UNIVERSITY OF CAPE COAST

THE ROLE OF ACADEMIC HISTORY ON THE ACADEMIC PERFORMANCE OF ACCOUNTING STUDENTS IN UNIVERSITIES IN GHANA

BY

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Thesis submitted to the Department of Business and Social Science Education of the Faculty of Humanities and Social Science Education, University of Cape Coast, in partial fulfilment of the requirements for the award of Master of Philosophy in Accounting Education

MARCH 2023

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……

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Supervisor's Declaration

I 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.

Supervisor's Signature…… Date……

Name: Professor Joseph. T. Kwarteng

ABSTRACT

This study investigated the assertions made by early researchers on the role prior knowledge in Accounting has on the academic performance of university students in Ghana. It was designed to make a comparison on the differences in academic performance between students with Accounting background prior to gaining admission to pursue Accounting degree and those without prior Accounting knowledge. All the respondents included in the sample were university students pursuing a Bachelor degree programme in Accounting in both Private and Public universities in Ghana. A total of 250 students were sampled. This was made of 130 who pursued Accounting programme and 120 students who did not pursue Accounting programme at the Senior High School. Correlation and regression analyses were carried out and the finding was that, the subjects pursued at the senior high school has a relationship with the academic performance of university accounting students. In addition to this, a T-test was performed to assess the difference in the performance of the students, and it was revealed that there was no significant difference between students with prior Accounting background and those without accounting knowledge. It was also revealed that the performance of students without Accounting background was as a result of other courses in the accounting programme but not accounting-related courses. It is therefore recommended that a balanced background should be provided to the students at the Senior High School level so that those students who would be admitted to pursue a bachelor degree in Accounting would have Accounting background prior to entering the university.

KEY WORDS

Academic History (Students' prior knowledge)

Academic Performance (CGPA)

Bachelor Accounting Degree

Prior Accounting knowledge

Senior High School

University

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DEDICATION

To my late Grandmother, Comfort Owusuah and my big brother, Amos Oware.

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CHAPTER ONE

INTRODUCTION

Excellence of any tertiary institution, particularly a university is determined by the calibre of graduates who come out of the institution periodically (Dillon & Smith, 2017). Efficient graduates are those described as having attained a higher class of degree and who are able to discharge their duties in line with set guidelines.

Tertiary institutions including universities admit students and prepare them by teaching them to attain a level that the job market needs, translating into building the economy of the country. Whilst this transition from senior high schools is endorsed by the accrediting board and the universities, a number of impediments besiege the students who have the desire to pursue accountancy as a profession. These among other things include the gender, age and difficulty in passing the subjects required for admission into the university (Papageorgiou & Carpenter, 2019)

Gaining admission into an institution of higher learning in Ghana has been an endemic problem among majority of students owing to situations ranging from lack of economic resources of families from which the students come to inadequate facilities of the universities (Abugre, 2018). Adding to the problem is the system of education in Ghana where though a lot of students from senior high schools which are rural-based with lack of teachers and learning facilities, are made to battle out with students from well-endowed schools in the urban areas, with the limited places in the universities on the basis of the West African senior school certificate examination (WASSCE) results (Atuahene & Owusu-Ansah, 2013). Arguably, the rural-based senior high schools lack textbooks and other resources worthy of making teaching

and learning appreciable and therefore the students from these schools in most cases are not well prepared for WASSCE (Bruce, 2018). The programmes run by the second cycle educational institutions include general science, visual arts, general arts, home economics and business programmes with accounting option and Secretarial option. With this system in place, universities are mandated to attract quality students with good background, admitted onto the various degree programmes and train them so they would be able to contribute to national development. This is done by admitting students to programmes for which the student has the basic knowledge on so that building on with a more advanced knowledge would be more reasonable and fruitful in shaping the student well to be fit for the job market upon graduation. It is therefore necessary to have a good look at the pre-university background of students seeking admission onto various degree programmes, especially Accounting in order to avoid any mis-match in the pre-university background and the university programmes students are being admitted to.

