poor academic performance. Relating this to the Ghanaian scene, it is imperative for stakeholders in education to inculcate in students effective study habits to reverse the worsening trend of dismal academic performance.

Sustaining the assertion that good study habits matter in attaining academic laurels, Ramamurti (1993) emphasizes that despite possessing good intelligence and personality, the absence of good study habits hampers academic achievement. This author recognizes that keen intelligence and persona are vital in accomplishing scholastic tasks, yet defective study habits inimical to academic progress. The position of Ramamurti (1993) suggests that intelligent and determined students may demonstrate poor achievement if they lack proper study habits. In a study conducted by Harvey (2001), it was observed that hard working students with high intelligent quotients (IQs) sometimes do not perform better than their classmates with lower IQs. In another study, Sarwar, Bashir, Khan and Khan (2009) found that overachievers possessed better study habits than underachievers. Therefore, in Ghana, especially at the basic level, it is important to investigate the nature of study habits that students possess, and assist them (students) to continuously enhance such habits.

2.3 Models of Study Habits

The concept of study habits is not new. Over the decades, several experts in study habits have propounded their study inventories through several studies. In 1941, Wrenn and Humber developed one of the first study habits inventories which were used to evaluate study habits and attitudes of high and low academic groups. The original inventory was developed in 1933 and the reviewed in 1941. In their conceptualization, Wrenn and Humber's (1941) inventory evaluates the effectiveness of the students' reading and note taking techniques, concentration, the amount of

continuous time spend studying, the extent to which a student suffers from exam stress, and the degree to which they plan their answers. In all, the inventory consists of 28 questions measuring the frequency with which students engaged with a particular behaviour on a three-point Likert scale such that (rarely or never, sometimes, often or always).

Nonis and Hudson (2010) developed a ten-item scale of study habits based on three subscales which includes access to good quality notes, scheduling and time management, and ability to concentrate. In this inventory, students are required to report the regularity of a particular behaviour on a five-point Likert scale: never, almost never, sometimes, fairly often, and very often. Khurshid et al. (2012) reported a study habit inventory developed by Dennis Congos and has been used to investigate academic performance among university level students. The inventory consists of 49 questions based on test, preparation, concentration, time management, text book, note taking and memory.

Furthermore, Estes and Richards (1999) developed a study habit inventory derived from Wrenn's study habit components in evaluating study habits of college engineering students. The inventory was developed for classifying both high school and college students based on three factors which included distractibility, inquisitiveness and compulsiveness.

The discussion has confirmed that study habits have been a subject of inquiry for several decades. The exponents of this concept are convinced that effective study habits would lead to good academic performance of students. An inspection of the constituents in each inventory reveals that even though the theorist differ in the items that comprise study habits, it could be observed that time management, reading and

note taking, concentration, the amount of continuous time spent studying, and memory are common elements.

2.4 Nature of Study Habits of Students

Effective study skills are necessary for a college student to excel academically. The student must develop these skills in order to retain information learned in the present for their future benefit. Xienono (2012) observed that study skills can be a combination of several techniques including time management, note-taking, and self-testing. The position of the above author suggests that effective study habits involve these components.

In another study, Onuoha and Subair (2013) found out that 48.9% of students prepare time table for studying and majority did not have fixed periods for studying. Therefore, time management was a vital component of students study habits. The findings also admitted that note taking during lessons was the most used method for study. It could be inferred from the results of Onuoha and Subair (2013) that note-taking a major aspect of students' study habits where they write salient points in lessons or books when reading.

Anameze (2002) did an assessment of study habits among secondary school students in Anambra State in Nigeria and indicated that respondents possessed only about half of the amount of skills required for effective study habits. Thus, the study suggests that students displayed poor study habits in their studies. However, Anameze (2002) did not find out what could have contributed to the ineffective study habits of the students.

2.5 Meaning of Learning Style

Like study habits, scholars proffer various definitions of learning style. According to Dunn et al. (2009), learning style refers to the way in which an individual concentrates on, processes, internalizes, and retains new and difficult information. Therefore, learning style could be seen as the peculiar manner in which an individual makes meaning of information, stores and retrieve the processed information when the need arises. Smith and Dalton (2005) posit that a learning style is a unique and habitual behaviour of acquiring knowledge and skills through everyday study or experience. From this definition, it could be realized that every learner has a distinct learning style, and that it the consistent manner a learn gains knowledge and skills. This view is supported by Schmid, Yeung and Read (2009) when they argue that it is possible to think that people learn differently.

The issue of learning styles has caught the attention of academicians and researchers due to its significance in students learning effectiveness. Boström and Lassen (2006) opine that students do homework, solve problems, and sift information available to them when they possess and apply knowledge of their typical learning styles. They further observe that when students are aware of their learning styles, they are able to take charge of their learning process, and modify existing styles when they are aware that such styles are less productive. The conclusion drawn from the preceding debates is that students should know their learning styles, employ them in their studies, and alter prevailing styles when there is proof that they (styles) are ineffectual in promoting meaningful learning. Therefore, it is required that JHS pupils in the Ekumfi District are educated on the various learning styles, guide them to identify their styles, and counsel them on the implications of clinching on a particular style.

It is argued that understanding of a person's best learning style helps to heighten the extent of knowledge that could be acquired within a period leading to improvement of the students' academic performance within the period (Schmid et al., 2006). It could be construed that lack of students' knowledge of their learning styles throttles their learning success, and results on poor academic attainment. Linking this assertion to the Ghanaian scene, it could be hypothesized that the poor academic performance at the basic level in recent years could be attributed to pupils' dearth of knowledge in learning styles, and how effectively they could employ such learning styles in their learning.

Scholars have established that students produce superior academic performance when they possess and apply different learning styles in the learning. This claim was supported by Abidin, Rezaee, Abdullah and Singh (2011) when they notice that those students with multiple learning styles tend to do better academically than those with just one dominant style. Therefore, it is not unconceivable to think that some learning styles are inappropriate in learning certain concepts and that specific style are required to learn particular concepts. Huang and Busby (2007) sustain the argument persons could adapt and switch to a different learning styles when the need arises when they have various learning styles. Thus, it is possible that an average student who develops multiple learning styles could outperform their peers who are categorised as above average students, but possess one learning style. It is therefore pertinent that educators in the Ekumfi District endeavour to guide their students to develop more than one learning style if they desire to realise desirable level of performance.

Several researchers have documented that an awareness of learning styles does not promote academic performance only, but other behaviours that are directly linked

to performance. Researchers like Boström and Lassen (2006) and Dunn et al. (2009) in previous studies found that when students were taught how to accommodate their own learning style preferences, their confidence, attitude as well as academic achievement improved. Conversely, poor learning styles make students reticent in their learning processes, and this stifles their academic performance. Furthermore, Boström and Lassen (2006) intimate that making students aware of their own learning styles influences metacognition, self-efficacy, and choice of learning strategies. In the view of Dunn et al. (2009), matching student learning styles with instructional styles has been shown to improve student attitudes toward learning, and strengthening achievement. This author has pointed out that it is not enough to know the learning styles of students, but to link the styles to the teaching styles of teachers. Teachers would be expected to vary their teaching techniques to accommodate the diverse learning styles of students.

2.6 Concept of Academic Performance

Several authors have explained the concept of academic performance of students. According to Nuthana and Yenagi (2009) academic performance represents the amount of knowledge and skills developed by a student in various courses. They further explained that the level of academic performance is measured by tests, assignments and final examination results and is dependent on the standards put in place by the educational institution. It could be said that academic performance is the totality of knowledge and competencies a student has attained in the prescribed subject areas. The definition from the above scholars also indicates that academic performance is not subject specific, but rather the aggregate performance in all courses. This explanation of academic performance relates to the basic education system in Ghana where Junior High School Students are graded in aggregate scores in

the compulsory subjects (English, Mathematics, Integrated Science, Social Studies) and any other two subjects. Besides, teachers conduct tests and give assignments to assess the level of academic performance of students.

Otoo (2007) advances that academic performance constitutes what a student is capable of achieving when he or she is tested on what he or she has been taught. Otoo's (2007) delineation of academic performance is similar to that of Nuthana and Yenagi (2009) that academic performance is evaluated through test. Therefore, it is construed that the above educationists consider tests as critical processes through which students are judged to have acquired knowledge and skills as outlined in the curriculum. This perspective is upheld by Velasco (2007) that many available definitions of academic achievement rely on quantitative data and calculation like that of test scores and grades. However, Otoo (2007) has pointed out that teaching determines academic performance of students, and it precedes testing. This study derives two conclusions from the viewpoint of Otoo (2007). Firstly, students are tested on what has been taught which makes academic performance an outcome of the experiences of students in the classroom encounter. This observation presumes that students should not be tested on what they have not been taught. Secondly, the role of the teacher is vital in determining the academic performance of students through teaching. Therefore, effective teaching results in good performance, and poor teaching leads to dismal performance.

The concept of academic performance has caught the attention of researchers and academicians in recent times. Daulta (2008) argues that academic performance serves as a key criterion in judging students' true potentials and capabilities. Therefore, academic performance mirrors a student's aptitudes and worth in a chosen endeavour, and a system of identifying and selecting competent students for future

tasks. In Ghana, employers require that job seekers present certificates and transcripts of results for consideration for employment. Tertiary institutions demand certificates and statement of results from prospective candidates for admission. Consistently, de Simone (2008) asserts that valuable insights are necessary in admission processes because "college admissions can be a high-stakes gamble" (p12). Therefore, information regarding academic performance and is essential decision making. The above scenarios suggest that students of good academic standing are judged as more competent than their peers with low performance. Thus, determining the level of academic performance could help sustain the performance of those who are high achievers, and implement strategies to enhance the performance of those struggling.

To some scholars, academic performance is the focus of any education system. Nuthanap (2007) contends that academic performance is one of the most important goals of the educational process. Therefore, the success of educational institutions is based on the degree to students demonstrate good academic performance. Basic schools whose students attain high performance could be considered as accomplishing educational goals than those whose students perform poorly in Ghana. Furthermore, academic performance plays a major role in ensuring education quality (Ali, et al., 2009). Thus, it is one of the determinants of quality education in any country.

2.7 Effect of Study Habits and Learning Styles on Academic Performance

Previous studies have investigated the effect of study habits and learning styles on academic performance of students. Several researchers have established that study habits affect academic performance. In a study by Bashir and Mattoo (2012), it was revealed that there is a relationship between study habits and academic performance among students. The results of the study suggest that good study habits enhance academic performance whilst poor study habits stifles performance. In

another study, Sarwar et al. (2009) concluded that overachievers possessed better study habits than underachievers. Similarly, other studies like Credé and Kuncel (2008) and Nuthana and Yenagi (2009) support the findings of earlier studies that study habits impact academic performance of students. They further revealed that students who are better in reading and note-taking, well prepared for the board examination and have concentration may have better academic achievement. Based on findings of these studies, it is obvious that study habits are major determinants of academic achievement of students.

Researchers have examined the impact of the individual components of Bakare's (1977) study habit inventory. On time allocation, Strauss and Volkwein (2002) found that learning for more hours was positively related to academic performance. The findings of these researchers suggest that it is not time allocated for study per se that impacts performance, but rather the academic learning time that influences performance. Apparently, students in a school may have longer hours in school but achieve less if the time allocated is wasted whilst students in another school with fewer hours could perform better if instructional hours are prudently used for learning. This result implies that instructional time in public basic schools in Ghana should be used judiciously to maximize learning and lead to good performance.

On homework/assignment, Minotti (2005) and Mushtag and Khan (2012) discovered that students who showed positive attitude towards homework attained higher academic performance than those who showed lukewarm attitude to homework. Homework provides students the opportunity to revise what has been learnt, thereby helps student to internalize learnt material. This, in turn, ensures recollection when the need arises. In a study conducted by Afful-Broni and Hogrey

(2010) suggested that assignment should be used as one of students' learning to improve their study habits and academic performance because assignment could make students understand more lessons in class due to practicing to do questions, attempt to solve problem and paying concentration on reading rather than no work assigned for them. Based on this result, it could be understood that assignment is a critical component of study habits which affects students' academic performance.

On note-taking, studies like one conducted by Kiewra, Benton and Lewis (2007) have confirmed that students who take notes score higher on tests of than students who do not take notes. Therefore, students are expected to take-notes as part of their study habits which will eventually result in enhanced academic performance. Yet, it appears scholars are skeptical on the effect of note-taking on students' learning outcomes nowadays. This concern is supported by Muraina (2013) when he argued that the effectiveness of note-taking in reinforcing learning of students is questionable due to advancement in commercial note taking services. From the position of this author, students are required to practice and take notes on their own so as to realize results.

Many researchers are convinced that concentration plays a crucial role in the study habits of students which lead to improved academic performance. Accordingly, Oladele (2000) advocated that students need to concentrate on their studies choosing a place of study which can stimulate them to study avoid of external distractions. The argument from Oladele (2000) presupposes that when students concentrate on their studies, they are able to apply themselves favourably to the learning assignment and reap the benefits through good academic performance. However, conflicting results exist on the effects on concentration on academic performance. In a study by Oluwatimilehin and Owoyele (2012), it was revealed that concentration does not

predict academic performance of students in English, Mathematics, and Art. As a result, studies are needed to establish the effect of concentration on the academic performance of pupils in the Ekumfi District. Furthermore, time management practices have an impact on the academic attainment of students as proven in empirical studies done by previous researchers. For instance, Agarwal (2008) observed that students need to be self-disciplined in their time to improve their performance. Nevertheless, stakeholders bemoan that the importance of time management on academic performance of students is not accorded the needed attention (Sevari & Kandy, 2011). Hazard and Nadeau (2006) reported that study habit skills such as effective schedule, time management and note-taking influence academic achievement of students whilst findings of Oluwatimilehin and Owoyele (2012) discovered that of all the study habits subscales, teacher consultation was most influential while the time allocation, concentration, note-taking reading and assignments were regarded as less integral to academic performances.

Besides study habits, scholars have noted that learning styles affect academic performance of pupils. Ali et al. (2009) found out that students' learning styles positively affect their performance. In essence, appropriate learning is needed to boost academic performance. Likewise, it was established that students who applied their learning style preferences attained higher academic performance (Aripin, Mahmood, Rohaizad, Yeop & Anuar, 2008; Dunn et al., 2009). Based on these results, it could be expected that pupils in public basic schools in Ghana are assisted to recognise their preferred learning styles so obtain good performance.

The literature reviewed have shown that study habits and learning styles separately influence academic performance. However, some researchers have attempted to investigate whether learning styles mediate the effect of study habits on

academic performance. In this direction, Hoeffner (2010) discovered an inconclusive result where he was unable to determine the relationship between these variables.

2.8 Demographic Factors and Study Habits

Several studies have investigated the influence of demographic factors on the study habits of students. Khurshid et al. (2012) noted that class level affected study habits of students where those in a higher class displayed better study habits than those in lower class. It was realized in the study that first year students have entered a new educational institution where the working environment is completely different from what they are accustomed to. Thus, they have brought with them their own ways and ideas of how to study and have not yet developed or adjusted them. Third years on the other hand, have had time to mature within their study habits over the years and have gained a better understanding on what may or may not work for them within a particular course. Therefore, first year students need time to modify their study habits so that they can cope with their learning task after transition to higher institutions or class level.

Other researchers have focused on the effect of sex on the study habits of students where they observed significant difference in the study habits of male and female students (Pillai, 2012). Sud and Sujatha (2006) revealed that female students had better study habits than their male counterparts. This finding was sustained by Aluja-Fabregat and Blanch (2004) who found that girls scored higher on study habits than their male peers. With these results, much attention would be given to male students to assist them to improve on their study habits so as to enhance performance. However, Awabil, Kolo, Bello and Oliagbo (2013) discovered that gender was not a significant determinant of study habits among students. Similar result was found in Zimbabwe where Mushoriwa (2009) found no significant difference in the study

habits of male and female students. What is not clear from the studies of Awabil et al. (2013) and Mushoriwa (2009) is the status of the students' study habit in terms of high or low. The issue is that even though no difference was found, it could be that the level of students' study habit might be low which still calls for guidance to improvement.

Age was another factor that received the attention of researchers in relation to study habits. Ossai (2012) revealed a significant difference in the study habit of students based on age. Analysing the cause of the disparity in study habits due to age, Heath (2007) explicates that mature age students are more motivated to succeed academically due to greater maturity and better study habits. Heath (2007) assumes that when students become mature, their educational goals become clearer which engenders commitment to thrive and attain such goals. To this end, they employ effective study habits. Ehiozuwa and Anaso (2013) also revealed that significant difference exist between younger students (16 years and below) and older students (17 years and above) in their study habits where older students exhibited better study habits than the younger students. Consistent with these reports, it is expected that JHS 2 pupils are likely to possess better study habits than those in JHS 1.

Moreover, researchers have explored the impact of geographical location of a school on students' study habits. Agina-Obu, Amakiri and Emesiobi (2011) observed that there is no significant difference between rural and urban students in their study habits. This result suggests that environmental disparity between rural and urban schools does not account for the study habits of students. In the Ekumfi District, educational circuits like Narkwa and Otuam are located in hard-to-reach rural areas as compared to Eyisam and Essuehyia Circuits. It is therefore imperative that pupils'

study habits are investigated across these geographical locations so that specific solutions based on evidence are offered for support.

The literature reviewed have highlighted that class level, sex, age, and geographical location of a school are variables that have caught the attention of previous researchers in determining their impact on study habits of students. The discussion has also indicated that researchers differed in their findings on the influence of these variables on students' study habits. Hence, studies are required to explore these variables in other contexts like the Ekumfi District.

2.9 Demographic Factors and Academic Achievement

Demographic variables have been investigated as determinants of academic performance. Suleman, Aslam, Shakir, Akhtar, Hussain and Akhtar (2013) in their study concluded that parental socio-economic status (SES) such as educational background, occupational and income level affects academic performance of students. Accordingly, these variables need to be improved if education stakeholders desire to step up academic attainment in their students. Alokan, Osakinle and Onijingin (2013) indicated that in a family where both the father and mother are educated, such parents take good care of their children in academic endeavours. Such parents provide educational materials for their children in school, inspect children's exercise books, provide private tuition for children after school, and they may have a library at home which collectively promote good academic performance.

Gender is another factor that researchers have investigated in relation to academic performance. A gap between the achievement of boys and girls has been found with girls showing better performance than boys in certain instances (Chambers & Schreiber, 2004). Ceballo, McLoyd and Toyokawa (2004) established in their study

that student's gender strongly affects their academic performance with girls performing better in the subjects of Mathematics, and English as well as aggregate performance. These authors explained that girls usually show more efforts in their studies leading to better grades at school. However, this finding of Ugoji (2008) found no significant difference in the academic performance of students based on gender. These mixed results suggest that evidence through studies is required to examine the linkage between gender and academic performance.

Other studies found that age influences academic performance of students. Zeegers (2004) found that mature age students consistently perform better on an academics than younger ones. Huang and Invernizzi (2012) found that younger students had lower literacy scores than the older students in the same class. Contrarily, Grissom (2004) in his study concluded that there is a negative relationship between age and achievement which remains persists over time. Therefore, when students grow older their academic performance diminishes. Some scholars depart from the connection between actual age and academic performance when they argue that it is rather the age at which a student enters school that matters. In analyzing the relation between age of entry and academic performance, Lincove and Painter (2006) studied student entrance age and found that young and older students had similar eighth-grade achievement whilst in the 10th and 12th grades, younger students outperformed the older students on tests.

