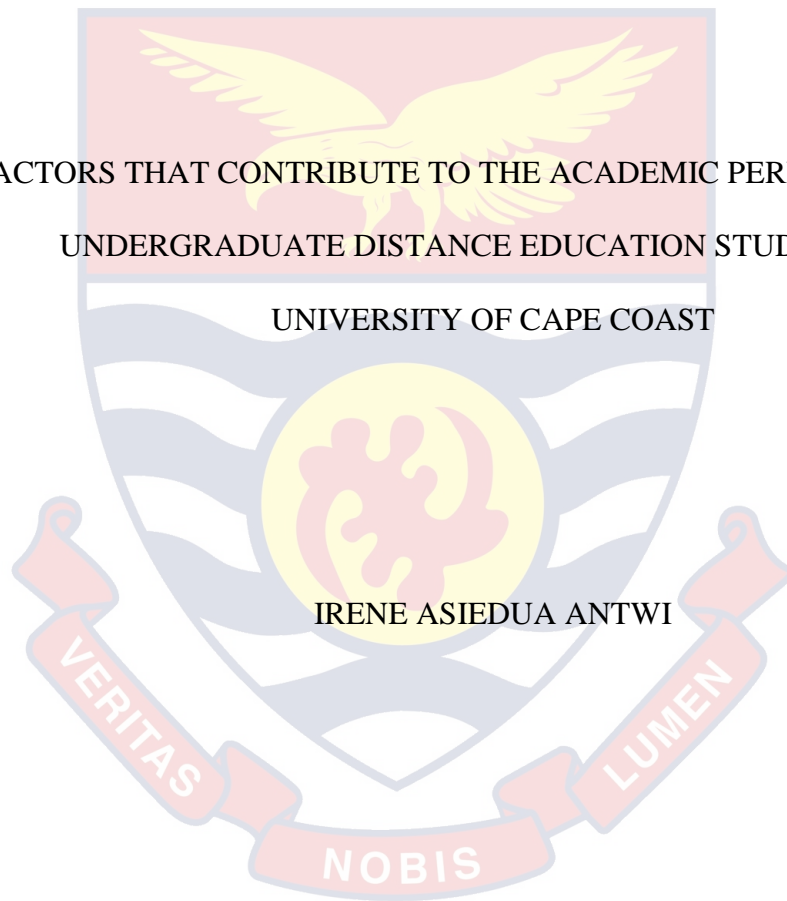


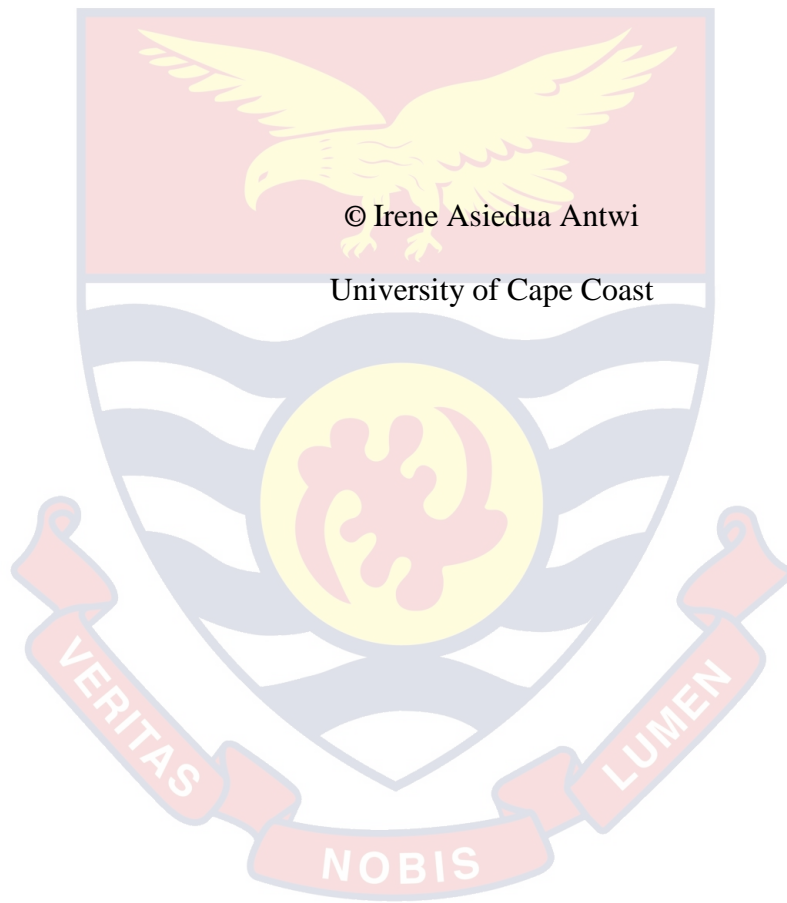
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FACTORS THAT CONTRIBUTE TO THE ACADEMIC PERFORMANCE OF
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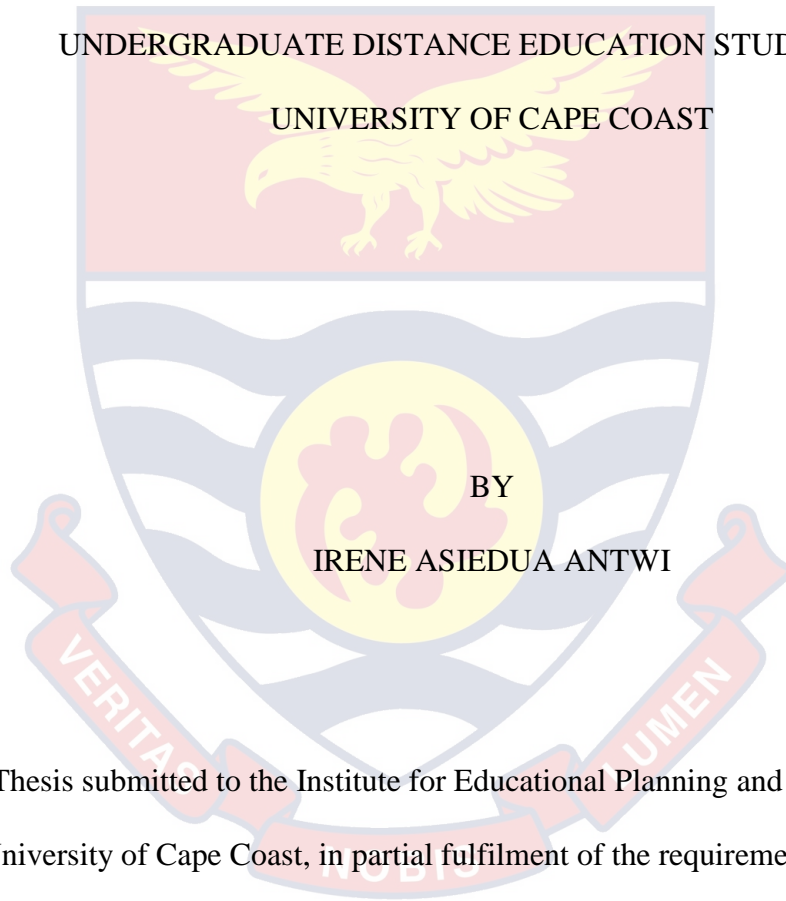
IRENE ASIEDUA ANTWI

2020



UNIVERSITY OF CAPE COAST

FACTORS THAT CONTRIBUTE TO THE ACADEMIC PERFORMANCE OF
UNDERGRADUATE DISTANCE EDUCATION STUDENTS OF
UNIVERSITY OF CAPE COAST



BY
IRENE ASIEDUA ANTWI

Thesis submitted to the Institute for Educational Planning and Administration,
University of Cape Coast, in partial fulfilment of the requirements for the award
of Master of Philosophy degree in Administration (Higher Education)

JULY 2020

DECLARATION

Candidate's Declaration

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

Candidate's Signature:..... Date:.....

Name:

Supervisors' Declaration

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

Principal Supervisor's Signature:..... Date:.....

Name:

Co-Supervisor's Signature:..... Date:.....

Name:

ABSTRACT

The purpose of the study was to explore factors that contributed to the academic performance of undergraduate distance education students of University of Cape Coast. Survey was used for the study. Descriptive and inferential statistics were used to analyse research questions and hypothesis. Three hundred and eighty-one respondents were sampled for the study. Perceived school-related factors that contributed to undergraduate student performance of distance education were qualified and experienced teachers, good class size, supervision to check tutors, constant supply of electricity and provision of instructional materials. Perceived tutor-related factors that contributed to undergraduate student performance of distance education were on time reporting, adequate preparation, effective and varied teaching skills while teaching, tutor qualification, interest, passion and motivation, timely feedback and completion of modules in time. Perceived student-related factors that contributed to undergraduate student performance of distance education were positive attitude towards tutors, competency and have great study habits, understand lessons taught, complete assignments in time, motivated to learn in groups, and punctual and attend lectures frequently. Student-related factors predicted high academic performance followed by school-related factors, and tutor-related factors. In view of this, it is recommended that College of Distance Education, University of Cape Coast, should be involved in employing qualified and experienced tutors to handle distance education programmes. This would help improve upon the poor performance of College of Distance Education students.

KEY WORDS

Academic Performance

School-related factors

Student-related factors

Tutor-related factors

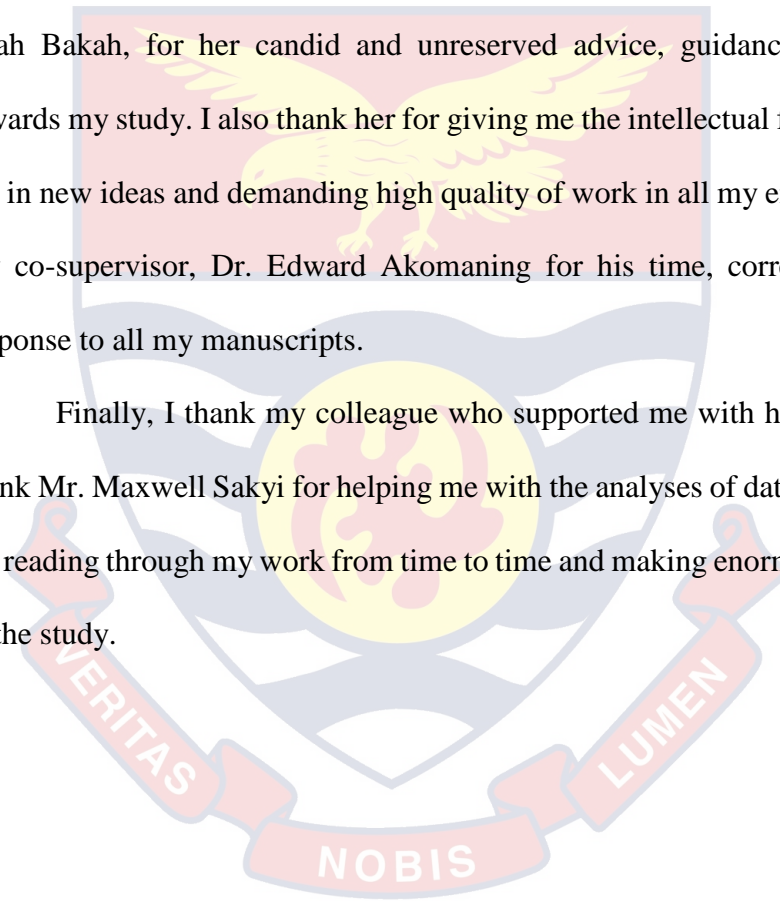


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DEDICATION

To my son: Nana Yeboah Amaniampong



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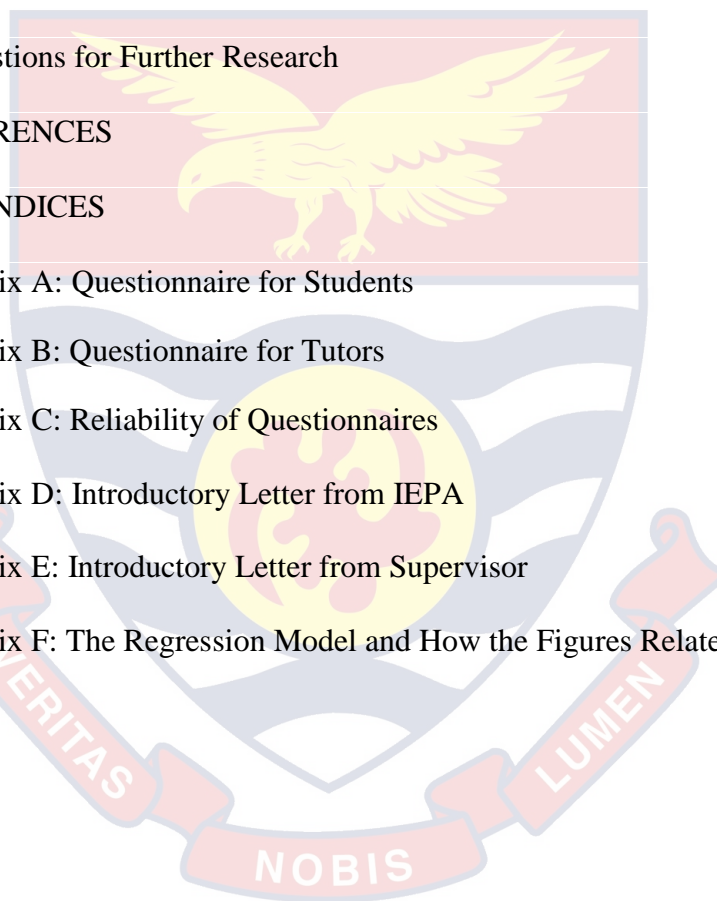
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CHAPTER ONE

INTRODUCTION

Background to the Study

Higher education is perceived to be of extensive importance for an individual as it is a necessary requirement in today's world for procuring lucrative jobs, success, and opportunities for better living. With the increasing number of educational institutions, there is a need to give special prominence on imparting specialized knowledge and technical skills to students to increase and expand their productivity and opportunities for better living which leads to exponential economic growth of a country.

However, there are certain factors that affect students which limit them from giving out their best. Some of these factors may be poor lighting, noise, high levels of carbon dioxide in lecture theatres, and inconsistent temperatures make teaching and learning difficult. Poor maintenance and ineffective ventilation systems lead to poor health among undergraduates as well as lecturers, which lead to poor performance and higher absentee rates as suggested by Lyon (2001). Although, some studies have been made about these factors, much emphasis was put on primary and secondary education (Farooq, Chaudhry, Shafiq & Berhanu, 2011; Jaynes, 2007). Few studies have been done on tertiary education (Sansgiry, Bhosle, & Sail, 2006; Kyoshaba, 2009; Kasworm & Pike, 1994) and not in the Ghanaian setting. It is in light of the above, the study seeks to find out the factors that

contribute to academic performance of undergraduate distance education students of University of Cape Coast.

Student's academic performance may be influenced by their faculty's attributes as they interact closely with their lecturers in their day-to-day interactions. The presentation of the module content by the concerned instructor should be made considering the interests of the students, as the attitude and motivation towards a module may be influenced by the way in which module content is presented to student (Sikhwari, Maphosa, Masehela, & Ndebele, 2015). They also stated that there should be respect and trust in the interactions between students and the faculty.

According to Adeyele and Yusuf (2012), the ability of the academic staff matters the most for students' good performance. Mlambo (2011) found that there is a relationship between performance of students in higher education and the lecturer's teaching style. The factor which motivates the students to attend classes is the way of teaching of the content using active learning approaches by the lecturer even if the topic under discussion is not interesting (Clay & Breslow 2006).

Rahimpour and Magsoudpour (2011) studied teacher-student interactions in task-based vs. form-focused instruction and found that students are motivated towards completion of a task when it is a new task and stimulating. In their study, Schwerdt and Wuppermann (2008) stated that the students' achievement is influenced by effective teaching practices. Lee and Rha (2009) concluded that the interactions and discussions of students with lecturer and the fellow students are important for the effective learning.

The study habits play an important role in achieving higher grades. Few researchers have examined the effect of time studying on the academic performance (Ng & Zakaria, 2014; Jez & Wassmer, 2013; Rogaten, Moneta & Spada, 2013). However, Nonis and Hudson (2006) found that the amount of time spent studying or at work had no direct influence on academic performance. Kleijn, Van der Ploeg and Topman (1994) gave emphasis on the fact that empirically, deep and strategic learning strategies results in success at final examinations, however the surface learning results in failure. There are many factors that would be further discussed.

Education is the process of facilitating learning, or the acquisition of knowledge, skills, values, beliefs, and habits. Educational methods include storytelling, discussion, teaching, training, and directed research. Education frequently takes place under the guidance of educators, but learners may also educate themselves (Dewey as cited in Thomas, Dymont & Hay, 2018). In addition, education can take place in formal or informal settings and any experience that has a formative effect on the way one thinks, feels, or acts may be considered educational. Formal education is commonly divided formally into such stages as preschool or kindergarten, primary school, secondary school and then college, university, or apprenticeship. Education takes place in a school environment.

Distance education or long-distance learning is the education of students who may not always be physically present at a school (Kaplan & Haenlein, 2016). According to Mnyanyi and Mbwette (2009), distance education involves learning process whereby a teacher and a learner are separated in terms of space and time and their communication is mediated by print media or ICT. Also, learning is under

the control of the learner rather than the teacher. This definition endorsed by Sherry (1996) when she states that distance learning or education occurs when there is a separation of teacher and learner in space and/or time, volitional control of learning is by the student instead of the instructor and the communication between the two is non-contagious and mediated by print or some form of technology.

This description by Sherry recognizes the use of both paper-and-pencil and ICT equally. But this situation may not be the case as developing countries are consistently faced with obsolete technology, inadequate infrastructure and energy problems (Nyerere, Gravenir & Mse, 2012). Similarly, Caruth and Caruth (2013) indicated that distance education involves instruction in which students are separated from instructors during the entire course of study. Based on their categorisation, Ghana's distance education can be defined as a hybrid of correspondence and traditional education where correspondence is where learning and instruction conducted through the mail via the print media and traditional 'education' which is the conventional method is the face-to-face interaction between the teacher and the student.

The tertiary sector of Ghana's education system is broadly categorised into public and private tertiary institutions. Both categories admit students into the distance learning programmes albeit in different models. The public universities use the dual model and are heavily dependent on the print media while the private educational institutions are mostly dependent on the ICT. The mission of Ghana's distance education programme is to make quality education at all levels more accessible and relevant to meet the learning needs of Ghanaians so as to enhance

their performance and improve the quality of their lives (Larkai, Ankomah-Asare & Nsowah-Nuamah, 2016). It also seeks to provide an alternative approach to the traditional models and ensure judicious use of physical and human resources (Larkai et al., 2016).

In 1996 the University of Education, Winneba admitted its first batch of distance education students. The University of Ghana and Cape Coast started diploma programmes by distance in 2001/2002 academic year in youth development work and basic education respectively (Hope & Guiton as cited in Stepanyan, Littlejohn & Margaryan, 2013). In the Ghanaian model, students attend series of lectures at designated distance learning centres nationwide and then move onto centralised university campuses to attend revision lectures and write examinations while the regular students are on vacation. Another model employed is the franchised campus model where each region has a designated centre where students write their examination and attend their lectures. This approach is cost beneficial to employers. Where employers would have had to grant paid or unpaid study leave, it can now enjoy the services of its staff while they acquire necessary training and skills for improved service delivery. Distance learning ensures that teaching and learning at the tertiary education level is in a continuous loop all year.

To improve access to tertiary education through distance learning, Modular Teacher Training Programme was introduced in 1982 mainly to upgrade untrained teacher academically and professionally (Hope & Guiton as cited in Stepanyan et al., 2013). This faded out but by the 1991 Education Reforms Recommendations paved way for the new face of distance education in Ghana where University of

Education, Winneba, University of Cape Coast and University of Ghana commenced the distance education programmes in 1996 and 2001/2002 respectively.

At the end of the 2018 accrediting year, tertiary education sector had about 64 private and 10 public institutions. Nine out of these institutions were offering distance programmes, four were public and five were private. As at March 2016 the number of tertiary institutions offering distance education was eight. This includes four public and four private institutions (Hope & Guiton as cited in Stepanyan et al., 2013). While the public participation remained the same, private institutions reduced from five to four (National Accreditation Board, 2018). The reduction according to National Accreditation Board is because the accreditation status of some of the distance learning institutions has expired. One of the major objectives of the Ghana national policy on education is the provision of equal educational opportunities to all citizens at different levels of education. With regard to higher education, an aspect of the policy encourages distance learning (education)-education that may be received outside the university environment to be organised and delivered by tertiary education institutions in Ghana.

According to Agyemang (2014), some of the distance students did not have access to reading materials which they have paid for. He added, some students could not even register but the university authorities still go on to organise examination and mid-term papers. The author said, most of the students cannot have access to reading materials after having paid huge sum of money. Agyemang

(2014) added that course tutors ask students to download softcopies of books at their own expenses.

Agyemang (2014) further enumerated that University of Ghana distance education has challenges such as declining government funding, poor infrastructure, inadequate classrooms, inadequate teaching aids, lack of systematic approach in ICT use and poor learning environments. This is due to neglect of the physical facilities at the various centres in Ghana. As regards to staff development programmes, Agyemang indicated that there were unstructured and haphazard career progression which did not inure to the benefit of personnel. These challenges culminated in declining standards in quality with learner achievement test results.