Background to the Study

Throughout the academic years of a student in any university, regardless of the type of the university and where it is located, the most important issue that confronts the student is the academic performance. For the purpose of this study, the academic performance is proxied by final cumulative grade point average which determines the type of degree certificate the student may graduate with (Ibrahim & Rusli, 2007). This is a common requirement of all students pursuing any degree programme for which Accounting is no exception. The success of a student in terms of how such student performed on the degree programme has an effect on whether the student may wish to pursue a higher degree or pursue a professional

programme (Gracia & Jenkins, 2003). Regarding the demand for Accounting graduates in the job market, the success of a student on a degree programme will also be a contributory factor for employment and may influence them to pursue higher level qualifications either in the university or embark on professional accountancy career (Bakre & Lauwo, 2016). Another factor accounting for the choice and performance of students is the perception that prospective students conceive that accounting programme is challenging, and that students on the programme hardly graduate with a good class of degree. This fear grips them to the extent that students who may perform better decide to pursue another degree which they consider less challenging whilst those already admitted allow this negative perception to rip them off the studying attitude to apply in order to excel on the programme. Against the background of this perception is the thought that accounting in general is a challenging discipline and it is therefore difficult to achieve the class of degree one desires.

In Ghana, though, the Ghana Tertiary Education Commission (GTEC) sets the general requirements for admission of applicants into universities, all universities, including the University of Cape Coast in Cape Coast and the SD Dombo University in Wa prescribe their specific entry requirements for admission in their handbooks (Aidoo-Buameh & Ayagre, 2013; Iddrisu, 2009). From the admission handbooks of the various universities, it is stated that the requirement for admission for their Bachelor of Commerce degree programme is a good passes of grade C6 or better in all the Core subjects and three of the subjects in the business programme at Senior high school (Iddrisu, 2009) . Some other universities, particularly the privately-owned, open their requirements for accounting degree programmes as three core subjects and any three passes in relevant elective subjects. It is therefore imperative that

students desiring to pursue a bachelor degree programme in accounting possess a good prior knowledge in the programme at the senior high school level.

Ghana operates a nine – year of basic education, three –year of senior high and a four-year tertiary or university education system with each level of the system or terminus graduating with Basic Education Certificate, West African Senior School Certificate and a bachelor degree certificate respectively (Quainoo, Quansah, Adams, & Opoku, 2020). After the second terminus, some students proceed to further their studies in various tertiary institutions.

A research reports that admitting students to pursue academic programmes based on vigorous admission standard has the ability to determine the students who could complete the intended programme (Yousafzai & Jamil, 2019). The admission requirements used by the universities in the admission of students are described by researchers as the mental state of the individual as well as the non-mental capacity of the individual which makes it possible for the individual to make logical reasoning (Mudavanhu & Zezekwa, 2011). These intellectual capabilities encompass the propensity of the individual to judge between two alternative courses of action, prior academic knowledge, past occurrences, age, gender and where the individual comes from.

In making the admission decisions, the university authorities incorporate the composition of the intellectual capabilities with the view to determining that the applicants who are selected have the tendency to fully complete the degree programme and attain a good performing grade at the end. Thus, those students who possess the requisite entry requirement with prior learning experience are able to make a good comprehension of the

content of what is presented at lectures and make good grades at the end. On the other hand, those without prior learning as part of their requisite entry qualification find it difficult to make good grades (Newman-Ford, Lloyd, & Thomas, 2009). For admission into any degree programme in Ghana, a student is supposed to possess three core subjects made of English Language, Mathematics and either Integrated Science or Social Studies depending on the background of the student and three elective subjects to satisfy the requirement for the intended programme. Coupled with the three core subjects and three elective subjects, the aggregate score of twenty-four or better in the West African Senior School Certificate Examination is required for admission. In addition to WASSCE results, some universities also accept the General Business Certificate Examination results, the Cambridge International General Certificate of Secondary Education (Begel, Garcia, & Wolfman) and Advanced level results as well as matured students who pass through the qualifying examination organised by the universities.