School location and class have also been explored in several studies in connection to academic performance. According to Akomolufe and Olorumfemi-Olabisi (2011), school location influences students' academic achievement. More recently, Igboegwu and Okonkwo (2012) study indicated a significant difference in students' achievement with respect to location of school and education zones.

Nonetheless, these researchers did not identify the nature of the location that supports superior performance. For class, Bernardi (2014) disclosed that lower grade students outperform their upper grade students. Based on this result, academic performance among JHS 1 pupils could be better than those in JHS 2. The literature has shown that age, gender, educational zones/school location, and class level are determinants of academic performance albeit with conflicting results. These variables will be investigated

2.10 Theoretical Framework of the Study

This study was guided by Bakare (1977) Study Habits Theory and Fernald, Keller, Orton Gillingham, Stillman and Montessori (1920) Learning Styles Theory.

2.10.1 Bakare (1977) Study Habits Theory

Study habits as conceptualized by Bakare (1977) embraces competences in the areas of homework and assignment, time allocation, reading and note-taking, study period procedures, concentration, written work, examination taking and teacher consultation. Bakare (1977) used his study habit inventory to conduct several studies and concluded that study habit variables correlated positively with academic performance.

Besides Bakare (1977), other researchers have employed this theory in their studies. The study by Salami and Aremu (2006) using this habits model found a relationship between study and academic achievement. Bagongon and Connie (2009) conducted a study on the effect of study habits on the academic performance of freshmen education students in XAVIER University, and a positive relationship was found. In Tope's (2011) investigation on the effect of study habit on the performance of students, he used the Bakare (1977) study habits inventory, and it was discovered that study habits affected student's academic performance. Aluede and

Onolemhemhen (2001) studied the effect of study habits counseling on the academic performance of senior secondary school student in English language. The study involved 108 senior secondary school class one and two students of Lumen Christ secondary school, Uromi, Edo State, Nigeria. The study habit inventory of Bakare (1977) was adopted, and the findings revealed that counseling students on good study habits can bring about improvement in the students' academic achievement.

The literature reviewed has demonstrated that Bakare (1977) study habits inventory has been used extensively by researchers in different contexts. In most of the studies, it has been established that this study habit inventory affected students' academic performance. The conclusion from these studies implies that effective study habits leads to good academic achievement whilst ineffective study habits result in poor performance. Even though the original study habits by Bakare (1977) consisted of many components, five components would be included in this study. These include homework/ assignments, time allocation, reading and note taking, concentration, and time management. These elements were considered in the study because they relate well to the Ghanaian education context, and the results would have implications for effective learning.

2.10.2 Fernald et al. (1920) Learning Styles Theory

Mackay (2007) reports that Fernald, Keller, Orton Gillingham, Stillman and Montessori (1920) who were psychologists and educationists developed VAK learning theory, an acronym for visual, auditory, kinesthetic. The VAK learning styles are grounded on the sensory experiences of learners in the acquisition and processing of information. Fernald et al. (1920) and other learning styles theorists like Wallace (2004) and Sholes (2012) argue that humans naturally use their eyes, ears, and hands to receive information from our environment and then process that information to

construct meaning. Consequently, people learn by using visual, auditory and motor senses. The VAK theory therefore categorizes learners into three groups according to their preferred learning style.

In visual learning style, learners rely on their sight where they prefer seeing and reading as they learn. Therefore, they learn better if they have the opportunity to work with pictures, diagrams, and text. In the classroom, the teacher is expected to use visual aids, illustrations and texts to appeal to the learners' visual sense to help them learn effectively. The teacher should also encourage students to make notes which they can read after lessons to reinforce learning.

Auditory learning style relates with the sense of hearing. Therefore, auditory learners learn more effectively when they listen and speak. They prefer listening to the teacher and discussing what has been said with colleagues. Therefore, the teacher should encourage them to ask questions and share ideas through the use of teaching techniques such as debates, discussion, and role-play. Auditory materials such as the radio and tape recorder could be effective in the teaching and learning process.

With kinesthetic learning style, learning takes place effectively through practical activities. Touching and doing things is preferred by kinesthetic learners where they learn best while experiencing and doing hands-on activities. The teacher is expected to design tasks during which they can move or do things physically. The activity approach to teaching where leaners are engaged in activities is needed for kinesthestic learners.

Researchers have adopted the VAK learning styles in their studies. In a study by Bricheno and Younger (2004) using the VAK questionnaire, it was revealed that there was no significant relationship between gender and preferred learning styles.

According to Mulalic, Mohd Shah and Ahmad (2009), students preferred the kinesthetic learning style more than visual and audio learning styles. Contrary to this result, a study by Aultman College (2008) disclosed that the visual learning style is the most common in learning. Other scholars have established that a combination of learning styles produced better academic performance than one style. This claim was proven in a study by Kim, Seitz and Shams (2008) who found that adults who were trained using both visual and auditory styles performed significantly better than a control group that used only visual stimuli. Therefore, it would be expected that pupils in the Ekumfi District are encouraged to apply multiple learning styles so as to obtain good academic performance.

2.11 Conceptual Framework of the Study

The conceptual framework for the study as in Figure 2.1 was developed based on the relationships among the study variables. There were three set of variables in the study: independent, dependent, and control. Study habits and demographic factors constituted the independent variables in the study. The study habits were drawn from the Bakare (1977) framework of study habits inventory which served as the theoretical basis of the study. This was made up of homework/assignments, time allocation, reading and note taking, concentration, and time management. The demographic factors were built on the study's hypotheses, and to through more light on the distribution of the study habits across these factors. These demographic factors were worthwhile in the study so as to ascertain the specific groups among the pupils where help may be needed.

The dependent variable was the academic performance of the pupils which comprised the four compulsory subjects: English Language, Mathematics, Integrated Science, and Social Studies. The overall performance of the pupils was determined by

computing the average of these subjects using the SPSS compute function. Learning styles which were made up of auditory, visual, and kinesthetic styles served as the control variables in the study. The researcher sought to ascertain whether the learning styles controlled the effect of study habits on academic performance of the pupils.

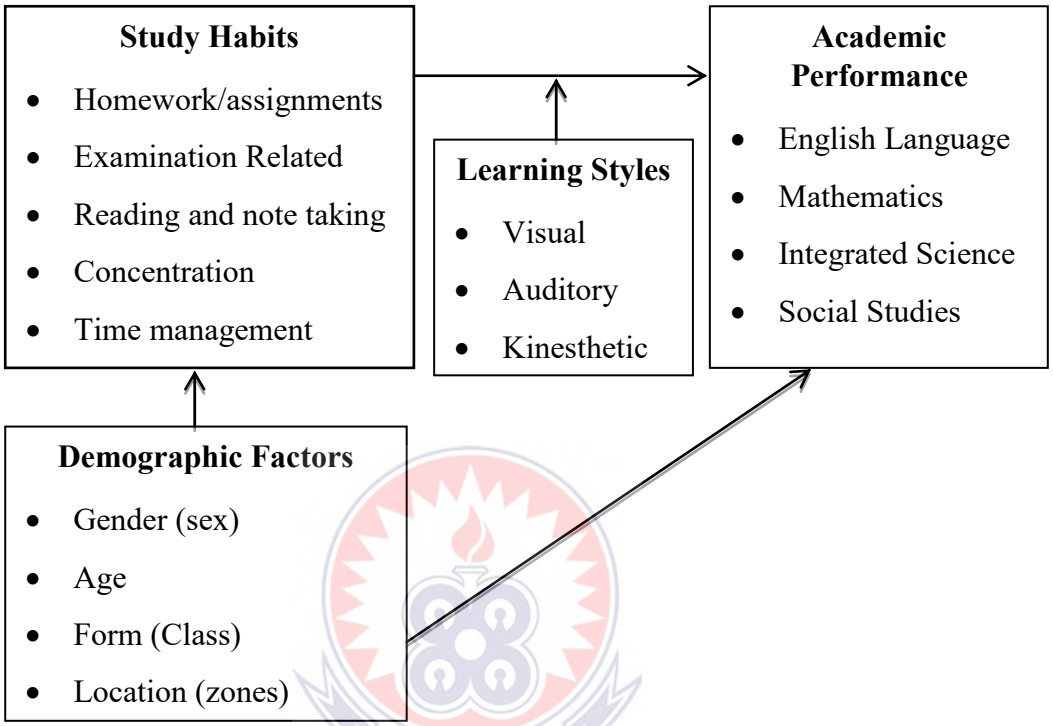

Figure 2. 1 Conceptual Framework

Source: Designed by Researcher, 2016

2.12 Summary of Literature Review

This chapter reviewed relevant literature related to the study. The review was composed of theoretical, empirical and conceptual frameworks that guide the study. The literature was reviewed on the concept of study habits, learning styles, and academic performance as outlined in the study. It also examined the Bakare (1977) Study Habits Theory and Fernald et al. (1920) Learning Styles Theory. It was established that these theories have been used extensively by researchers in different context and produced contrasting results. Whilst some researchers discovered that

study habits and learning styles influenced academic performance, others did not find any relationship among these variables. This situation calls for further studies to shed more light on the linkage among these factors. However, since the pupils have different learning styles, this study sought to determine whether learning styles control the effect of study habits on academic performance of pupils in the Ekumfi District. The next chapter presents the methodology employed in the conduct of the study.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter discusses the research methodology of the study. It evaluates the philosophical underpinnings of research and the justification for the adoption of a research approach. This is followed by a section that describes the research design, the methods and procedures used to obtain data, and the procedure employed to analyse the findings. The chapter finally explains the ethical issues and practices employed in the study.

3.1 Philosophical Underpinnings

Research philosophy relates to the development of knowledge and the nature of that knowledge (Saunders, Lewis & Thornhill, 2012). Corbin and Strauss (2008:1) also advance that a philosophical positioning is conceptualized as a "worldview that underlies and informs methodology and methods". The significance of a researcher's philosophical viewpoint is captured in the reasoning of Speziale and Carpenter (2007) when they argue that it is essential for researchers to understand the philosophical underpinning of each methodology. From the perspectives of Speziale and Carpenter (2007) and Corbin and Strauss (2008), research philosophy affords insights into what factors to consider when deciding upon the appropriate methodology to employ so as to answer research questions, and produce trustworthy results.

Bryman and Bell (2011) identify two research philosophies: positivism and interpretivism. Positivism is the natural science procedure for collecting data about an observable reality and search for regularities and relationships to create generalizations. It is said that positivist researchers adopt structured methodology to

facilitate replication (Gill & Johnson, 2010). In addition, a positivist approach to research is that the research is conducted in a value-free way, and the outcome is totally objective (Saunders et al., 2012). It could be construed from the discussion that researchers in the positivist tradition use the methods and strategies found in the natural sciences (chemistry, physics, biology) to the study of social phenomena. Consequently, the researcher is seen as a 'distant observer' of social reality usually with the use of measuring instruments like the questionnaire to gather data for statistical analysis.

Bryman and Bell (2003:16) argue that interpretivism is centred on the claim that 'the subject matter of the social sciences – people and their institutions – is fundamentally different from that of the natural science'. Interpretivist researchers are seen as social scientists who strive to grasp the subjective meaning of social action (Saunders et al., 2012). A crucial part of interpretivist philosophy is that the researcher has to enter the social world of the researched and understand their world from their point of view (Saunders et al., 2012). Cohen et al. (2011) further argue that interpretivists conceptualize reality as a complex social construction of meanings, values and lived experiences which results in the production of knowledge through a social construction of the world. Therefore, the researcher is part of what is observed and researched.

Creswell (2008) identifies three types of research approaches: qualitative, quantitative, and mixed methods. Creswell defines qualitative research as a means for exploring and understanding the meaning individuals or groups ascribe to social or human issues. In contrast, quantitative research is a means for testing objective theories by examining the relationship among variables. Blaxter, Hughes and Tight (2006) highlight the differences between quantitative and qualitative approaches when

they argue that quantitative data is often associated with the gathering of facts whereas qualitative data is related to the collection of non-numerical information. Glesne (2011) corroborates the earlier views that a qualitative research is "a type of research that focuses on qualities such as words or observations that are difficult to quantify and lend themselves to interpretation or deconstruction" (p. 283). The main differences between these two researches lie in the use of words and open-ended questions in qualitative research rather than using numbers and close-ended questions in quantitative research (Saunders et al., 2007; Creswell, 2008).

Contrary to the claims put forward by the preceding authors that quantitative and qualitative approaches lay on the extreme ends of a continuum, other research experts (Bryman, 2008; Denscombe, 2010) believe that these approaches are compatible. Bryman (2008:22) particularly cautions that "it is necessary to be careful about hammering a wedge between them (qualitative and quantitative) too deeply". The mixed method approach therefore combines quantitative and qualitative approaches and strategies (Denscombe, 2010; Saunders et al., 2012).

Linking the philosophies to the research approaches, Saunders et al. (2012) theorize that quantitative research design is associated with positivist philosophy whiles qualitative design is associated with an interpretive school of thought. A mixed method approach harmonizes the tenets of positivism and interpretivism in the same study which is consistent with the pragmatic philosophy. Denscombe (2010) contends that pragmatism is a concept that both positivism and interpretivism can work in parallel. This study adopted the mixed method approach, particularly, the sequential explanatory mixed method to use the qualitative data to supplement the quantitative data for rich and in-depth understanding of the phenomena (Creswell, Plano-Clark, Gutmann, & Hanson, 2003). The choice of this approach was also based on the views

of Johnson and Onwuegbuzie (2004, p. 15) as they point out that "mixed methods as a paradigm has the advantage of drawing from the strengths and reducing the weaknesses of quantitative and qualitative approaches instead of replacing them", as it draws on the strengths of the two traditions. Therefore, the study was conducted in two stages: quantitative followed by qualitative.

3.2 Research Design

A research design is a plan that describes the conditions and procedures for collecting and analyzing data (McMillan & Schumacher, 2010). Similarly, a research design refers to a detailed plan of how a research study is to be conducted by operationalizing variables to be measured, selecting samples of interest, process of data collection to answer research questions and testing hypothesis, and the analysis of data (Creswell, 2008). On his part, Babbie (2007) conceptualizes research design as consisting of study questions; its propositions; its units of analysis; the logic link of data to the propositions and the criteria of interpreting the findings. Therefore, research design serves as a blueprint that guides a researcher on the process of collecting, analyzing and interpreting data so as to answer research questions.

This study adopted a cross-sectional survey design. This design involves collecting data at one point and over a short period to provide a 'snapshot' of the outcome and the characteristics associated with a population at a specific point in time (Cohen et al., 2011). The rationale for the adoption of a survey design was that it relies on large-scale data from a representative sample of a population with the aim of describing the nature of existing conditions (Cohen et al., 2011). Babbie (2007) contends that survey research in general offers advantages in terms of economy, the amount of data that can be collected, and the chance to sample a large population.

The justification for the adoption of the cross-sectional surveys design is also contained in the argument of Fowler (2010) that cross-sectional surveys can be conducted using any mode of data collection including telephone interviews in which landline telephones are called, telephone interviews in which cell phones are called, face-to-face interviews, mailed questionnaires. Therefore, the design involves employing both quantitative and qualitative approaches because researching the issue of study habits of students is complex, and as Cresswell (2009) suggests, one approach alone cannot adequately supply all the answers. The variety of data collection instruments will provide rich, in-depth qualitative as well as large objective quantitative data so as to shed light on the study habit of the pupils, and its effect on their academic performance.

3.3 Population of the Study

Population of a study refers to all the members of the real or hypothetical set of people, events or objects to which a researcher wishes to generalize the results of a research (Gall, Gall & Borg, 2007). Heldal and Jentoft (2011) posit that target population is the population of individuals which researchers are interested in describing and making statistical inferences about. In this research, the target population consisted of all junior high school pupils in the Ekumfi District. This comprised 1,644 boys and 1,520 girls, totaling 3,164. These pupils were considered appropriate for the study because they are preparing to write the Basic Education Certificate Examination (BECE). Their study habits are therefore cardinal to ascertain how they are studying which has implications for their academic performance in the BECE.

3.4 Sample and Sampling Procedure

A sample is a subset of the population of interest selected to participate in a study and is representative of the total population that one desires to study (Polit & Beck, 2010). A sample size of 475 was drawn from the population for the quantitative phase of the study. This sample size was deemed representative of the target population based on the recommendations of Gay and Airasian (2003) that a sample size of 10% to 20% of the target population is representative in descriptive research.

Qualitative researchers assert that in qualitative studies, samples are typically small and based on information needs (Polit & Beck 2010), and due to the in-depth nature of the study and the analysis of data required (Cormack, 2000). Based on this viewpoint, Creswell (2002) recommends three to five participants for qualitative studies. Whitehead and Annells (2007) also propose eight to fifteen participants in qualitative studies. Drawing from these recommendations, ten (10) pupils (5 girls and 5 boys) were involved at the qualitative stage.

Hart (2012) states that sampling is the process of selecting a sub-set of a population which can be representative of the population. Therefore, findings related to the sample can then be used to make inferences about the wider population. The study adopted a multi-stage sampling method by the use of proportionate stratified random sampling and convenience sampling in the selection of the study sample. The stratified random sampling method was used because of its prospects of accuracy; easily accessible as well as better comparison and hence representation across strata (Saunders, Lewis & Thornhill, 2007). Proportionate stratified random sampling was used to put the population into strata and random selection was done so that each stratum is fairly representative of the target population (Cohen et al., 2011). The main principle of the stratified sampling is that each member of the population has equal

chance of being selected to be in the sample, and that the sample replicates the population.

The selection of the sample was done at two levels. First, the target population was categorised into circuits, and the percentage of each circuit to the population was computed. For instance, Eyisam Circuit had 695 pupils representing about 22% of the population. Therefore, 22% of the sample size (475) represents about 104 pupils. The second stage of the selection was based on sex. Out of the population size for Eyisam (695), 332 (48%) were boys and 363 (52%) were girls. Based on these percentages, 50 boys and 54 girls were selected in Eyisam Circuit using simple random sampling technique.

Convenience sampling is a process of selecting samples that are readily available to a researcher (Cohen, et al., 2011). Polit and Hungler (1999) also explain that in convenience sampling, participants are included in a study because they happen to be in the right place at the right time. For the qualitative stage, the researcher selected pupils who agreed to participate in the study. Scholars like Creswell (2002) argue against the use of the convenience sampling technique that it is bias as researchers deliberately enlist participants based on favoritism which affects the representativeness of the sample. However, this sampling technique was appropriate for the study because the qualitative phase was carried out after school, and those who had time and agreed to participate were involved in the study.

3.5 Area of the Study

The Ekumfi District was carved out from the Mfantseman Municipal in 2012 by Legislative Instrument 2027, and located in the Central Region. Its capital is Essarkyir. It is located along the Atlantic coastline of the Central Region of Ghana. It is bounded to the West by Mfantseman Municipality, to the North by Ajumako-

Enyan-Essiam District, to the East by Gomoa West District, and to the South by the Gulf of Guinea. It has a projected total population of 65,775 made up of 32,230 males and 33,545 females.