More so to these challenges faced by University of Ghana distance and other distance education institutions have been confronted with inadequate administrative procedures, ineffective monitoring by management, inadequate directional, irrelevant and non-functional curriculum contributed to lack of self-confidence in student graduates (Agyemang, 2014).

The school environment is powerful and dynamic which is consistent with the changing needs of the society and the world at large. The more the emphasis on speeding up the learning process, the more will be the emphasis on good learning environment (Anbalagan, 2017). The school environment should endue students with knowledge, interest, ideals, attitudes, habits, and skills. The school environment is designed to shape individuals to meet needs of the society. The achievement of such objectives necessitate proper school environment.

Miletzki and Brotens (2017) described learning environment as a physical space that supports multiple and diverse teaching-learning programmes including current technologies, one that demonstrates optimal, promotes effective performance and operation over time; one that respects and is in harmony with the environment; and one that encourages social participation, provide a healthy, comfortable, safe, secure and stimulating setting for its occupants. School environment has also been emphasized as an essential requirement for smooth teaching and learning process to take place (Van Roekel as cited in Ramachandiran, Mahmud, & Jomhari, 2016). Akhtar, Hashmi and Naqvi's (2010) study conducted on public school in Islamabad Pakistan showed that teaching via technology based learning environment enhanced the achievement level of the students. Lecturers are responsible for equipping students with desirable skills, knowledge and attitudes that will enable them to work and live in the society of knowledge (Chikadibia & Odey, 2014). There is ubiquitous postulation that the condition of school's learning environment including infrastructure has a significant influence on lecturers' efficacy and students' academic performance. The facilities that are needed to facilitate effective teaching and learning in an educational institution include the classrooms, offices, laboratories, washrooms and other buildings as well as furniture items and sporting equipment.

Conducive lecture theatre temperatures and smaller classes enhance lecturers' effectiveness and provide chances for students to receive more individual attention, ask more questions, participate more fully in discussions, reduce discipline problems and perform better than students in schools with substandard

buildings by several percentage points (Ryan as cited in Reeve, 2013). The environment in which you study can have enormous impact on how effective and efficient your study time (Maxwell, Mitchell & Evans, 2008). They identified noise, interruptions, lighting, temperature, neatness, comfort, instructional materials and facilities such as buildings and equipment to have potential effect on study habits.

Performance test is a type of mental test in which the subject is asked to do something rather than to say something (Singer, cited in Driskell, Copper & Moran, 1994). Drever, cited in Mueller and Piper (2014) mentioned that performance test is the type of test which throws light on the ability to deal with things rather than symbols. In the university environment, the grade point that students' obtained after performance test is considered as their academic achievement. Academic achievement refers to a successful accomplishment or performance in a particular subject area. It is indicated as by grades, marks and scores of descriptive commentaries. It includes how students deal with their studies and how they cope with or accomplish different tasks given to them by their lecturers in a fixed time or academic year (Hawis & Hawes, cited in Dimbisso, 2009).

Diaz (2003) considers low academic performance or academic failure as the situation in which the subject does not attain the expected achievement according to his or her abilities, resulting in an altered personality which affects all other aspects of life. Similarly, Diaz notes that while the current educational system perceives that the student fails if he or she does not pass, a more appropriate way for determining academic failure is whether the student performs below his or her potential. Aremu, Salami and Salam (2000) define poor academic performance as

performance that is adjudged by the examinee/testee and some other significant as falling below an expected standard. In this study, the researcher is not considering just a subject to determine his academic performance; however, Cumulative Grade Point Average will be considered to be his academic achievement.

According to UNICEF (1990), poor learning environment in developing countries have always been identified as key factor that lead to poor performance in schools. The availability and adequacy of learning aids and other resources are among the most influential factors which explain the differing performance levels. It is generally assumed that the use of teaching resources led to better performance in examinations. A study conducted by Ndiritu (2012) showed that a school library has a significant effect on the learners. They found out that the simple presence of a school library was significantly related to achievements in Brazil, Chile, Botswana and Uganda. Factors encapsulated in school environment that may have bearing on academic performance among university students have been categorized into three; school-related factors, lecturer-related factors and student-related factors. For example, instructional materials provide information, organise the scope and sequence of the information presented, and provide opportunities for students to use what they have learned promote academic performance (Lockheed & Verspoor, 1991).

School-related factors are encapsulated in school environment and it has a bearing on academic performance or achievement. In addition to the aforementioned, physical things such as the building, libraries and other infrastructure in the school, it is believed to have an implication on students'

academic performance. Harbison and Hanushek (1992) stated that the quality of the physical facilities is positively related to student performance. This is consistent with an assertion by Danesty (2004). He stressed out that good sitting arrangement and good buildings produce high academic achievements and performance, while dilapidated buildings that lack mental stimulating facilities coupled with low or no sitting arrangements is destructive.

From the background of the study, it is suggested that there are many factors that have bearing on academic performance. However, these factors that were reviewed were mostly found in secondary schools and primary schools. This does not change the fact that there are factors in tertiary education that can also implicate students' academic performance. It is in view of this the study seeks to find factors that contributes to undergraduate students' academic performance at College of Distance Education, University of Cape Coast.

Statement of the Problem

Many studies outside Ghanaian setting have indicated that there are factors that can contribute to academic performance (Farooq et al., 2011; Jeynes, 2007). Abenga (1995) underlines that a factor like high intelligence leads to high academic performance whereas low intelligence brings about poor academic performance. More recent evidence revealed that 370000 students do fail in academic performance in the USA due to factors such as academic preparedness, instructions, faculty instruction and behaviour, cost of education, lack of motivation (Afshar, Jafari, Heshmati, Movahedzadeh, & Cherif, 2019).

A study done in University of Ghana revealed that factors such as poor infrastructure, inadequate classrooms, lack of teaching aids, and poor learning environment had impact on academic performance (Agyemang, 2014). Other factors that also had impact on academic performance according to Agyemang were inadequate instructional materials, gender disparity and declining standards in quality with achievement test or results.

Currently, in University of Cape Coast Distance Education, one of the biggest challenges is that many of the distance students fail abysmally, although, tutors put in their maximum best to help students to pass. For example, preliminary data gathered depicts that from 2013 to 2018; about 300527 papers were to be rewritten as re-sit papers (College of Distance Education, 2019). The large amount of re-sit papers from 2013 to 2018 is as a result of a student having two or three papers to be written. Others also have neglected and have refused to come to write their papers due to excessive piling up of re-sit papers. Researches have demonstrated that usually students do not perform better in any examination due to the combination of factors. These factors may be related to the tutors, school and students.

Agyemang (2014) reported that a teacher who does not have both the academic and the professional teacher qualification will undoubtedly have a negative influence on the teaching and learning of his/her subject. This will lead to high re-sit and poor performance of students. A teacher can be academically and professionally qualified, but works under unfavourable conditions of service. This will make the tutor less dedicated to his work and thus be less productive than a

teacher who is unqualified but works under favourable conditions of service. Correspondingly, Etsey (2005) attributed poor performance of students in Ghana to factors that relate to school environment. These factors included, limited teaching and learning materials (TLMs), inadequate textbooks and less professionally trained teachers. Other factors revealed by Etsey (2005) included lateness to school, absenteeism, inability to complete syllabi and lack of interest in subject. It can logically be applied that, the reason why most undergraduate students pursuing distance education fail may be attributed to some of the negative factors revealed by Agyemang (2014) and Etsey (2005).

Agyemang (2014) and Etsey (2005) only looked at the factors that negatively affects students, which eventually leads to poor academic performance. These authors did not look at what can be done to improve upon the factors. In order to meet the educational needs of the undergraduate distance education students of University of Cape Coast, positive factors should be encouraged to facilitate teaching and learning. It is in view of this the study seeks to explore factors that contribute to undergraduate distance students' academic performance at the College of Distance Education, University of Cape Coast.

Purpose of the Study

The general purpose of the study is to find out the factors that contribute to the academic performance of undergraduate distance education students of University of Cape coast.

Objectives of the Study

The objectives of the study are to identify:

- i. School-related factors that contribute to students' academic performance.
- ii. Tutor related factors that contribute to students' academic performance.
- iii. Students related factors that contribute to students' academic performance.
- iv. The best predictor of academic performance: school-related factors, student-related factors or tutor-related factors

Research Questions

The following questions guided the study:

1. What are the perceived school-related factors that contribute to academic performance?
2. What are the perceived tutor-related factors that contribute to academic performance?
3. What are the perceived student-related factors that contribute to academic performance?
4. Which is the best predictor of academic performance: school-related factors, student-related factors or tutor-related factors?

Null Hypothesis

1. H_0 : There is no significant relationship between tutors' quality of teaching and students' academic performance.

Significance of the Study

The study would be significant for the following reasons apart from adding to the body of knowledge that is already available;

- i. The results of the study would be useful to academic leaders, professors, lecturers and school administrators. They would be acquainted with how school environment had direct impact on students' academic performance. This would help them to adjust their attitudes, behaviours and develop good pedagogical prowess to help better the performance of students.
- ii. It would help policy makers with brainy forecast and analyse future needs of University of Cape Coast in the areas of building and facilities. The study may be helpful for both school policy makers and school administrators to design and implement policies to improve students' achievement and the quality of education by changing the attitude of students towards learning, facilitating students' learning and improving teaching procedures. The outcome of the study is therefore expected to assist all stakeholders in the district, to fashion out appropriate strategies that would enhance the academic achievement of students.
- iii. It would help the voice of students to be heard by the academic leaders especially through unveiling the factors that make the students perform not quite well in examinations. This can be known through student-related factors that may correlate with academic performance.

Delimitation

There are so many University of Cape Coast study centres but this research is focused on 10 study centres which have been in existence for over 10 years from each of the regions in Ghana. These centres were Wesley College (Ashanti Region), Sunyani Technical University (Brong Ahafo), SWESCO (Central Region), Oyoko Methodist SHS (Eastern Region), Accra High (Greater Accra), Akatsi College of Education (Volta Region), Holy Child College of Education, Sekondi (Western Region), Tamale College of Education (Northern Region), Bolgatanga Girls (Upper East) and Wa SHS (Upper West).

The study was delimited to undergraduate students who had their studies at College of Distance Education irrespective of the following; programme that students read; diploma or/and post diploma that the students study and the centres of the students. The study also included course tutors who teach students at the study centres.

School-related factors that are considered for the study are instructional materials, class size, supervision, physical facilities (school library, computer laboratory and electricity). Tutor-related factors that are considered for the study are tutor qualification and experience, tutor attendance, tutor interest and motivation, teaching effectiveness and methods of teaching. Student-related factors that are considered for the study are time with books and assignment, attendance to lectures, attitudes of students, student self-concept and motivation, intelligence, student competence and study habits.

Limitations of the Study

The research may have two limitations. The first is difficulty in ensuring the questions to be answered are clear and not misleading. The second is getting respondents to answer questions honestly is a setback. These shortfalls were minimised by ensuring that instruments were standardized, pilot tested, clear and not ambiguous.

Definition of Terms

- a. Academic performance is the extent to which a student, has achieved their short or long-term educational goals.
- b. School-related factors are the physical things that can enhance teaching and learning.
- c. Student-related factors are the students' traits and attributes that have a bearing on their academic performance.
- d. Tutors-related factors are the traits and attributes of tutors that can implicate students' academic performance.

Organisation of the Study

The chapter two covers both theoretical and empirical literature related to the study. Chapter three presents the research methods of the study which comprise the research design, population, sample and sampling procedures, instruments, data collection method and data analysis. In chapter four, the results and discussion of the research findings was clearly and vividly presented. Chapter five gave a general overview of the research study as well as a summary of the key findings of the study. Conclusions and recommendations are also included in this chapter.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The study is about the factors that contribute to the academic performance of undergraduate distance education students of University of Cape Coast. The first chapter dealt with the background of the study, statement of the problem, purpose of the study and the research questions. Also, it highlighted the significance of the study and the definitions of terms. This helped to put the study in perspective. This chapter reviews literature related to the topic. The objective is to explore what major authors and writers have written on the topic. The review was done under the following sub-headings;

- a. Theoretical Review
- b. Conceptual Review
- c. Empirical Review

Theoretical Review

Urie Bronfenbrenner's Ecological Systems Theory

This study considered Urie Bronfenbrenner's ecological systems theory. He developed the ecological systems theory in an attempt to define and understand human development within the context of the system of relationships that form the person's environment. According to Bronfenbrenner's initial theory (1989), the environment is comprised four layers of systems which interact in complex ways

and can both affect and be affected by the person's development. These are Microsystem, Mesosystem, Ecosystem and Macrosystem. He later added a fifth dimension that comprises an element of time (Bronfenbrenner et al., 1995) which he called Chronosystem. This theory can be extended to model the development of an organisation as well, and is particularly appropriate for describing the complex systems of a school district or even of an individual school. Each of the four system layers is described below:

Microsystem: The Microsystem is defined as the pattern of activities, roles, and interpersonal relationships experienced by a developing person in a particular setting with particular physical and material features and containing other persons with distinctive characteristics of temperament, personality, and systems of belief (Bronfenbrenner et al., 1995). In other words, this layer forms a set of structures with which a person has direct contact, and the influences between the developing person and these structures are bidirectional. The person influences and is influenced by the Microsystem. If this theory is extended from human development to organisational development, and an individual school is the unit of interest, the Microsystem of the university environment would include students, parents and family members, administration, lecturers, and the surrounding community (De Mazancourt, Johnson & Barraclough, 2008).

Mesosystem: The mesosystem, simply stated, comprises the linkages between Microsystems (Bronfenbrenner et al., 1995). Just as the direction of influence between the school and each structure within the Microsystems is bi-directional, the mesosystem involves bi-directional influences between these

various structures. An example of the mesosystem of an individual school can be seen in the interactions and dynamics between two of its microsystems, students and their family members. Family expectations regarding the academic and extra-curricular success of student can often create a dynamic that directly and indirectly impact the climate of the school. Unreasonably high expectations and low tolerance for failure can create a dynamic between family members and students that is characterized by tension and fear.

These dynamics impact the school in various direct and indirect ways, including, for example, student attitude at the study centres resulting from such expectations, pressures to ensure their students' success placed on school personnel by the family members, or an attempt by school personnel to shield students from such family pressures by restricting the amount of information that is communicated regarding student achievement (De Mazancourt et al., 2008).

Ecosystem: The ecosystem represents the larger social system, and encompasses events, contingencies, decisions, and policies over which the developing person has no influence. The ecosystem thus exerts a unidirectional influence that directly or indirectly impacts the developing person. The ecosystem of an individual school might be composed of such structures as, for example, state regulations, local economies, district mandates, and local disasters (De Mazancourt et al., 2008).

Macrosystem: The macrosystem can be thought of as the “social blueprint” of a given culture, subculture, or broad social context and consists of the overarching pattern of values, belief systems, lifestyles, opportunities, customs, and

resources embedded therein (Bronfenbrenner et al., 1995). This system is generally considered to exert a unidirectional influence upon not only the person but the microsystem, mesosystem, and ecosystem as well. The macrosystem of an individual school is embodied not only in the cultural, political, social, technological and economic climate of the local community, but that of the nation as a whole (De Mazancourt et al., 2008).

Chronosystem: Although not one of the four system layers per se, the chronosystem represents a time based dimension that influences the operation of all levels of the ecological systems. The chronosystem can refer to both short- and long-term time dimensions of the individual over the course of a lifespan, as well as the socio-historical time dimension of the macrosystem in which the individual lives. The chronosystem of an individual school, therefore, may be represented by both the day-to-day and year-to-year developmental changes that occur in its student body, teaching staff, curricular choices, etc., as well as the overall number of years in operation (newer school faces challenges and opportunities that differ from those of a school that has been in operation for a length of time).

In an attempt to understand the factors that contribute to the academic performance of undergraduate distance education students of University of Cape Coast, one has to take into account the students as well as the context within which it occurs. The relevance of this theory to the study is that it impinges on the researcher to view academic performance in the school as a phenomenon that is influenced by wider social systems. The theory opined that students are directly present within some of these social systems, such as their household, school and

immediate neighbourhood, and there are others in which they are not directly represented, but which impinge on their development including their siblings, social networks and family members, leisure and the workplace relationships (Bronfenbrenner et al., 1995). In addition, the theory makes us aware of the influences of wider social systems including the cultures, political systems, social institutions, and values that exist in the society and argues that they should be taken into account in students' educational upbringing.

By inference, the influences and experiences that result from the interactions between different social systems play a key role in determining the extent to which students perform in school. From the constructs of the ecological theory, the academic performance of the students is inextricably linked with the characteristics of social systems at the various study centres. The ecological theory is, therefore, the most appropriate theory for studying the factors contributing to academic performance and for locating target(s) of intervention. It is appropriate in that it directs attention to the whole and not to any one part, system, or aspect of the children situation.

Consequently, it is within this framework that the present study seeks to explore factors that contribute to undergraduate students' academic performance. Since learning outcomes depend on the way it is presented to the learner by his or her teacher, the way the learner interacts with the learning experiences presented to him and the environment within which the learning takes place, it is therefore expected that these entities would be affected by factors associated with the school

environment, community conditions, teacher, education administration and the students themselves.

The Humanist Theory

This theory emerged in the 1960's and focused on human freedom, dignity and potential. A central assumption of humanism, according to Huitt (2001), is that people act with intentionality and values. This contrasts the behaviourist notion of operant-conditioning, in which all behaviour is as a result of the application of consequences and the humanist belief that discovering knowledge or constructing meaning is a central tenet of learning. Humanists also believe that it is important to study the human being as a whole, especially as an individual grows and develops over a lifespan. It follows that the study of self, motivation and goals are areas of particular interest. Key proponents of this approach include Carl Rodgers, Abraham Maslow and Malcom Knowles. The primary purpose of the humanist may be described as the development of self-actualized, autonomous people. In humanism, learning is student-centred and personalized; the educator's role is that of facilitator.

The humanist theory has a bearing on the study in so far as it helps to understand the spaces in which learning takes place. It recognizes the need for personalized spaces to help develop individual student's uniqueness and therefore allow them to nurture and express these talents. Attention to quality of the indoor and outdoor environment must be evaluated in light of the extent to which it supports the individual student. It means that school environments should be such that they take care of the able-bodied students, the physically challenged, the slow

learners and even those who are highly talented. The theory emphasizes that values add an important aspect that seek to ensure that the ethos of the neighbourhood should be reflected in the education of the students in the school. In the study, this ethos was studied through the understanding of the contribution of the neighbouring physical environment to achievement.

The Cognitivist Theory

The cognitivist theory came into existence in the second half of the 20th century after many researchers found that behaviourism did not account for all learning (Gagne, 1984). The theory focuses on the study of mental processes to explain learning (Semple, 2000). This learning theory argues that the mind is a 'black box' that should be opened and understood (Akinsanmi as cited in Guney & Ai, 2012). The learner is viewed as an information processor, like a computer (Bruner, 1966). It focuses on the inner mental activities. Opening the 'black box' of the human mind is valuable and necessary in order to understand how people learn. Mental processes such as thinking, committing to memory, knowing and problem solving need to be explored.

Knowledge can be seen as a schema or a set of symbolic mental constructions. Learning is defined as the change in a person's schema. Cognitivism argues that people are not 'programmed animals' that merely respond to environmental stimuli, rather rational beings that require active participation to learn and whose actions are a consequence of thought. Changes in behaviour are observed, but only as an indication of what is occurring in the learner's mind. It

uses the metaphor of the mind as a computer where information is fed, processed and leads to certain outcomes.

This theory views learning as the active process of drawing meaning from experience (Semple, 2000). The responsibility of knowledge transfer lies with the learner, not the teacher. The learning environment designs based on this theory are student-centred, collaborative, cooperative, and experiential. Teachers serve as facilitators (Caine & Caine, 1991). Learning environments should be safe, challenging, comfortable, social, and should enhance interaction. Learning opportunities need not take place in the classroom setting alone. They may also take place in hallways, outdoors, or during lunchtime (ibid).

Moore and Sugiyama (2007) explained the interactional constructivist theory that conceptualizes the learning environment into indoor, outdoor and neighbouring environments. Learning environments should encourage curiosity and provide opportunities for inquiry. School layouts are built in single or double storied buildings connected by walkways. The classroom buildings house students according to their grades. Usually, buildings house one grade level per floor (Bruner, 1966). The cognitivist theory speaks audibly to the needs of the students in not only the internal environment but the external and neighbouring environment as well. The school infrastructure in itself is a teacher and so are the resulting spaces around these facilities. The theory challenges the teacher and student to engage the environment and learn from it.

Conceptual Review

The Concept of School Environment

School environment can refer to an educational approach, cultural context, or physical setting in which teaching and learning occurs. The term is commonly used as a more definitive alternative to "classroom", but it typically refers to the context of educational philosophy or knowledge experienced by the student and may also encompass a variety of learning cultures—its presiding ethos and characteristics, how individuals interact, governing structures, and philosophy. In a societal sense, learning environment may refer to the culture of the population it serves and of their location. Learning environments are highly diverse in use, learning styles, organisation, and educational institution. The culture and context of a place or organisation includes such factors as a way of thinking, behaving, or working, also known as organizational culture. For a school environment such as an educational institution, it also includes such factors as operational characteristics of the instructors, instructional group, or institution; the philosophy or knowledge experienced by the student and may also encompass a variety of learning cultures—its presiding ethos and characteristics, how individuals interact, governing structures, and philosophy. In a so earning styles and pedagogies used; and the societal culture of where the learning is occurring. School environment encompasses all resources human and material, programmes and opportunities, for students to use these resources creatively and imaginatively to learn and develop their potentials. According to Oduwaye, Ilechukwu and Yadaua (2010), school environment refers to the context in which learning takes place. It is the surrounding

circumstance which effects learning. An environment in which learning occurs can be as wide as particular society and it may be viewed as an educational institution.