These requirements set out by the regulatory body and the universities are to ensure that the students in question possess the relevant prior knowledge which are necessary to move and strengthen the students' basic knowledge which could be built on in the degree programme applied for (Chakrabarty & Martin, 2018). The relevant prior knowledge of students is the history of their academic work done prior to entering universities to pursue the bachelor degree programmes (Owoh & Ogwa, 2019; Toth & Daniels, 2021). Satisfying this requirement is the surety that the student is prepared to pursue a degree programme successfully. Though the entry requirement for the accounting degree programme is varied, the study focuses on the students who enter the universities with the WASSCE results.

In relation to the students who desire to study accounting in the universities, they are supposed to have three passes in the elective subjects of the business programme at the senior high school including the three core subjects. These subjects are Financial Accounting, Cost Accounting, Business Management, Economics and Elective Mathematics. The groupings of the subjects differ from one school to another. Whilst some schools offer Financial Accounting, Cost Accounting, Business Management and Economics as the elective subjects others do Financial Accounting, Cost Accounting, Business management and Elective mathematics. However, some universities admit students to pursue the bachelor degree without having the relevant prior knowledge in accounting.

Research suggests that there exists a connection between a student's academic qualification used to apply for admission into a university degree programme and the performance of such student on the degree programme (Masasi, 2012). In view of this, the academic history of any prospective student wanting to pursue an accounting degree in a university must be looked at with great care in order not to produce graduates who would not just possess a strong academic knowledge, with a high class of degree but would not be recognised on the job market.

Statement of the Problem

Universities in Ghana admit students to pursue academic degree programmes using requirements of each programme as the basis of the courses pursued at the senior high school level. For instance, to be admitted onto physical and applied science programmes in a university in Ghana, a student is required to have a science background at the senior high school level, implying that such student should have followed a general science programme

and must have passes in physics, chemistry, biology and mathematics being elective subjects and passes in all the core subjects.

Making it more appropriate for admission is the fact that for a science-based programmes in the universities, inspite of the student passing all the core subjects the criteria set is that a good pass is required in integrated science. In effect, a student is adjudged to have satisfied the entry requirement on the basis of three passes in the elective science subjects and three passes in the core subjects including core mathematics, core English and integrated science as well as social studies though social studies is not mandatory for a science student. In the same way, students wanting to pursue non-science programmes are required to, in addition to the core subjects, possess a strong background in the respective areas at the senior high school level. However, most universities in Ghana and particularly the private universities admit students to pursue accounting degree programmes without considering the senior high school level programme pursued by such students, though some public universities do same (Adu-Gyamfi, Donkoh, & Addo, 2016). The accounting programme is both a numerate and principled-based programme and that there appears an imbalance for admitting students with no accounting background to pursue the degree programme. Admitting students without accounting background to pursue accounting degree is culminating in a reduction in enrolment in the accounting programme at the senior high level as well as poor performance in accounting courses in the universities accounting degree programmes (Ampofo & Osei-Owusu, 2015).

Some studies show that students with diverse pre-university background selected to pursue a degree programme perform differently in the accounting courses in the universities (Zandi & Shahabi, 2012). Thus,

students who have a good background in a discipline and admitted onto the appropriate academic degree programme outperform those without pre-university background in the discipline (Alfan & Othman, 2005; McPhail, 2015). Another school of thought posits that some students without the pre-university background perform better than those with the requisite background at the pre-tertiary level (Budd, 2017). However, another group of researchers suggest that entry requirements into a university programme do not affect academic performance in Accounting degree programmes (Aidoo-Buameh & Ayagre, 2013; Hepworth, Littlepage, & Hancock, 2018; Mutonga, 2011; Zezekwa & Mudavanhu, 2011). For the different positions above, most of them used the final grade point averages (FGPA) as the proxy for academic performance of the students without specifically considering the effect of accounting courses and non-accounting courses in the accounting degree programme on the FGPA (Nketiah-Amponsah, Asamoah, Allassani, & Aziale, 2017a; York, Gibson, & Rankin, 2015).