Pineapple production is the main farming activity in the district. Other agricultural products such as cassava, maize, vegetables and fruits are produced. Fishing is also carried out by the people especially along the coastal areas. Salt mining is done on small scale at Suprodo and Narkwa. Trading is done virtually in every area in the district with Essuehyia as a major focal point and involves agricultural products and other merchandise. The people speak *Fanti*. There are five education circuits in the district: Essarkyir, Narkwa, Eyisam, Essuehyia, and Otuam. The district has 42 kindergartens, 41 Primary Schools, 39 Junior High Schools and the T. I Ahmadiyya Senior High School at Essarkyir.

3.6 Instrumentation

A multi-method approach was used to triangulate data as researchers argue that a complete picture could not be generated by any one method alone (Bryman, 2008). By triangulation, it refers to a systematic process of looking across multiple data sources to validate and confirm evidence to derive themed findings (Cohen et al., 2011). Data were therefore collected from participants using structured questionnaire, semi-structured interview guide, and check list.

3.6.1 Questionnaire

Structured questionnaire contains pre-determined responses and the respondents can only choose from these responses (Cohen et al., 2011). Scholars like Gall et al. (2007) recounts the merits of questionnaire such as low cost in terms of both money and time involved, and wider coverage of participants and it is also an efficient way to collect statistically quantifiable information (Cohen et al., 2011). The

choice of structured questionnaire was influenced by Denzin and Lincoln's (2012) argument it is relatively low cost, structured information leading to straightforward analysis, quick results as well as its stable, consistent, and uniform method of collecting data. However, structured questionnaire has been criticised that it is limited to literate population and does not provide an opportunity to collect additional information (Fraenkel & Wallen, 2000). This limitation however did not affect the study because participants were literate which made the choice of the questionnaire in this study more appropriate. Besides, the researcher used interviews to gather additional information that the structured question could not provide.

The questionnaire was adapted from Bakare's (1977) Study Habits Inventory (SHI). The adaptation of the questionnaire took the form of rewording some items to make them understandable to the pupils. The Study Habits Inventory is a self-reporting inventory which enables the individual students to describe the situations, habits and conditions which affect their use of study time and their subsequent performance on tests and examinations (Bakare, 1977). The inventory consists of 34 items in the form of direct questions and requires students to provide responses relating to (i) homework and assignments; (ii) time allocation; (iii) reading and note-taking; (iv) concentration; and (v) time management.

The questionnaire was made up of two sections. Section A focused on the background information of the participants such as sex, age, educational level, and parents' education level. Section B measured the variables as contained in the conceptual model and measured on a 5-point Likert scale such that 1= Strongly Disagree, 2= Disagree, 3= Undecided, 4= Agree, and 5= Strongly Agree, and all the items were positive statements. Sarantakos (1998) supports the use of Likert scales

because it has a high degree of validity and reliability even if the scale contains a few items.

3.6.2 Interview

Creswell (2003) postulates that the most commonly used method in qualitative research is in-depth interviews. Interviewing is the process of directing a conversation to collect information (Angrosino, 2007). This researcher argues that interviews provide the flexibility for the researcher to manage and organize the interview process, and it is suitable for probing questions to acquire in-depth information from the interviewees.

Willig (2005) explains that interviews involve collection of data through verbal interaction between the researcher and subjects, to collect "naturally occurring" data (Silverman, 2010). Therefore, the method helps explore participants' views in more depth (Invankova et al., 2006) and supports in-depth analysis (Flick, 2006). Interviews can be used as the main data collection instrument or in conjunction with observation, document analysis or some other data gathering technique (Gray, 2009).

In semi-structured interviews, the researcher has a list of themes or some key questions to be covered, but their use may vary from interview to interview. The order of questions may also be different depending on the conversation and additional questions that may be required (Saunders et al., 2012). The interview mode was face-to-face which permits creating rapport and also allows researchers to observe participants' non-verbal communication such as their use of gestures (Nissim, Gagliese & Rodin, 2009). Open-ended items were used in this study as they granted the researcher opportunity to interact with the participants in a way that they feel free to express their opinions, and to solicit open-ended responses (Minichiello, Aroni & Hays, 2008). These responses led to some further questions which increased the

richness of data. Semi-structured interview permits the exploration of participants' experiences of the phenomenon in-depth (Trigwell, 2006). This interview protocol enabled the researcher to collect data in a natural conversational manner.

3.6.3 Checklist

A checklist was used to record examination scores of the pupils. Authors (Galiher, 2006; Hijazi & Naqvi, 2006) have used different methods to assess academic performance of students. For instance, Galiher (2006) used Grade Point Average (GPA) to measure student performance because the focus was on student performance for the particular semester. Hijazi and Naqvi (2006) used test results or previous year's results since they were studying performance of students for the specific subject or year.

In Ghana, tests and examinations are generally used to measure students' academic performance. Unlike the tertiary institutions where GPA is used, academic performance at the pre-tertiary level is usually quantified in percentages. Therefore, the study used examination scores of the pupils (in percentages) to determine the status of academic performance. End of term examination scores in English Language, Integrated Science, Mathematics, and Social Studies for 2015/2016 academic year were used. These subjects were considered because they are core subjects that all students study and are crucial in determining students' grades at the BECE. The examination was conducted by the Ekumfi Education Directorate which was considered to be standardized. Hence, comparison could be made based on the results of the examination within the district.

3.6.4 Pre-testing of the Instruments

A pilot study was conducted to ascertain the validity and reliability of the instruments. The pilot study was carried out in the Mfantseman Municipality, and

involved 80 JHS pupils. The choice of Mfantseman Municipality was based on the views of Kusi (2012) that participants in a pilot study should have similar characteristics as those in the study. Ekumfi District was formed from the Mfantseman Municipality which suggests that Junior High School pupils in Mfantseman have similar features their colleagues in the Ekumfi District.

3.7 Validity

Validity is the extent to which a measuring instrument truly measures the characteristics it intends to measure (Bryman & Bell, 2011). Cohen et al. (2011) contend that a research instrument must be validly designed to obtain rigorous conclusions. The validity of the instruments was approached in two ways: face validity, and content validity.

3.7.1 Face Validity

Face validity of the instruments was ensured by giving the instruments to colleagues on the Master of Philosophy programme as well as other graduate students of the University of Education, Winneba, for review. These colleagues made comments relating to the length of items, the number of items, and the general layout of the instruments that were considered in fine-tuning the instruments.

3.7.2 Content Validity

Content validity refers to the extent to which the measuring instrument shows that it fairly and comprehensively covers the variables that it purports to measure (Cohen et al., 2011). According to Borg and Gall (2003), content validity of an instrument is ensured through expert judgment. Therefore, content validity of the instrument was granted by supervisors and other lecturers who are experts and have knowledge in the issues of the study. These scholars evaluated the extent to which the instruments could produce data consistent with the variables under investigation. For

instance, Bryman (2012) and Patton (2002) argue that a pilot study is necessary to test an interview guide for clarity of the questions, whether the questions captured the research interest, whether the domains of interest were covered, and the length of the interview. The researcher made changes to the interview guide based on the feedback information from the pilot study.

3.8 Reliability

Reliability is concerned with consistency, dependability or stability of an instrument (Cohen et al., 2011). In this study, reliability was approached as internal consistency of the questionnaire items. In this approach, the questionnaire was administered to participants in the pilot study once and the coefficient of the inter-item correlations was computed using Cronbach alpha to determine the reliability. The Cronbach alpha coefficients for each of the variables were: 0.89 for homework and assignments; 0.85 for time allocation; 0.78 for reading and note taking; 0.81 for concentration; 0.83 for time management; 0.84 for auditory, 0.82 for visual, 0.86 for kinesthetic learning styles and 0.85 for the entire questionnaire. McMillan and Schumacher (2010) argue that Cronbach alpha coefficient should be at least 0.70 to be indicative of internal consistency. Based on this view, it could be observed that the questionnaire was reliable.

3.9 Data Collection Procedure

To gain access to the district, the researcher obtained an introductory letter from the Head of Department of Basic Education, University of Education, Winneba. Then, a covering letter was given by the Ekumfi District Director of Education which gave the researcher permission to go to the schools. The researcher approached the head teachers and sought their consent to conduct the study in their schools.

Two visits each were made to the schools for data collection. During the first visit, the questionnaires were administered, and the examination scores of the pupils were recorded. With assistance from teachers, all the participants were assembled in one classroom, the purpose of the study was explained to them, and how they would be involved. Having agreed to participate in the study, the questionnaire was administered. The researcher read the items to the participants, and they chose their options to reflect their perception. The process was interactive as the participants asked questions which the researcher clarified until all the items were completed. All the questionnaires were collected and sealed in an envelope. Teachers assisted to record pupils' examination scores which were done concurrently with questionnaire administration. The checklist was used where teachers ticked options to reflect marks obtained by pupils for the year.

The second visit was used to conduct the interviews. A tape recorder was used to capture the interactions with permission from the interviewees. The interviewees were allowed to listen to the playback of the interview recorded after each session. Since the tape could develop mechanical faults which could result in loss of valuable information, the researcher used field notes to supplement the tape recordings.

3.10 Data Analysis Procedure

Data analysis is a process where a researcher continually reflects on collected data, moving deeper for understanding and representing the data, and deriving an interpretation of the larger meaning of the data (Creswell, 2003). The researcher checked all filled-in questionnaires, and eliminated those that were either not properly responded to or not responded to at all. The questionnaire was coded, and the data were entered into the Statistical Product for the Service Solution (SPSS) Version 22. The data were explored to identify missing data and outliers.

Descriptive and inferential statistical tools were used to analyse the data. Descriptive statistics (mean, standard deviations) was used for the analysis of demographic data. Borg and Gall (2003) argue that descriptive statistics not only allows the researcher to use numbers, but also provides the researcher with data that allow for inferences on the population and directions for answering research questions. Therefore, descriptive statistics was used to describe the variables, and provided information which served as basis for making inferences.

The quantitative data were analysed using inferential statistical tools such as t-test, one-way between groups analysis of variance (ANOVA), Pearson Product Moment Correlation Coefficient, and multiple regression. Independent samples t-test and one-way analysis of variance (ANOVA) were used to compare groups to determine if any significant differences existed. The one-way ANOVA was appropriate because it is used to determine whether there are any significant differences between the means of three or more independent (unrelated) groups whiles the independent samples t-test is suitable for comparing the means of two independent groups (Lund & Lund, 2012).

In order to determine the relationship between the study variables, Pearson Product Moment correlation was employed because it is suitable for determining linear correlation between two variables (Pallant, 2005). To determine the effect of study habits on academic performance, multiple regression analysis was carried out using forced entry method. With this method, all the predictor variables were entered into the equation and the relative contribution of each predictor to the outcome variable was assessed (Pallant, 2005). The study habits served as predictor variables, and academic performance was the dependent variable in the regression equation.

The qualitative data analysis followed the thematic approach where themes and patterns were developed from the data collected based on the research questions backing the study (Silverman, 2010; Cohen et al, 2011). The analysis involved processes of listening, reading and re-reading, inductive reasoning, reflecting and coding the interview transcripts and drawing out major themes and patterns of views from the data. Interview recordings were listened to severally and transcribed. The transcription involved verbatim representation of the interview tapes into text which were used to describe the views of the participants from their point of view.

3.11 Assumptions Underpinning Statistical Tests

The use of parametric tests requires that certain assumptions are met. These include normality of data, equality of variance, multicollinearity, and scale of measurement.

3.11.1 Normality Test

Research scholars such as Lund and Lund (2012) suggest that there are two main ways of measuring normality: graphically and numerically. In this study, normality of data was evaluated numerically using Shapiro-Wilk Test. If the p-value of the Shapiro-Wilk Test is greater than 0.05, then the data is normal. If it is below 0.05, then the data significantly deviate from a normal distribution (Lund & Lund, 2012). Therefore, the assumption of dependent variable being approximately normally distributed for each combination of the levels of the independent variables was met (Appendix C).

3.11.2 Equality of Variance

Equality of variance, also known as homogeneity of variance, requires that the variability of scores for each of the groups is similar, and Levene's test is used to assess this assumption. Levene's test looks at whether there are any significant

differences between group variances (Pallant, 2005). The author adds that this assumption is determined when the Levene statistic is greater than 0.05. Assessment of the Levene's statistic which accompanies t-test and ANOVA outputs revealed that this assumption was satisfied.

3.11.3 Multicollinearity

Multicollinearity measures the degree to which the independent variables are interrelated (Pallant, 2005). Scholars like Pallant (2005) propose that in determining the presence of multicollinearity, correlation coefficients greater than 0.80 is indicative of the presence of multicollinearity. The Pearson correlation coefficients revealed that the predictor variables were not highly correlated.

3.11.4 Scale of Measurement

Scholars (Pallant, 2005; Cohen et al., 2011) argue that parametric tests require that data are collected using either interval or ratio scale of measurement. The data collected through the structured questionnaire (Appendix A) and examination scores satisfied this criterion of scale of measurement. To ensure that both the independent variable (study habit) and the dependent variable (academic performance) had similar scale for the analysis, the examination scores, hitherto measured in percentages, were converted so that the highest score was 5 to correspond with the questionnaire value. For example, 60% in the examination was converted, thus: $60/100 \times 5 = 3$.

3.12 Ethical Issues

Ethical issues refer to the moral principles guiding a research (Babbie, 2007). Research ethics is "the standard of the researcher's behaviour in relation to the rights of those who become the subject of a research project, or who are affected by it" (Saunders et al., 2012, p. 680). Saunders et al. (2012) enumerate ethical issues such as anonymity, confidentiality, and informed consent.

3.12.1 Informed Consent

Bryman (2008) maintains that informed consent is a

> …key principle in social research ethics. It implies the prospective research participants should be given as much information as might be needed to make an in-formed decision about whether or not they wish to participate in a study (p.124).

Informed consent is concerned with the right of participants to know the purpose of the study, how the researcher intends to involve them, and that they can withdraw from the study at any point when they want to do so (Kankam & Weiler, 2010). It could be deduced from the above views that the involvement of participants in a research study should be voluntary.

Heath, Crow and Wiles (2004:406) have argued that:

> informed consent is a largely unworkable process given that researchers can rarely know the full extent of what participation may entail, or predict in advance all the possible outcomes of participation.

However, the researcher strove to secure informed consent by giving the participants information on the purpose of the study, the nature of data to be collected and how they would be involved. The researcher also assured the participants that they could seek clarification on issues when they were in doubt.

3.12.2 Anonymity

Anonymity is a requirement that the identity of the participants who provide information in a study is hidden so that nobody can identify who provides particular information (Kankam & Weiler, 2010). Bogdan and Biklen (1992:23) are concerned that "unless otherwise agreed to, the subjects' identities should be protected so that the information you collect about them does not embarrass or in other ways harm them". The researcher ensured anonymity in this study by not indicating names and

addresses of participants either in the instruments for data collection or in the final reports.

3.12.3 Confidentiality

Bryman (2008:92) explains confidentiality as "not disclosing information from a participant in any way that might identify that individual or that might enable the individual to be traced". Confidentiality is an ethical requirement that information provided in a research study is not disclosed publicly (Kankam & Weiler, 2010). This was achieved by assuring the participants that data would be kept secret from public access by locking all data gathered in cabinets, shredding filled-in questionnaires, interview recordings secured in computer and protected by password, and destroying interview videos and tapes at the end of the study.

3.13 Summary of Methodology

This chapter delved into the methodology adopted to conduct the study. The chapter discussed the research design, population and sampling procedures, instrumentation, data collection procedures and analysis as well as ethical issues. It was established that the study adopted a cross-sectional survey design where both quantitative and qualitative data were collected, analysed, and interpreted with the aid of questionnaire and interview guide. The next chapter presents the results of data analysis and the discussion of the findings.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF RESULTS

4.0 Introduction

This chapter presents the results and discussion of the analyses of data. The chapter is presented in five sections. Section one presents a report on the response rate and a discussion on its appropriateness. This is followed by the demographic representations of the sample and a justification of their relevance to the study. The third section presents data and analyses of research questions, and test of the study's hypotheses is done in section four. The discussion of the results concludes the chapter.

4.1 Response Rate

Out of a total of four hundred and seventy-five (475) questionnaires administered, three hundred and eighty (380) were involved in the analysis representing a response rate of 80%. This response rate was obtained because some respondents did not fill-in their questionnaires whilst other questionnaires contained errors in answering that could not be included in the analysis. However, this response rate was deemed appropriate based on the recommendation of Babie (1998) and Dillman (2000) that a response rate of 50% and 70% respectively is enough in a survey. The next section presents the demographic characteristics of the respondents.

4.2 Demographic Characteristics of the Respondents

This section of the study examined the demographic characteristics of the respondents. The distribution of the respondents was done based on circuit, sex, age, form, parental marital studies, parental educational background, and parental occupation. The distribution of the respondents by circuit is presented in Figure 4.1.

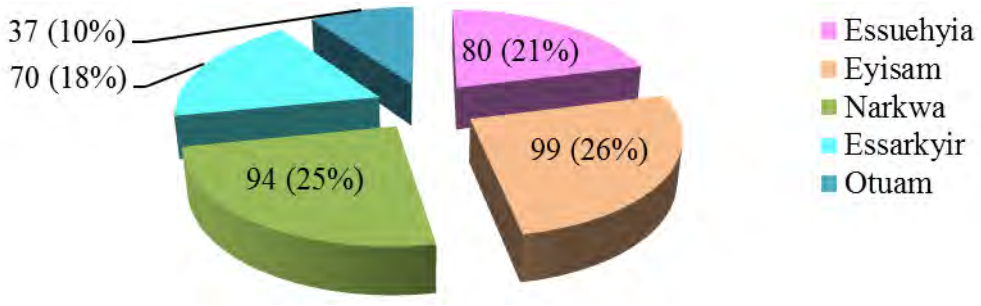

Figure 4. 1 Distribution of Respondents by Circuit.

Source: Field work, 2016

It could be observed from Figure 4.1 that Eyisam Circuit constituted the greatest proportion of the study sample (n=99, 26%) as compared with the Narkwa (n=94, 25%), Essuehyia (n=80, 21%), Essarkyir (n=70, 18%) and Otuam (n=37, 10%). The distribution of the respondents across circuit was crucial to the study because it demonstrated that the respondents were proportionately chosen based on their representation in the population which could ensure generalisability of the findings to the population. Besides, this distribution served as the basis for comparison of the students on their study habits and academic performance.

The distribution of the respondents by Form is illustrated in Figure 4.2

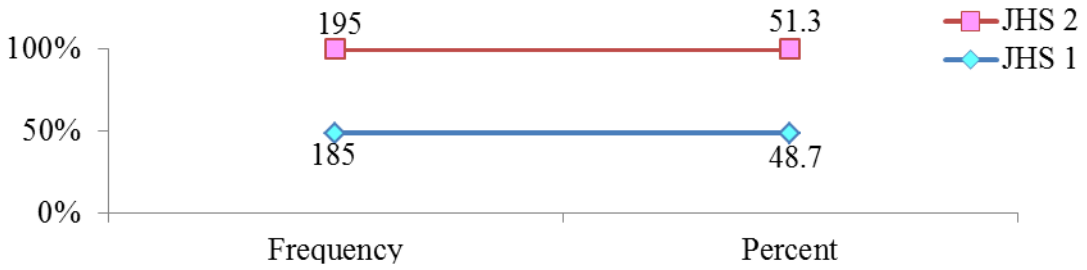

Figure 4. 2 Distribution of Respondents by Form

Source: Field work, 2016

Figure 4.2 have disclosed that more than half the number of the pupils were in JHS 2 (n=195, 51.3%) whilst the remaining were in JHS1 (n=185, 48.7%). This distribution was vital to the study because pupils were drawn from both JHS 1 and

JHS 2, and they were compared on the study variables to determine whether any variations existed between them.