A school environment is the condition and influence which a learner comes in contact with, resulting in a series of complex interactions and ensuring a permanent change in behaviour. This implies that an individual's acquisition of skills, knowledge and competencies would occur under certain conditions and influences (Nwadiani as cited in Adeyemi, 2008). In the views of Obanya (2007), education does not occur in vacuum. It grows in a socio-political-economic environment and there can be no education without a society. Thus, a society provides a macro environment in which a school is located and from which it draws its resources. Within the school, there is also a macro environment which influences the operation and the extent to which educational objectives can be achieved. Therefore, the development of an individual, through knowledge and skills acquisition in school, could be influenced positively or negatively by the socio-political and economic conditions of the environment.

This is probably why Akubue as cited in Ndagire (2012), indicated that a good school environment has the advantage of promoting desirable behaviour and attitude; developing problem solving skills as well as creative thought. It encourages students' interrelationship and fostering centred methods. School environment reflects the physical and psychological aspect of the school that is more susceptible to change and provides the pre-conditions necessary for teaching and learning to take place (Junglee, 2003). Tshui and Cai (2011) described school

environment as an orderly environment in which the school family feels valued and able to pursue the school's mission free from concern about disruptions and safety.

Conducive learning environment has been identified as essential for effective teaching and learning to take place. Olutola (2008) postulated that school environment which includes instructional spaces, administrative spaces, circulation spaces, spaces for washrooms and accessories are essential in facilitating teaching-learning process. Over the last decade, research studies from a range of historically somewhat fields (e.g., risk prevention, health promotion, character education, marital health, and social-emotional learning) have identified research-based school improvement guidelines that predictably create safe, caring, responsive and participatory schools (Sanoff, 2009). In the opinions of Cohen (2006) school environment is the quality and character of school life. It is based on patterns of school life experiences and reflects norms, goals, values, interpersonal relationships, teaching, learning and leadership practices, and organisational structures. A sustainable, positive school environment fosters youth development and learning necessary for a productive, contributing and satisfying life in a democratic society. This climate includes norms, values, and expectations that support people's feelings socially, emotionally and physically safe.

Learning environment which include classroom spaces planning, administrative places planning, circulation spaces planning, spaces for washrooms planning, general infrastructure planning, the teachers as well as the students themselves are essential in teaching-learning process. The extent to which students' learning could be enhanced depends on their location within the school compound,

the structure of their classroom, availability of instructional facilities and accessories (Cohen,2006). It is believed that a school with adequate learning environment contributes to stir up expected outcomes of learning that will facilitate good academic performance, by encouraging effective teaching and learning.

According to Mick (2011), school environment means the extent to which school settings promote student safety and student health, which may include topics such as the physical plant, the academic environment, available physical and mental health supports and services, and the fairness and adequacy of disciplinary procedures, as supported by relevant research and an assessment of validity. In this study, the researcher was talking about the university campuses and other schools that have been turned into learning centres.

University is an institution of higher (or tertiary) education and research which awards academic degrees in various academic disciplines. Universities typically provide undergraduate education and postgraduate education. Currently, there has been the introduction of teaching distance students and these students are considered to be in higher education because they are also awarded with degrees. University is a formal organization where teachers and learners' activities are planned, organised and controlled both internally and externally. It is a formal learning environment which is influenced internally and from outside physically (Rohana as cited in Andersen, Boud & Cohen, 2000).

According to Esan, Obashoro and Osondu (2008), the school as a learning environment comprises physical, academic, social and cultural environment. The physical environment is made up of school location, physical features and

structures within and outside the school. For example, a school may be located in urban or rural areas, noisy or quiet areas. Buildings, equipment and infrastructure available within a school and its surroundings also constitute its physical environment. School environment is reflected by curricular and co-curricular activities in which teachers and learners engage in classrooms, libraries, laboratories and other places in the school (Esan, Obashoro & Osondu). Social environment is created through interaction among teachers and learners in classrooms and other places in the school.

The cultural environment consists of rules, regulations, values and discipline. It also includes all school activities which are meant to initiate learners into societal culture and the dominant among these features is the physical environment as described by Mark (2007) and Ajayi (2009) that school physical features consist of the basic systems and structures which are viable and are needed by schools or institutions in order to function effectively and to fulfil the purpose for which it was established. Physical learning environment if adequately provided and maintained is capable of influencing students and teachers positively as suggested by Olagboye (2004) physical learning environment reflects the political, social, economic and intellectual activities of a given school. He referred to them as physical resources, school plant or school facilities. Bosque and Dore (2008) teaching and learning environment out to implement six functions: inform, communicate, collaborate, produce, scaffold, and manage. They added that conceptually speaking, the learning environment refers to the whole range of components and activities which learning happens.

Organization for Economic Co-operation and Development (OECD) (2009) described learning environment as a physical space that supports multiple and diverse teaching and learning programmes and pedagogies, including current technologies; one that demonstrates optimal, cost effective building performance and operation over time; one that respects and is in harmony with the environment and stimulating setting for its occupants.

Learning environment in its narrow sense is a conventional classroom and in its widest sense, is a combination of formal and informal education system where learning takes place both inside and outside the school for the purpose of achieving the set objectives (Manninen, 2007). The concept of physical learning environment with respect to physical structures relates to spaces, equipment and tools within the school (James, 1997). Dikko (2008) suggested that learning environment is a complex structure that includes teaching equipment, sources of information and events within and outside the schools where students can take part in the learning process both directly and virtually. Looking at the learning environment is about more than the structures, it is about the social relationship within the space.

Ellis, Cox and Hall (1993) asserted that space can be conceptualized as being an interaction between physical and social space. Also the concept of learning environment has been viewed by Sariola, as cited in Seppälä and Alamäki (2003) as an environment for the teachers and students' activities within which learning is seen as an active process in a multi-information and co-operational network environment. Moreover, technology is often considered valuable for increasing educational benefit and instructional quality (Dexter, Anderson, & Becker, 2009).

Mobile devices, wireless communications, and network technology have recently advanced significantly, and have been integrated into various wireless learning environments that attract many individuals' attention and expectations (Rochelle & Pea, 2003; Norris & Soloway, 2004). For instance, many studies have been predicted that wireless learning environments have the potential to create something new and significant impact on education (Penual, Tatar, & Rochelle, 2004).

Wireless learning environments, offer many educational possibilities that are not easily achieved in other learning environments. Mobile devices enable both the teachers and students to employ computing power without time or location constraints while the internet and wireless technologies enable mobile devices to interconnect seamlessly with each other or with other computing devices (Penual et al., 2004). Wireless learning environments have the following features based on seamlessly linking various computing power with mobile learning devices at hand which include, enhancing availability and accessibility information networks; engaging students in learning related activities in diverse physical locations; supporting group work in projects; improving communication and collaborative learning in the classroom; and supporting quick content delivery (Liang, 2005; Zurita, Nussbaum & Salinas, 2005). Therefore, wireless learning environments are regarded as more suitable than ordinary classroom or computer classroom for supporting teaching and learning based on learner-centred teaching methods which Schwartz-Bloom and Halpin (2003) and Zurita et al. (2005) described as active, productive, creative, and collaborative learning methods. Environment of an

organisation has all elements relevant for its operations and they include direct and indirect action elements. School facilities constitute the major components of both direct and indirect elements in the environment of learning. Learning environment is a controlled environment that facilitates the teaching and learning process through the various elements that exist within it and as well protect the well-being of its occupants (Hawkrigde, 2006). Fenker (2004), Bob (2012) and Creemers (2004) all posited that a safe and orderly environment is the one that is free from threat of personal harm and conducive to teaching and learning.

The Need for School Environment

The university environment and even any school environment are very vital to achieving educational goals. The totality of internal and external influences surrounding a school constitutes its environment. The appropriateness of a learning environment is a key both to safety and to effective learning and development (Liu & Zumbo, 2006). According to Charnet (2008), the surrounding in which students learn can greatly influence the academic performance and well-being of the learners. The architecture, layout, and facilities of the school play a vital role in shaping the learning environment and promotion of effective teaching and learning.

Again, Michael (2007) argued that the school environment can serve as a tool for influencing behaviour and as an aid to the teacher in the management tasks. Michael submitted that students learn better in a well-manage classroom environment. Rutter, Dukor and Fair (2009) and Adewuyi (2002) submitted in their various studies that conducive learning environment can have effect on both the attitudes and achievement of students. Positive learning environment is relevant for

students to achieve their educational goals and teachers to meet their instructional objectives as indicated by Asiabaka (2008) who argued that the school physical facilities and other elements are the determinant factors in the attainment of educational goals. Also, Nwagwu (2006) and Ogusanu (2004) maintained that the quality of education that children receive bears direct relevance to the availability or lack of physical facilities and overall atmosphere in which learning takes place. The school facilities consist of all types of buildings for academic and non-academic activities, areas for sports and games, landscape, farms and gardens including trees, roads and parks. Others include furniture and toilet facilities and packing lot, security, transportation, ICT, cleaning materials, food storage facilities and social facilities for the physically challenged persons.

Positive learning environment needs to be actively created and sustained by members of the student, parent and school personnel groups in school, and supported by the community at large. When the school community works together to understand and improve learning environment, collective action powerfully supports positive youth development and learning and promotes the underlying 21st century skills and knowledge (James, 2005). School environment promotes students' learning. Positive learning environment powerfully affects students' motivation to learn. For example, activities like community service-learning and students' value, and students' engagement can enhance learning environment by providing students with opportunities to participate in the learning process and construct their own knowledge of social and government system. Moreover, when such activities are presented in a supportive and collaborative learning

environment, they encourage students to build upon one another's ideas in productive and engaging ways.

Together, the experience realistically represents the social situation that they may find themselves part of the greater civil society (Bandeled, 2002). In an overlapping manner, positive learning environment promotes cooperative learning, group cohesion, respect and mutual trust (Bandura, 1991). These facilities play pivotal role in the actualization of the educational goals and objectives by satisfying the physical, emotional, cultural, social, educational and psychological needs of students as well as the general educational goals of the society.

Bickel (2007) emphasized that the physical needs are met through provision of safe structure, adequate sanitary facilities, a balanced visual environment, appropriate thermal environment, and sufficient shelter space for his work and play. Learners' emotional needs are met by creating pleasant surroundings, a friendly atmosphere, and a spring environment. In fact, schools exist to serve socio-economic and political needs of the ever-changing society. Consequently, they are in constant interaction with their external environment. They receive inputs from the external environment in the form of human and material resources, process them and empty same into the society as finished products and services. School environment is also relevant to its occupants and the society where it exists because of its multipurpose facilities which can be used for academic activities during school hours, and may be available for community use during or after school hours (Bickel).

Such facilities may be used for continuing educational programmes, social activities and recreation. Through appropriate scheduling multipurpose facilities may be available to the community during school hours. This will eliminate the burden of duplication of such facilities as conference halls, gymnasium, library, theatre and sporting facilities. Such integrated effort is effective and brings the community closer to the school. Again, decent facilities in our learning environment make additional contributions to teacher's work. Siegal (2004) asserted that there is a direct relationship between architecture and the collaboration of teachers. The availability of relevant and recent facilities and equipment in a conducive school climate can influence teacher's abilities and increase the formation of social and professional relationship and sharing of information and knowledge. School environment reflects the shared ideas, assumptions, values, beliefs and practices that define its culture and standards for expected behavior (Siegal). A school climate that contributes to learning focuses on essential components, including safety and strong relationship between teaching and learning.

A positive school climate means that students, staff, and visitors all feel safe. Threats to their physical and emotional safety (example, building) can take a great toll on students, leading some to be fearful of attending school and ultimately impacting negatively on students' learning. A school climate that builds a culture of mutual trust and respect, engage participants, and supports a relationship between teaching and learning that can improve childhood health and academic performance. Ensuring that a school learning environment is sensitive to its

culturally and linguistically diverse student body, result in stronger connections between each student and teacher. Finally, from the foregoing contributions of different authorities on the relevance of learning environment we can sum up that, positive learning environment promotes student learning, academic achievement, school success and healthy development, as well as effective risk prevention, positive youth development and increase teachers' relations.

Empirical Review

School Related Factors and Academic Performance

There are several school factors that affect academic performance. However, the current study delimited school factors to the following: teachers' experience and qualification, class size, supervision of tutors, instructional materials, electricity, and library and computer laboratory.

Teachers' Experience and Qualification

Many occupations recognise employees' years of experience as a relevant factor in human resource policies, including compensation systems, benefit packages, and promotion decisions. The idea is that experience, gained over time, enhances the knowledge, skills, and productivity of workers. In education, teacher experience is probably the key factor in personnel policies that affect current employees: it is a cornerstone of traditional single-salary schedules; it drives teacher transfer policies that prioritize seniority; and it is commonly considered a major source of inequity across schools and, therefore, a target for redistribution. The underlying assumption is that experience promotes effectiveness. But is this really the case? Do students attain higher levels of achievement when taught by

more experienced teachers? What is the relationship between teacher experience and teacher productivity?

Experience matters, but more is not always better. The impact of experience is strongest during the first few years of teaching; after that, marginal returns diminish. A number of CALDER studies confirm findings from existing research that, on average, brand new teachers are less effective than those with some experience under their belts (Clotfelter, Ladd, & Vigdor, 2007; Harris & Sass, 2007; Kane, Rockoff, & Staiger, 2006; Ladd, 2008). These studies conclude that teachers who are new in a school environment are not effective and this would adversely impede the performance of students.

The magnitude of the effect of teacher experience varies depending on the teacher's level of education and the subject area. The impact of early years of experience is strongest in the subject of mathematics and more consistent at the elementary and middle school levels than at the high school level (Harris & Sass, 2007). According to one study using data from North Carolina, elementary school teachers with one or two years of experience are more effective, on average, than teachers with no experience by .06 standard deviation (SD) in math achievement, and .03 SD in reading achievement (Rice, 2010). Also, a study using North Carolina high school data estimates the effect of early career experience as .05 SD, with the largest effects observed for student achievement in mathematics and biology (Rice, 2010). In contrast, a study using data from Florida finds little evidence of an impact of early-career experience among high school teachers, and no effect (or even a negative effect) of teaching experience beyond the first several years on high school

student achievement in mathematics and reading (Harris & Sass 2007). Also, Hanushek and Rivkin (2006) reported that correlation between years of experience and student achievement is statistically weak in many instances, and therefore cannot contribute to a strong assumption of the effect.

Dial (2008) also reported inconsistency results in the correlation between experience and students' achievement. According to Dial (2008), teaching experience is positively correlated with higher student achievement even though findings about its meaning vary. For example, some studies find that years of teaching experience are a consistent predictor of higher test scores. He stated that other researchers document a negative effect when a high proportion of inexperienced teachers are present in a school, in terms of higher drop-out rates and lower achievement scores.

The difference between the already done studies and the current study is that most of the already done studies were mostly about how that teachers' experience and qualifications implicate students' performance in the junior or senior high schools whereas the current study would be looking at how generally teachers' experience and qualification would affect the performance of university students on distance education mode.

Class Size

The size of the class matters when it comes to the academic performance of students generally. The smaller the class size the better attention can be given to students and the better their performance. The effectiveness of class size reduction (CSR) is based on the idea that reducing the number of students in a classroom

alters the entire classroom environment, creating a more positive learning environment (Ready, 2008). Pritchard as cited in Uhrain (2016), stated that the student-teacher dynamic, student-student dynamic, and teacher-parent dynamic are all improved in smaller classrooms. In addition, teachers have more time, resources, and incentive to create improved lesson plans with greater levels of differentiation.

Pritchard as cited in Uhrain (2016), stated that after being assigned into smaller classes, teachers reported that students received more individualized attention. Teachers got to know individual students better and kept track of individual student progress. In turn, students became more engaged because of this increased, personalized learning environment. Additionally, teachers spent less time on classroom management, which offered additional instructional time for all students in the classroom. Din as cited in Murawski and Hughes (2009), confirmed that in smaller classes, students received more individualized help from teachers. Blatchford, Bassett, and Brown (2011) conducted a study at both the primary and secondary school level and found that in larger classes, student interaction with teachers decreased, which resulted in a lower level of student engagement confirming Pritchard's theory. Englehart and Fan as cited in Uhrain (2016) confirmed that in smaller classes, time spent on classroom management was decreased which led to improvement in academic achievement. Expressing a divergent view, Bolton as cited in Fabunmi, Brai-Abu and Adeniji (2007) found that there was no significant difference in post-test achievement scores between large classes and small classes control groups; he concluded that larger is sometimes better.

Adeyela (2000) found in her study that large class size is not conducive for serious academic work. In the same vein, Afolabi as cited in Owoeye and Yara (2011), found no significant relationship among class size and students' learning outcomes. Owoeye and Yara (2011) in their study on class size and academic achievement of students in mathematics in South-Western Nigeria found out that the performance of students in large classes was very low (23%) compared to those students in smaller classes (64%). The implication of this is that smaller class size are better than larger class size. However, it is not always the case that smaller class size students would perform better than a large size class students according to Bolton as cited in Fabunmi, Brai-Abu and Adeniji (2007). The above studies indicate that, the size of the class is a contributory factor to the performance of students. However, what is not known is that of students of higher institution. This current would help us to know whether class size is also a contributory factor to the performance of students in the higher education setting.

Supervision of Instruction

According to Dipaola and Hoy (2008), the most important role school principals and anybody heading education institutions can take up is that of the “teacher of teachers”. The heads of institutions should be model collaborator and a reflector of his or her own practice. Heads of institutions must encourage teachers to observe their instructional process and ask them to offer constructive criticism. Kimosop (2002) asserts that, this will motivate the teacher to view supervision as a collegial process. And by daily exhibition of these behaviours, they are not only learning alongside their teachers, but also act as a catalyst to professional learning.

Mullen and Hertinger as cited in Elenwo (2018) assert that to improve students' performance school heads must provide instructional leadership and resources. One basic instructional practice is classroom visitation. This is applicable to distance education in Ghana, that is, University of Cape Coast can send supervisors to the learning centres and this can strengthen academic activities which would go a long way to improve both the performance of tutors and students.

The supervisors from University of Cape Coast must make deliberate visits to the learning premises to inspect the state of learning resources. According to Onyango as cited in Mavindu (2013), instructional supervision in the areas of class visitation, conferencing and teacher observation greatly influence students' performance. Gachoya (2008) stresses that the supervisors who made these visits were able to have an insight into the actual state of instruction and this reinforces performance. This means that if class visits are seriously carried out, students would keep alert and study and this would influence their academic performance. Another basic practice in principals' supervision is classroom observation. During classroom observation the principal observes how the teacher plans his work for delivery to learners.

Okumbe (1998) opined that principals must prepare a supervision schedule indicating how the teacher maintains class discipline, the lesson presentation, provision for learner differences, mastery of content, learner involvement as well as teaching methodologies used. The principal can video tape the lesson without being disrupted in the class so as to sit later with the supervised teacher and discuss

the strengths and the weaknesses of the supervisee's lesson in an attempt to improve teachers' quality in instructional process.

Sule as cited in Chidi and Victor (2017) states that the supervisor acts as another set of eyes holding up a mirror of practice. Individual conferencing follows classroom observation during which the supervisor discusses with the supervisee what he or she observed during the observation when he or she visited the classroom. At this stage the video tape could be brought in. Edoho (2009) observes that principals' supervision should be interactive by nature. In view of Kimosop (2002), feedback got through interactive analysis helps both the supervisor and the teacher in terms of shared information in that, incorporation of the supervised teacher's suggestions helps build his confidence hence enhancing learning process. Eshiwani (1993) is of the view that, principal must check the teaching standards by reference to schemes of work, lesson plans, records of work covered, ensure duty attendance by teacher and class attendance by students by keeping their respective registers.

Ayot and Briggs (2002) opined that ineffective instructional supervision leads to poor performance among learners. They recommend regular classroom visitations to enhance higher students' achievement level. Ngunjiri (2012) agreed with this argument that effective instructional supervision results in students getting high grades in examination while fewer supervision or lack of it leads to laxity of teachers hence poor performance.

Provision of Instructional Materials

Instructional materials serve as a channel between the teacher and the students in delivering instructions. They may also serve as the motivation in the teaching-learning process. They are used to get the attention of the students and eliminate boredom. Instructional materials are highly important for teaching; especially for inexperienced teachers. Teachers rely on instructional materials in every aspect of teaching. They need materials for background information on the subject they are teaching. Instructional material theories assume that there is a direct link between the materials that the teachers use, and the students' learning outcomes. These outcomes include higher abilities to learn, quality strategies to learn and perform classroom activities and positive attitude towards learning (Gagné, & Deci, 2005).

Adeogun (2001), in his study revealed a strong positive link between instructional resources and academic performance. According to him, schools that possess more instructional resources performed better than schools that have less instructional resources. This finding supported the study by Babayomi (1999) that private schools performed better than public schools because of the availability and adequacy of teaching and learning resources. Adeogun (2001) noted that there was a low level of instructional resources available in public schools and hence commented that public schools had acute shortages of both teaching and learning resources. He further commented that effective teaching and learning cannot occur in the classroom environment if essential instructional resources are not available.