Whilst research looks at entry requirements and their impact on academic performance, the academic performance was considered as the general cumulative grade point average which encompasses both accounting and non-accounting courses. In some cases, only one accounting course was selected and looked at without considering other accounting courses (Abdullahi, 2014; Ibrahim & Usman, 2015). Thus, the researchers do not look at how the prior knowledge of the students explains the performance in the main accounting courses such as Financial Accounting, Cost and Management Accounting, Taxation, Financial management and Auditing holistically in the university. This is the gap in literature and which has necessitated this study, to analyse the extent to which academic background of accounting students in

the university influences the academic performance in the accounting courses of those students in the universities in Ghana.

Purpose of the Study

The General purpose of this research work was to examine the influence of pre-university background of students on the academic performance of such students in the universities in Ghana. The study seeks to find out whether it is worth admitting students with accounting background only or admit students with different backgrounds at Senior High School level to pursue accounting degree programmes in the universities in Ghana.

Research Objectives

In order to achieve the main purpose of the study, the following specific purposes have been set out.

1. Find out whether academic history of accounting students influences their academic performances in universities.
2. To find out whether the performances in accounting courses differ between students with accounting background and that of students without accounting background in the universities in Ghana.
3. To Analyse the difference between the general performances of accounting students with accounting background and those without accounting background in the universities in Ghana.
4. To examine how students of accounting perceive the discipline at the tertiary level.

Research Hypothesis

On the basis of the empirical literature outlined in the background, the statement of the problem and the research objectives the following assumptions have been made to guide the study.

H_{1O}.: Academic history of accounting students does not significantly influence their academic performances

H_{11}: Academic history of accounting students significantly influences their academic performances

H_{20}: Academic performances in accounting courses in the universities do not vary between students with prior accounting knowledge and those without prior accounting knowledge.

H_{21}: Academic performances in accounting in the universities vary between students with prior accounting knowledge and those without prior accounting knowledge.

H_{3O} : There is no difference between the general performances of Accounting students with prior accounting background and those without accounting background in Ghana

H_{31} : There is no difference between the general performances of Accounting students with prior accounting background and those without accounting background in Ghana

H_{40}: Accounting students in general do not perceive accounting degree programme as challenging.

H_{41} : Accounting students in general perceive accounting degree programme as very challenging.

Significance of the Study

The study can be viewed to be beneficial to five main stakeholders; the student, the school authorities, the external policy formulators such as the Ghana Tertiary Education Council and the ministry of education, the teachers in the senior high schools and lecturers of accounting courses in the universities as well its contribution to existing knowledge.

Establishing the role that the background of a student plays in the academic performance of students would enable those who by virtue of the programme pursued at the senior high school, would not apply for accounting degree programme now be willing to pursue the accounting programme with a positive expectation of performing creditably.

When making a choice of programme in a pool of the numerous programmes available, knowing how the academic background in accounting influences the academic performance in the university would move such students to consider other programmes they would perform better. Thus, per this study, if academic performance of a student a specific background is not good for a student without pre-university accounting background such students may decide to opt for any other programme available, for which the performance would be better.

To the school authorities, this work would inform them of how important the background of selected students is in terms of their academic performance. It would be a guide for the officers responsible for admission and administrators when making decisions as to the suitability of students to be admitted onto accounting programmes. Even if a student does not have an accounting background prior to admission, the information this study will provide would be an eye opener as to whether or not such student should be granted admission or not.

To the Accounting teachers and lecturers, the study would be of great assistance to them. Being aware of students with different backgrounds and their ability to succeed on the accounting degree programme would move them to strategize their teaching approaches so as to direct their instructions to serve the needs of their students

The study would also be important to the policy makers when accrediting programmes and ensuring that appropriate students are admitted onto university programmes. Developing programmes at the Senior High Level would necessitate taking into consideration the need for the student at senior high school to have the basic knowledge about the interested programme that the student would want to pursue at the tertiary level after completion of Senior High School consult

Lastly, it would be an added voice in research, most importantly in West Africa where studies on the issue of entry requirements are based on final grade point averages. This study centres on how academic background of the students and how they contribute to university students' performance in accounting courses. It would unearth the gaps in the field of accounting and would be a research consult for further studies in the field.