The sex distribution of the respondents is presented in Figure 4.3.

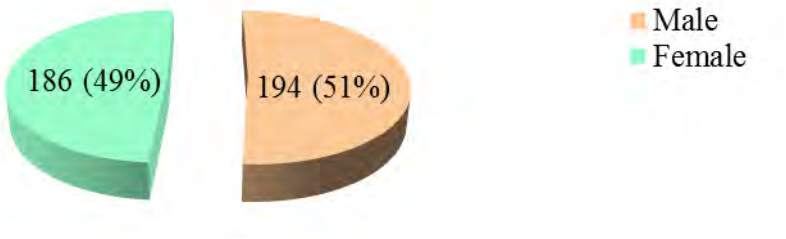

Figure 4. 3 Sex Distribution of Respondents.

Source: Field work, 2016

The information in Figure 4.3 portrays that more males (n=194, 51.1%) than females (n=186, 49%) participated in the study. This sex distribution is consistent with the composition of the entire population where there were more males than females, hence presents a fair representation of the population. In addition, sex was vital in the study because it was used a factor to conduct a comparative analysis of respondents on the study variables to determine the extent to which it influenced respondents on the variables.

The composition of the sample by age is shown in Figure 4.4.

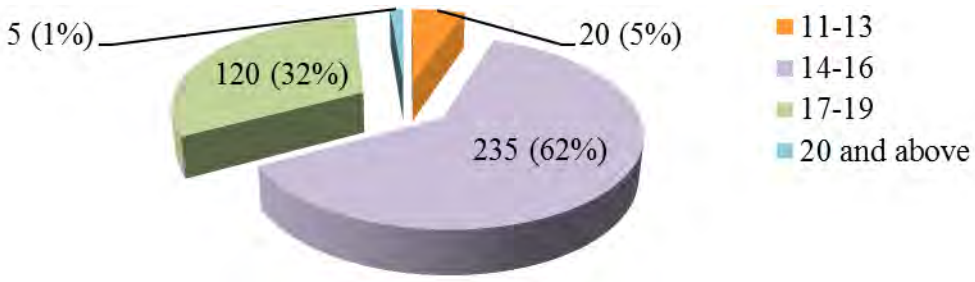

Figure 4. 4 Age Distribution of Respondents.

Source: Field work, 2016

Figure 4.4 revealed that many younger pupils (n=255, 67%) than older ones (n=125, 33%) took part in the study. Age was also directly involved in the data

analysis to ascertain the extent to which it affected pupils' study habits and their academic performance.

The distribution of respondents by parental sector of occupation was investigated, and the results are presented in Figure 4.5.

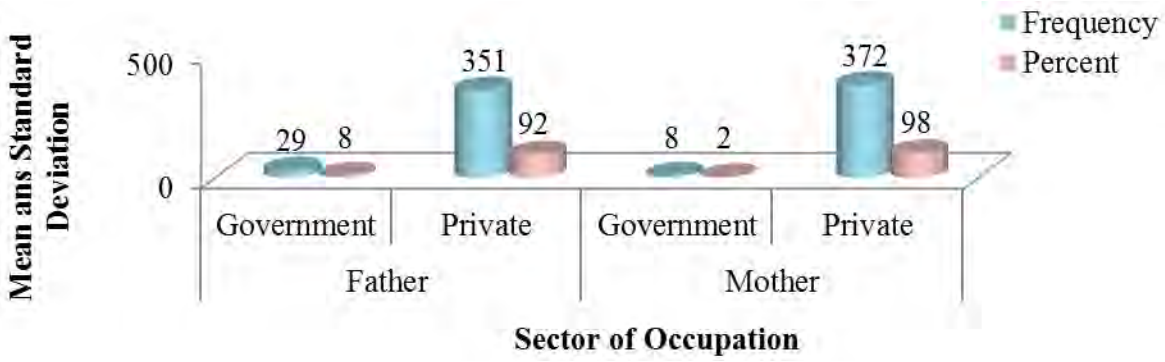

Figure 4. 5 Distribution of Respondents by Parental Sector of Occupation.
Source: Field work, 2016

The results in Figure 4.5 indicated that majority of respondents had parents who were found in private businesses than those in the government sector. Indeed, a greater number of pupils had fathers who were engaged in private businesses (n=351, 92%) than those employed in the government sector (n=29, 8%). Likewise, a greater portion of the pupils had mothers who were into private business (n=372, 98%) as compared with the ratio of those employed in the government sector (n=8, 2%).The researcher was interested in determining how parental sector of occupation influenced the study habits and academic performance of the pupils which made sector of occupation relevant to the study.

Parental marital status of the pupils is presented in Figure 4.6. The results in Figure 4.6 disclosed that a larger proportion of the pupils had parents who were married and staying together (n=178, 46.8%) than those whose parents were divorced (n=89, 23.4%), widowed (n=63, 16.6%) and separated (n=50, 13.2). The effect of

parental marital status on pupils' study habits and academic performance informed its inclusion of in the study.

Figure 4. 6 Distribution of Respondents by Parental Marital Status

Source: Field work, 2016

Figure 4.7 presents the distribution of the respondents by parental education background.

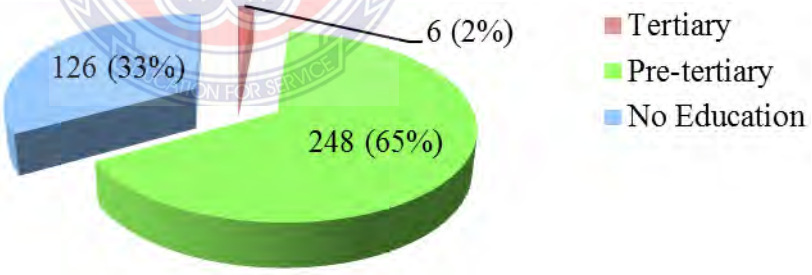

Figure 4. 7 Distribution of Respondents by Parental Education Background

Source: Field work, 2016

It could be observed from Figure 4.7 that a greater proportion of the respondents had parents who attained pre-tertiary education (n=248, 65%) than those who had no education (n=126, 33%) and tertiary level education (n=6, 2%) respectively. The parental education background constituted a vital part of data

analysis and discussion as it facilitated the comparison of pupils on study habits and academic performance.

In conclusion, the results provided proof that the sample reflected respondents from varying demographic backgrounds thereby generating rich data. The findings also showed that data collected was not biased which further supports the credibility of the data and inferences made. The next section presents the results of the analysis of research questions.

4.3 Data Presentation and Analyses of Research Questions

Research Question One - What is the perception of pupils on the nature of their study habits in the Ekumfi District?

The aim of Research Question One was to investigate the kind of study habits adopted by pupils in Junior High Schools in the Ekumfi District. Generally, study habits practiced by the pupils are presented in Figure 4.8. The results in Figure 4.8 has revealed that the pupils practiced examination related study habits most (M=3.57, SD=0.58) than homework and assignment (M=3.55, SD=0.78), concentration (M=3.46, SD=0.64), reading and note-taking (M=3.43, SD=0.47) and time management (M=3.42, SD=0.60). Collectively, the study habits inventory yielded a mean of 3.44 (SD=0.38). The analysis further delved into the factors that could have accounted for the above study habits, and the results are shown in the subsequent sections.

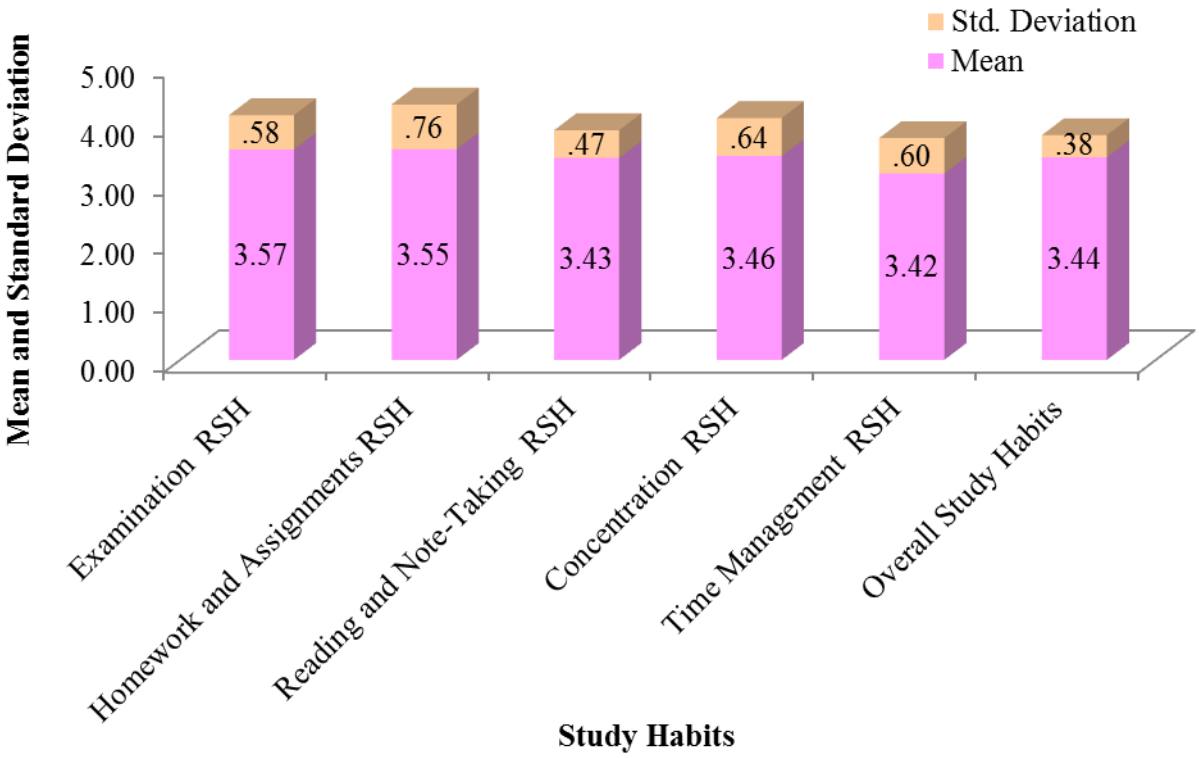

Figure 4. 8 Summary of Pupils' Study Habits.

Source: Field work, 2016

Note: RSH stands for Related Study Habits

4.3.1 Circuits and Study Habits

The study habits of pupils in the various circuits were investigated, and the results are illustrated in Table 4.1. The information in Table 4.1 has proven that pupils in Essuehyia Circuit rated highest on examination related study habit (M=3.64, SD=0.56) than those in Eyisam (M=3.60, SD=0.52), Narkwa (M=3.57, SD=0.60), Otuam (M=3.50, SD=0.61) and Essarkyir (M=3.48, SD=0.67) circuits on the same variable whilst pupils in Eyisam Circuit recorded highest (M=3.65, SD=0.58) than those in Narkwa (M=3.62, SD=0.70), Essuehyia (M=3.53, SD=0.08), Essarkyir (M=3.50, SD=0.74) and Otuam (M=3.47, SD=0.48) on homework and assignments related study habits.

Table 4.1: Mean and Standard Deviation for Circuits and Study Habits

		Mean	Std. Deviation
Examination-Related Study Habits	Essuehyia	3.64	0.56
	Eyisam	3.60	0.52
	Narkwa	3.57	0.60
	Essarkyir	3.48	0.67
	Otuam	3.50	0.61
	Total	3.57	0.58
Homework and Assignments Related Study Habits	Essuehyia	3.53	0.08
	Eyisam	3.65	0.58
	Narkwa	3.62	0.70
	Essarkyir	3.50	0.74
	Otuam	3.47	0.48
	Total	3.57	0.76
Reading and Note-Taking- related Study Habits	Essuehyia	3.41	0.55
	Eyisam	3.43	0.43
	Narkwa	3.50	0.48
	Essarkyir	3.40	0.45
	Otuam	3.34	0.41
	Total	3.43	0.47
Concentration-related Study Habits	Essuehyia	3.44	0.61
	Eyisam	3.48	0.58
	Narkwa	3.51	0.74
	Essarkyir	3.42	0.61
	Otuam	3.38	0.68
	Total	3.46	0.64
Time Management Related Study Habits	Essuehyia	3.31	0.72
	Eyisam	3.09	0.51
	Narkwa	3.20	0.61
	Essarkyir	2.99	0.61
	Otuam	3.27	0.41
	Total	3.16	0.60
Overall Study Habits	Essuehyia	3.47	0.41
	Eyisam	3.45	0.31
	Narkwa	3.48	0.43
	Essarkyir	3.36	0.40
	Otuam	3.39	0.21

Source: Field work, 2016

The results further indicated that pupils in Narkwa Circuit scored highest on reading and note-taking related study habits (M=3.50, SD=0.48) than those in Eyisam (M=3.44, SD=0.43), Essuehyia (M=3.41, SD=0.55), Essarkyir (M=3.40, SD=0.45) and Otuam (M=3.34, SD=0.41) circuits on the same variable whereas those in Narkwa Circuit ranked greatest on concentration related study habits (M=3.51,

SD=0.74) as compared with those in Eyisam (M=3.48, SD=0.58), Essuehyia (M=3.44, SD=0.61), Essarkyir (M=3.42, SD=0.61) and Otuam (M=3.38, SD=0.68) circuits. Furthermore, the information in Table 4.1 disclosed that pupils in Essuehyia Circuit attained the highest mean (M=3.31, SD=0.72) than those in Otuam (M=3.27, SD=0.41), Narkwa (M=3.20, SD=0.61), Eyisam (M=3.09, SD=0.51) and Essarkyir (M=2.99, SD=0.61) on time management related study habits whilst pupils in Narkwa Circuit rated greatest (M=3.48, SD=0.43) than Essuehyia (M=3.47, SD=0.41), Eyisam (M=3.45, SD=0.31), Otuam (M=3.39, SD=0.21) and Essarkyir (M=3.36, SD=0.40) with regards to the overall study habits.

To check out whether the assumption of homogeneity of variance for all the dependent variables were fulfilled, Levene's test was carried out and the results (Appendix C1) confirmed that this assumption was satisfied for examination (1.170, p>0.05), Homework and Assignments (1.490, p>0.05), Reading and Note-Taking (1.426, p>0.05), Concentration (1.675, p>0.05), Time Management (3.719, p>0.05) as well as the Overall Study Habits (3.200, p>0.05). A one-way between groups ANOVA test was conducted and the results are shown in Table 4.2. The ANOVA results in Table 4.2 revealed that except time management related study habit where a statistical significant difference was realized [F (4, 375) = 3.532, p=0.008], there were no statistical significant differences in the means for Examination [F (4, 375) = 0.893, p=0.468], Homework and Assignments [F (4, 375) = 0.718, p=0.580], Reading and Note-Taking [F (4, 375) = 0.958, p=0.431], Concentration [F (4, 375) = 0.394, p=0.813] as well as the overall study habits [F (4, 375) = 1.348, p=0.252] at 0.05 alpha level due to the circuits in which pupils were located. Based on these results, it could be concluded that except time management, pupils' study habit was not contingent on the circuits the pupils were located in the Ekumfi District.

Table 4.2: ANOVA Results for Circuits and Study Habits

		Sum of Squares	df	Mean Square	F	Sig.
Examination	Between Groups	1.222	4	0.306	0.893	0.468
	Within Groups	128.337	375	0.342		
	Total	129.559	379			
Homework and Assignments	Between Groups	1.669	4	0.417	0.718	0.580
	Within Groups	217.771	375	0.581		
	Total	219.440	379			
Reading and Note-Taking	Between Groups	.846	4	0.212	0.958	0.431
	Within Groups	82.849	375	0.221		
	Total	83.695	379			
Concentration	Between Groups	.659	4	0.165	0.394	0.813
	Within Groups	156.792	375	.418		
	Total	157.451	379			
Time Management	Between Groups	5.033	4	1.258	3.532	0.008
	Within Groups	133.615	375	0.356		
	Total	138.648	379			
Overall Study Habits	Between Groups	0.760	4	0.190	1.348	0.252
	Within Groups	52.891	375	0.141		
	Total	53.651	379			

Source: Field work, 2016

To determine where the differences among the circuits occurred, post hoc analysis using Tukey HSD test was conducted, and the results are displayed in Table 4.3. The post hoc results in Table 4.3 have revealed that there was significant pair-wise group difference between the pupils in Essuehyia and Essarkyir where those in Essuehyia Circuit scored significantly higher (M=3.47, SD=0.41) than Essarkyir Circuit (M=3.36, SD=0.40) on time management.

Table 4.3: Post hoc Results for Circuit and Study Habits

Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Time Management	Essuehyia	Eyisam	0.222	0.090	0.098	-0.02	0.47
		Narkwa	0.113	0.091	0.723	-0.14	0.36
		Essarkyir	0.323*	0.098	0.009	0.05	0.59
		Otuam	0.034	0.119	0.999	-0.29	0.36
		Essarkyir	0.100	0.093	0.820	-0.16	0.36
	Narkwa	Essuehyia	-0.113	0.091	0.723	-0.36	0.14
		Eyisam	0.109	0.086	0.710	-0.13	0.34
		Essarkyir	0.209	0.094	0.174	-0.05	0.47
		Otuam	-0.080	0.116	0.959	-0.40	0.24
	Essarkyir	Essuehyia	-0.323*	0.098	0.009	-0.59	-0.05

Source: Field work, 2016

4.3.2 Form and Study Habits

The study habits of pupils in JHS 1 and JHS 2 were examined and the results are presented in Figure 4.9.

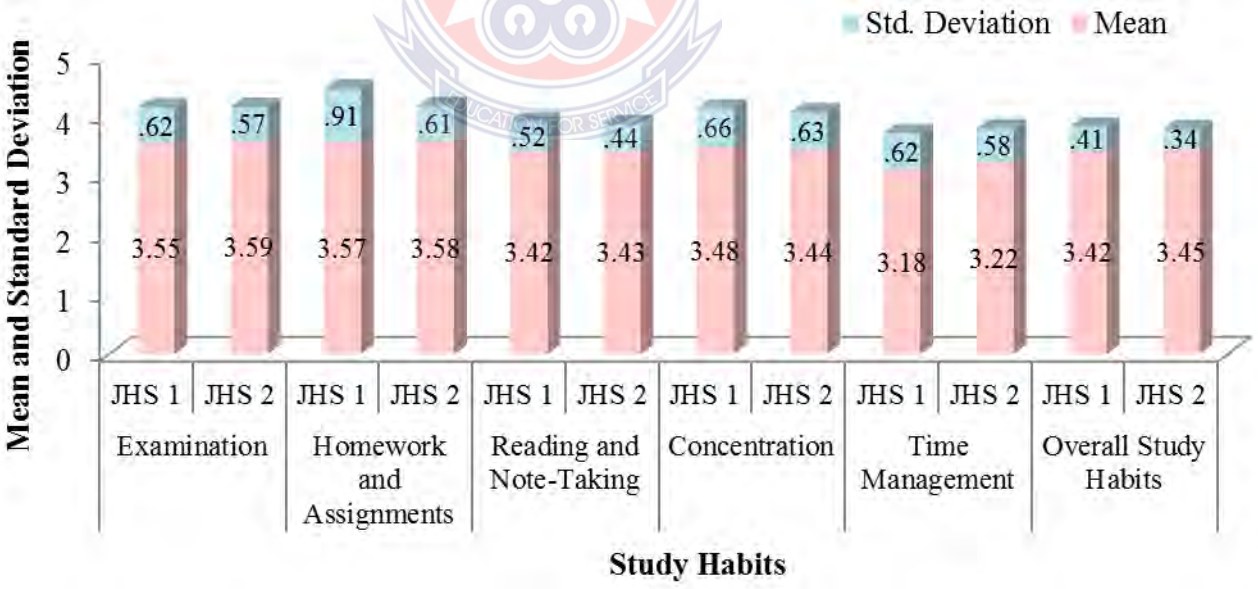

Figure 4.9 Form and Study Habits.