Conway and Clark (2003) suggested that the quality of instructional processes experienced by a learner determines quality of education. In their view they suggest that quality instructional materials create into the learner's quality learning experience. Mwiria (1995) also supports that students' performance is affected by the quality and quantity of teaching and learning resources. This implies that the schools that possess adequate teaching and learning materials such as textbooks, charts, pictures, real objects for students to see, hear and experiment with, stand a better chance of performing well in examination than poorly equipped ones.

Adalikwu and Iorkpilgh (2013) conducted a study which explored influence of instructional materials (teaching aids) on students' academic performance in senior secondary school Chemistry in Cross River State. A two-group pre-test and post-test quasi-experimental design was adopted for the study. Fifty SSI students (Experimental group) were taught with instructional materials and another forty (Control group) were taught without instructional materials. A validated Chemistry Achievement Test (CAT) was used to gather data for the study and a split-half was carried out using the Pearson product moment correlation to obtain a reliability coefficient of .67. Independent t-test was used to test the hypothesis at .05 significant level while the Pearson product moment correlation coefficient at that level was used to analyse the research questions. The study revealed that students taught with instructional materials performed significantly better than those taught without instructional materials and that the use of instructional materials generally

improved students' understanding of concepts and led to high academic achievements.

School Library

A school library is a centre within a school where students, staff, and often, parents of a public or private school have access to a variety of resources. Studies by different researchers have revealed that schools with library increases the chances of students performing better. Studies were carried out in Massachusetts (Baughman, 2000) and Texas (Smith, 2001) which support the assertion that educational institutions with well-resourced libraries tend to perform better academically. The Massachusetts study found a strong correlation between school libraries and student achievement. Mean Massachusetts Comprehensive Assessment System (MCAS) scores were higher in schools that had school library programmes at all levels as opposed to schools that do not have such programmes. The study showed that the highest achieving students attend schools with good school libraries (Baughman 2000). Other findings were that at each level, higher MCAS scores were associated with increased use of the school library, higher per pupil book count, and longer opening hours. At the elementary and middle/junior high school levels, students also scored higher on the MCAS when there was a library instruction program and larger per pupil expenditures for school library resources.

Similarly, Smith's study (2001) which examined data from a random sample of 600 Texan school libraries, at elementary, junior and high school levels, as well as community socioeconomic data, in order to determine the impact of

school libraries on student performance, found that students achieved higher scores on the Texas Assessment of Academic Skills (TAAS) at each level in schools with teacher librarians than in schools without librarians. The study used more than 200 variables to examine the relationship between libraries and TAAS performance, including 34 identified as significant indicators of library performance. These variables were grouped into the areas of programme development, leadership, collaboration through teaching, library technology and school technology.

Another important source of evidence showing the positive impact of school libraries on student achievement relates to the Library Power initiative. This initiative was set up in 1988 when the DeWitt Wallace-Reader's Digest Fund provided funding to 19 communities in the United States to improve their school library programmes. The studies draw on both qualitative and quantitative data. The data from the schools involved in the studies demonstrate that improvements to the library facilities and collection and an emphasis on collaboration between the librarian and teachers are contributing factors to the impact on academic achievement, but that school readiness to accept changes of roles and teaching styles also play a part in sustaining the impact (Williams, Wavell & Coles, 2001).

The studies indicated earlier (Baughman, 2000; Smith, 2001; Williams, Wavell & Coles, 2001) found that school libraries had positive impact on the academic performance of students. However, there could be instances whereby there would be libraries available and yet there would be no resources to keep the library running or libraries could be available with intact resources and students may also not patronise it. So, all things being equal, schools with library would

produce academically better students than schools without libraries. It agrees with Jato, Ogunniyi and Olubiyo's (2014) study, which connotes school libraries have positive impact on student achievement and thus, school library provides a quiet, well-lit study place and environment that is conducive to mental concentration. The difference is that the already done study was conducted in middle high schools whereas the current study would be taking place in distance education centres at a tertiary education institution.

Tutors Related Factors that Influence Academic Performance

Time Management

Tutors do not play with their time at all when it comes to academic work. A teacher who manages his time very well would produce excellent students. Time management means the maximum use of time for the productivity and achievement. It concerns with the management of schedules of work with planning, organising and implementation in order to achieve the aims and objectives of theirs and that of the organisations. A qualitative research done by Zafarullah, Mumtaz, Murad, Abida, and Humera (2016) explored teachers' time management and the performance of students. The authors revealed that proper time allocation and the management of teachers led to the following:

- i. regularity and punctuality
- ii. advanced preparation of different schedules
- iii. lesson plans and activities
- iv. acquiring students' active participation
- v. review and repetition of lectures

- vi. dealing with students individually
- vii. teaching the different subjects by subject specialists
- viii. readiness and high level of willingness of teachers
- ix. advance planning of using multidimensional things to teach depending on students centred teaching learning process
- x. separate time allocation for counselling and guidance of students;
- xi. plan, prepare and organize curricular and co-curricular activities for students physical and spiritual developments
- xii. dedication and commitment of teachers
- xiii. support of administration
- xiv. availability of resource or resource development
- xv. proper and authentic feedback system for teachers
- xvi. students' impact positively on the time management skills of teachers which is positively and directly connected with the performance of students

Siachifuwe (2017) also explored teacher based factors influencing academic performance among learners in open learning classes at Twin Palm Secondary School, Lusaka, Zambia. The research targeted 118 pupils in open learning class (OLC), 1 head teacher, 1 deputy head teacher and 30 teachers offering different subjects at a particular school in Lusaka district. The 118 OLC pupils were grade 12, who were selected from different classes in the school since they had been in the school long enough to understand the factors that affect the learner achievement. The study used purposive sampling. It employed qualitative data collection tools which included interview guides, a focus group discussion guide and observation.

Only qualitative data collection tools were employed in order to ensure efficiency in data collection. Qualitative data was analysed thematically. The findings of the study revealed that the unsatisfactory academic performance of learners in open learning classes was due to some of the teacher related factors such as, lack of teacher motivation, inadequate teacher preparedness, lack of punctuality (timing) by teachers, lack of teaching aids and non-marking of learners' exercises.

Siachifuwe (2017) found during the interviews with head teachers that some teachers were fond of going late for classes. As a result of lack of punctuality, head teachers tended to rush through the lessons to cover up for lost time. By so doing, the slower learners failed to grasp the concepts and lagged behind. Moreover, teachers rushing through their lessons impact negatively on pupils' comprehension of the taught material or the teacher's failure to complete their planned work which disadvantages the learners thereby adversely affecting their academic performance. Teachers' punctuality to work is a vital factor or sub-variable of teachers' attitude to work, which can affect academic performance of pupils. Teachers who are always punctual to school can instil such attitude in pupils and this can result in good academic performance of the pupils.

The difference is that Siachifuwe (2017) was done among pupils whereas the current study was done among distance students. But time is something cherished by every tutor irrespective of the level taught. Therefore, the study has shown that time management has implication on students' academic performance.

Butakor and Boatey (2018) explored supervision of teacher's punctuality and students' attendance in senior high schools. The authors' objectives for the

study were; to establish student attendance pattern in selected senior high school, find out the extent to which teachers' attendance is checked and to establish the relationship between teachers' punctuality and regularity and students' attendance pattern. A descriptive survey method was used to collect data from 200 students using an 18-item questionnaire. The findings showed that most students attend classes every day. It also indicated that supervision had positive effect on teachers' attendance which in tend influence students' attendance.

The researches on time management have demonstrated that punctuality of teachers has bearing on students' academic performance. The difference is that the already done study was conducted in the primary schools and senior high schools whereas the current study was carried out in distance education centres of University of Cape Coast. This would mean that the variable for the study (time) is the same but the candidates used for both studies are different and that may bring about the discrepancies in the results of the already done study and the current study. Other than that, it still remains from the reviewed literature that time management has bearing on students' academic performance.

Teacher Effectiveness and Adequate Preparation

Teaching effectiveness has been accepted as a multidimensional construct since it measures different aspects of teaching such as; subject mastery, effective communication, lesson preparation and presentation (Onyeachu, 1996). The influence of teachers' teaching effectiveness on the learning outcome of students as measured by students' academic performance has been the subject of several studies (Adediwura & Tayo, 2007; Adu & Olatundun, 2007; Schacter & Thum,

2004). The above studies suggest that effective teaching is a significant predictor of students' academic achievement. Therefore, effective teachers should produce students of higher academic performance.

Akiri and Ugborugbo (2009) explored teachers' effectiveness and students' academic performance in public secondary schools in Delta State, Nigeria. It was descriptive in nature and involved 979 teachers, made up of 450 males and 519 females, drawn from 72 out of the total of 361 public secondary schools in the State by stratified random sampling technique. Academic performance records of 50 students per teacher, which is 48,950 students' scores were also used. Two questionnaires and a rating scale were used to collect data for the study. Cronbach's alpha value of 0.98 and 0.79 respectively were obtained from the two questionnaires used for the study.

Four hypotheses were tested at the .05 level of significance using correlation, simple regression, t-test, and single factor analysis of variance. The results showed that effective teachers produced better performing students. However, the observed difference is that students' performance were statistically not significant. This could be due to the influence of student and school environment related factors which were not included in this study. It was concluded that teachers' effectiveness is not the only determinant of students' academic achievement.

Josiah and Oluwatoyin (2017) also conducted a study exploring teacher quality as determinant of students' academic performance in secondary schools in Edo South Senatorial District of Nigeria. A correlational research based on survey

research design was adopted. The population for this study consisted of 418 Mathematics and English Language teachers in secondary schools in Edo South Senatorial District of Nigeria. Eighty-four (84) Mathematics and English Language teachers in secondary schools were sampled. The checklists titled: “Students’ Academic Performance Checklist (SAPC)” and “Teacher Quality Checklist (TQC)” were used for data collection.

The analysis of the result was carried out using frequencies, percentages and Pearson Product Moment Correlation Coefficient. The results revealed that the level of teacher quality in secondary schools in Edo South Senatorial District of Nigeria was high. However, it culminated in average level of students’ academic performance in secondary schools in Edo South Senatorial District of Nigeria. The actual expectation should have been that since teacher’s quality is high, they should be able to produce above average level of students’ academic performance. It can also mean that other factors may be contributing to this result and not only teachers’ quality.

The difference is that Josiah and Oluwatoyin’s (2017) study looked at quality of teachers and its bearing on students’ academic performance whereas the current study is looking at how the variable teachers’ effectiveness and adequate preparation may contribute to students’ academic performance. Josiah and Oluwatoyin (2017) study is relevant to the current study because every teacher whose quality is high would be effective.

Boyd, Grossman, Lankford, Loeb and Wyckoff (2009) explored teacher preparation and student achievement. The authors’ paper appears to be one of the

first to estimate the effects of features of teachers' preparation on teachers' value-added to student test score performance in Mathematics and English Language Arts. Their results indicate variation across preparation programmes in the average effectiveness of the teachers they are supplying to New York City schools. In particular, preparation directly linked to practice appears to benefit teachers in their first year which contributed to students' performance in Mathematics and English Language. The difference is that Boyd et al. (2009) study was about teachers' adequate preparation in specific subjects such as Mathematics and English language whereas the current study would be looking at adequate preparation in general and not specifically to a subject. However, Boyd et al. (2009) study has been able to establish that teachers' preparation does contribute to students' academic performance.

Tutor Qualification

Qualification is one of the critical factors that drives students' academic performance (Hakielimu as cited in Kola & Sunday, 2015). Eryilmaz and Ilaslan (1999), observed that one of the most important factors in the teaching process is a qualification of the teacher. The perspective of Ibrahim (2000) was that teachers' qualifications can go a long way to bring about students' higher academic achievement. But who is a qualified teacher? According to Usman as cited by Kola and Sunday (2015), a qualified teacher can be defined as one who holds a teaching certificate and/or licensed by the state, owns at least a bachelor's degree from a four-year institution and well qualified in his/her area of specialization.

Moreover, Usman as cited by Kola and Sunday (2015), quotes the Pakistan Ministry of Education officials who described a qualified teacher as one who possesses knowledge of the subject matter, human growth and development, ethical values, instructional planning and strategies, assessment, learning environment, communication and advocacy, collaboration and partnership, continuous professional development, code of conduct and skilful use of information communication technologies.

There are mixed results when it comes to whether qualification has bearing on students' academic performance or not. That is to say that, some authors agree that teachers' qualification contributes to student academic performance whereas other authors disagree. Kola and Sunday (2015) reviewed teachers' qualifications and its implication on students' academic achievement in Nigerian schools. The authors found common opinion that subject matter knowledge, pedagogy studies, professional development and years of experience which are composite teachers' qualification are imperative and positively correlated with students' academic achievement. Researchers have never reached a consensus on the specific teacher factors that influence students' academic achievement (Rivkin, Hanushek & Kain, 2005).

Some studies found that teachers' experience and educational qualifications significantly influenced students' academic achievement (Njeru & Orodho, 2003; Ankomah, Koomson, Bosu, & Oduro, 2005; Ugbe & Agim, 2009; Asikhia, 2010; Yala & Wanjohi, 2011; Olaleye, 2011). When conducting research on factors contributing to under achievement of Zambian female students in General

Certificate O'Level Physics examinations, Maguswi (2011) found that lack of qualified teachers of Physics had a significant contribution. Moreover, a study done by Adaramola and Obomanu (2011) in Nigeria found that lack of qualified teachers led to consistent poor performance of students in SMT subjects. These authors' findings are indication that the qualifications of teachers had impact on academic performance of students.

However, Musau and Abere (2015) found that there was no significant difference in means between teacher qualification and students' performance in SMT subjects at form four level $F(df) = 0.02, p > .005$. They also found out that majority of the teachers of SMT subjects were trained graduates, most of them had attended in-service or refresher courses but resulted in slight improvement in the students' performance in SMT subjects.

Furthermore, studies done by other scholars found that teachers' professional qualifications and teaching experience are not significantly related to students' academic achievement (Buddin & Zamarro, 2009; Kimani, Kara & Njagi, 2013; Mbugua, Kibet, Muthaa & Nkonke, 2012; Musau & Abere, 2015; Rivkin et al., 2005). It is in view of this that the researcher also wants to find out whether teachers' qualifications have bearing on students' academic performance or not. The difference is that most of the studies were done in the secondary schools whereas the current study would take place at the centres where distance education students study.

Tutor Motivation

Motivation is a drive that influences someone's efforts towards performing a task. Motivation can be in two forms. They are intrinsic and extrinsic motivation. Intrinsic motivation rises from within the individual whereas extrinsic is in the form of praises, good comments and rewards from employers to employees. However, for the purpose of this study, general motivation was taken into consideration.

The basic principle of motivation is based on an individual's ability (drive) (Agebure, 2013). According to this principle, any task cannot be performed successfully unless the person, who has chosen to do it, has enough ability to act. Similarly, in order for an individual to achieve a high excellent performance he/she should also be eager to achieve such a high level of performance. Other earlier studies (Ayeni, 2011; Wambugu, 2018) further noted that motivation is seen as the person's effort to accomplish his/her duties, dedicating the needed effort and continuing it. This observation is also supported by Schlosburg, Whitfield, Park, Crawford, George, Vendruscolo and Koob (2013), who argued that motivation plays a significant role in individual's educational life and their performance.

Wambugu (2018) explored the influence of teachers' motivation on students' performance in KCSE in public secondary schools in Kinangop. The target population comprised 28 head teachers and 310 teachers totalling to 338. Slovin's formula was used to select a sample of 184 participants. Stratified random sampling was employed to create 8 zones based on the 8 administrative wards within the sub-County. Using simple random sampling, 16 head teachers and 168 teachers were sampled for the study. Questionnaires and interview guide were used

to collect data in this study. Qualitative data analysis was done thematically in narrative forms, while quantitative data was analysed descriptively using frequencies and percentages, means and standard deviation. The study established that teachers' appreciation through rewards and incentives which constitute motivation for good performance enhances work commitment, increases engagement with students consequently leading to improved academic performance.

This study implies that a well-motivated teacher is likely to produce students with good academic performance. The difference is that Wambugu's (2018) study considered teachers' motivation at the secondary level whereas the current study would consider teachers' motivation at the tertiary education level. Also, the type of motivation given to the teachers were revealed in the already done study whereas the current study would consider motivation as a whole. Thus, Wambugu (2018) has provided some information that teachers motivation does have impact on students' academic performance which is relevant to the current study.

Adeyemo, Asabi, and Omisore (2013) examined teachers' motivation on students' performance in mathematics in government secondary schools, Makurdi Lg Area. The general objective of this study is to examine the effect of teachers' motivation on students' performance in mathematics. This study adopted both descriptive research design, the research design in this study used an ex post factor research design. The study population comprised the teachers in four different government schools in Makurdi. The study used a self-administered questionnaire

to collect data from 100.0 teachers who were selected by the use of simple random sampling while the four schools were selected through purposive sampling. The study results revealed that majority of the teachers (61.0%) under study were not satisfied with their condition of service. Three quarters of teachers (75.0%) under study were not satisfied with the fringe benefits attached to their salaries while majority of the respondents (66.0%) were not satisfied with the condition of service of teachers. It was observed that the condition of service of teachers, teachers' fringe benefit payment, and teachers' promotion of in-service training have a direct influence on the student's performance in mathematics.

Similarly, Gitonga (2012) explored the influence of teachers' motivation on students' performance in Kenya certificate of secondary education in public secondary schools in Imenti South District Kenya. The study adopted a descriptive survey. The sample was 100.0 respondents. Data were gathered by use of questionnaire. The analysis was done using the Pearson Correlation Coefficient and Linear Regression. Findings revealed that conducive working conditions had been provided by the schools. Based on the findings it was concluded that working conditions provided conducive learning atmosphere for teachers to perform better hence good students' performance in the examinations. The study also concluded that influenced performance revealed a strong relationship between working condition and school performance in secondary school. It was also concluded that there was a strong relationship between remuneration related factors and school performance in secondary school.

Ta tan, Davoudi, Masalimova, Bersanov, Kurbanov, Boiarchuk and Pavlushin (2018) explored the impacts of teacher's efficacy and motivation on student's academic achievement in science education among secondary and high school students. The authors used motivation for academic performance scale ($\alpha = 0.89$) and teacher self-efficacy scale ($\alpha = 0.91$) as measuring instruments and achievement test in science education. Two hypotheses were tested using the statistical programme. For evaluating the demographical differences of the students in terms of their academic achievement, comparative analyses were performed using t-test.

Results showed that gender difference was not significant but nationality difference was significant in terms of students' academic achievement in science education. Also, other findings reported significant impact of teacher self-efficacy and motivation on academic achievement in science education. This implies that academic performance of students is dependent on self-efficacy and motivation and in situation where teachers are not motivated, students' academic performance would be affected. The difference is that the authors' research was done among secondary school students whereas the current study would be done in the tertiary education. However, motivation cuts across every sector, so, the authors' research would be relevant to the current study.

Shelnutt (2003) examined the differences between the components of teacher motivation in high and low achieving elementary schools. This study measured the motivational components influenced by the principal as identified by the Teacher Motivation Diagnostic Questionnaire (TMDQ). The four components

of the model are: self-concept of ability, attitude toward the principal, principal's expectations, and future utility. Data used in this study were collected from a randomly selected sample of elementary schools defined as high achieving and low achieving. The defining factor for selection was ranking by the state of Georgia on the Georgia Public Education Report Card. Selected schools were ranked in the top or bottom performing schools for three consecutive years. A total of 144 teachers were mailed the TMDQ. Responses were received from 86 teachers.

The results obtained on comparison of the TMDQ between the low and high achieving elementary schools indicated the following: there is a statistically significant difference between the total motivation mean scores, mean scores for teachers' perceptions of the principal's expectations for student achievement, and mean scores for teachers' perceptions of the future utility of improved performance. Conversely, the results obtained on comparison of the TMDQ between the low and high achieving elementary schools indicated that there is not a statistically significant difference between the mean scores of the teachers' attitude toward the principal and the mean scores of teachers' self-concept of ability.

Conclusions from this study recognize that teachers at low achieving elementary schools have different motivational needs than those at high achieving elementary schools. The difference is that Shelnett's (2003) study considered four components of motivation (ability, attitude, expectation and utility) whereas the current study considers various components of motivation, that is, ranging from intrinsic factors to extrinsic factors. Most of the components considered by Shelnett (2003) were intrinsic factors without paying attention to extrinsic factors. Apart

from that, the author's study has shown that at least motivation has bearing on students' academic performance. This is applicable to the current study in the sense, most of the UCC lecturers do travel to various distance education centres to teach and it can be tiring. If they are not motivated well, some would eventually stop and seek for other jobs that are more lucrative.

Principals have the task of focusing not just on the demands of today's standards but also on the motivational needs of their teachers. From the literature about motivation, every organisation cannot do without motivation of their staff and because of this, motivational policies must be structured and appropriated properly and accordingly to retain workers and bring about better work output as well.

Feedback

Feedback is an important aspect of teaching and learning. In recent years' corrective feedback has received increasing attention from researchers and teachers in different parts of the world, because it has a corrective function which improves the learner's performance in the process of education (Lee, 2008). Corrective feedback improves learning skills of learners through error correction. Teacher feedback is an integral part of students' learning and improvement. It helps in closing the learning gap. It also increases the learning proficiency of students (Bitchener, 2008). Feedback is teachers' response for students' performance. It helps the teacher to know how to respond to students after they demonstrate their knowledge, reasoning, skill or performance. It is in fact the transfer of information from the teacher to the student. It helps the student in meaningful construction of

knowledge, understanding of the concepts and development of reading and writing skills (Ashwell, 2000).