Delimitation of the Study

This study begun in 2021 with the data related to the year of reference, is limited to public and private university accounting students from 2015 to 2019 academic years. The universities involved in the study were those found in Accra. This is justified by the fact that all the types of universities found in other parts of the country which run accounting degree programmes at bachelor degree level are also found in Accra or have campuses in Accra and run the accounting degree programmes as well. Additionally, there are many universities in Accra than all the other places in Ghana and therefore choosing Accra is considered representative of all the other places. The selection of the university programme and the students involved is informed by the nature of the different pre-tertiary requirements accepted by the universities for admitting students for their accounting programmes. With this in view, the

courses the study focused on are financial accounting, financial reporting, cost and management accounting, financial management, auditing and taxation.

Limitations of the Study

This study is focused on accounting students only and therefore the results cannot be used to explain a phenomenon on another discipline. In addition to this, the analysis was done on specific courses in the concerned universities and the general performance of the accounting students in the universities. It is therefore expected that any other analysis constructed using the entry requirements for general performance of students in disciplines other Accounting may not yield the same results as contained in this study.

The study adopted the quantitative approach in performing the analysis even though it could also be done qualitatively. Therefore, if a qualitative design is used in any other study on the subject matter, the same conclusion may not be reached.

The tool used to determine the influence that academic history of students has on the performance of university accounting students was multiple regression. This is a deterministic model, and can be used to generalize and predict the academic performance of students given the academic history of university accounting students. Any other model other than being deterministic for the same purpose would therefore not result in the same conclusion as contained in this study.

Definition of Terms

Terms are used in research in reference to different meanings other than what they are originally stand for. In this study the following terms used which might connote different meanings have been explained to fit the context within which they are being used. These terms in the study include Entry

requirements academic history, accounting background and Non-accounting background, General performance and academic performance.

1. Entry requirements /academic history is defined as the qualification needed in order to apply to read a university programme.
2. Business background is the requisite combination of subjects read at pre-tertiary level (Senior High School). According to the Ghana Education Service the business Accounting programme at the senior high level is made up of three core subjects, namely Cost accounting, Business management and Financial accounting, and a selection of either Economics or elective mathematics (Adu-Gyamfi et al., 2016). In the event where the student has a foreign background, the business programme include Accounting, Business studies and Economics at Advanced level and five subjects at International General Certificate of Secondary Education (Begel et al.) including Accounting, Business Studies, Economics, English language and Mathematics and one science subject (Karuensatit, 2019; Zanu, 2019).
3. Non-Accounting background students are those who have the requisite passes but in different programmes such as General Science, General Arts, Home economics, Agricultural science and Visual arts.
4. General performance is defined as the Final grade point average (FGPA) of the various students involved in the completion of the research questionnaire.
5. Accounting courses in the bachelor degree programmes of the universities include Financial accounting, Public sector Accounting, Financial reporting, Management and Cost Accounting, Financial management, Auditing and Taxation.

Organisation of the Study

This study is structured in five chapters. This chapter has dealt with the introduction of the study which presented the problem being studied and the reason for undertaking the study. It has also pointed out the statement of the problem and the gap within which it lies in academic literature.

The purpose of the study, the research objectives, research questions and hypothesis have been expounded in this chapter as well as the significance and the delimitations and the limitations. The variables used in the study have been explained in this chapter and terms used in the study fully defined.

Chapter two was used to review relevant existing literature which included the theoretical and conceptual frameworks. It explains in detail the variables in the study and aligns them to their relevance in the study. The chapter also reviewed empirical literature which gave account of what the researchers covered and through these the research gap of this study was expounded.

The third chapter was devoted to the methodology of the study. It accounted for the design adopted for the study which served as the guide for the whole research. It took into consideration the data collection tools and the procedure used in gathering the data for analysis as well as the tools and procedure applied in the analysis of the data.

Chapter four is focused on the analysis carried out in the study. It is the main base for which the findings were made and the part on which the summary and conclusion explained in chapter five depends. It shows how the data were analysed and how the tools mentioned in chapter three were carried out.