Source: Field work, 2016

It could be observed from Figure 4.9 that JHS 2 pupils recorded higher mean (M=3.59, SD=0.57) than JHS 1 pupils (M=3.55, SD=0.62) on concentration, and similarly, JHS 2 pupils rated higher (M=3.58, SD=0.61) than JHS 1 pupils (M=3.57, SD=0.91) on homework and assignment. In relation to reading and note-taking, the results indicated that JHS 2 pupils attained higher mean (M=3.43, SD=0.44) than JHS 1 pupils (M=3.42, SD=0.52) whilst JHS 1 pupils rated higher (M=3.48, SD=0.66) than JHS 2 pupils (M=3.44, SD=0.63) on concentration. Concerning time management, the information has shown that JHS 2 pupils ranked higher (M=3.22, SD=0.58) than JHS 1 pupils (M=3.18, SD=0.62) whereas JHS 2 pupils rated higher (M=3.45, SD=0.34) than JHS 1 pupils (M=3.42, SD=0.41) on the overall study habits.

To ascertain whether the differences observed in the study habits of pupils in Figure 4.9 were statistically significant, an independent samples t-test was conducted and the results are shown in Table 4.4.

Table 4.4: T-test Results for Form and Study Habits

		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Examination	EVA	0.008	0.930	-0.773	378	0.440	-0.046
	EVNA			-0.772	373.337	0.441	-0.046
Homework and Assignments	EVA	3.315	0.069	-0.141	378	0.888	-0.011
	EVNA			-0.139	318.791	0.889	-0.011
Reading and Note-Taking	EVA	3.409	0.066	-0.166	378	0.868	-0.008
	EVNA			-0.166	368.449	0.868	-0.008
Concentration	EVA	0.180	0.672	0.670	378	0.503	0.044
	EVNA			0.670	374.563	0.504	0.044
Time Management	EVA	0.607	0.436	-2.022	378	0.044	-0.125
	EVNA			-2.018	372.158	0.044	-0.125
Overall Study Habits	EVA	3.622	0.056	-0.756	378	0.450	-0.029
	EVNA			-0.753	357.558	0.452	-0.029

Source: Field work, 2016

Note: EVA= Equal Variances Assumed; EVNA= Equal Variances not Assumed

Inspection of the results in Table 4.4 has revealed that the assumption of equality of variance examination (F=0.008, p>0.05), homework and assignment (F=3.315, p>0.05), reading and note-taking (F=3.409, p>0.05), concentration (F=0.180, p>0.05), time management (F=0.607, p>0.05) and the overall study habits (F=3.622, p>0.05) were not violated. The t-test results revealed that except time management where the difference in the means reached statistical significance [t (378)= -2.022, p=0.044, 2-tailed], no statistical significant differences were obtained for examination [t (378)= -0.773, p=.440, 2-tailed], homework and assignment [t (378)= -0.141, p=0.888, 2-tailed], reading and note-taking [t (378)= -0.166, p=0.868, 2-tailed], concentration [t (378)= 0.670, p=0.503, 2-tailed], and the overall study habits [t (378)= -0.756, p=0.450, 2-tailed] at 0.05 alpha level due to form. These results suggest that whereas form is a determinant of time management practices, it does not influence the other study habit inventories of pupils in the Ekumfi District.

4.3.3 Sex and Study Habits

The study habits based on pupils' sex were examined, and the mean and standard deviation are presented in Figure 4.10 overleaf. The results in Figure 4.10 have established that there were differences in the study habits of males and females as illustrated in the means. Indeed, males scored higher (M=3.58, SD=0.62) than females (M=3.56, SD=0.55) on examination, and on homework and assignment, males rated higher (M=3.58, SD=0.85) than females (M=3.57, SD=0.66). Contrarily, females recorded higher mean (M=3.47, SD=0.50) than males (M=3.39, SD=0.44) in relation to reading and note-taking whereas females obtained higher mean (M=3.54, SD=0.64) than males (M=3.38, SD=0.64) regarding concentration. Furthermore, the information has shown that for time management females attained greater mean

(M=3.24, SD=0.63) than males (M=3.09, SD=0.57) whilst females graded higher (M=3.47, SD=0.36) than males (M=3.40, SD=0.39) on the overall study habits.

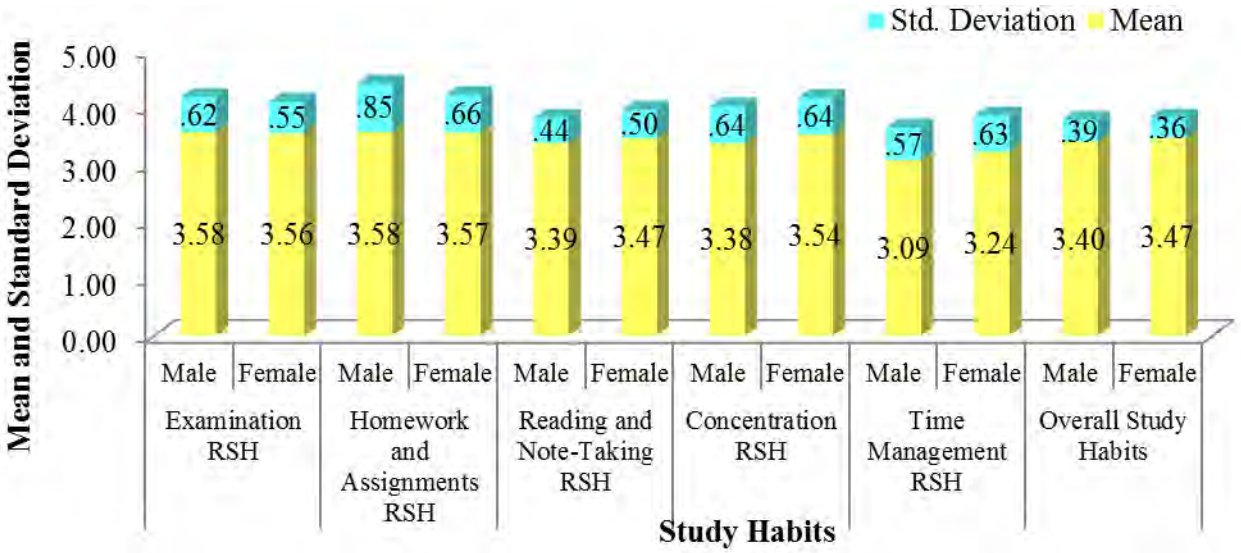

Figure 4.10 Mean and Standard Deviation for Sex and Study Habits.

Source: Field work, 2016

An independent samples t-test was used to determine whether the differences in the means were statistically significant, and the results are displayed in Table 4.5.

Table 4.5: T-test Results for Sex and Study Habits

		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference
Examination RSH	EVA	1.173	0.279	0.375	378	0.708	0.023
	EVNA			0.376	376.029	0.707	0.023
Homework and	EVA	0.015	0.901	0.196	378	0.845	0.015
Assignments RSH	EVNA			0.197	363.149	0.844	0.015
Reading and Note-	EVA	2.129	0.145	-1.754	378	0.080	-0.084
Taking RSH	EVNA			-1.750	368.609	0.081	-0.084
Concentration RSH	EVA	0.092	0.762	-2.444	378	0.015	-0.161
	EVNA			-2.445	377.539	0.015	-0.161
Time Management	EVA	1.936	0.165	-2.414	378	0.016	-0.149
RSH	EVNA			-2.409	370.646	0.016	-0.149
Overall Study	EVA	0.739	0.391	-1.850	378	0.065	-0.071
Habits	EVNA			-1.853	377.742	0.065	-0.071

Source: Field work, 2016

Note: EVA= Equal Variances Assumed; EVNA= Equal Variances not Assumed

Table 4.5 has unveiled that the homogeneity assumption for examination (F=1.173, p>0.05), homework and assignment (F=0.015, p>0.05), reading and note-taking (F=2.129, p>0.05), concentration (F=.092, p>0.05), time management (F=1.936, p>0.05) and the overall study habits (F=0.739, p>0.05) were fulfilled. The t-test results revealed that there were no statistical significant differences in the means for examination [t (378) =.375, p=0.708, 2-tailed] and homework and assignment [t (378) 0.196 = 0.196, p=0.845, 2-tailed] whilst the differences in the means for reading and note-taking [t (378) = -1.754, p=0.080, 2-tailed], concentration [t (378) = -2.444, p=0.015, 2-tailed], time management [t (378) = -2.414, p=0.016, 2-tailed], and the overall study habits [t (378)= -1.850, p=0.065, 2-tailed] were statistically significant at 0.05 alpha level due to sex. Therefore, it could be inferred from these results that sex does not influence examination and homework and assignments related study habits whilst it does affect reading and note-taking, concentration, time management, and the overall study habits of pupils in public JHS in the Ekumfi District.

4.3.4 Age and Study Habits

In determining how age affects study habits of pupils, the descriptive information is presented in Table 4.6 overleaf. Table 4.6 revealed that older pupils ranked higher (M=3.59, SD=0.60) than younger ones (M=3.57, SD=0.58) on examination, and concerning homework and assignments, older pupils rated higher (M=3.61, SD=0.67) than younger ones (M=3.56, SD=0.80). The information also disclosed that whereas younger pupils recorded higher mean (M=3.56, SD=0.80) than older ones (M=3.41, SD=0.51) with regard to reading and note-taking, older pupils obtained greater mean (M=3.47, SD=0.68) than younger ones (M=3.56, SD=0.80) in relation to concentration. For time management, older pupils rated higher (M=3.18, SD=0.65) than younger ones (M=3.15, SD=0.58), and on the overall study habits,

older pupils graded higher (M=3.45, SD=0.38) than younger ones (M=3.43, SD=0.37).

Table 4.6: Mean and Standard Deviation for Age and Study Habits

		Mean	Std. Deviation
Examination	Young	3.57	0.58
	Old	3.59	0.60
Homework and Assignments	Young	3.56	0.80
	Old	3.61	0.67
Reading and Note-Taking	Young	3.44	0.45
	Old	3.41	0.51
Concentration	Young	3.44	0.63
	Old	3.47	0.68
Time Management	Young	3.15	0.58
	Old	3.18	0.65
Overall Study Habits	Young	3.43	0.37
	Old	3.45	0.38

Source: Field work, 2016

An independent samples t-test was carried to determine whether the mean differences were statistically significant, and the results are presented in Table 4.7.

Table 4.7: T-test Results for Age and Study Habits

		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference
Examination	EVA	0.017	0.896	-0.104	378	0.917	-0.007
	EVNA			-0.103	241.123	0.918	-0.007
Homework and Assignments	EVA	0.010	0.920	-0.679	378	0.498	-0.056
	EVNA			-0.724	291.959	0.470	-0.056
Reading and Note-Taking	EVA	2.405	0.122	0.539	378	0.590	0.028
	EVNA			0.514	218.274	0.608	0.028
Concentration	EVA	1.041	0.308	0.322	378	0.748	0.023
	EVNA			0.313	229.825	0.754	0.023
Time Management	EVA	1.400	0.237	-0.369	378	0.713	-0.024
	EVNA			-0.354	223.082	0.723	-0.024
Overall Study Habits	EVA	0.128	0.720	-0.181	378	0.857	-0.007
	EVNA			-0.179	239.758	0.858	-0.007

Source: Field work, 2016

Note: EVA= Equal Variances Assumed; EVNA= Equal Variances not Assumed

The results in Table 4.7 have disclosed that the assumption of equality of variance for examination (F=.017, p>0.05), homework and assignment (F=0.010, p>0.05), reading and note-taking (F=2.405, p>0.05), concentration (F=1.041, p>0.05), time management (F=1.400, p>0.05) and the overall study habits (F=.128, p>0.05) were not violated. The t-test results discovered that there were no statistical significant differences in the means for examination [t (378) =-0.104, p=0.917, 2-tailed], homework and assignments [t (378)= -0.679, p=0.498, 2-tailed], reading and note-taking [t (378) =0.539, p=0.590, 2-tailed], concentration [t (378) = 0.322, p=.748, 2-tailed], time management [t (378) = -0.369, p=0.723, 2-tailed] and the overall study habits [t (378)= -0.181, p=0.857, 2-tailed] at 0.05 based on age. These results implied that age did not significantly influence the study habits of public junior high pupils in the Ekumfi District.

From the analysis of the interview data, it was discovered that pupils practiced the study habits as outlined in the study. One of the pupils said that:

> *I have a timetable that tells me the subject to learn during the day, and I try to follow it. After school, I try to do my housework quickly so that I can have time for my studies. Sir the fact is that I find it difficult to follow the timetable because I do a lot of work after school such as selling, cooking, and washing (Female JHS2 Pupil, Interview Data, 2016).*

It could be deduced from the above views that the pupils recognize time management as vital for the practice of study habits, and they make attempts to manage time for studies. The comments also indicated that pupils have challenges in following the timetable because of many house chores. Whilst some pupils plan their studies, others do not as contained in the following comment:

> *Our teachers advise us to plan our studies, but we don't do it. We use our time to play football and watch movies after school. Some of us*

> *take care of ourselves because our parents have travelled. We go to the beach after school to get some fish to sell and make some money to take care of ourselves (Male JHS2 Pupil, Interview Data, 2016).*

The preceding comment disclosed that parental support was either absent or inadequate which made pupils to engage in economic activities to make a living thereby deprived them enough time to study. The analysis further revealed that those who study after school are selective in the subjects they study as captured in the following opinion:

> *Sir my father always tells me to study after doing my housework. I read notes that my teachers give me. I like learning RME [Religious and Moral Education], Fante, Social Studies and BDT [Basic Design and technology]. I don't like learning Mathematics and Science because these subjects are difficult, and I don't understand them (Female JHS1 Pupil, Interview Data, 2016).*

The subjects the pupils study could have implications for their general performance. Except Social Studies, they do not study the compulsory subjects that constitute integral components of the grading system at the pre-tertiary level.

It emerged from the interview data that pupils had challenges in retrieving material during examinations as one of the pupils lamented thus:

> *Sir I sometimes fail in class tests and examinations because I forget all the things I learn, and I sometimes feel like crying. Even the things I learn just before the exam I find difficult to remember and write. But I can remember all the things I learn after taking the exam, and this pains me a lot (Female JHS2 Pupil, Interview Data, 2016).*

It could be inferred from the above statement that pupils experienced high test anxiety which inhibits their ability to think and retrieve learned material. Other pupils

were unable to answer the required number of questions, hence affects their performance as observed in the following comments:

> *The time given in examination is not enough to answer all the questions. In some of the subjects like Science and Mathematics, one question has many sub-questions making it difficult for me to complete answering all the questions (Male JHS1 Pupil, Interview Data, 2016).*

Poor spelling was identified as one examination challenge leading to low academic performance of the pupils. On this point, one of the pupils remarked:

> *Some of us get low marks in examinations because we make mistakes in spelling words. Sir for example, in Science, if you spell one word wrongly our teacher will not give you the mark. Our Science teacher does not consider [pardon] us at all, and the words in Science too are difficult to remember and write correctly. I can say the answers well, but when I write them down, I don't get everything wrong (Female JHS2 Pupil, Interview Data, 2016). .*

The pupils perceived homework and assignment as one of the school routines that must be carried out to escape punishment. Generally, doing homework and assignments were not seen as a way of studying, but rather a means to avert sanctions from teachers as pointed as follows:

> *We don't play with assignments or homework in this school. If we don't do assignment, the teachers will punish us. But Sir the secret is that most of us copy from our friends. Some of us don't do the assignment at home; we wait, and come to school the following morning and copy from our friends (Female JHS1 Pupil, Interview Data, 2016).*

Another pupil remarked:

> *The assignments and homework are sometimes many. Sir we learn many subjects and the teachers give many assignments. Sometimes we*

> *will have about four assignments to do, and because we have other things to do at home, we don't complete all of them. For me, if I am not able to do assignments, I do not go to school because the teachers will punish me (Male JHS2 Pupil, Interview Data, 2016).*

The responses from the pupils suggested that pupils did not consider homework and assignments as a vital way to consolidate what had been learnt. It was also revealing that pupils would not do assignments if teachers would not punish them.

The analysis revealed that pupils attempted to read whiles studying, but poor reading ability of the pupils was noted to militate against their study habits, a point stressed in the ensuing comment:

> *Most of us don't read our notes at home. Sir it is not that we are lazy, but we cannot read well. Sir if you take a book to learn, but you cannot read it, how are you going to learn? I sometimes take my notes to learn, because I cannot read, I sleep or put the book down to go and play or watch television (Male JHS1 Pupil, Interview Data, 2016).*

The above view hinted that even though the pupils had the keen to study, they could not do so due to their inability to read. Another pupil said:

> *I read notes that our teachers give us, and sometimes I read the textbooks. Our teachers give us long notes; I find it difficult to know the part I have to remember to pass the examination. Sir you can't remember the long note that the teachers give us. Ah! It is too long (Female JHS2 Pupil, Interview Data, 2016).*

It could be observed that notes given by teachers and textbooks were the major reading materials for the pupils. It could also be inferred from the statement that the pupils tried to memorize entire notes without identifying the salient ideas in the notes. Another pupil added that:

> *What I read all the time is the notes we copy in the classroom. The questions our teachers ask in examination, the answers are in the notes they give us. So I don't waste time to read other books. If you read other books, you can fail in the examinations because these books will not help you to answer the questions (Male JHS2 Pupil, Interview Data, 2016).*

It could be seen from the above comment that except textbooks and classroom notes, the pupils perceived other reading materials as irrelevant to their academic success. This position of the pupils arose from the fact that teachers asked examination questions directly from the notes they give to the pupils, and that without reading the notes they would not be able to answer the questions. This could limit their ability to read extensively, thereby limit their scope and mechanics of language such as vocabulary and spelling. Besides, they do not practice the skill of note-taking since they are unable to identify important points and writing them as notes.

The views of the pupils showed that pupils had challenges with concentration-related study habits as reported as follows:

> *Sir people make too much noise in our town so it does not make me think about what I am learning. People who sell drinks play music very loud and you cannot learn at all. When it is time for a funeral, they play sound system [public address system] for many days, so I can't learn when there is noise (Female JHS1 Pupil, Interview Data, 2016).*

Another pupil added that:

> *I cannot learn for a long time because I sleep when I am learning. I do a lot of housework, so I become tired. As soon as I take the book to learn, I feel to sleep (Male JHS2 Pupil, Interview Data, 2016).*

The above views supported the fact that outside distractions and fatigue were key factors that prevented pupils from concentrating on their learning task.