Ahmad, Saeed and Salam (2013) explored the effect of corrective feedback on academic achievements of students in Pakistan. For this purpose, a self-designed questionnaire was used to collect data from a random sample of 200 teachers in 20 government secondary schools in District Chitral Khyber Pakhtunkhwa, Pakistan. To ensure validity and reliability of the data, the questionnaire was piloted in six secondary schools before distributing in the field and refined in the light of the pilot test. Finally, data were collected, tabulated and analysed for results using simple percentages.

Analysis of the data showed that there was a close relationship between teachers' corrective feedback and academic achievements of students. The study further showed that students who get corrective feedback scored high in the examination, have deeper understanding of the concepts, participate actively in the classroom activities, do their classroom assignments in time, easily communicate their views in classroom discussions.

Ferris (2006) found that feedback has significantly positive effects on students in terms of academic achievements. Students who are provided feedback by their teachers show good results in examination and have a greater rate of participation in classroom activities. Ferris after examining student progress in written accuracy found that students who received feedback on their errors showed improvement in examination results. Ferris, Pezone, Tade, and Tinti (1997) examined and compared the achievements of students who were given feedback

with those who were taught without written feedback. The results indicated that students who had been given continuous written feedback by their teachers got good grades in examination than students who had not received feedback. Ahmad et al. (2013) argue that the accuracy of students in expression of ideas, understating of concepts improves through positive feedback of teachers. Ferris (2003), concluded that written feedback is effective in improving students' writing skills. Ellis (2008) discovered that giving feedback to students on their class assignments produces significantly high results for students. In this way the students fully understand the concepts. Sheen (2007) found that students' revisions in response to teachers' written feedback were associated with significantly higher test results.

Beach and Eaton as cited by Ahmad et al. (2013), advocate that written corrective feedback improves learners' speaking and writing accuracy and positively impacts on acquisition of language accuracy. Beach and Eaton (1984) comparing results of students in various language classes concludes that students who receive regular feedback from their teachers have improved linguistic skills such as writing, reading, speaking and listening. Ahea (2016) examined the value and effectiveness of feedback in improving students' learning and professionalizing teaching in higher education. According to Ahea, there is a great importance of feedback in improving learning experience for the students. This has also significant effect in professionalizing teaching in the higher education level.

Ghani and Asgher (2012) also explored effects of teacher and peer feedback on students' writing at secondary education level. The authors collected data from five different government schools by using a survey questionnaire, students' pre-

test and post-test, and students' written remarks about the whole experimental feedback activity from the sample including 100.0 students studying at secondary school level in Bahawalpur. The results showed that students have positive attitudes towards teacher feedback and peer feedback, and this activity helped them improve their performance. Teacher feedback and peer feedback provides an effective way of learning to the students. The implication of the literature is that feedback is very important and that teachers should consistently give students feedback about their assignments, tests and examinations. This would help clear confusion about students' performance and through that students would learn and improve.

Coverage of Syllabus

Researchers have found out that the coverage of syllabus has the capacity to affect the performance of students whereas inability to finish covering the syllabus before the term or semester ends has consequences on the performance of students. Nakhanu's (2012) study was done in Kakamega South District, covering a total of 85 secondary schools, whose objective was to determine the percentage of the syllabus covered, and compare it to student performance. 16 out of the 85 schools were purposively selected and used in the study. A total of 64 people, thus the head teacher, the head of mathematics department, and two randomly selected mathematics teachers, from each of the 16 schools, served as respondents. A descriptive survey design was adopted for the study, and data collected using three questionnaires.

Correlation between syllabus coverage and student performance was 0.8343, established using the Pearson's Product Moment Correlation Coefficient

formula, and its significance tested using the conversions equation ' $t = r(n-2) / (1-r^2)$ '. Furthermore, a One Way Analysis of Variance, (ANOVA) was determined, to confirm that syllabus coverage has a significant effect on student performance in mathematics at KCSE level.

The difference is Nakhanu's (2012) study was conducted among secondary school students whereas the current study was conducted among tertiary distance education students. Also, it is observed from the already done study that the author considered specificity of subject which was mathematics whereas the current study looked at completion of general topics printed on their outline. Apart from that the author's study is relevant to the current study.

Student-Related Factors that Influence Academic Performance

Positive Attitude of Students towards Teachers

An attitude is a relatively enduring organisation of beliefs, feelings, and behavioural tendencies towards socially significant objects, groups, events or symbols (Hogg & Vaughan, 2005). Attitudes structure can be described in terms of three components: affective component (involves a person's feelings / emotions about an attitude object), behavioural (or conative) component (the way the attitude we have influences how we act or behave) and cognitive component (involves a person's belief/knowledge about an attitude object). This model is known as the ABC model or three component model of attitudes (for example Rosenberg & Hovland as cited by Fishbein & Ajzen, 1975; Hogg & Vaughan, 2005).

Attitudes towards school and learning are associated with academic achievement. Students with poor academic performance have a more negative

attitude towards learning and believe that school and learning will not help them to be successful in the future (Candeias, Rebelo & Oliveira, 2010). Mark (2007) conducted a wide-ranging research, where he studied attitudes of students, teachers, parents and school administration towards the school environment, changes in attitudes over 10 years and the impact of attitudes on the sense of success. The vast majority of respondents agreed that school should provide a stimulating environment, where students feel comfortable and safe, are satisfied with their teachers and derive joy and pleasure from learning. School environment should, therefore, facilitate academic achievement. When examining the quality of school environment students expressed a positive attitude, felt successful as students and agreed that school will prepare them for the future.

A study on attitudes over time indicates a moderate decline of attitudes towards school and teachers (Mark, 2007). This decline is presumably affected by decreased satisfaction young people feel towards institutions in general, media communications about issues in the educational system, different profiles of teachers and their teaching techniques. The main factors influencing attitudes of students towards school include the subjects learnt, policy and requirements of an individual school.

Verešová and Malá (2016) explored attitude toward school and learning and academic achievement of adolescents. The sample consisted of 269 adolescents studying at secondary schools (146 girls, 123 boys). Among adolescent boys and girls, we noted significant differences in the Attitudes Toward School and Learning (ATSL) in favour of a more positive ATSL for girls ($t=-2.862$, $p=.005$). The

analysis of the internal components of ATSL shows significant differences between girls and boys in cognitive component ($t=-3,044$, $p=.003$) and behavioural component ($t=-4,299$, $p=.000$) of ATSL (more positive attitude among girls). The authors identified a significant relationship between ATSL and GPA ($r = -.312^{**}$, $p = .000$).

The authors found that the more positive is the ATSL of adolescents, the more positive is academic achievement expressed by GPA at the end of the school year. Analysing the relationship of the components of ATSL we have established the identical findings that there is a significant relationship between affective component and GPA ($r = -.267^{**}$, $p=.000$), between behavioural component and GPA ($r = -.265^{**}$, $p=.000$), and between cognitive component and GPA ($r = -.276^{**}$, $p=.000$). In the field of predictive relationship, we note that the attitude toward school and learning is an important predictor of academic achievement ($R^2=.098$, $\beta = -.312$, $t=-5,373$, $p=.000$). The difference is that the already done study looked at the attitude of students towards school whereas the current study looked at attitude of students towards teachers. But what can be said is that, teachers are also included in the school as a whole. Therefore, the already done study would be relevant to the findings of the current study.

Kpolovie, Joe and Okoto (2014) study explored the prediction of academic achievement. Multiple prediction design was applied to ascertain the magnitude of relationship and prediction that students' interest in learning and attitude to school individually and collectively have on their academic achievement. A stratified random sample of 518 was drawn with the aid of table of random numbers from

the 14459 students who enrolled for the 2013 May/June Senior Secondary Certificate Examination (SSCE) in Bayelsa State. Multiple regression statistical technique was used for analysis with SPSS to test tenability of each postulated null hypothesis at .05 alpha level. Results showed significant correlation and multiple prediction of students' academic achievement with the predictor variables; accounting for 21.60% of the variance in students' academic performance. The authors found out that interest in learning and attitude towards school were the contributory factors of students' academic performance. The difference is that the already done study took place in a secondary school whereas the current study was carried out at the tertiary education level. But, can someone have bad attitude towards course tutors at the tertiary education level and would not perform well in their studies? The current study would help bring results that may agree or disagree with the already established result that at the secondary level, students' attitudes have bearing on their academic performance.

Das, Halder, Mishra & Debnathm (2014) studied on relationship between attitude towards education and academic achievement in secondary education level minority students. The researchers also made an attempt to find out the correlation between attitude towards education and academic achievement. A sample of 257 (127 boys and 130 girls) of secondary level minority students of Class-X were selected randomly. Analysing the data, the result shows that there is no significant difference between boys and girls students in attitude towards education and academic achievement scores. It was also found that attitude towards education and academic achievement have very low negative relation (-0.10) which is not

statistically significant. This study also reveals that although there was very low negative relationship between attitude and academic performance, the relationship was not significant. In other words, attitudes of students have little influence on academic performance. What can be said about this study is that they were not able to let readers know the type of attitude that had low impact on academic performance. It can be either positive or negative attitude but nothing of such was said in the article. However, the empirical studies on attitudes have been able to bring about some information that when it comes to academic performance.

Langat (2015) similarly conducted a study to explore students' attitudes and their effects on learning and achievement in mathematics. The study found out that most students had a positive attitude towards mathematics and that they perceived mathematics as doable, learnable and important yet this did not translate to good grades. It is therefore recommended that teachers should varied instructional strategies, which promote discovery and elicit learner interest. The students should be encouraged to apply the taught knowledge and skills through feedback and assignments. There is therefore, a need to offer and build on experiences and opportunities that inspire the students to engage fully in the material fact and acquire knowledge and skills that would enable them excel in the mathematics because they like and value it. The difference is that Langat (2015) focused on secondary students, however, its finding can be relevant and comparable with attitudes and academic performance of the tertiary education students.

Punctuality

A school is set up for the main purpose of bringing students from different families together under one roof, that is, the classroom. Effective teaching and learning cannot take place without the coming together of the teacher and students. For academic work to be effective, then, both the teacher and students should come on time. However, students who are not punctual or do absent themselves from class tend to experience nosedive in their academic performance. The next paragraph indicates that punctuality has a bearing on students' academic performance.

Oghuvbu (2010) explored attendance and academic performance of students in secondary schools and it was a correlational approach. A checklist was used to collect 2860 students' percentage scores in attendance and academic performance from 58 secondary schools, used in this study. Three research questions were raised and answered using percentage mean and linear regression equation. Two hypotheses were formulated and tested using Pearson r . The study revealed that; the mean score of students in attendance was 68% and academic performance 66%. It also revealed a fair positive correlation between attendance and academic performance. It showed the coefficient of determination $r^2 = 0.22$, which is an indication that, 22% of students' academic performance was influenced by attendance in secondary schools in Delta State, Nigeria.

Similarly, Jumare, Maina and Ankoma-Sey (2015) explored students' late-coming factors in selected secondary schools in Zaria. Sample of sixty students' late comers were administered with the questionnaire within a period of two weeks.

The instrument was partly adopted, while the other part was self-constructed. The instrument was validated by expert in educational administration and language. Data collected was analysed using simple percentages and frequencies for easy interpretation and understanding. The results indicate that late coming to school is higher among female students, those within the ages of 16-20 are frequent late comers and senior among others. It was recommended that parents (especially mothers) should reduce engaging female students with home activities especially in the morning; school administrators and teachers should increase effort on counselling strategies to adolescent students due to their change in perception and school rules. Usually, people with punctuality problems likely absents themselves from school and this would have implication on their academic performance. Eide, Fillmore and Showalter's (2017) results suggest that missing two weeks of school is associated with a one-tenth standard deviation reduction in math score. This is indicative of the fact that students who misses school for sometimes would have a problem with their academic performance.

Similarly, Chafloque Céspedes, Vara-Horna, Lopez-Odar, Santi-Huaranca, Diaz-Rosillo and Asencios-Gonzalez (2018) revealed that presenteeism has a higher impact on the academic performance of students ($\beta = 0.628$) compared to absenteeism ($\beta = 0.101$). Absenteeism has a greater effect on courses and disapproved terms (Beta = 0.163) and presenteeism, on the evolution of academic performance ($\beta = -0.145$). Finally, by means of a model of structural equations, the causal structure of the academic performance decrease from absenteeism and presenteeism is proven. From the literature, it has been revealed that students'

punctuality which has the elements of absenteeism do have impact on the academic performance.

Student Motivation

Motivation is one factor that do have effect on academic performance (Turan, 2015). Baumeister and Vohs (2007) define motivation as a state where the individual displays various attitudes voluntarily in order to achieve a certain goal. For example, in a classroom or lecture theatre, students can be directed to achieving academic results and it can be done intrinsically and extrinsically. The intrinsic type of motivation is usually generated within the student and it is very powerful in helping the student to achieving great results. However, the extrinsic type of motivation involves using external rewards such as praise, tokens, etc. in helping the student to perform very well. Özen's (2017) results of the random effect model, showed that motivation has a low-level positive effect on student achievement. Also, Gbollie and Keamu (2017) motivated strategies for learning questionnaire (MSLQ) was adapted and 12 potential learning hindrances were identified and used as instruments. The authors found out that the extrinsic motivation was found to have bearing on academic performance rather than test anxiety. It also revealed that motivational beliefs are very essential to the academic achievement of students because they help to determine the extent to which students will consider, value, put in effort, and show interest in the task (Bandura, 1993; Yukselturk & Bulut, 2007).

Muhammad, Bakar, Mijinyawa, and Halabi (2015) explored impact of motivation on students' academic performance. The authors aim to examine the

relationship between students' motivation and their academic performance (GPA). Secondly, to find out the effect of motivation on students' academic performance (GPA). Data was analysed using correlation analysis and a simple linear regression. Findings of the study revealed that a strong positive relationship exist between motivation and students' academic performance. This is because the r-value from the correlation analysis is 0.667 revealing a strong link between the study variables. Similarly, result from the regression analysis indicated that motivation serves as a good predictor of students' performance.

Bakar, Tarmizi, Mahyuddin, Elias, Luan and Ayub (2010) examine the relationships between university students' achievement motivation, attitude and academic performance in Malaysia. But, conversely, indicated that a low and negative correlation exist between students' achievement motivation and their academic performance. According to the authors, student's motivation and academic performance are inversely related. This means as students' motivation goes high, their academic performance goes down. This analysis must be done again by the researcher.

In a comparative study, Tüysüz, Yıldiran & Demirci (2010) assess the difference in motivation between university students and high school students. The objective of their work is to compare the motivation of high school students and that of a university student. In particular, their study is devoted toward finding how students' motivation is changing due to selecting a science career for studying in the university. To achieve this, a structured questionnaire was administered to 302 university students and 294 high school students that were in science major. An

exploratory factor analysis was used to provide evidence to construct validity. Obtained data was analysed using descriptive statistics. The result of the study revealed that university students were highly motivated to pursuing science related programme as compared to high school students.

In a similar study, Abdullah, Elias, Mahyuddin & Uli (2009) examine emotional intelligence, achievement motivation and academic achievement among students of the public and private higher education institutions. Findings from their study revealed a significantly low positive relationship between students' achievement motivation and their academic performance. The literature is indicating that motivation is one of the factors that do have bearing on students' academic performance. The implication of this is that schools and other organisations should be able to bring out motivational strategies that would help employees and students unleash their potentials from within and the nation would benefit as well when students put up their best.

Incompetence

Nyandwi (2014) explored the factors influencing poor academic performance of secondary school students in Sumbawanga District, Tanzania. The finding reveals that truancy and incompetence of English language of some students reduces the efficiency in their academic works. The difference is Nyandwi's study was conducted among secondary school students whereas the current study would be done at the tertiary education level.

Other Students' Characteristics

Engin-Demir (2009) stated that apart from strong mental capacity and prowess, students who spend more time on assignments and homework are able to improve their grades. Butler (1987) found that the amount of time students invests in homework and other related activities have also been found to be strongly related to motivation and a student who is highly motivated would yield great results. On the other hand, a student who is poorly motivated would not come out with good academic results. But, the current study is conducted using tertiary education student and it cannot be explicitly concluded that motivation would have a bearing on them especially with classroom motivation.

Etsey (2005) also found out that homework correlates with performance. He stated that “homework bore a positive relationship with learning outcomes when it is relevant to learning objectives, assigned regularly in reasonable amounts, well explained, motivational and collected and reviewed during class time and used as an occasion for feedback to students” (p. 3). Homework is in reality an interaction between school and the home, and an essential ingredient of the educational process when measuring academic achievement (Harbison & Hanushek, 1992).

Teacher Quality and Academic Performance

Teacher quality is a reflection of competence (for example, degree, exam scores, certification, knowledge of subject matter and experience) whereas academic performance refers to how students deal with their studies and how they cope with or accomplish different tasks given to them by the teachers. Teachers quality do have bearing on academic performance either positively or negative.

Blömeke, Olsen, and Suhl (2016) explored relation of student achievement to the quality of their teachers and instructional quality. The sample included 205,515 students from 47 countries nested in 10,059 classrooms. Results revealed that teacher quality was significantly related to instructional quality and student achievement, whereas student achievement was not well predicted by instructional quality.

Dali, Daud, Sofian and Fauzee (2017) explored the relationship between teachers' quality in teaching and learning with students' satisfaction. The data were analysed by using the statistical descriptive and inferential such as the mean, standard deviation, t-test and Pearson correlation. Students' perceptions on the quality of teacher's teaching and learning are based on the level of perceptions of 5-point Likert scale. In general, the result showed that the students' level of perceptions on the quality of teachers' teaching and learning is in a good category. However, there was no significant relationship between male and female perceptions toward the quality of teachers' teaching and learning and their achievements. In addition, the result also showed that there was no difference in the quality of teachers' teaching and learning between them.

Sirait (2016) also explored the effect of teacher's quality and academic performance. The result of this study showed that teacher quality, in term of teacher evaluation score, is a matter and statistically significantly to student performance, in senior high school level.

Similarly, Aitokhuehi and Ojogho (2014) conducted a study about teacher quality and students' academic performance in Esan West Local Government of

Edo State. The study revealed that factors of teacher quality such as teacher qualification (academic and professional) have significant effect on students' academic performance in the study area. Also, Seebruck (2015) explored teacher quality and student achievement and found out that teacher credentialization (quality) has positive effects on both measures of student achievement.

Moreover, Ehinola (2013) examined quality of teachers and academic performance of secondary school students in Ondo State. The study was designed to find out whether qualities of teachers; qualification and experience are related to academic performance. The study revealed the present quality of teachers in Ondo State. It also confirmed the significant relationship between the quality of teachers and student academic performance in the three core subjects; English language, ($r=0.501$, $r\text{-tab } 0.288$), Mathematics ($r=0.291$, $r\text{-tab } 0.288$) and Biology ($r=0.484$, $r\text{-tab } 0.288$) in Ondo State secondary schools. The implication of this is that teachers should work towards developing themselves through furthering to pursuing higher degree and shaping their skills in order to produce students with great academic performance.

The difference is that the already done studies study area was the secondary school whereas the current study area is college of distance education centres. However, it has been established that teachers' quality does have a bearing on students' academic performance.

Summary

The chapter reviewed related literature of school-related factors, tutor-related factors and student-related factors and how these factors have bearing on academic performance of students. The review was done under three themes, thus, theoretical, conceptual and empirical.

The theoretical review was done on Urie Bronfenbrenner ecological system, humanist theory and cognitivist theory. Urie Bronfenbrenner ecological system gives the insight that the teaching centres of distance education students are systems and in every system, there are human beings and it is the interaction that takes place within the system that would determine how humans would behave.

The humanist also emphasises the uniqueness of each individual in a particular setting. So because of that the humanist helps to understand that students are unique in their own ways and therefore must be attended to uniquely and this would yield better academic performance.

The cognitivist theory is important to this study because they see humans as processors of information in their environment. According to them, students draw meaning from experiences they have from their environment. Therefore, distance education centres should be safe, challenging, comfortable and should enhance interaction.

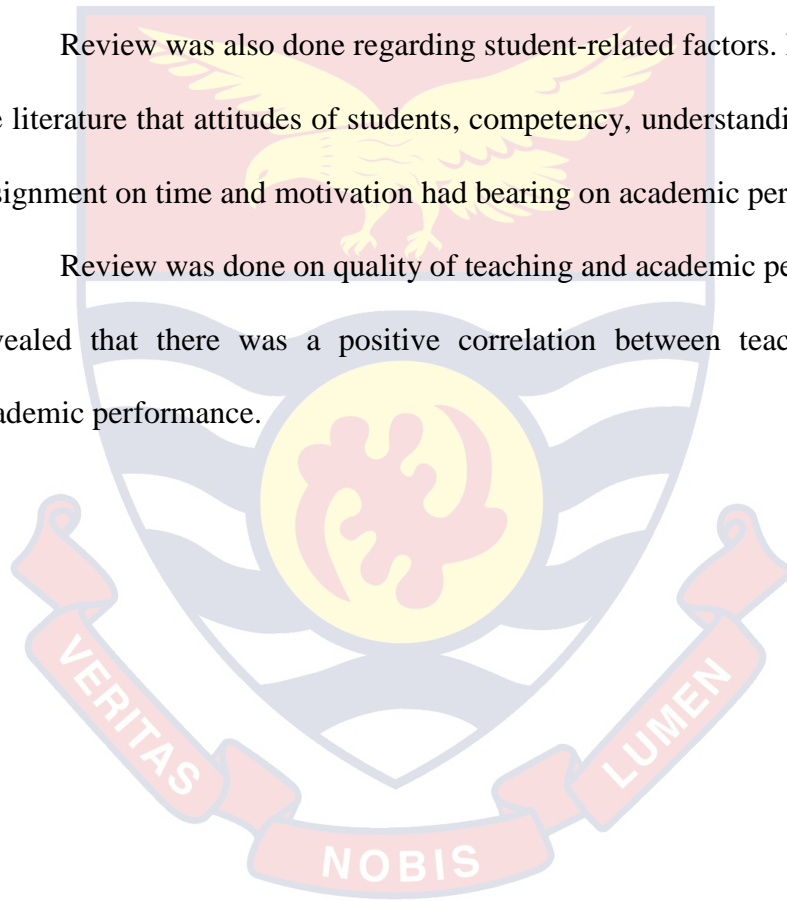
Again review was done on school-related factors that affect academic performance of students. The literature revealed that qualification and experienced tutors, class size, supervision of school works, supply of electricity and provision

of instructional materials were found to have impact on academic performance of students.