Chapter five was used for the summary and conclusions arrived at in the study. In addition, the chapter also carried in it the recommendations and the gaps still left to be filled by any future research.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter looked at the review of work in relation to the current study, identifying the main tenets of the topic on which the work was based and providing a roadmap for identifying the research gap which this study sought to close. The chapter is structured into three sub-sections, namely; the theoretical framework, the conceptual framework and the empirical review.

The conceptual framework reviewed the various constructs intended to be measured by the researcher and which provided the yardstick for the provision of conclusions made in the study. It also unveiled the necessary variables used in the work, provided clear explanation of each of them and expounded on their importance in the study.

The empirical review brought to the fore the previous studies on similar subject and the conclusions made by such studies. This set the platform for the nature of conclusions likely to be made and the extent to which such conclusion harmonises or contradicts the existing conclusions made by existing researchers. From the empirical review, the gap this work sought to close became clear and that permitted the researcher to justifiably sailed through the process to complete the work.

Theoretical Framework

The theoretical framework of this study made a good examination into the major theories on the learning process, explored on the transition of accounting students from pre-university level to the university level and accentuated the relationship between the prior knowledge possessed by such students and their academic performance in the university. The theories

comprise the behaviourist and the cognitive schools of thought. For the two strands theory, the classical and the operant conditions theory have been adopted from the bahaviourist strand. On the part of the cognitive theory, Elaboration, Piagetian and the Relevance theories were used for the explanation of the relevance of prior knowledge in a discipline in relation to any future endeavour.

Behaviourist Theories

Among the orthodox philosophies of learning, behaviourism is regarded as one of the earliest forms of learning as well as the dominating school of thought in the learning environment (Harold & Corcoran, 2013; Khan et al., 2017; Nalliah & Idris, 2014). This theory projects that responses stem from the exhibition of stimulus. Thus, any behaviour results from inducements of objects. Despite the countless criticisms which have stood against the behaviourist school of thought the position of the disciples of behaviourism is that for anything to happen something must have caused it and strengthened to get firmly established and used as the basis for knowledge meant to be thought to learners (Ertmer & Newby, 2013; Hickey, 2014). Thus, learning takes place when the individual displays a change in behaviour in the learning process (Kasonde Ng'andu, Haambokoma, & Tomaida, 2013). Among the theories of the behaviourists, two intriguing of them being classical conditioning and the operant conditioning strands have been expounded in support of this study.

The classical conditioning theory as a behaviourist theory is a grounded philosophy propounded through a study of the salivation of dogs upon the occurrence of stimuli is being used to explain the nature of humans and how they make decisions over alternative courses of actions they face

every day (Pavlov, 1906). The theory describes the extent to which an activity becomes a learned behaviour using the combination of the resultant of an activity which occurs neutrally and the one which exerts an effort on the neutral element. The originator calls the activity which when left alone produced no response as a conditioned stimulus, free from any manipulation, whereas the one that is enforced on the conditioned stimulus to produce a result is described as unconditioned stimulus. The theory further concludes that when the conditioned stimulus and the unconditioned stimulus are paired, an unconditioned response is elicited (Shaffer, 2008). This behaviourist thought which is represented by the dog which responds to stimuli in three phases, emphasising the significance of any prior knowledge in solving current problems is displayed on figure 1 below.