Based on the quantitative results which disclosed that pupils had differences in time management due to the circuit, sex and class, the interview explored what could have accounted for these differences. The reports indicated that geographical location (circuits) determined parental occupation and influenced pupils' time management as stated as follows:

> *Sir some of us are close to the sea and we spend a lot of time every day at the beach to get fish to sell. If you go to other places like Essuehyia and Eyisam, they are close to Mankessim [market hub] so pupils can sell there [Mankessim] during the weekends and learn during school days (Male JHS2 Pupil, Interview Data, 2016).*

Another pupil explained that:

> *The work our parents do tells the way we learn after school. For those of us who have parents who are fishermen and fish sellers, we don't get time to learn after school. We help our parents to carry the fish from the beach, prepare and fry or smoke it. Sometimes by the time we finish all these it is 1 o'clock am or more. But for those who farm like in Adansi [Essuehyia Circuit] and Nanaben [Eyisam Circuit], pupils there help their parents Saturdays only or after school, but not at night (Female JHS2 Pupil, Interview Data, 2016).*

The above view suggested that pupils who had parents who were farmers had more time to study than those whose parents were fishermen and fishmongers.

The data analysis revealed that JHS2 pupils were better equipped to deal with the complexities of JHS learning than JHS1 pupils. This was explained as follows:

> *We in JHS2 know how to plan and learn all the subjects, but JHS1 pupils think they are still in Class Six. Sir in JHS everything is different. One teacher will come to the class, teach and go, and another will come. If you don't copy the notes or do the exercise quickly, the next teacher will clean everything on the blackboard. You see... you have to write fast (Male JHS2 Pupil, Interview Data, 2016).*

Another pupil compared JHS and primary learning thus:

> *In Class Six, the subjects were not many like in JHS. So it was not very difficult to learn all of them. In Class Six too, we had one teacher who taught us all the subjects, so if we didn't finish copying notes he would give us more time to finish. But in JHS, the teachers do not allow us to finish our work. Hmmmm! They just tell us to stop everything, and they start teaching a new topic (Female JHS1 Pupil, Interview Data, 2016).*

The comment above revealed the frustration among JHS1 pupils as they try to adjust to learning at the JHS and deal with many subjects and teachers.

In investigating why girls demonstrated better study habits than boys, the girls reported that they were more disciplined than the boys:

> *The boys do not take anything serious, and they are not afraid of punishment like we the girls. Some of the boys do not do homework and assignments, and they are ready to take any punishment (Female JHS2 Pupil, Interview Data, 2016).*

Another pupil added that:

> *Sir girls are quiet and they don't want to get into troubles. So they obey school rules better than we the boys. Also, the girls are always at home, but we boys roam about a lot. Sometimes, we follow our friends to play football or sit at the beach to chat (Male JHS2 Pupil, Interview Data, 2016).*

The aforementioned reports suggest that girls are better organised and manage their time properly than the boys who were boisterous and could dare to flout school regulations with impunity.

Research Question Two - What is the effect of study habits on academic performance of Public Junior High School pupils in the Ekumfi District?

Research Question Two examined the effects of study habits on academic performance. In order to answer this research question, a multiple regression analysis was carried out where examination, reading and note-taking, homework and assignments, concentration, and time management were used as predictors of academic performance in the regression model. Scholars like Pallant (2005) and Cohen et al. (2011) posit that multiple regression requires a linear correlation between the independent and dependent variable. In line with this view, a bivariate linear correlation was conducted using Pearson Product Moment correlation, and the results are presented in Table 4. The interpretation of the strength of correlation coefficients was based on the recommendation of Kothari (2004) that coefficients of 0.5 but less than 1 implies a strong relationship, coefficients greater than 0.3 but less than 0.5 indicates a moderate relationship, and coefficients less than 0.3 show a weak relationship. The correlation results were tested at 0.05 alpha level.

The Pearson correlation results in Table 4.8 revealed a moderate and statistical significant positive relationship between examination and overall academic performance (r=0.42, p=0.000, 2-tailed), and moderate and statistical significant positive relationship was observed between homework and assignments and overall academic performance (r=0.49, p=0.000, 2-tailed). The information also established a strong and statistical significant positive relationship between reading and note-taking and overall academic performance (r=0.64, p=0.000, 2-tailed) whereas concentration made a moderate and statistical significant positive association with overall academic performance (r=0.31, p=0.000, 2-tailed). It is further noticed that there was a weak but statistical significant positive relationship between time management and overall

academic performance (r=0.31, p=0.000, 2-tailed), and overall study habits attained a strong and statistical significant positive relationship between with overall academic performance (r=0.54, p=0.000, 2-tailed). Based on these results, it was concluded that the assumption of linear correlation between the predictors and the outcome variable was satisfied in this study.

Table 4.8: Pearson Correlation Matrix for Study Habits and Academic Performance

		1	2	3	4	5	6	7	8	9	10	11
	Mean	3.75	3.88	3.66	3.56	3.52	3.61	3.33	3.37	3.35	3.41	3.37
	Std. Dev.	0.66	0.70	0.55	0.64	0.67	0.44	0.16	0.79	0.87	0.69	0.65
1	Examination	1										
2	Homework & Assignments	0.55* (0.00)	1									
3	Reading & Note-Taking	0.62* (0.00)	0.73* (0.00)	1								
4	Concentration	0.35* (0.00)	0.44* (0.00)	0.52* (0.00)	1							
5	Time Management	0.21* (0.00)	0.21* (0.00)	0.24* (0.00)	0.13 (0.01)	1						
6	Overall Study Habits	0.73* (0.00)	0.83* (0.00)	0.84* (0.00)	0.70* (0.00)	0.27* (0.00)	1					
7	English Language	0.06 (0.21)	0.14* (0.01)	0.12* (.02)	0.01 (0.88)	0.19* (0.00)	0.10 (0.06)	1				
8	Integrated Science	0.45* (0.00)	0.54* (0.00)	0.70* (0.00)	0.37* (0.00)	0.22* (0.00)	0.60* (0.00)	0.26* (0.00)	1			
9	Mathematics	0.44* (0.00)	0.46* (0.00)	0.63* (0.00)	0.27* (0.00)	0.29* (0.00)	0.52* (0.00)	0.25* (0.00)	0.71* (0.00)	1		
10	Social Studies	0.41* (0.00)	0.43* (0.00)	0.64* (0.00)	0.40* (0.00)	0.12* (0.02)	0.54* (0.00)	0.21* (0.00)	0.60* (0.00)	0.51* (0.00)	1	
11	Overall Academic Performance	0.42* (0.00)	0.49* (0.00)	0.65* (0.00)	0.31* (0.00)	0.28* (0.00)	0.54* (0.00)	0.67* (0.00)	0.81* (0.00)	0.80* (0.00)	0.71* (0.00)	1

*Correlation is significant at p< 0.05 (2-tailed)
Source: Field Data, 2016
Note: P-values are in parentheses

Inspection of the collinearity statistics in Table 4.10 confirmed that the assumption of multicollinearity was not violated. The multiple regression results are displayed in Table 4.9.

Table 4.9: Multiple Regression and ANOVA Results for Study Habits and Academic Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	70.279	5	14.056	58.889	0.000
	Residual	89.267	374	0.239		
	Total	159.546	379			

R = 0.664
R^2 = 0.440
Adjusted R^2 =.433
Std. Error of the Estimate=0.489

Source: Field work, 2016

The multiple regression results as presented in Table 4.9 revealed that collectively study habits accounted for 44% in pupils academic performance which was proven to be statistically significant [F (5, 374) =58.889, p=0.000] at 0.05 alpha level. The results implied that study habit is a good predictor of pupils' academic performance, and that other factors not included in this study could contribute 56% in pupils' academic performance in the Ekumfi District.

The study further investigated the contribution of each study habit inventory, and the results are presented in Table 4.10 overleaf. The results in Table 4.10 disclosed that reading and note-taking (β=0.605, p=0.000) and time management (β=0.133, p=0.001) made unique significant individual contribution to academic performance whilst the contribution of examination (β=0.011, p=0.830), homework and assignments (β=0.036, p=0.529), and concentration (β=.-.039, p=0.394) did not individually contribute significantly to academic performance. It could be noticed that even though reading and note-taking and time management are good predictors of

academic performance, the results have shown that reading and note-taking contributed stronger than time management.

Table 4.10: Standardized and Unstandardized Coefficients for Study Habits

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	0.290	0.206		1.407	0.160		
	Examination	0.011	0.049	0.011	0.215	0.830	0.585	1.710
	Homework and Assignments	0.034	0.054	0.036	0.630	0.529	0.447	2.237
	Reading and Note-Taking	0.708	0.075	0.605	9.402	0.000	0.362	2.765
	Concentration	-0.039	0.046	-0.039	-.853	0.394	0.719	1.391
	Time Management	0.129	0.039	0.133	3.311	0.001	0.934	1.071

Source: Field work, 2016

Data from the interviews supported the findings of the quantitative data that study habits affect academic performance. One of the pupils had this to say:

> *Those who learn everyday get high marks than those who don't learn at all. Sir if you don't learn you will not know anything. Some of my classmates feel that they are intelligent, so they don't learn. Because they don't learn, they get low marks in class tests and examinations (Female JHS2 Pupil, Interview Data, 2016).*

However, some of the pupils stressed that the quality of study habits determines the level of academic performance. This point was contained in the following comment:

> *Some of us take the book and behave as if we are studying, but our mind is not on what we are learning. For example, I sometimes take the book to study, but for about ten or fifteen minutes I start to sleep (Female JHS2 Pupil, Interview Data, 2016).*

Similar point was made by another pupil thus:

> *Sir there is one boy in my class who learns well. He knows how to read very well, and he learns always after school. He has small notebooks, and he writes points in these notebooks. Anywhere he goes, he carries these notebooks and read them. He gets high marks and he is always first in examinations (Male JHS1 Pupil, Interview Data, 2016).*

A girl lamented that:

> *I study every day after school, but I don't do well in school. I don't go out like my friends. I am always in the house, and I study my notes and textbooks. But I always forget what I learn (Female JHS1 Pupil, Interview Data, 2016).*

From the above comments, it is implied that good study habits is liked directly with good academic performance, and ineffective study habits result in poor academic performance.

Research Question Three - To what extent do learning styles control the influence of study habits on the academic performance of pupils in public Junior High Schools in the Ekumfi District?

To verify that the control variable (learning styles) correlates with the dependent variable (academic performance), Pearson correlation was carried out and the results are presented in Table 4.11. The results in Table 4.11 revealed that there was a relationship between learning styles and academic performance even though some of the relationships were not significant. Specifically, visual learning style made a moderate and statistical positive relationship with academic performance (r=0.33, p=0.00); auditory learning style had a weak and insignificant positive relationship with academic performance (r=0.03, p=.60); and kinesthetic learning style had a negative correlation which was not statistically significant (r=-0.02, p=0.71), all at 0.05 alpha level.

Table 4. 11: Pearson Correlation Matrix for Learning Styles and Academic Performance

		1	2	3	4	5	6	7	8
	Mean	3.44	3.59	3.26	3.33	3.37	3.35	3.41	3.37
	Standard Deviation	0.47	0.15	0.34	0.16	0.79	0.87	0.69	0.65
1	Auditory Learning Style	1							
2	Visual Learning Style	0.01 (0.89)	1						
3	Kinesthetic Learning Style	0.02 (.74)	0.18* (.00)	1					
4	English Language	-0.01 (0.81)	0.33* (0.00)	-0.02 (0.70)	1				
5	Integrated Science	0.05 (0.33)	0.23* (0.00)	-.01 (0.78)	0.26* (0.00)	1			
6	Mathematics	0.01 (0.86)	0.27* (0.00)	-0.02 (0.68)	0.25* (0.00)	0.71 (0.00)	1		
7	Social Studies	0.05 (0.30)	0.09 (0.07)	0.00 (0.94)	0.21* (0.00)	0.60* (0.00)	0.51* (0.00)	1	
8	Overall Academic Performance	0.03 (0.60)	0.33* (0.00)	-0.02 (0.71)	0.67* (0.00)	0.81* (0.00)	0.80* (0.00)	0.71* (0.00)	1

*Correlation is significant at p< 0.05 (2-tailed)
Source: Field Data, 2016
Note: P-values are in parentheses

The study proceeded to conduct a hierarchical multiple regression where learning styles were treated as control variables, and study habits and academic performance were the independent and outcome variables respectively in the regression equation. The results of the model summary for Models One and Two as well as the ANOVA results are presented in Table 4.12. It could be observed from Table 4.12 that the learning styles collectively contributed 11.9% variance to academic performance which was statistically significant [F (3, 376) = 16.947, p=0.000] at 0.05 alpha level. The results also indicated that with the inclusion of study habits into the model, all the predictors (both learning styles and study) accounted for

53.5% variance in academic performance which demonstrated an improvement of 41.6% over model one which was assessed to be statistically significant [F (8, 371) = 53.357, p=0.000] at 0.05 alpha level. Review of Table 4.12 has shown that there were 0.7% and 1% shrinkage in the population for the contribution of learning styles and study habits on academic performance respectively.

Table 4.12: Multiple Regression and ANOVA Results for Learning Styles, Study and Academic Performance

	Model Summary			ANOVA Results				
Model	Model 1	Model 2		Sum of Squares	df	Mean Square	F	Sig.
1			Regression	19.003	3	6.334	16.947	0.000
			Residual	140.543	376	0.374		
			Total	159.546	379			
2			Regression	85.358	8	10.670	53.357	0.000
			Residual	74.188	371	0.200		
			Total	159.546	379			
R	0.345	0.731						
R^2	0.119	0.535						
Adjusted R^2	0.112	0.525						
Std. Error of the Estimate	0.611	0.447						
R^2 Change	0.119	0.416						

Source: Field work, 2016

The study further investigated the contribution of the individual predictors to academic performance, and the results are displayed in Table 4.13. It could be observed from Table 4.13 that with the absence of study habits in the regression model, visual learning style contributed significantly to academic performance (β=.350, p=0.000) whilst auditory (β=0.027, p=0.574) and kinesthetic (β=-0.077, p=0.118) learning styles could not contribute significantly to academic performance. Having included all the predictors (learning styles and study habits) into the equation,

it was established that auditory learning style (β=-0.174, p=0.000), visual learning style (β=0.265, p=0.000), kinesthetic learning style (β=-0.088, p=0.015), reading and note-taking (β=0.669, p=0.000), and time management (β=0.105, p=0.005) made a significant unique contribution to academic performance whilst the individual contribution of examination (β=-0.018, p=.700), homework and assignments (β=-0.040, p=0.457), and concentration (β=-0.019, p=0.652) did not reach statistical significance.

Table 4.13: Standardized and Unstandardized Coefficients for Learning Styles and Study Habits

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	2.648	0.257		10.315	0.000		
	ALS	0.038	0.067	0.027	0.562	0.574	1.000	1.000
	VLS	0.197	0.028	0.350	7.100	0.000	0.967	1.035
	KLS	-0.037	0.024	-0.077	-1.565	0.118	0.966	1.035
2	(Constant)	0.721	0.249		2.896	0.004		
	ALS	-0.241	0.053	-0.174	-4.571	0.000	0.860	1.162
	VLS	0.150	0.021	0.265	7.176	0.000	0.916	1.091
	KLS	-0.043	0.017	-0.088	-2.437	0.015	0.956	1.046
	Examination	-0.018	0.046	-0.018	-0.385	0.700	0.569	1.756
	Homework and Assignments	-0.037	0.050	-0.040	-0.745	0.457	0.433	2.308
	Reading and Note-Taking	0.818	0.074	0.699	11.106	0.000	0.317	3.158
	Concentration	-0.019	0.043	-0.019	-.451	0.652	0.700	1.429
	Time Management	0.102	0.036	0.105	2.842	0.005	0.922	1.084

Source: Field work, 2016

Based on these results, three conclusions were derived: learning styles collectively influenced academic performance in the Ekumfi District; study habits collectively influenced academic performance when the learning styles were controlled for in the Ekumfi District; and learning styles and study habits together

contributed significantly to academic performance better than the unitary contributions of learning styles on one hand, and study habits on the other to academic performance. However, it was auditory, visual, and kinesthetic learning styles, and reading and assignment, and time management that were needed to boost academic performance in the Ekumfi District. Therefore, it could be hypothesized that academic performance of junior high school students in the Ekumfi District would improve when they develop and practice appropriate study habits and learning styles in their studies.

Research Question Four - What practices are being put in place to enhance study habits of public Junior High School pupils in the Ekumfi District?

This research question investigated measures that are being put in place to improve pupils' study habits. The interview data revealed that some actions are being taken to improve study habits of pupils. One of the students commented thus:

> *Our Form Masters help us to plan a timetable for studies at home. The timetable helps me to know the subjects to learn at a certain time and the minutes to spend on each subject (Male JHS1 Pupil, Interview Data, 2016).*

The above comment showed that time management is one of the strategies adopted to enhance pupils' study habits. Another pupil added that:

> *Teachers in my school talk to our parents to give us more time at home to study. At PTA [Parent-Teacher Association] meetings, teachers tell our parents to reduce the work we do at home so that we can get more time to study (Male JHS2 Pupil, Interview Data, 2016).*

Despite the above measures on time management, the pupils disclosed that they rarely comply with the timetable. It was reported that:

> *Sir we don't follow the timetable at all. Sometimes it is our fault, but sometimes too, it is not our fault. Some of us don't help our parents at home. We waste the time watching television or play with our friends. Sometimes too, some of us help our parents in frying or smoking fish, and if you don't help them, they will not buy your school things for you (Female JHS2 Pupil, Interview Data, 2016).*

The analysis revealed that school authorities organize symposia on strategies to learn effectively. A pupil reported that:

> *Sometimes, the headmaster and teachers talk to us about how we can study. Every year at our Catholic Week celebration, the teachers tell us how they do their studies and help us to do our studies well. We ask questions on how we should study, and they tell us how we can learn well (Female JHS2 Pupil, Interview Data, 2016).*

Improvement in reading skills emerged as one of the strategies adopted in schools to enhance pupils' study habits. A pupil commented that:

> *In my school we practice the DEAR [Drop Everything And Read]. During the DEAR, everybody: head master, teachers, pupils, and food sellers stop whatever they are doing to read. We do this fifteen minutes before morning assembly and fifteen minutes before closing (Female JHS1 Pupil, Interview Data, 2016).* .

The School Management Committees and Parent –Teacher Associations have formulated bye-laws to monitor and prevent pupils from loitering and watching television at night. This was captured in the following statement:

> *The PTA told us that we should not watch television at night or be in town after 8pm. Members of the PTA go round in the evening, and when they catch anybody watching television on school days that person will be punished (Female JHS2 Pupil, Interview Data, 2016).*

However, the pupils noted that some parents made the implementation of this bye-law difficult. Oftentimes, some parents attack PTA executives who ensure the execution of the bye-law as pointed out thus:

> *Sir these days PTA members do not always go round to catch those who watch television at night because some parents insult them when their [parents] children were punished. At first you would see them in groups, and they hold canes. If they catch you they would cane you or report you to the teachers for punishment (Male JHS1 Pupil, Interview Data, 2016).*

It was also discovered that the chiefs and other opinion leaders in some of the communities have formulated a bye-law against noise making. The bye-law specifically prohibits playing loud music during funerals and at drinking bars at night.