Furthermore, factors such as report on time, adequate preparation, tutors' qualification, motivation, feedback and coverage of syllabus had impact on academic performance of students. These factors were considered to be tutor-related factors.

Review was also done regarding student-related factors. It was revealed by the literature that attitudes of students, competency, understanding, completion of assignment on time and motivation had bearing on academic performance.

Review was done on quality of teaching and academic performance. It was revealed that there was a positive correlation between teaching quality and academic performance.



CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter discusses the research methods used for the study. It consists of seven sub-sections. These are the research design, population, sample and sampling procedure and research instruments, as well as, pre-testing procedure, data collection procedures and data analyses.

Research Design

Survey was used in soliciting for the opinions and feelings of distance education students of University of Cape Coast. This involves collecting data in order to test a hypothesis or answering research questions concerning the current status of the subject of study. It determines and reports the way things are (Gay, Mills & Airasian, 2011). According to Gay et al., the descriptive survey method is useful for assessing a group of people's preferences, attitudes, concerns, interests, practices and perceptions.

Descriptive data are usually collected through questionnaires, interviews or observations (Creswell, 2012). Since the study seeks to collect information about the factors that contributes to academic performance, it was appropriate to use survey. According to Mugenda and Mugenda (1999), a descriptive survey design is designed to get pertinent and precise information concerning the current status of

a problem with respect to one or more variables and where possible draw valid general conclusions from the facts discovered.

Again, descriptive survey research is usually used as a precursor to quantitative research designs (De Vos, Strydom, Fouchè & Delpont, 2012). The descriptive research design was deemed best for the study because, according to Cohen, Morrison and Manion (2004), in descriptive survey design, researchers gather data at a particular point in time with the intention of describing the nature of existing conditions or identifying standards against which existing conditions can be compared. In addition, the descriptive survey helps deal, essentially, with questions concerning what exists with respect to variables or prevailing conditions in a situation (Ary, Jacobs & Razavich, 1990).

As recommended by Leedy and Omrod (2010), this method is suitable for purposes of making generalisations from a sample to a population so that inferences could be made about the characteristics, opinions, attitudes and experiences of the population. Descriptive survey design provides a more accurate and meaningful picture of event and seeks to explain people's perception and behaviour based on data gathered at a particular time (Fraenkel & Wallen, 2006). This according to Fraenkel & Wallen would allow for in-depth follow up questions and items that are unclear to be explained.

In spite of the advantages of descriptive surveys aforesaid, Fraenkel and Wallen as cited in Johnson (2001) identified the shortcomings of the descriptive survey. (1) Difficulty in ensuring the questions to be answered are clear and not misleading, (2) getting respondents to answer questions with careful consideration

is a setback, and (3) getting a sufficient number of questionnaires completed. He continued by adding that, while descriptive research is a prerequisite for finding answers to questions, it is not in itself enough comprehensive to make available for use answers and that it cannot also provide cause-and-effect relationships. These restrictions were minimised by ensuring that instruments are clear, not open to more than one interpretation and provided a signed consent form to ensure confidentiality.

Population

Population refers to the large general group of many cases from which a researcher draws a sample and which is usually stated in theoretical terms (Neuman, 2003). It is a group of individuals who have one or more characteristics in common that are of special interest to the researcher. In this study, the population was all undergraduate students and course tutors at College of Distance Education, University of Cape Coast. The current total population of the undergraduate distance students and tutors is 44280.

Sampling Procedure

A sample is a small subset of the total population of interest selected for a research work. Amedahe (2010) says that a sample refers to a group of people that a researcher carefully selects from a defined population. Sampling can be defined as the process of selecting a percentage of a population that can be said to be a representative of the entire population of interest to enable a researcher to gather data (Amedahe, 2000; Sarantakos, 2005). According to Krejcie and Morgan (1970)

table for determining sample size of a known population, a population of 44286 required a sample size of at least 381.

With selecting respondents for the study, multi-stage random sampling was used. Multistage sampling refers to sampling plans where the sampling is carried out in stages using smaller and smaller sampling units at each stage. In a two-stage sampling design, a sample of primary units is selected and then a sample of secondary units is selected within each primary unit (Burns & Grove 2001). Multi-stage sampling is a further development of the principle of cluster sampling (Kothari, 2004). There are five categories of respondents that are at College of Distance Education namely as Business 1, Business 2, Education 1, Education 2 and course tutors were considered for the study.

Furthermore, proportionate random sampling was then used to select the number of respondents from the categories of respondents, thus Business 1 (10%), Business 2 (12%), Education 1 (46%), Education 2 (26%) and Course tutors (6%). Simple random sampling technique was used because the study desires to give the subjects equal chance of being selected. The researcher believes that students in these classes might have knowledge about school environmental factors and its implication on academic performance. Table 1 shows distribution of sample size of students at College of Distance Education, University of Cape Coast.

Table 1: A-Distribution of Students at College of Distance Education, University of Cape Coast

Programme	Number of Students	Sample Size
Business 1	4382	38
Business 2	5099	46
Education 1	20888	175
Education 2	11417	99
Course Tutors	2500	23
Total	44286	381

Source: Field Survey (2019)

Data Collection Instrument

Two sets of questionnaire designed by the researcher used for data collection.

A 30-item questionnaire for students

A 30-item questionnaire based on literature reviewed was used for soliciting responses from students was appropriate because according to Pallant and Manual (2010), the minimum valid items required on a questionnaire should be 10. This questionnaire had two sections (Section A and Section B). Section A of this questionnaire elicited background information of students, that is, age, gender, marital status, and level of education. Section A had four items students were required to either tick options applicable to them.

Section B had items that sought answers on perceived school-related factors, perceived tutor-related and perceived student-related factors that may contribute to academic performance of students at College of Distance Education, University of Cape Coast.

Perceived school-related factors comprise seven items that answer research question one. Perceived tutor-related factors also comprise seven items that answer

research question two. Student-related factors consist of nine items that answer research question three. The four-point Likert-type scale ranging from Most of the time to 1 = Never was used for the perceived related-school factors, perceived related-tutor factors and perceived related-student factors.

Item 28 in Section B solicits information on other factors that contribute to academic performance. With this, students were asked to write the answer themselves. Item 29 of this questionnaire inquire from the students how they rated the quality of their academic performance. Item 30 inquiries from students to rate distance education programme in the University of Cape Coast. The item 29 has options from very poor to excellent whereas the item 30 has options from poor to excellent. Item 29 and item 30 used a five-point Likert scale.

A 30-item Questionnaire for tutors

A 30-item questionnaire based on literature reviewed was used for soliciting responses from tutors. Section A of this questionnaire elicits background information of tutors, that is, gender, marital status, level handled, years of teaching and academic qualification. This section had five items the tutors were required to answer.

Section B had items that sought answers on perceived school-related factors, perceived tutor-related and perceived student-related factors that may contribute to academic performance of students at College of Distance Education, University of Cape Coast.

Perceived school-related factors of this section also comprises seven items that answer research question one. Perceived tutor-related factors also comprise

seven items that answer research question two. Student-related factors comprise nine items that answer research question three. The four-point Likert-type scale format with 4 = Most of the time, 3 = Some of the time, 2 = Seldom and 1 = Never was used for the perceived related-school factors, perceived related-tutor factors and related-student factors.

Item 28 in Section B solicits information on other factors that contribute to academic performance. With this, tutors were asked to write the answer themselves. Item 29 of this questionnaire enquires from the tutors how they would rate the quality of their teaching. Item 30 enquires from tutors to rate distance education programme in the University of Cape Coast. The item 29 has options from very poor to excellent whereas the item 30 has options from poor to excellent. Item 29 and item 30 would be measured on a five-point Likert scale.

With all items measured on a four-point Likert scale, the midpoint for the extreme scores would be 2.5. This would mean that any factor that would yield a mean of 2.5 and above would be the highest mean whereas factors that would fall below the mean of 2.5 would be considered as the lowest mean.

With all the items measured on five-point Likert scale, the highest mean on these items (item 29 and 30 on both the student and tutors' questionnaire) would be 5 whereas the lowest mean would be 1. However, the cut-off point to determine whether a mean is high or low would be known after midpoint of two extreme scores have been calculated. The midpoint for both the extreme scores of this item would be 3.0. This would imply that any factor that is 3.00 and above would be

highest mean whereas factors that would fall below 3.00 would be considered as the lowest mean.

Pilot Testing of Instruments

University of Education, Winneba was considered for the pilot testing of the instruments because they also offer distance education services and they would be able to relate to the items on the questionnaire. Fifty-two students and 30 course tutors were used for the pre-testing. The use of this number of students and course tutors was appropriate because according to Sudman as cited in Burr (1993), at least 12 to 50 people is a minimum requirement for pilot testing.

The researcher obtained the following Cronbach's alpha coefficients for both questionnaires: Questionnaire for students (0.71) and Questionnaire for course tutors (0.77). One of the items on questionnaire for students was deleted because with the availability of that item (students have time for learning), it rendered the Cronbach's alpha of students' questionnaire to be 0.656. However, after it had been deleted the Cronbach's alpha improved to 0.71. This is deemed reliable because other methodologists have suggested that the minimum alpha coefficient should be 0.7 (Pallant & Manual, 2010; Nunnally as cited in Sullivan, 1994). Extra sheets of paper were added to the questionnaire for respondents to pass comments on the clarity, weaknesses, inadequacies, ambiguities and problems on all aspects of the items in the instruments.

As a result of such comments, statements felt to be ambiguous or misleading or redundant were either removed or revised for clarity before the actual data collection for the main study. To further refine the instruments, the questionnaires

were given to my supervisors to pass their comments. Based on the pilot testing, the instruments were refined for the main study. The pre-testing helped to ensure that the final instruments are minimised of ambiguity. Additionally, it would help to check the time needed to respond and to test the coding system (Cohen et al., 2004).

Validity and Reliability

Validity is defined as “the appropriateness of the interpretations, inferences, and actions that we make based on test scores” (Onwuegbuzie, & Johnson, 2006, p.140). They cautioned that, in ensuring validity, we must ensure that the test measures what it is intended to measure, for the particular group of people and for the particular context, and also that the interpretations that are made based on the test scores are correct. As a result, DiStefano, Zhu and Mindrila (2009) opined that validity refers to how well the concept is defined by the measure.

Reliability on the other hand, “refers to the consistency or stability of the test scores” (Gay et al., 2011, p. 12). This means that the assessment tool would yield the same or almost the same scores any time it is administered to the same individual or group. There are several ways of determining the reliability of an instrument, for example, there is the split half, test retest, alternative form methods and the internal consistency method.

The Cronbach’s alpha is estimated to be the most widely used method in estimating the internal consistency of an instrument (Kimberlin & Winterstein, 2008). Kimberlin and Winterstein reported that it is used for summated scales or Likert scale items. Since the questionnaires are predominantly Likert scale and the

researcher wanted to estimate the internal consistency of the instruments, the Cronbach's alpha was deemed the best method to estimate the reliability of the instrument. The Cronbach's alpha has a correlation coefficient ranging in value from 0 to 1. The closer a reliability coefficient value is to 1, the more reliable the test, while the closer the reliability coefficient value is to 0, the less reliable the test (Gay et al., 2011). The reliability coefficient of the questionnaire was determined after the pilot testing of the instruments.

To establish the validity of the questionnaires, the questionnaires were given to the supervisors for their review, since face or content validity can be determined by expert judgment (Gay et al., 2011). The suggestions they made help to restructure the items. According to Amedahe (2010), it is the soundness of the interpretations given to the assessment scores that are validated, not the instrument. If the instrument measures what it intends to measure and the results are used for the intended purpose, then the instrument can be said to be valid. The pilot testing of the instruments helps to refine the research instruments. The questionnaires were refined based on the comments made during the pilot testing.

Data Collection Procedures

Before, the actual data collection, the researcher sent an introductory letter from Institute for Educational Planning and Administration to the heads of the College of Distance Education centres. Then the researcher sought after an ethical clearance from the Institutional Review Board in the University of Cape Coast. The ethical clearance spelt out the purpose of the study, the need for individual participation, anonymity as well as confidentiality of respondent's responses. After

that the necessary contact with the heads of the centres was established, permission was sought for the administration of the instrument.

Upon approval of the study protocol and ethical clearance by the heads of the centres, respondents were recruited from the centres. The researcher administered the questionnaire personally and this enabled the researcher to explain the purposes of the study and establish rapport with respondents. Distributions of the questionnaire were done with the assistance of some of the students at the centres. An informed consent, explaining the purpose of the study and assurance of confidentiality and anonymity to respondents, preceded the questionnaire administration.

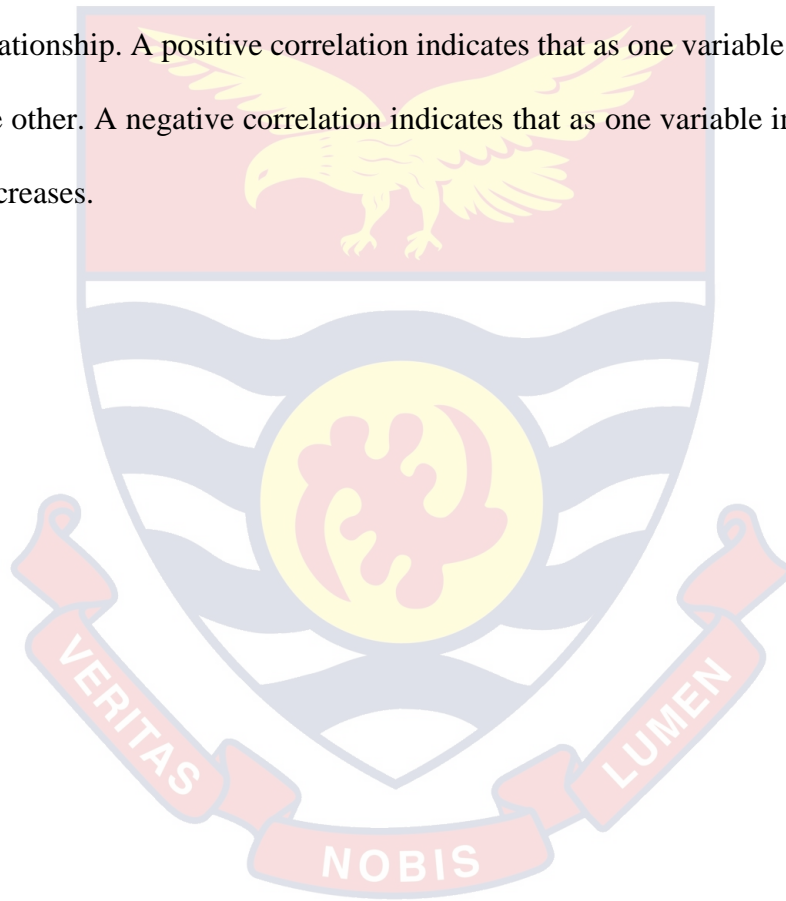
Data Processing and Analysis

Analysis is the process of obtaining findings from data derived from respondents. It goes beyond raw data; it entails organising, describing, interpreting, discussing and presenting the data to readership (Ryan as cited in Reeve, 2013). The study was analysed quantitatively. The Statistical Package for Social Science (SPSS 22nd version) was used for data analysis. All the items on the questionnaire were entered into SPSS. Socio-demographic variables, research question one, two, and three were analysed with descriptive statistics.

Research question four was analysed using multiple regression (Tabachnick Fidell, 2013). Multiple regression is a more sophisticated extension of correlation and is used when you want to explore the predictive ability of a set of independent variables on one continuous dependent measure. It can be used to test the predictive

power of a set of variables and to assess the relative contribution of each individual variable (Pallant & Manual, 2010).

Hypotheses One were analysed using Pearson product-moment correlation (Pallant & Manual, 2010). Pearson correlation is used when you want to explore the strength of the relationship between two continuous variables. This gives you an indication of both the direction (positive or negative) and the strength of the relationship. A positive correlation indicates that as one variable increases, so does the other. A negative correlation indicates that as one variable increases, the other decreases.



CHAPTER FOUR

RESULTS AND DISCUSSION

The purpose of the study was to explore factors that contribute to the academic performance of undergraduate distance education students of University of Cape Coast. Survey was used in soliciting for the opinions and feelings of distance education students and course tutors. This chapter deals with data presentation and analysis of the data collected from respondents from College of Distance Education learning centres.

The data were analysed according to the research questions and hypotheses. Socio demographic variables, research questions one, two, and three were analysed with frequencies, percentages, standard deviation and mean whereas research question four was analysed using multiple regression. Hypotheses one, two, three and four were analysed using Pearson product-moment correlation. The sample size finally used for the study increased to 411.

Socio-Demographic Information

This section of the chapter presents the analysis of the background data of the respondents.

Table 2: Gender Distribution of Respondents (Students and Course Tutors)

Gender	Frequency	Percent
Male	240	58.4
Female	171	41.6
Total	411	100.0.0

Source: Field Survey (2019)

Out of 411 respondents who participated in the study, 240 representing 58.4% were males whereas 171 representing 41.6% were females. The result in Table 2 indicates that majority of respondents who participated in the study were males.

Table 3: Age Distribution of Students

Age	Frequency	Percent
18-27years	167	43.2
28-37years	182	47.1
38-47years	33	8.5
48-57years	4	1.2
Total	386	100.0

Source: Field Survey (2019)

Table 3 depicts the age ranges of undergraduate students who participated in the study. Out of 386 students, 167 representing 43.2% were 18-27years old, 182 representing 47.1% were 28-37years old whilst the remaining 9.7% represents ages between 38 and 57 years old. The result indicates that more 90% of the respondents were between 18 and 37 years old.

Table 4: Marital Status of Respondents

Marital Status	Frequency	Percent
Single	255	62.0
Married	153	37.2
Divorced	3	0.7
Total	411	100.0

Source: Field Survey (2019)

Table 4 reveals that, out of 411 respondents, 255 representing 62.0% were single, 153 representing 37.2% were married and 3 representing 0.7% were

divorced. The result can be concluded that majority of respondents who participated in the study were single.

Table 5: Levels of Students

Level	Frequency	Percent
Level 100.0	12	3.1
Level 200	220	57.0
Level 300	36	9.3
Level 400	118	30.6
Total	386	100.0

Source: Field Survey (2019)

Table 5 reveals that out of 386 students, 220 representing 57.0% were in Level 200, 118 representing 30.6% were in Level 400, 36 representing 9.3% were in Level 300 and 12 representing 3.1% were in Level 100.0. The result indicates that majority of student respondents who participated in the study were in Level 200.

Table 6: Level Handled

Level	Frequency	Percent
Level 100.0	3	12
Level 200	5	20
Level 300	8	32
Level 400	9	36
Total	25	100.0

Source: Field Survey (2019)

With regard to levels handled by tutors, Table 6 indicates that out of 25 tutors, 9 representing 36% taught in Level 400, 8 representing 32% taught in Level 300, 5 representing 20% taught in Level 200 and 3 representing 12% taught in Level

100.0. It can be concluded that more tutors who participated in the study were tutors who taught in Level 400.

Table 7: Academic Qualification of Tutors

Qualification	Frequency	Percent
B.Ed	9	36
M.Ed	5	20
MPhil	7	28
PhD	1	16
Total	25	100.0

Source: Field Survey (2019)

Table 7 shows academic qualifications of tutors and out of 25 tutors, 9 representing 36% had B.Ed., 7 representing 28% had MPhil, 5 representing 20% had M.Ed. and 1 representing 16% had PhD. The result can be concluded that more of tutors who participated in the study had B.Ed. as their academic qualification.

Table 8- Years of Teaching

	Frequency	Percent
1-5years	7	28
6-10years	8	32
11-15years	6	24
16years and above	4	16
Total	25	100.0

Source: Field Survey (2019)

Out of 25 tutors, 8 representing 32% taught for 6-10years, 7 representing 28% taught for 1-5years, 6 representing 24% taught for 11-15years and 4 representing 16% taught for 16years and over. The result indicates that more of the tutors who participated in the study taught for 6-10years (see Table 8). The rest of the chapter addresses the research questions.

Research Question One: *What are the perceived school-related factors that contribute to academic performance?*

Research Question One was analysed descriptively using mean and standard deviation of the factors displayed in Table 9. With all items measured on a four-point Likert scale, the midpoint for the extreme scores would be 2.5 mean.