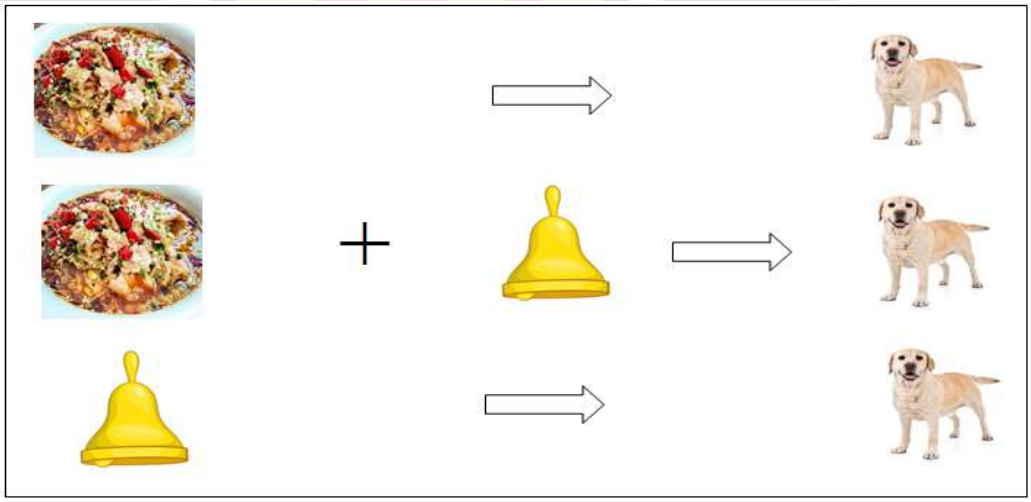

Figure 1: Classical Conditioning (Ivan Pavlov: 1849-1936)

According to the theory, the dog in the experiment salivates when food is ready to be served. Extending the theory, Pavlov added the ringing of a bell, described as the stimulus to signify the readiness of the food and upon that the dog salivates, christened as the unconditioned response. This was repeated many times to the extent that the dog became conditioned to the

sound of the bell that each time it rang, it salivates. Thus, unconditioned responses are produced unwillingly by unconditioned stimulus naturally. Expounding on the experiment, John B. Watson (1878-1958) opined that the individual's learned ability is behavioural and overt instead of any cognitive ability. Changes in behaviour is therefore said to have been the result from stimulus-response linkage (Zhou & Brown, 2015).

By deduction, previous and repetitive relevant knowledge is ideal for the individual to perform well academically and can be applied to the selection of students to pursue an accounting degree programme in any university. That is, students with business and particularly, pre-university accounting background, which is considered as the repetitive stimulus, would perform better than those without any accounting background.

The second strand of the behaviourist theory which seeks to explain the relevance of the prior knowledge is the operant conditioning. This is credited to B.F Skinner, and it is a learning theory that emanates from the Thorndike's (1898) law of effect which explains that behaviour is outcome-based and that a behaviour is repeated if the outcome is positive (Walters, 2020). However, if the consequence is negative, a cessation of the behaviour occurs. Skinner added the term 'reinforcement' to the law and adduced it to the activities in the learning environment. Three reactions, termed as 'operants' were made present in the theory and the propounder then asserts that for any possible behavioural change an operant must avail itself. Since changes in behaviour could either be neutral, increase or decrease, the theory made an account of neutral operants, reinforced operants and the punishers. Whilst neutral operants are reactions which do not make any change in behaviours and punishers being the reactions which work to reduce the

likelihood of a behaviour being repeated, a reinforced operant is a reaction from a situation that has the ability to increase the repetition of a behaviour. These are popularized in the theory as the tenets and Skinner concluded that a behavioural change is the consequence of any possible operant, depending on the expected outcome. The theory came about through the study of a hungry rat placed in a 'Skinner box' and observing the behavioural changes that could occur on account of making food available to it over time. This wandering rat in the box identifies a lever and realises that when it presses it food comes. Over time it goes straight to the lever whenever it is hangry. This is shown on the figure 2 below.