> *In my village, the assemblyman and chiefs have made a law that people should not play sound system [public address system] during funerals after 8pm. This also includes people who sell drinks. If they catch you, you would be sent to the chief's palace (Male JHS2 Pupil, Interview Data, 2016).*

Even though these bye-laws were enacted, implementation was a challenge, a view expressed as follows:

> *Our people don't respect the law. The problem is that when some people were caught, the chiefs did not punish them. Sometimes too, some members of the chiefs' families don't obey the law, so everybody breaks the law and they are not punished (Female JHS2 Pupil, Interview Data, 2016).*

In summary, the interview data has proven that stakeholders of education have put in place measures to improve study habits of pupils. The strategies include planning a study schedule, organising symposia on effective ways of studying, education of parents to minimize workload of pupils at home, and the promulgation of bye-laws to curtail noise making and monitor pupils against waste of time by

watching television and slothful chatter. However, the results also indicated that implementation of some of the strategies such as bye-laws and strict adherence to timetables emerged as challenges.

4.4 Test of Study's Hypotheses

H_{01}: There is no statistical significant difference in the academic performance of pupils in the circuits.

H_1: There is a statistical significant difference in the academic performance of pupils in the circuits.

The academic performance of pupils in the circuits was compared to find out whether there was a significant difference, and the results are shown in Figure 4.11.

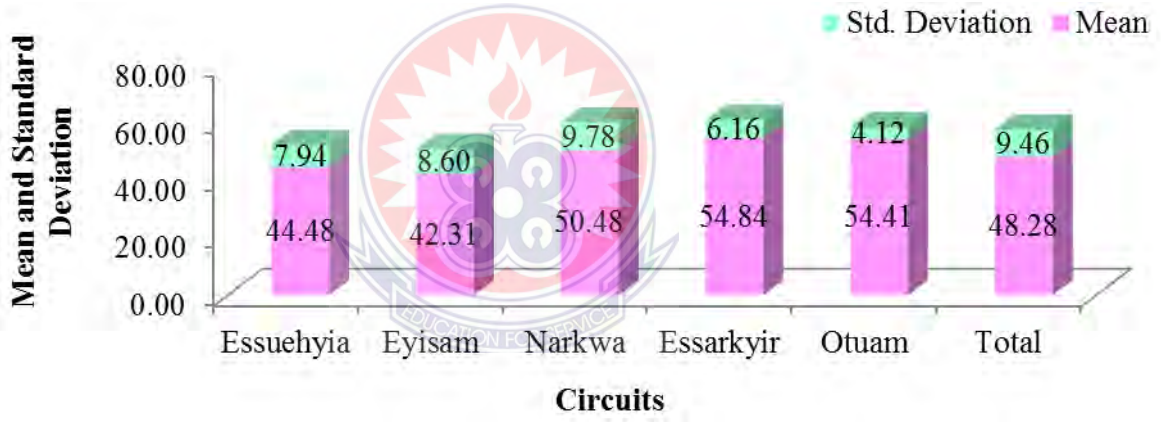

Figure 4.11 Mean and Standard Deviation for Circuits and Academic Performance.

Source: Field work, 2016

Figure 4.11 has revealed that academic performance of pupils in Essarkyir Circuit was highest (M=54.84, SD=6.16) than those in Otuam (M=54.41, SD=4.12), Narkwa (M=50.48, SD=9.78), Essuehyia (M=44.48, SD=7.94), and Eyisam (M=42.31, SD=8.63) circuits. One-way between groups ANOVA was conducted to ascertain whether the differences in performance were statistically significant, and the results are illustrated in Table 4.14. The assumption of homogeneity of variance was

checked, and the results (Appendix C2) has shown that this assumption was met (7.594, p>0.05).

Table 4.14: ANOVA Results for Circuits and Academic Performance

		Sum of Squares	df	Mean Square	F	Sig.
Academic Performance	Between Groups	9542.9	4	2385.73	36.723	0.000
	Within Groups	24361.9	375	64.965		
	Total	33904.8	379			

Source: Field work, 2016

The ANOVA results in Table 4.14 has disclosed that the differences in pupils' academic performance in the circuits reached statistical significance [F (4, 375) = 36.723, p=0.000] at 0.05 alpha level. Based on this result, the null hypothesis that there is no statistical significant difference in the academic performance of pupils in the circuits was not supported whilst the alternative hypothesis was supported. Nevertheless, generally, academic performance was below 50% average (M=48.28, SD=9.46) as shown in the total performance in Figure 4.11.

However, post hoc analysis using Tukey HSD test as contained in Table 4.15 has indicated that pupils in Narkwa circuit performed significantly highest (M=50.48, SD=9.78) than Essuehyia (M=44.48, SD=7.94), and Eyisam (M=42.31, SD=8.63) circuits; Essarkyir Circuit performed significantly highest (M=54.84, SD=6.16) than Essuehyia (M=44.48, SD=7.94), Eyisam (M=42.31, SD=8.63), and Narkwa (M=50.48, SD=9.78) circuits; and Otuam Circuit performed significantly highest (M=54.41, SD=4.12) than Essuehyia (M=44.48, SD=7.94) and Eyisam (M=42.31, SD=8.63) circuits.

Table 4.15: Tukey Test Results for Circuits and Academic Performance

(I) Name of Circuit		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Narkwa	Essuehyia	5.997*	1.226	0.000	2.64	9.36
	Eyisam	8.168*	1.161	0.000	4.99	11.35
Essarkyir	Essuehyia	10.362*	1.319	0.000	6.75	13.98
	Eyisam	12.532*	1.259	0.000	9.08	15.98
	Narkwa	4.364*	1.272	0.006	0.88	7.85
	Otuam	.431	1.638	0.999	-4.06	4.92
Otuam	Essuehyia	9.931*	1.602	0.000	5.54	14.32
	Eyisam	12.102*	1.553	0.000	7.84	16.36
	Narkwa	3.933	1.564	0.090	-0.35	8.22

Source: Field work, 2016

$H_{O2:}$ There is no statistical significant difference in the academic performance of JHS1 and JHS2 pupils in the Ekumfi District.

$H_{2:}$ There is a statistical significant difference in the academic performance of JHS1 and JHS2 pupils in the Ekumfi District.

To test this hypothesis, the academic performance of pupils in JHS1 and JHS2 was compared, and the results are presented in Table 4.16.

Table 4.16: Mean, Standard Deviation and T-test Results for Class and Academic Performance

	Form	Mean	Std. Dev.		F	Sig.	t	df	Sig. (2-tailed)
Academic Performance	JHS1	47.36	3.28	EVA	0.000	0.983	-1.844	378	0.066
	JHS2	49.14	4.57	EVNA			-1.845	377.804	0.066

Source: Field work, 2016

Note: EVA= Equal Variances Assumed; EVNA= Equal Variances not Assumed

It could be seen from Table 4.16 that JHS2 pupils performed higher (M=49.14, SD=4.57) than JHS2 pupils (M=47.36, SD=3.28). The t-test results indicated that there was a statistical significant difference in the performance of JHS2 and JHS1 pupils [t (378) = -1.844, p=0.066, 2-tailed] at 0.05 alpha level where JHS2 pupils had significantly better academic performance than those in JHS1. Therefore,

the null hypothesis that there is no statistical significant difference in the academic performance of JHS1 and JHS2 pupils was not supported whereas the alternative hypothesis was supported.

H_{O3}: There is no statistical significant difference in the academic performance of boys and girls in the Ekumfi District.

H_3: There is a statistical significant difference in the academic performance of boys and girls in the Ekumfi District.

The academic performance of boys and girls was compared, and the results are presented in Table 4.17.

Table 4.17: Mean, Standard Deviation and T-test Results for Sex and Academic Performance

	Sex	Mean	Std. Dev.		F	Sig.	t	df	Sig. (2-tailed)
Academic Performance	Male	48.70	4.76	EVA	1.030	0.311	0.886	378	0.376
	Female	47.84	4.14	EVNA			0.887	377.798	0.376

Source: Field work, 2016

Note: EVA= Equal Variances Assumed; EVNA= Equal Variances not Assumed

Reviewing Table 4.17 has shown that boys recorded higher performance (M=48.70, SD=4.76) than girls (M=47.82, SD=4.14). However, the t-test results indicated that the difference in the performance did not reach statistical significance [t (378) = 0.886, p=.376, 2-tailed] at 0.05 alpha level due to sex. It could be concluded that the null hypothesis that there is no statistical significant difference in the academic performance of boys and girls in the Ekumfi District is supported whilst the alternative hypothesis was not supported.

H_{O4}: There is no statistical significant difference in the academic performance of young and old pupils in the Ekumfi District.

H_4: There is a statistical significant difference in the academic performance of young and old pupils in the Ekumfi District.

To provide answers to this hypothesis, the performance of young and old pupils were compared, and the results are shown in Table 4.18.

Table 4.18: Mean, Standard Deviation and T-test Results for Sex and Academic Performance

	Age	Mean	Std. Dev.		F	Sig.	t	df	Sig. (2-tailed)
Academic Performance	Young	48.02	2.51	EVA	0.001	0.971	.751	378	0.453
	Old	48.80	3.36	EVNA			-.755	250.002	0.451

Source: Field work, 2016

Note: EVA = Equal Variances Assumed; EVNA = Equal Variances not Assumed

It could be observed from Table 4.18 that older pupils recorded higher performance (M = 48.80, SD = 3.36) than younger pupils (M = 48.02, SD = 2.51). Nevertheless, the t-test results confirmed that there was no statistical significant difference in the performance of pupils [t (378) = -.751, p = 0.453, 2-tailed] at 0.05 alpha level due to age. Based on these results, the null hypothesis that there is no statistical significant difference in the academic performance of young and old pupils in the Ekumfi District was supported whilst the alternative hypothesis was not supported.

4.5 Discussion of the Results

The first Research Question investigated the nature of study habits of pupils in public basic schools in the Ekumfi District. The study habits were related to homework/ assignments, time allocation, reading and note taking, concentration, and

time management. The findings revealed that the pupils practiced examination related study habits most (M=3.57, SD=0.58) than homework and assignment (M=3.55, SD=0.78), concentration (M=3.46, SD=0.64), reading and note-taking (M=3.43, SD=0.47) and time management (M=3.42, SD=0.60). This result indicates that the study habits of the pupils involved activities that would lead to success in examinations whilst time management was given the least attention. However, the results discovered that the pupils practiced a mix of all the study habits domains most of the time where all the factors performed above an average of 3.0 on the 5-point Likert scale. Therefore, the pupils were diligent in the application of study habits in their studies.

The finding of the study is consistent with Xienono's outcome where he observed that students practice a combination of several study habits. The results of the current study and that of Xienono (2012) agree with the argument of Geiser (2000) that students who apply different study habits are effective in their studies. Therefore, it could be concluded that pupils in the Ekumfi District endeavour to apply a blend of study habits in their studies. Contrarily to Onuoha and Subair's (2013) finding which showed that note taking during lessons was the most used habit in their study, this study revealed that examination related study habit was dominant among the pupils. This situation where pupils paid most attention to examination related study habits than others is not surprising because in Ghana outcomes of both internal and external tests and examinations influence students' progression to higher institutions and programmes. Therefore, it would be expected, as is the case, that pupils make efforts to pass examinations through the application of relevant study habits.

Excepts from the qualitative results corroborate the quantitative results that pupils practice multiple study habits: *I have a timetable that tells me the subject to learn during the day, and I try to follow it. After school, I try to do my housework quickly so that I can have time for my studies. I read notes that my teachers give me. We don't play with assignments or homework in this school.* Thus, time management, assignment/ homework, and reading notes were highlighted in the study habits of the pupils. Yet, the interview data disclosed that people had challenges in their study habits. These were seen the following statements: … *I find it difficult to follow the timetable because I do a lot of work after school such as selling, cooking, and washing. We use our time to play football and watch movies after school. ...I can remember all the things I learn after taking the exam. Some of us get low marks in examinations because we make mistakes in spelling words. ... most of us copy [assignments] from our friends. Most of us don't read our notes at home. ... we cannot read well.* From the above comments, it could be seen that poor time management, test anxiety, poor spelling, poor reading skills, and lack of seriousness in doing assignments were major factors that militated against effective study habits of the pupils.

The study further explored the extent to which factors like circuits (zones), sex, age, and form (class) accounted for the study habits of the pupils. The aim was to discover specific categories of pupils who might need assistance in their study habits. The study discovered that pupils' study habit was not influenced by the circuits (zones) the pupils were found in the Ekumfi District [$F(4, 375) = 1.348$, $p=0.252$]. This resonates with Agina-obu, Amakiri and Emesiobi's (2011) observation that location of school in relation to rural and urban areas does not affect study habits of students. Besides, the study found that form (class) did not influence the study habits

of pupils in the Ekumfi District [t (378) = -.756, p=0.450, 2-tailed]. This revelation departs from Khurshid et al. (2012) finding, where it was found that class affected study habits of students where those in a higher class displayed better study habits than those in lower class.

Concerning sex, this study disclosed that sex affected the study habits of pupils in public JHS in the Ekumfi District [t (378) = -1.850, p=0.065, 2-tailed] where females had better study habits (M=3.47, SD=0.36) than their male peers (M=3.40, SD=0.39). This result concurs with previous studies (Aluja-Fabregat & Blanch, 2004; Sud & Sujatha, 2006; Pillai, 2012), where similar findings were found that girls had better study habits than their male counterparts. However, the result of this study digresses from Awabil et al. (2013) and Mushoriwa's (2009) revelation that gender was not a significant determinant of study habits among students. In relation to age, the result had shown that age did not matter in the study habits of pupils in the Ekumfi District [t (378) = -.181, p=0.857, 2-tailed]. This finding disagrees with previous studies (Heath, 2007; Ossai, 2012; Anaso, 2013). In conclusion, sex is a critical factor to consider in the study habits discussion of pupils in the Ekumfi District.

The second research question investigated the effects of study habits on pupils' academic performance. The study revealed a moderate and statistical significant positive relationship between study habits and academic performance (r=0.54, p=0.000, 2-tailed), and that study habits accounted for 44% in pupils academic performance which was proven to be statistically significant [F (5, 374) =58.889, p=0.000]. Based on these results, it was concluded that study habits was a good predictor of academic performance of pupils in the Ekumfi District. The interview data corroborate the quantitative results that study habits influenced academic performance as seen in these comments: *Those who learn everyday get high*

marks than those who don't learn at all. … He knows how to read very well, and he learns always after school. He has small notebooks, and he writes points in these notebooks. He gets high marks and he is always first in examinations. This finding concurs with previous studies (Credé & Kuncel, 2008; Nuthana & Yenagi, 2009; Sarwar et al., 2009; Bashir & Mattoo, 2012) where it was found that study habits affected academic performance of pupils.

Nevertheless, reading and note-taking (β=0.605, p=0.000) and time management (β=0.133, p=0.001) made unique contributions to academic performance of the pupils whereas examination (β=.011, p=.830), homework and assignments (β=0.036, p=0.529), and concentration (β=.-.039, p=0.394) did not influence academic performance. The finding that time allocation does not affect academic performance is inconsistent with Strauss and Volkwein's (2002) study where it was discovered that time allocation influenced academic performance whilst is agrees with previous studies (Minotti, 2005; Mushtag & Khan, 2012) where homework/assignment affected academic performance. Besides, the finding of the study is similar to Kiewra, Benton and Lewis's (2007) finding that note taking influences academic attainment of students. Whilst this study validates the finding of Oladele (2000) that concentration affects academic performance, it disagrees with Oluwatimilehin and Owoyele's (2012) where it was found that concentration did not academic performance. Furthermore, this study's finding reflects Agarwal's (2008) that time management influenced academic performance.

The third research question stated in this study was to find out the extent to learning styles control the influence of study habits on the academic performance of pupils in the Ekumfi District. It was revealed that learning styles uniquely contributed 11.9% to academic performance which was statistically significant [F (3, 376) =

16.947, p=0.000]. This discovery is consistent with earlier studies (Aripin et., 2008; Ali et al., 2009; Dunn et al., 2009) where learning styles positively affected academic performance. Both learning styles and study contributed 53.5% to academic performance indicating 41.6% increase in performance when learning styles were used. The results suggest that even though learning styles and study habits separately influenced academic performance, learning styles strengthens the effect of study habits on performance. This study conflicts with Hoeffner's (2010) finding where he could not establish the effects of study habits on academic performance whiles controlling for learning styles.

Research question four explored the views of the pupils on what attempts are being made to enhance their study habits. Time management emerged as one of the strategies adopted to enhance pupils' study habits through the preparation of timetables and symposia as contained in the following comments: *Our Form Masters help us to plan a timetable for studies at home. Teachers in my school talk to our parents to give us more time at home to study. ...the headmaster and teachers talk to us about how we can study.* Therefore, it is not surprising that time management contributed considerably to the pupils' academic performance. Evidence from the study shows that effort at time management came from head teachers and teachers, and not much was seen from other stakeholders. However, the pupils had challenges in time management as some of them could not comply with their timetables. The pupils indicated that they and their parents were responsible for time mismanagement: *...we don't follow the timetable at all. Sometimes it is our fault, but sometimes too, it is not our fault.* This situation mirrors the sentiment of that Sevari and Kandy (2011) that the importance of time management is not given the required attention.

The study revealed that improvement in reading was a focus of the schools: *In my school we practice the DEAR [Drop Everything And Read]*. This strategy aimed at enhancing pupils' proficiency in reading as an important component of study habits. Allocation of time for study was also seen as an attempt to improve pupils' study habits: *The PTA told us that we should not watch television at night or be in town after 8pm.* But parents and chiefs hinder the effective implementation of this bye-law: *…these days PTA members do not always go round to catch those who watch television at night because some parents insult them when their [parents] children were punished. The problem is that when some people were caught, the chiefs did not punish them.* From the discussion, it could be seen that areas such as time management and reading where stakeholders paid attention to contributed substantially to pupils' academic performance.

Four hypotheses were tested in this study. For the first hypothesis, it was revealed that there was a statistical significant difference in the academic performance of pupils in the circuits which endorses previous studies (Akomolufe & Olorumfemi-Olabisi, 2011; Igboegwu & Okonkwo, 2012) where school location and education zones influenced students' academic achievement. Further observation revealed that Narkwa Circuit performed better than Essuehyia and Eyisam Circuits, and Essarkyir Circuit did better than Essuehyia and Eyisam. This supported in the statement thus: *...some of us are close to the sea and we spend a lot of time every day at the beach to get fish to sell. If you go to other places like Essuehyia and Eyisam, they are close to Mankessim [market hub] so pupils can sell there.* Schools found in Narkwa and Essarkyir Circuits are located in villages where there is less economic activities especially selling along the main Accra-Takoradi road as compared to Essuehyia and Eyisam which are found along the main road and close to Mankessim, a major market

hub. Therefore, it is presumed that pupils in Narkwa and Essarkyir circuits had enough time for studies than those in Essuehyia and Eyisam Circuits.