Table 9: A Descriptive Analysis of Perceived School-Related Factors on Academic Performance

School-related factors (n=411)	Mean	Standard deviation
Qualified and experienced tutors	3.52	.69
Good class size	3.49	.82
Supervision to check tutors	3.14	2.26
Constant supply of electricity	3.10	1.12
Provision of instructional materials	3.06	.80
Library to make study and research	1.40	.88
Computer laboratory provided to facilitate doing of assignment	1.26	.72

Source: Field Survey (2019)

This would explain that any factor that would yield a mean of 2.5 mean and above would be the highest mean whereas factors that would fall below the mean of 2.5

would be considered as the lowest mean. The higher mean is the most contributing perceived school-related factors whereas the lower mean is the least contributing perceived school-related factor that has bearing on academic performance of undergraduate students at learning centres in College of Distance Education, University of Cape Coast.

The result shows in order, that the important perceived school-related factors that had bearing on either low or high academic performance of undergraduate students in College of Distance Education, UCC were qualified and experienced teachers ($M= 3.52, SD= 0.69$), Good Class Size ($M=3.49, SD=.82$), Supervision to check tutors ($M=3.14, SD=2.26$), Constant supply of electricity ($M=3.10, SD=1.12$), Provision of instructional materials ($M=3.06, SD=.80$).

Clotfelter, Ladd and Vigdor (2007); Harris and Sass (2007); Kane, Rockoff, and Staiger (2006) and Ladd (2008) also found out that teachers' experience gained over years has bearing on academic performance of students and the current finding is consistent with the authors' result. The current result is also consistent with the study of Rice (2010), who found out that experience has bearing on academic performance of students, although, his study was conducted in the elementary school.

Even though, researchers have found that experience and academic performance do correlates, it is very important for teachers to constantly upgrade themselves because spending a lot of years in a field especially, teaching a particular subject, for a long time can make a person relent and not strive for

advance knowledge and this may instead yield to low output thereby affecting negatively, the academic performance of students.

Dial (2008) and Hanushek and Rivkin (2006) found that there was no correlation between years of teaching experience and academic performance. Nonetheless, the current study has found out that experience of tutors does contribute to academic performance of students.

The current study also found out that good class size is a contributory factor to academic performance. The current study supports studies done by Pritchard as cited in Uhrain (2016), Murawski and Hughes (2009), Blatchford, Bassett, and Brown (2011), Adeyela (2000) and Owoeye and Yara (2011), although, some of the authors like Pritchard as cited in Uhrain (2016); Adeyela (2000); Englehart and Fan as cited in Uhrain (2016) prefer smaller classrooms to large classroom because of attention factor. However, large classrooms are not bad because students would learn other skills from their friends. Afolabi as cited in Owoeye and Yara (2011), found no significant relationship among class size and students' learning outcomes. Bolton as cited in Fabunmi, Brai-Abu and Adeniji (2007) also is of the view that it is not always the case that students in a smaller classroom would perform better than students in large classroom. Although, there are mix results with regard to classroom size, the current result has found out that a good classroom size is a contributory factor to undergraduate students' academic performance at College of Distance Education, UCC.

Supervising teachers from time to time when they teach in classroom has also been found to be a contributory of academic performance and this is consistent

with views expressed by Onyango as cited in Mavindu (2013), Ayot and Briggs (2002), that, supervision and academic performance do correlates.

Table 9 also depicts that provision of instructional materials has influence on academic performance of undergraduate students of College of Distance Education, UCC. This result is consistent with Adeogun (2001), Babayomi (1999), Conway and Clark (2003), Mwiria (1995) and Adalikwu and Iorkpilgh (2013). These authors found out that provision of instructional materials have bearing on academic performance of students. The implication of the current study is that students must be supplied with enough instructional materials so that effective learning can take place among students of College of Distance Education, UCC.

Library and computer laboratory at the tertiary level were considered to be the least factors that contributes to academic performance. However, studies by Baughman (2000), Smith (2001), Jato (2014) found that schools with good library facilities have students performing well. But this current results happen to find out that at the tertiary level of education, factors like good library facilities were the least factors to be considered as affecting academic performance. The reason may be because of proliferation of technological advancement and everyone can access information through their phones, laptops, iPad etc.

Research Question Two: *What are the perceived tutor-related factors that contribute to academic performance?*

Research Question Two was analysed descriptively using mean and standard deviation of the factors displayed in Table 8. With all items measured on a four-point Likert scale, the midpoint for the extreme scores would be 2.5 mean

(This mean would be the mean all factors under perceived tutor-related factors would be measured against). This would explain that any factor that would yield a mean of 2.5 and above would be the highest mean whereas factors that would fall below the mean of 2.5 would be considered as the lowest mean. The higher mean is the most contributing perceived tutor-related factors whereas the lower mean is the least contributing perceived tutor-related factor that has bearing on academic performance in College of Distance Education, UCC.

Table 10: A Descriptive Analysis of Perceived Tutor-Related Factors on Academic Performance

Tutor-related factors (n=411)	Mean	Standard Deviation
On time reporting	3.56	.65
Adequate preparation	3.52	.65
Effective and varied teaching skills while teaching	3.50	.63
Tutor qualification	3.46	.69
Interest, passion and motivation	3.44	.69
Timely feedback	3.06	.89
Completion of modules in time	3.00	.79

Source: Field Survey (2019)

When the factors were measured against the general mean (2.5 above or below), all the tutor-related factors were relevant to academic performance of undergraduate students in College of Distance Education, UCC (Table 10). These factors were on time reporting (M=3.56, SD=.65), adequate preparation (M=3.52, SD=.65), effective and varied teaching skills while teaching (M=3.50, SD=.63), Tutor qualification (M=3.46, SD=.69), interest, passion and motivation (M=3.44,

SD=.69), timely feedback (M=3.06, SD=.89) and completion of modules in time (M=3.00, SD=.79).

The result indicates that tutors reporting on time for their lectures had impact on students' academic performance. This result supports studies done by Zafarullah, Mumtaz, Murad, Abida, and Humera (2016); Siachifuwe (2017); Butakor and Boatey (2018), who found out that attendance and punctuality of teachers had tremendous effect on academic performance of students. This implies that tutors at College of Distance Education, UCC, should adopt the habit of coming for lectures early and also avoid absenteeism.

Adequate preparation before coming to teach in the classroom had also been found as a contributory factor to academic performance. This is consonance with studies done by Adediwura and Tayo (2007); Adu and Olatundun (2007); Schacter and Thum (2004). These authors found that effective teaching and adequate preparation have the ability to predict students' academic performance.

Other studies done by Akiri and Ugborugbo (2009), Josiah and Oluwatoyin (2017); Boyd, Grossman, Lankford, Loeb and Wyckoff (2009) are in support with the current results that effective teaching and adequate preparation had effect on students' academic performance. It implies that tutors at College of Distance Education, UCC make adequate preparation and also expand their knowledge through seminars and workshops. By so doing, they would be able to produce graduates who can better serve the nation as well.

Qualification of teachers have bearing on academic performance. This is consistent with views expressed by Hakielimu as cited in Kola and Sunday (2015)

and Ibrahim (2000), that, qualification is one of the critical factors that drive students' academic performance. There are mixed results with regard to qualification of teachers being able to impact on academic performance of students. The findings of this study is similar to studies done by Kola and Sunday (2015), Njeru and Orodho (2003); Ankomah, Koomson, Bosu and Oduro (2005); Ugbe and Agim (2009); Asikhia (2010); Yala and Wanjohi (2011) and Olaleye (2011), that, teachers' qualification does have a bearing on academic performance. However, Rivkin, Hanushek and Kain (2005), Musau and Abere (2015), Buddin and Zamarro (2009); Mbugua, Kibet, Muthaa and Nkonke (2012); Kimani, Kara and Njagi (2013) found out that teachers' academic qualification does not have a bearing on academic performance.

This shows that, when it comes to teachers' qualification and academic performance, some authors agree that, teachers' academic qualifications affect students' performance whereas other authors do not concur. But, the current results concur with the authors that agree that, teacher's academic qualification and students' academic performance do correlates. This implies that teachers should upgrade, that is, if the teacher holds a degree, he or she should further his or her education to let us say, master's level or even Ph.D. and this would bring out more students having better academic performance.

Interest, passion and motivation also have bearing on academic performance. This is in consonance with studies done by Ayeni (2011), Schlosburg et al. (2013), Wambugu (2018), Adeyemo, Asabi, and Omisore (2013), Gitonga (2012), Ta tan et al. (2018), Shelnutt (2003), found out that, motivation has effects

on academic performance. The implication of the current results is that every organisation cannot do without motivation of their staff and because of this, motivational policies must be structured and appropriated properly and accordingly to retain workers and bring about work output as well.

Timely feedback from tutors to students is found to have implication on the academic performance of students. This result is consistent with views expressed by Lee (2008), Bitchener (2008), Ashwell (2000) that feedback does propel students to perform well in their academics. Other studies that the current result do agree with were Ahmad et al. (2013), Ferris (2006), Ferris, Pezone, Tade, and Tinti (1997), Sheen (2007), Beach and Eaton (1984), Ahea (2016), Ghani and Asgher (2012). These authors were of the view that feedback was essential to improving students' academic performance.

The implication of this result is that tutors should make it a habit to give students feedback after quizzes have been marked. Tutors should not wait until the day to the end-of-semester examination before students get the opportunity to see their quizzes results. This has the potential of increasing students' anxiety and frustration if they did not do well in their quizzes which would impact negatively on their imminent examination.

Completion of modules on time has impact on students' academic performance according to the current result. The current result is consistent with studies done by Nakhanu (2012), who found that, teachers' ability to cover their syllabus has a significant effect on student performance in mathematics at KCSE level, even though, the author's study was done among secondary school students.

Research Question Three: *What are the perceived student-related factors that contribute to academic performance?*

Research Question Three was analysed descriptively using mean and standard deviation of the factors displayed in Table 11. With all items measured on a four-point Likert scale, the midpoint for the extreme scores would be 2.5 mean (This mean would be the mean all factors under perceived tutor related factors would be measured against). This would explain that any factor that would yield a mean of 2.5 mean and above would be the highest mean whereas factors that would fall below the mean of 2.5 would be considered as the lowest mean. The highest mean is the most contributing perceived student related factors whereas the lowest mean is the least contributing perceived student related factor that has bearing on academic performance in college of distance education, UCC.

Table 11: A Descriptive Analysis of Perceived Student-Related Factors on Academic Performance

Student-related factors (n=411)	Mean	Standard Deviation
Positive attitude towards tutors.	3.56	.62
Competent and have great study habits	3.22	.69
Understand lessons taught.	3.22	.60
Complete assignments in time.	3.16	.73
Motivated to learn in groups.	3.11	.87
Punctual and attend lectures frequently.	3.02	.69
Time for learning.	2.98	.76
High esteem and are motivated well.	2.97	.92

Source: Field Survey (2019)

Table 11 shows that relevant perceived student related factors that contributed to academic performance of undergraduate students of college of

distance education, UCC, after the factors have been measured against the general mean (2.5 and above or below). These relevant factors in order were positive attitude towards tutors (M= 3.56, SD=.62), Competent and have great study habits (M=3.22, SD=.69), Understand lessons taught (M= 3.22, SD=.60), complete assignments in time (M=3.16, SD=.73), motivated to learn in groups (M=3.11, SD=.87) and punctual and attend lectures frequently (M=3.02, SD=.69).

Positive attitude towards tutors has been one of the results of this study that commensurate students' academic performance. This result similarly is consistent with views expressed by Candeias, Rebelo and Oliveira (2010), that, students with negative attitude towards teachers usually perform not good in their academic. Verešová and Malá (2016), Kpolovie, Joe and Okoto (2014), Das, Halder, Mishra and Debnathm (2014), and Langat (2015), studies are in consensus that, interest and attitude of students have impact on their academic performance. However, most of the authors conducted their studies at the pre-tertiary education level but at least the authors' studies have revealed that attitudes of students towards teachers have a bearing on academic performance. The current result is also consistent with the already done studies.

Students who are competent and are of great study habits skills are revealed to have results in their academic performance. This result is in concurrence of study done by Nyandwi (2014), who found out that, truancy and incompetence of English language of some students reduce the efficiency in their academic works. The implication of the current result is that students should develop great study habits and be competent through exploration and it would reflect in their academic affairs.

Students with understanding also perform better in academic performance according to the current result. Usually students with understanding have great mental capacity which impacts on their academic performance. This result is consistent with a study done by Engin-Demir (2009).

The current result also found out that students who complete their assignments on time have bearing on academic performance. This is again consistent with Engin-Demir (2009), who expressed that, apart from strong mental capacity and prowess, students who spend more time on assignments and homework are able to improve their grades. The implication of this result is that undergraduate students should develop the habit of doing assignments themselves and the more they are involved, the more they would be learning which would impact their academic performance.

Motivation in the current study is one of the student-related factors that contributes to academic performance according to the current results. This finding is consistent with studies done by Gbollie and Keamu (2017), Turan (2015), Tüysüz, Yıldiran and Demirci (2010), Abdullah, Elias, Mahyuddin and Uli (2009) and Muhammad, Bakar, Mijinyawa, and Halabi (2015), who found out that, motivation has implication on academic performance. However, what needs to be explored, is, what type of motivation propels individual candidates to produce good academic performance. Knowing specifically the type of motivation that helps students to perform well academically would be effective in predicting academic performance rather than general motivation. Nonetheless, the current result has

revealed that motivation does have some influence on academic performance of undergraduate students of College of Distance Education, UCC.

The current result shows that punctuality has bearing on academic performance. These authors, Oghuvbu (2010), Eide, Fillmore and Showalter (2017), Jumare, Maina and Ankoma-Sey (2015), and Chafloque Céspedes, Vara-Horna, Lopez-Odar, Santi-Huaranca, Diaz-Rosillo and Asencios-Gonzalez (2018), found out that, punctuality does bring about academic performance and the current result is consistent with the authors' results. Some of the authors were of the view that students who were absenting themselves had low academic performance whereas those who were coming regularly had high academic performance.

The implication of this finding is that whether a student is punctual or not, there would be an effect of his or her punctuality on academic performance. But which direction should it go? Students should do their best to be punctual at school and classes and it would have bearing on their academic performance.

Research Question Four: *Which is the best predictor of academic performance: school-related factors, student-related factors or tutor-related factors?*

Research Question four was analysed using multiple regression presented in Tables 12, 13 and 14. The assumption of univariate normality was met considering the errors of prediction which were normally distributed along the zero residual line of the residual plot. A visual inspection of the residual plot revealed at least one outlier. To determine whether the outlier was extreme, its z-score was computed. This z-score met the criteria for standardized residuals, within the

absolute value range of greater than or less than 3.30 standard deviations from the zero residual line.

Table 12: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.313 ^a	.098	.080	.69140

a. Predictors: (Constant), student-related factors, school-related factors, tutor-related factors

The model summary shows that 9.0% of the variance in performance of students can be explained by student-related factors, school-related factors, tutor-related factors (Table 12). It means that all the factors (student-related factors, school-related factors, and tutor-related factors) are able to express 9 % in students' academic performance.

Table 13:ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	7.600	3	2.533	5.299	.002 ^b
Residual	69.794	146	.478		
Total	77.393	149			

a. Dependent Variable: Performance of Students

b. Predictors: (Constant), student-related factors, school-related factors, tutor-related factors

ANOVA table 13 shows that sig. (p=0.002) is less than alpha (0.05), therefore, we can say the model is significant [F (3,146) = 5.299, p=0.005].

Table 14: Coefficients^a

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.086	.374		10.925	.000
	School-Related Factors	-.061	.023	-.292	-2.620	.010
	Tutor-Related Factors	-.051	.024	-.280	-2.085	.039
	Student-Related Factors	.071	.021	.465	3.399	.001

a. Dependent Variable: Performance of Students

Table 14 shows that all the factors made significant contribution to academic performance of undergraduate students of distance education, UCC. However, in terms of which of the factors had highest predictive value, the, student-related factors (beta=0.46) predicted the highest academic performance of students. It was followed by school-related factors (beta= -.29) and tutor-related factors (beta=-.28).

The current result shows that when all the factors were categorised into school-related factors, tutor-related factors and student-related factors, and after various factors under each categories had been computed, student-related factors predicted high academic performance followed by school-related factors, and tutor-related factors.

Hypothesis One: *There is no significant relationship between teachers' quality of teaching and academic performance of students on distance education programmes, University of Cape Coast.* A Pearson product-moment correlation explored the individual relationships between study variables which takes values between -1 through 0 to +1. The sign (+ or -) of the correlation affects its interpretation. Coefficient value of -1 indicates a perfect negative correlation; +1

indicates a perfect positive correlation, and 0 shows no correlation at all. When the correlation is positive ($r > 0$), as the value of one variable increases, so does the other.

Table 15: A Correlation between Teaching Quality and Academic Performance

		Teaching Quality	Academic Performance
Teaching Quality	Pearson Correlation	1	.232**
	Sig. (1-tailed)		.000
	N	411	411
Academic Performance	Pearson Correlation	.232**	1
	Sig. (1-tailed)	.000	
	N	411	411

** . Correlation is significant at the 0.01 level (1-tailed).

Table 15 shows that there was a significant positive relationship between teaching quality of tutors and academic performance ($r = -0.77$; $n = 411$; $p < .01$). This results shows the more teaching quality is improved the more students' academic performance would also improve. From the results, p value is less than .01, therefore, the null hypothesis is rejected.

This result is consistent with studies done by Blömeke, Olsen, and Suhl (2016), Sirait (2016), Aitokhuehi and Ojogho (2014), Seebruck (2015), Ehinola (2013), who found out that teacher quality significantly affects students' academic performance. The implication of this result is that all unqualified teachers should be encouraged to obtain requisite qualification. More in-service course, workshops, conferences, and seminars should be made available for the teachers.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Overview

The purpose of the study was to explore factors that contribute to the academic performance of undergraduate distance education students of University of Cape Coast. The study aimed at finding school-related factors, tutor-related factors and student-related factors that contribute to academic performance of undergraduate distance education students of University of Cape Coast. Also, the study aimed at finding the best predictor of academic performance. The study again aimed at finding the relationship between tutors' quality of teaching and students' academic performance.

This research focused on 10 study centres which had been in existence for over 10 years from each of the regions in Ghana. Multi-stage random sampling was used. A total of 411 respondents were used for the study. This comprised 25 tutors and 386 students. Questionnaire was the main instrument for data collection.

Summary

The following were the key findings:

1. Perceived school-related factors that could contribute to undergraduate student academic performance of College of Distance Education, UCC were;
 - a. Qualified and experienced tutors

- b. Good class size
 - c. Supervision to check tutors
 - d. Constant supply of electricity
 - e. Provision of instructional materials
2. Perceived tutor-related factors that could contribute to undergraduate student performance of College of Distance Education, UCC were;
- a. On time reporting
 - b. Adequate preparation
 - c. Effective and varied teaching skills while teaching
 - d. Tutor qualification
 - e. Interest, passion and motivation
 - f. Timely feedback
 - g. Completion of modules in time
3. Perceived student-related factors that could contribute to undergraduate student-performance of College of Distance Education, were;
- a. Positive attitude towards tutors
 - b. Competent and have great study habits
 - c. Understand lessons taught
 - d. Complete assignments in time
 - e. Motivated to learn in groups
 - f. Punctual and attend lectures frequently
4. Student-related factors predicted high academic performance followed by school-related factors, and tutor-related factors.

5. There was a significant positive relationship between teaching quality of tutors and academic performance of students.

Conclusions

The study explored factors that contribute to the academic performance of undergraduate distance education students of University of Cape Coast. The factors were categorised into school-related factors, tutor-related factors and student-related factors and the factors were found to have a bearing on students' academic performance.

School-related factors include qualified and experienced tutors, good class size, supervision to check tutors, constant supply of electricity and provision of instructional materials were found to be contributing to academic performance of undergraduate students at College of Distance Education.

Tutor-related factors include on time reporting, adequate preparation, effective and varied teaching skills while teaching, tutor qualification, interest, passion and motivation, timely feedback and completion of modules in time were found to be contributing to academic performance of undergraduate students at College of Distance Education.

Student-related factors include positive attitude towards tutors, competent and have great study habits, understand lessons taught, complete assignments in time, motivated to learn in groups and punctual and attend lectures frequently were found to be contributing to academic performance of undergraduate students at College of Distance Education. Student-related factors as composite was found to be high predictor of academic performance. The implication of this result is that

when it comes to academic performance, it behoves on students to put in their best to come out with flying colours. However, attention should not be only paid to students related factors alone since other factor composite such as tutor-related factors and school-related factors also had implication on academic performance.