Evidence on the second hypothesis proved that JHS1 and JHS2 pupils differed in their academic performance where JHS2 pupils outperform those in JHS1. This finding disagrees with Bernardi's (2014) conclusion that lower grade students outstrip their upper grade peers in academic performance. However, performance in both classes was below average. On sex, the study found that that boys and girls did not differ in their academic performance departs from previous studies (Ceballo, McLoyd & Toyokawa, 2004; Chambers & Schreiber, 2004) but supports Ugoji's (2008) finding. Finally, evidence on the fourth hypothesis disclosed that age did not influence academic performance of the pupils which contradicts the results of previous studies (Zeegers, 2004; Huang & Invernizzi, 2012).

4.6 Summary of Data Analysis and Discussion

This chapter presented the results and discussion of the analyses of data. Data were analysed to provide answers to four research questions and four hypotheses. The study revealed that even though examination related study habit was dominant among the pupils than others habits, the pupils practiced a multiple study habits. With the exception of sex, the study revealed that circuits, class, and age did not influence pupils' study habits. The study established that study habits was a good predictor of academic performance, and that learning styles of the pupils heightens the effect of study habits on academic performance. Besides, efforts such as timetabling, symposia, enactment and enforcement of bye-laws were implemented to enhance pupils' study habits. It was also found that education circuits and class affected academic performance of the pupils. The next chapter presents the summary, conclusion and recommendations of the study.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the conclusion of the study. It is composed of the summary of findings, conclusions drawn and recommendations made from the study.

5.1 Summary of the Study

The study investigated the effect of study habits on academic performance of pupils in the Ekumfi District of the Central Region in Ghana. It examined the controlling effect of learning styles on the influence of study habits on pupils' academic performance. Bakare (1977) study habits served as the theoretical framework of the study. Multi-stage sampling with the use of stratified and convenience sampling techniques were used to select 475 pupils for the study. Structured questionnaire and face-to-face semi-structured interview guides were used as an instrument for the study. The data collected were analysed using both qualitative and quantitative methods. Descriptive statistics and inferential statistical tools were used for the analysis of quantitative data whereas the qualitative data were analysed through the thematic approach. The next section highlights the major findings of the study.

5.2 Major Findings of the Study

The findings revealed that generally pupils in Ekumfi District display good study habits. Even though the results disclosed that examination related study habits was dominant among the pupils than homework and assignment, concentration, reading and note-taking, and time management, it was discovered that the pupils combined all the facets of the study habits outlined in the study. Additionally, apart

from sex, the study revealed that circuits, class, and age did not influence pupils' study habits.

The study established that generally study habits were good predictor of academic performance of pupils in the Ekumfi District. Nonetheless, reading and note-taking and time management contributed substantially to academic performance of the pupils while examination, homework and assignments, and concentration did not influence their academic performance.

In determining the extent to which learning styles control the effect of study habits on the academic performance of pupils, the study revealed that learning styles exclusively contributed significantly to academic performance. It was further revealed that learning styles did not impede the effect of study habits on academic performance. Instead, learning styles reinforced the link between study habits and academic performance among the pupils.

It was disclosed in the study that stakeholders have attempted to enhance the study habits of the pupils through timetabling, symposia on how to study, enforcement of bye-laws, and strategies for improving reading skills of the pupils. However, these were not without challenges. These include non-adherence of the pupils to their timetables, lack of commitment on the part of chiefs to sanction pupils who violate the bye-laws, and attacks by parents on those who enforced that bye-laws.

5.3 Conclusion

The concept of study habits based on Bakare's (1977) theory is not new among pupils in the Ekumfi District in the Central Region of Ghana. The pupils practiced multiple study habits although much attention was directed at examination aspect of studying. This suggests that the pupils were conscious of the consequences

of outcomes of examinations which dominated their effort during studies. There is enough evidence from the study that study habits are vital in determining academic performance of pupils. Accordingly, it is anticipated that stakeholders would guide pupils to develop and apply appropriate study habits to promote good academic performance. Besides, academic performance of the pupils would be better if attention is also paid to the pupils learning styles. Therefore, the combination of study habits and learning styles are required if stakeholders desire to improve academic performance in the Ekumfi District. Finally, attempts at improving the study habits of the pupils were foiled with challenges that need redress so that the pupils could excel in their studies.

5.4 Recommendations

Based on the major findings and the conclusions drawn, the following recommendations are proposed:

From the study's finding that the pupils employ multiple study habits in their studies, it is recommended that the Ministry of Education and the Ghana Education Service should design and implement programmes to conscientize pupils on the need to develop and practice effective study habits to their studies. The Guidance and Counseling Coordinators and Circuit Supervisors should be equipped with current theories in study habits so that they can offer necessary assistance to pupils on how to improve on their study habits. In addition, the study revealed that girls had better study habits than their male peers. Therefore, it is recommended that much attention should be given to the boys to reorient them on the practice of effective study habits. These will help the pupils to apply relevant study habits so as to attain good academic performance.

The study disclosed that study habits impacted academic performance of the pupils. Accordingly, it is recommended that the Ministry of Education and the Ghana Education Service should organize in-service training for head teachers, teachers, and parents to help them identify the preferred study habits of the pupils and guide them accordingly. The study has shown that reading and note-taking and time management contributed significantly to academic performance.

Therefore, it is recommended that head teachers and teachers adopt measures to strengthen pupils' reading and note-taking and time management skills to boost academic performance. Again, the pupils should be reoriented to improve study habits in relation to time allocation, concentration, and homework/ assignment since these are crucial aspects of schooling. The Colleges of Education and the universities in charge of teacher education should incorporate contents related to pupils' study habits into their curricula so that graduates are well grounded to assist pupils in their study habits for improved academic performance.

The study revealed that the combined effect of study habits and learning styles on academic performance was stronger than the individual influence of these variables. Thus, it is recommended that strategies aimed at improvement in study habits should run concurrently with approaches to enhancing learning styles of the pupils for better results. Teachers should be equipped and encouraged to choose instructional methodologies and materials to suit the study habits and learning styles of the pupils so as to enhance academic performance.

The study revealed that even though stakeholders have implemented strategies to enhance study habits of the pupils, these were bedeviled with challenges. It is therefore recommended that head teachers and teachers liaise with parents, chiefs and other opinion leaders to engender commitment to the successful implementation of

the strategies. Awareness should be created among the pupils to recognise the consequences of practicing effective or ineffective study habits in their studies. This will make them apply result-driven study habits so as to achieve desired academic performance.

Generally, the study has shown that academic performance of the pupils was below average. It is therefore recommended that efforts are made by all education stakeholders to enhance academic performance of the pupils. It was found in the study that academic performance was low in Essuehyia and Eyisam Circuits than Narkwa and Essarkyir Circuits. Hence, it is recommended that pupils in Essuehyia and Eyisam Circuits are targeted more because they produce worse results than others. Besides, JHS1 pupils should be assisted to transition and cope favourably with their academic work at the junior high level.

5.5 Suggestions for Further Studies

The following are suggested for further studies:

It is proposed that the study is carried out in the entire country to determine the nature of study habits employed by pupils, and how they impact their academic performance. This will help develop a national strategy to improve on the academic performance in the entire country.

Again, based on the finding that 56% in academic performance was unaccounted for by the variables involved in this study, it is suggested that further studies are conducted to examine the effects of other variables that could account for academic performance of the pupils.

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APPENDICES

APPENDIX A

QUESTIONAIRE ID

QUESTIONNAIRE

UNIVERSITY OF EDUCATION, WINNEBA

DEPARTMENT OF BASIC EDUCATION

This questionnaire aims to collect information on pupils' study habits and academic performance. This questionnaire is strictly for an academic exercise, and you are please requested to provide accurate and frank information that will assist the researcher in obtaining the correct data for this exercise. Your responses will be treated in strict confidence. You are please requested to circle (O) on the column that best describes your habit. Thank you.

Joseph Bentil

SECTION A: Personal Information

1. Form: JHS 1 ☐ JHS 2 ☐

2. Sex:

(i) Male ☐

(ii) Female ☐

3. Age:

(i) 11-13 ☐

(ii) 14- 16 ☐

(iii) 17-19 ☐

(iv) 20-22 ☐

(v) 22 and above ☐

4. Who are you staying with?

(a) Both parents ☐

(b) Mother only ☐

(c) Father only ☐

(d) Other relatives ☐

5. Parents' level of education (Tick one):

(i) University ☐

(ii) 'A' Level ☐

(iii) 'O' Level ☐

(iv) Middle School ☐

(v) SSS ☐

(vi) JSS ☐

(vii) No education ☐

6. Father's occupation:

(i) Government ☐

(ii) Private ☐

(iii) Specify……

7. Mother's occupation:

(i) Government ☐

(ii) Private ☐

(iii) Specify……

8. Parents' marital status

(a) Married ☐

(b) Divorced ☐

Instructions

The following is a list of questions concerning your habits and method of study. Read each statement carefully and answer it as accurately as possible. Circle (O) a number that best describes your habit. Thank you.

S/N		Please **CIRCLE** a number to rate EVERY option				
		Strongly Agree	**Agree**	**Undecided**	**Disagree**	**Strongly Disagree**
1	I do poorly in tests because I find it hard to think clearly.	5	4	3	2	1
2	I get nervous and confused when taking a test and therefore fail to answer the questions.	5	4	3	2	1
3	When getting ready for a test, I arrange facts to be learned in some planned order.	5	4	3	2	1
4	I am careful about spelling, punctuation and grammar when answering test questions.	5	4	3	2	1
5	I am able to finish tests within the time allowed.	5	4	3	2	1
6	I finish my examination papers and hand them in before time during examination.	5	4	3	2	1
7	When my assigned homework is too long or hard, I either stop or study only the easier parts of the lesson.	5	4	3	2	1
8	If I am absent from class, I make up missed lessons and notes immediately.	5	4	3	2	1
9	Even though an assignment is dull and boring I stick to it until it is completed.	5	4	3	2	1
10	I put off doing written assignments until the last minute.	5	4	3	2	1

S/N		Please **CIRCLE** a number to rate EVERY option				
		Strongly Agree	**Agree**	**Undecided**	**Disagree**	**Strongly Disagree**
11	I complete and submit my assignments on time.	5	4	3	2	1
12	I begin my assignments as soon as the teacher gives them to me and not allow them to pile up.	5	4	3	2	1
13	I read my notes only once, before the examination starts.	5	4	3	2	1
14	After reading several pages of an assignment, I find it easy to remember what I have read.	5	4	3	2	1
15	I find it easy to pick out the important points of a reading assignment.	5	4	3	2	1
16	When reading a long assignment I stop now and then to try to remember what I have read.	5	4	3	2	1
17	I have to re-read material several times because the words don't have much meaning the first time I go over them.	5	4	3	2	1
18	I have trouble picking out the important points in the material I read or studied.	5	4	3	2	1
19	I go back and recite to myself the material I have studied, rechecking any points I find doubtful.	5	4	3	2	1
20	I miss important points in class while copying down notes.	5	4	3	2	1
21	I pronounce words to myself as I read.	5	4	3	2	1
22	I read only books prescribed by my teacher for his/her subjects.	5	4	3	2	1
23	I find that day dreaming distracts my attention from lessons while studying.	5	4	3	2	1
24	I find it hard to keep my mind on what I am studying for any length of time.	5	4	3	2	1
25	Outside interruptions disturb me while am studying.	5	4	3	2	1
26	I focus entirely on my work when I am studying.	5	4	3	2	1

S/N		Please **CIRCLE** a number to rate EVERY option				
		Strongly Agree	**Agree**	**Undecided**	**Disagree**	**Strongly Disagree**
27	I feel sleepy and drowsy whenever I want to study.	5	4	3	2	1
28	I can only study when a place is completely quiet.	5	4	3	2	1
29	I waste too much time talking, watching TV or listening to the radio instead of studying.	5	4	3	2	1
30	I find that having many other things to do cause me to get behind in my school work.	5	4	3	2	1
31	Problems outside the classroom, with other students or at home cause me to neglect my school work.	5	4	3	2	1
32	I study for at least three hours each day after classes.	5	4	3	2	1
33	I spend too much time on some subjects and not enough on others.	5	4	3	2	1
34	I spend too much time reading other books, or going out for the good of my school work.	5	4	3	2	1

S/N		Please **CIRCLE** a number to rate EVERY option				
		Almost Always	**Most of the Time**	**Occasionally**	**Almost Never**	**Not at all**
35	I can remember best about a subject by listening to a lesson that includes information, explanations and discussions.	5	4	3	2	1
36	I do best in academic subjects by listening to lessons and tapes.	5	4	3	2	1
37	I prefer listening to the news on the radio rather than reading the paper.	5	4	3	2	1
38	I talk to myself aloud when studying	5	4	3	2	1
39	I prefer to see information written on a chalkboard and supplemented by visual aids and assigned readings.	5	4	3	2	1
40	I like to write things down or to take notes for visual review.	5	4	3	2	1
41	I think the best way to remember something is to picture it in your head.	5	4	3	2	1
42	I prefer obtaining information about an interesting subject by reading about it.	5	4	3	2	1
43	I enjoy working with my hands or making things.	5	4	3	2	1
44	I can remember best by writing things down.	5	4	3	2	1
45	I like to solve problems by physically working through them when studying	5	4	3	2	1
46	I enjoys doing activities whiles studying	5	4	3	2	1

From a scale of 3 to 1, rate your preference of the following styles of learning:

LEARNING STYLES	**Rating of Preference**
Auditory Learning style	
Visual Learning style	
Kinesthetic Learning style	

APPENDIX B

INTERVIEW GUIDE

UNIVERSITY OF EDUCATION, WINNEBA

DEPARTMENT OF BASIC EDUCATION

SEMI-STRUCTURED INTERVIEW GUIDE

This interview session is meant to gather your views on the effect of study habits and learning styles on academic performance. Your candid opinion is needed to provide answers to the issues raised in the study, and also will help to offer recommendations that will assist in improving your learning. You are assured of strict confidentiality of any information you provide. Thank you.

Joseph Bentil

1. How would you describe your particular way of studying?

2. Do you think the way you study affects your performance in tests and examinations?

Please explain.

3. In your opinion, do you think the link between the way you study and your performance in tests and examinations is influenced by your style of learning?

Please explain.

4. Please can you tell me attempts that have been made to help you study effectively?

Please explain further.

THANK YOU FOR YOUR TIME

APPENDIX C

PUPIL'S ID

UNIVERSITY OF EDUCATION, WINNEBA

DEPARTMENT OF BASIC EDUCATION

CHECK LIST FOR EXAMINATION RESULTS

This check list was designed to collate examination results of the pupils for the three terms in 2015/2016 academic year. The researcher circled the examination scores for English Language, Mathematics, Integrated Science, and Social Studies as in the Continuous Assessment.

English Language					Mathematics					Integrated Science					Social Studies				
1	21	41	61	81	1	21	41	61	81	1	21	41	61	81	1	21	41	61	81
2	22	42	62	82	2	22	42	62	82	2	22	42	62	82	2	22	42	62	82
3	23	43	63	83	3	23	43	63	83	3	23	43	63	83	3	23	43	63	83
4	24	44	64	84	4	24	44	64	84	4	24	44	64	84	4	24	44	64	84
5	25	45	65	85	5	25	45	65	85	5	25	45	65	85	5	25	45	65	85
6	26	46	66	86	6	26	46	66	86	6	26	46	66	86	6	26	46	66	86
7	27	47	67	87	7	27	47	67	87	7	27	47	67	87	7	27	47	67	87
8	28	48	68	88	8	28	48	68	88	8	28	48	68	88	8	28	48	68	88
9	29	49	69	89	9	29	49	69	89	9	29	49	69	89	9	29	49	69	89
10	30	50	70	90	10	30	50	70	90	10	30	50	70	90	10	30	50	70	90
11	31	51	71	91	11	31	51	71	91	11	31	51	71	91	11	31	51	71	91
12	32	52	72	92	12	32	52	72	92	12	32	52	72	92	12	32	52	72	92
13	33	53	73	93	13	33	53	73	93	13	33	53	73	93	13	33	53	73	93
14	34	54	74	94	14	34	54	74	94	14	34	54	74	94	14	34	54	74	94
15	35	55	75	95	15	35	55	75	95	15	35	55	75	95	15	35	55	75	95
16	36	56	76	96	16	36	56	76	96	16	36	56	76	96	16	36	56	76	96
17	37	57	77	97	17	37	57	77	97	17	37	57	77	97	17	37	57	77	97
18	38	58	78	98	18	38	58	78	98	18	38	58	78	98	18	38	58	78	98
19	39	59	79	99	19	39	59	79	99	19	39	59	79	99	19	39	59	79	99
20	40	60	80	100	20	40	60	80	100	20	40	60	80	100	20	40	60	80	100

APPENDIX D

Homogeneity Test Results

C1

Homogeneity Test Results Circuits and Study Habits

	Levene Statistic	df1	df2	Sig.
Examination	1.170	4	375	0.324
Homework and Assignments	1.490	4	375	0.204
Reading and Note-Taking	1.426	4	375	0.225
Concentration	1.675	4	375	0.155
Time Management	3.719	4	375	0.056
Overall Study Habits	3.200	4	375	0.590

C2

Homogeneity Test Results for Circuits and Academic Performance

	Levene Statistic	df1	df2	Sig.
Academic Performance	7.594	4	375	0.051

APPENDIX E

INTRODUCTORY LETTER

UNIVERSITY OF EDUCATION, WINNEBA
DEPARTMENT OF BASIC EDUCATION
P. O. Box 25, Winneba, Ghana Tel:(0432) 22036
E-mail: Basic@uew.edu.gh

Our: DBE/67/VOL.3/16/8 *Date*: March 21, 2016
Your Ref:

The Director
Ghana Education Service
Ekumfi District

Dear Sir/Madam,

LETTER OF INTRODUCTION

I introduce to you Mr. Joseph Bentil, an M.Phil student of the Department of Basic Education of University of Education, Winneba.

He wishes to carry out his research survey on the topic: "***Study Habits and Academic Performance among Public Junior High School Pupils in the Ekumfi District***" and would therefore need your assistance.

I would be grateful if he is given the needed assistance.

Thank you for your assistance.

Yours faithfully,

ASONABA KOFI ADDISON (PhD)
(Ag. Head of Department)

APPENDIX F

PERMISSION LETTER

GHANA EDUCATION SERVICE

In case of reply the Number and date of this Letter should be quoted

Ref. No.: GES/CR/ED/42/SFII/7
Your Ref.:.....
TEL:
Email: ekumfideo@gmail.com.

REPUBLIC OF GHANA

Ekumfi District Education Office,
c/o Post Office Box 4,
Ekumfi Essarkyir.

1st April 1, 2016

GRANTING OF PERMISSION TO CONDUCT RESEARCH IN EKUMFI DISTRICT

Permission is hereby granted to Mr. Joseph Bentil to carry out a research study in the Basic Schools of Ekumfi District.

Mr. Joseph Bentil is currently pursuing a master's degree at the university of education, Winneba, and is carrying out a research study on the "Study Habits and Academic Performance among Public Junior High School Pupils in the Ekumfi District." in the District: Investigating the Controlling Effect of Learning Styles.

He has duly sought permission and his permission is hereby granted by the Ekumfi District Director of Education.

Please give him the necessary assistance and co-operation

ROBERT MENSAH
AG. DISTRICT DIRECTOR OF EDUCATION
EKUMFI

JOSEPH BENTIL

DEPARTMENT OF BASIC EDUCATION

UNIVERSITY OF EDUCATION

WINNEBA

Distribution: All Headteachers