Recommendations

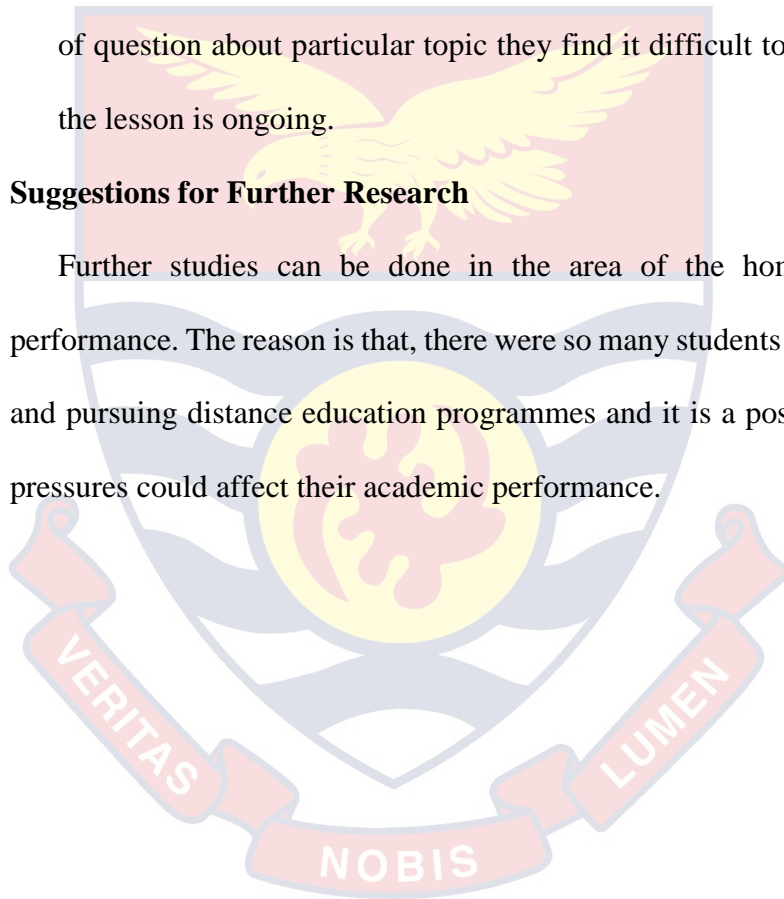
The following recommendations are made based on the findings of the research for policy and practice:

1. College of Distance Education, University of Cape Coast, should continue to employ qualified and experienced tutors to handle distance education programmes. This would at least help reduce the number of students who fail abysmally.
2. College of Distance Education, University of Cape Coast, should also provide supervisors to go to the various learning centres on regular basis to check on tutors' quality of teaching. This would put tutors on guard and they would prepare adequately before they would come and teach.
3. College of Distance Education, University of Cape Coast, should furnish (i.e. provision of libraries) various learning centres where teaching and learning takes place.
4. Tutors should be encouraged to complete their modules on time and also provide timely feedback to students after their quizzes are written and marked. It helps to reduce pressure from students and helps them to prepare adequately for the impending examinations.

5. Students are also encouraged to form study groups and connections with their friends. This would help develop great study habits among themselves and it would help bring about good academic performance.
6. Students are encouraged to personally take their studies serious. They should make conscious efforts to understand whatever they have been taught. This could be achieved by being interactive in class through asking of question about particular topic they find it difficult to understand while the lesson is ongoing.

Suggestions for Further Research

Further studies can be done in the area of the home and academic performance. The reason is that, there were so many students who were married and pursuing distance education programmes and it is a possibility that home pressures could affect their academic performance.



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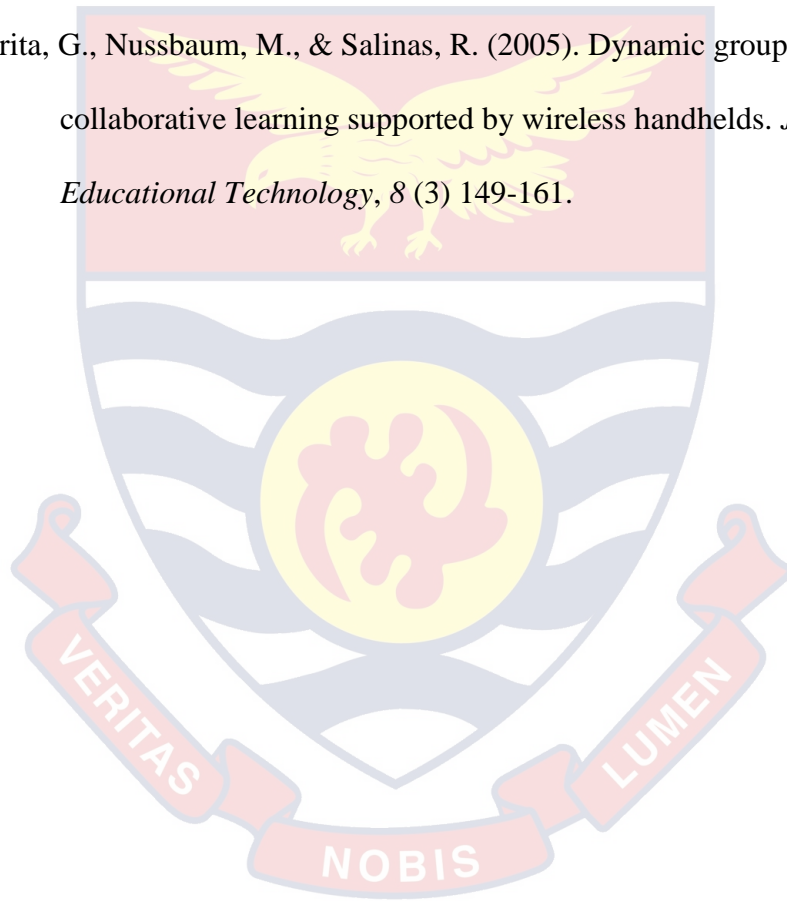
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APPENDICES

APPENDIX A

QUESTIONNAIRE FOR STUDENTS

The purpose of this study is to collect information about factors that contribute to the academic performance of undergraduate distance education students of University of Cape Coast. The questionnaire is made up of two sections labeled Sections A and B for you to complete. Your responses will be needed in understanding more about factors that contribute to the academic performance of undergraduate distance education students of University of Cape Coast. This questionnaire will take less than 20 minutes to complete. The information you disclose will be entirely confidential. Thank you for participating in this study.

SECTION A

Background Information

Instruction: Please, tick () in the boxes provided the response which corresponds with your background information

1. Age: 18-27 28-37 38-47 48-57
2. Gender: Male Female
3. Marital Status: Single Married Divorced
4. Level: 100 Level 200 Level 300 Level 400

SECTION B

PERCEIVED FACTORS

Instruction: Below is a table to be completed. It consists of statements about perceived school-related, tutor-related and student-related factors that contribute to academic of undergraduate distance education students of University of Cape Coast on a 4-point scale

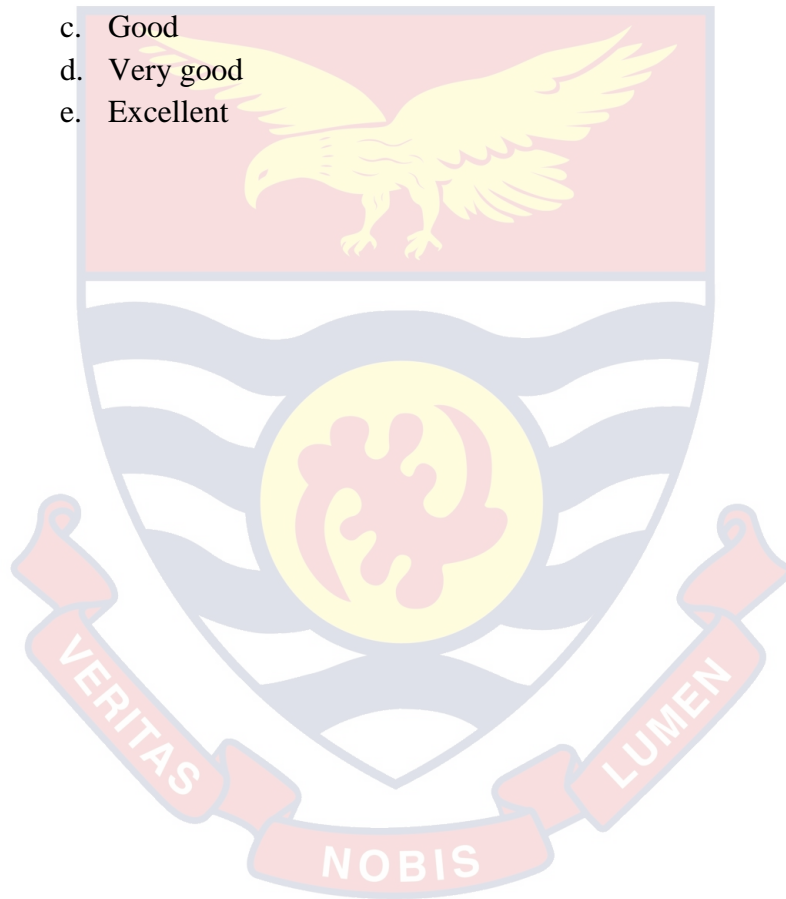
of 1; 2; 3; and 4. The figures stand for the following: 1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Most times

PERCEIVED SCHOOL-RELATED FACTORS					
	What are the perceived school-related factors that contribute to academic performance?	Never	Seldom	Sometimes	Most times
5.	There is provision of adequate instructional materials.				
6.	Class size is good for effective teaching and learning.				
7.	Teachers are qualified and experienced in what they teach.				
8.	Supervision is often made to check tutors while teaching in class.				
9.	There is library at the centre for us to study and make research.				
10.	Computer laboratory is provided at the centre for us to facilitate doing of assignments.				
11.	There is constant supply of electricity at the centre to facilitate teaching and learning.				
PERCEIVED TUTOR-RELATED FACTORS					
	What are the perceived tutor-related factors that contribute to academic performance?				
12.	Tutors prepare adequately before teaching.				
13.	Tutors report on time to teach the students.				
14.	Tutors are interested, passionate and motivated well to teach.				

15.	Tutors are effective and have varied teaching skills while teaching.				
16.	Tutors are qualified to handle the subjects they are teaching.				
17.	Tutors are able to complete their modules in time.				
18.	Tutors are able to give feedback to students timely.				
PERCEIVED STUDENT-RELATED FACTORS					
	What are the perceived student-related factors that contribute to academic performance?				
19.	Students are punctual and attend lectures frequently.				
20.	Students have time for learning.				
21.	Students understand lessons taught.				
22.	Students have positive attitude towards tutors.				
23.	Students complete modules in time.				
24.	Students complete assignments in time.				
25.	Students have high esteem and are motivated well.				
26.	Students are motivated to learn in groups.				
27.	Students are competent and have great study habits				

28. Please indicate other factors that contribute to your academic performance_____

1. How would you rate the quality of your academic performance?
 - a. Very poor
 - b. Below average
 - c. Average
 - d. Above Average
 - e. Excellent
2. How would you rate distance education programme of University of Cape Coast?
 - a. Poor
 - b. Fair
 - c. Good
 - d. Very good
 - e. Excellent



APPENDIX B

QUESTIONNAIRE FOR TUTORS

The purpose of this study is to collect information about factors that contribute to the academic performance of undergraduate distance education students of University of Cape Coast. The questionnaire is made up of two sections labeled Sections A and B for you to complete. Your responses will be needed in understanding more about factors that contribute to the academic performance of undergraduate distance education students of University of Education, Winneba. This questionnaire will take less than 20 minutes to complete. The information you disclose will be entirely confidential. Thank you for participating in this study.

SECTION A

Background Information

Instruction: Please, tick () in the boxes provided the response which corresponds with your background information

1. Gender Male Female
2. Marital Status Single Married Divorced
3. Level handled: Level 100 Level 200 Level 300 Level 400
4. Years of teaching: 1-5years 10years 11-15years 16 years and above
5. Academic Qualification: B'Ed M'Ed MPhil PhD
Professor

SECTION B

PERCEIVED FACTORS

Instruction: Below is a table to be completed. It consists of statements about perceived factors that contribute to academic of undergraduate distance students of

Cape Coast on a 4-point scale of 1; 2; 3; and 4. The figures stand for the following:

1 = Never, 2 = Seldom, 3 = some of the time, 4 = Most of the time.

SCHOOL-RELATED FACTORS					
		Never	Seldom	Sometimes	Most times
	What are the perceived school-related factors that contribute to academic performance?				
6.	There is provision of adequate instructional materials.				
7.	Class size is good for effective teaching and learning.				
8.	Teachers are qualified and experienced in what they teach.				
9.	Supervision is often made to check tutors while teaching in class.				
10.	There is library at the centre for us to study and make research.				
11.	Computer laboratory is provided at the centre for us to facilitate doing of assignments.				
12.	There is constant supply of electricity at the centre to facilitate teaching and learning.				
PERCEIVED TUTOR-RELATED FACTORS					
13.	What are the perceived tutor-related factors that contribute to academic performance?				
14.	Tutors prepare adequately before teaching.				
15.	Tutors report on time to teach the students.				
16.	Tutors are interested, passionate and motivated well to teach.				

17.	Tutors are effective and have varied teaching skills while teaching.				
18.	Tutors are qualified to handle the subjects they are teaching.				
19.	Tutors are able to complete their modules in time.				
20.	Tutors are able to give feedback to students timely.				
PERCEIVED STUDENT-RELATED FACTORS					
	What are the perceived student-related factors that contribute to academic performance?				
21.	Students are punctual and attend lectures frequently.				
22.	Students have time for learning.				
23.	Students understand lessons taught.				
24.	Students have positive attitude towards tutors.				
25.	Students complete modules in time.				
26.	Students complete assignments in time.				
27.	Students have high esteem and are motivated well.				
28.	Students are motivated to learn in groups.				
29.	Students are competent and have great study habits				

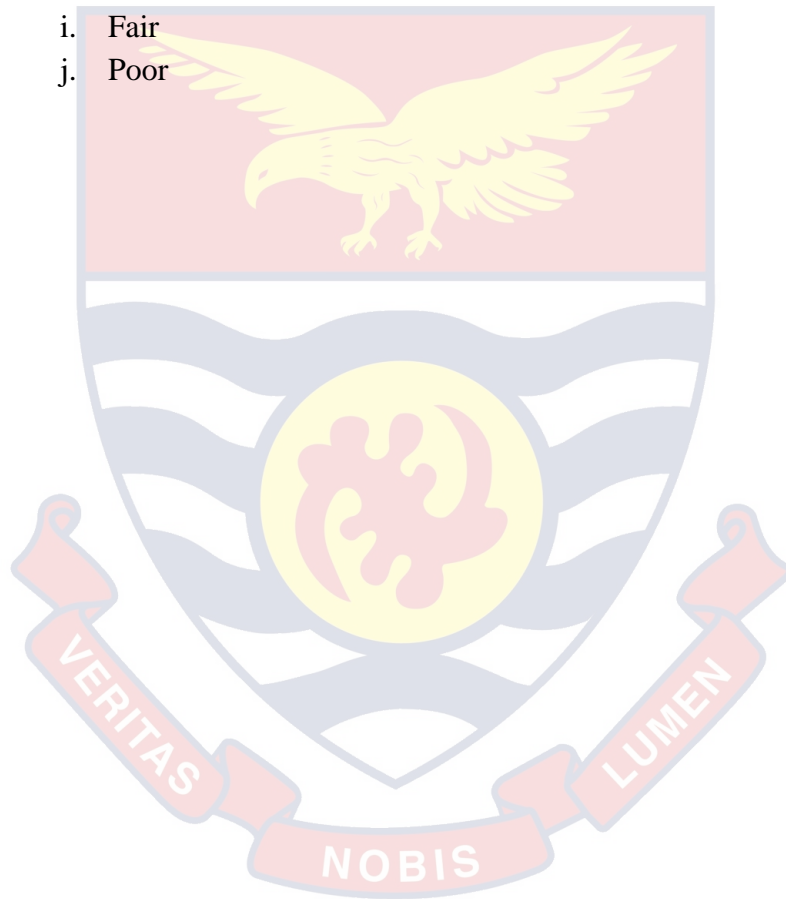
30. Please indicate other factors that contribute to your academic performance _____

31. How would you rate the quality of your teaching?

- f. Very poor
- g. Below average
- h. Average
- i. Above Average
- j. Excellent

32. How would you rate distance education programme of University of Cape Coast?

- f. Excellent
- g. Very Good
- h. Good
- i. Fair
- j. Poor



APPENDIX C

RELIABILITY OF INSTRUMENTS

Scale	Cronbach's Alpha	N of Items
Course Tutors' Questionnaire	.709	25
Students' Questionnaire	.826	24
Sub-scales for both Questionnaires		
Perceived school related factors	.723	7
Perceived tutors related factors	.743	7
Perceived students related factors	.761	8

Note: Initially the Cronbach Alpha was 0.665 with the inclusion of item 20 on the students' questionnaire. This is a good Cronbach alpha but improving upon the items to match the minimum standard Cronbach alpha is the best. The researcher improved upon the Cronbach alpha by deleting item 20 (because it was not contributing much to the research) and this shifted the Cronbach alpha to be .77. This is deemed reliable because other methodologists have suggested that the minimum alpha coefficient should be 0.7 (Pallant & Manual, 2010; Nunnally as cited in Sullivan, 1994).

APPENDIX D



UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION
SCHOOL OF EDUCATIONAL DEVELOPMENT AND OUTREACH
INSTITUTE FOR EDUCATIONAL PLANNING AND ADMINISTRATION

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University Post Office
Cape Coast
Ghana

Our Ref: IEPA/121/01

The Chairperson
2017.

6th August,

Institutional Review Board

UCC

Dear Sir,

REQUEST FOR ETHICAL CLEARANCE

IRENE ASIEDUA ANTWI (EO/HET/18/0006)

We write to introduce to you **Ms. Irene Asiedua Antwi** an Mphil. Second year student of the Institute for Educational Planning and Administration (IEPA) of the University of Cape Coast. Her registration number is **EO/HET/18/0006**.

We wish to inform you that the institute has approved **Ms. Antwi's** research proposal.

We would, therefore, be grateful if ethical clearance could be granted her to collect her data. Her research topic is: **"Factors That Contribute to the Academic Performance of Undergraduate Distance Education Students of University Of Cape Coast."**

Kindly find attached a copy of her proposal for your perusal.

Counting on your usual support.

Thank you

Yours Faithfully

A handwritten signature in blue ink, appearing to read 'Michael Amakyi'.

Dr. (Bro.) Michael Amakyi

DIRECTOR

APPENDIX E

Institute for Educational Planning & Administration
University of Cape Coast
Cape Coast
6th August, 2019

The Chairman
The Institutional Review Board
University of Cape Coast

Dear Sir

COVERING LETTER

I write to confirm that Irene Aseidua Antwi is an M.Phil student of IEPA of which I am one of her supervisors. Ms. Antwi is vigorously writing her thesis on the topic: **Factors that contribute to the academic performance of undergraduate distance education students of University of Cape Coast**

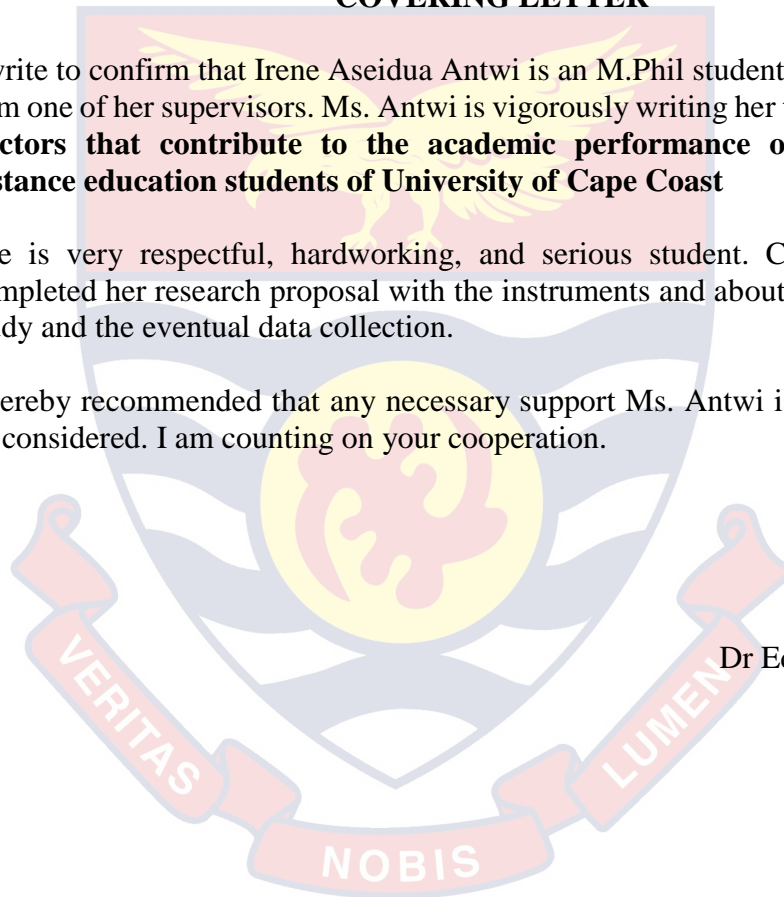
She is very respectful, hardworking, and serious student. Currently, she had completed her research proposal with the instruments and about to go for the pilot study and the eventual data collection.

I hereby recommended that any necessary support Ms. Antwi is demanding must be considered. I am counting on your cooperation.

Yours faithfully



Dr Edward Akomaning
0209166261



APPENDIX F

The Regression Model and How the Figures Relate To the Model

Model formula is:

$$Y=b_0+b_1X_1+b_2X_2+b_3X_3+e$$

Where:

Y= the predicted or expected value of the dependent variable

X1 to X3 = distinct independent or predator variables

b0 = the value of Y when all of the independent variables are equal to zero

b1 to b3 = estimated regression coefficients. (Each regression coefficient represents the change in Y relative to one unit change in the respective independent variable.)

e = error

Therefore:

Performance of students= 4.086-0.061 (School-related factors) - 0.051 (tutor-related factors) + 0.071 (Student-related factors) + e.

For every 1 unit of change (1 additional point) in school-related factors, we see a 6.1% reduction in performance of students. For every additional point in tutor-related factors we see a 5.1% reduction in performance of students. For every additional point of change in student-related factors, we see a 7.1% increase in performance.