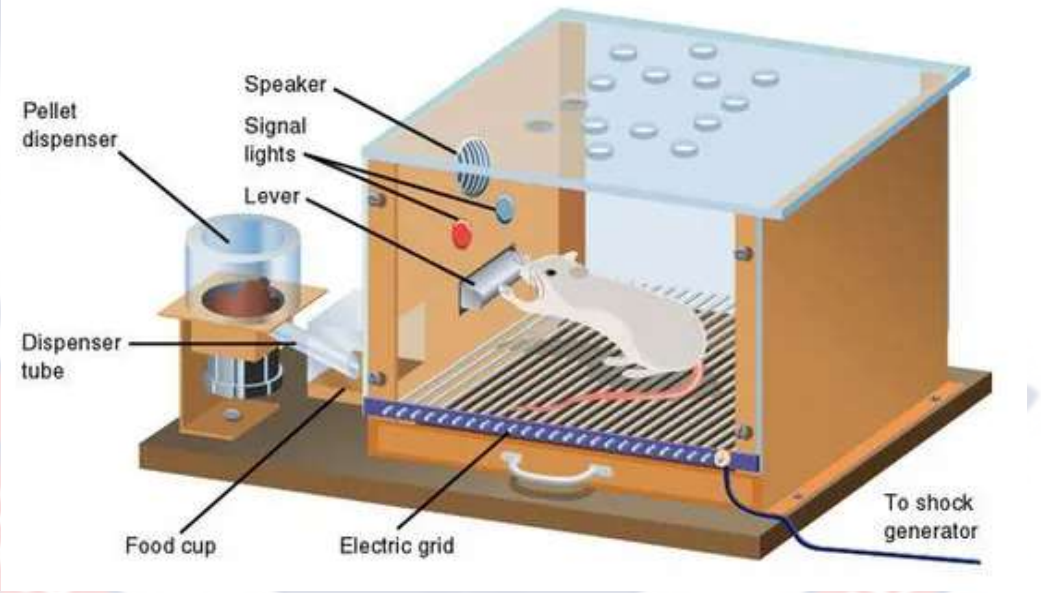

Figure 2: Operant Conditioning (B. F. Skinner: 1904-1990)

The rat wanders through the box due to hunger and by coincidence it presses the lever, food rolls from the dispenser into the box for the rat to eat. Identifying that upon pressing the lever food becomes available the rat does this anytime it is hungry. Thus, the reward from the pressing of the lever stimulates the operant behaviour. Where there is no positive or negative reward out of the pressing of the lever, there would be no behavioural change and therefore a neutral operant occurs. Conversely, if by pressing the lever a

punishment is experienced the rat would no longer press the lever and that is described as the occurrence of a punished operant.

This confirms the conclusion of the study made by Skinner (1971) that, future results of an activity which is function of behaviour is influenced by the reward of actions that are elicited from previous period. The application of this theory in this study is that the performance of an accounting student on a university programme depends on how the individual perceives the reward that awaits such individual after the completion and not necessarily the pre-university knowledge in accounting or what the student is expected to have pursued at the senior high school level.

The Cognitive Theories

According to the theories, the rational nature of man makes it possible for choosing between various options in such a manner that the selected option would present the best and most beneficial to them (Santrock, 2004). Rationality is explained as being a product of the cognitive part of human endeavour and is responsible for reasonability of the thoughts of man.

The theories expound that thinking and learning goes through a process by assimilating and memorizing the learnt information and reproducing it at an appropriate time so that it would be used to solve problems (Huitt, 2012). Implied in this is that what is learnt previously in a subject matter is very relevant in the decision making process presently and the future as well (Sweller, 2015). Thus, for knowledge, understanding and progress in human endeavour to occur, past information which has been stored in the brain is of an essence (Çeliköz, Erişen, & Şahin, 2016). Using the theory to explain the performance of accounting students in the university, it is necessary to have learnt the subject at the level preceding the tertiary in order to perform well

academically in the university. Students without accounting or business background may therefore be found as not performing creditably in the accounting degree programme. Three of the cognitive theories which explain the relevance of prior knowledge in any human endeavour are the Elaboration model, the Piagetian school of thought and the Relevance Learning philosophy. To ensure that learning process assumes its optimum level, the elaboration theory which was credited to Reigeluth (2018), posits that the instructional content should be structured by way of the difficulty of the entire load. The beginning of the lesson is made to fit into the less challenging stage of the load, followed by the next level which assumes a little challenging than the first level. This continuous sequentially until the total lesson is completed and at the completion level the entire instruction with all its levels of difficulties would have been completed and therefore the learner would be able to exhibit excellence cognitively, affectively and demonstrate the psychomotor domain on the topic taught (C. M. Reigeluth, 2018). According to the model, a whole teaching block, being the major entire knowledge that is intended to be taught to the learner in order for the learner to exhibit proficiency is sequentially structured in line with the content of the instructional material. The main tenets of the content of the material to be used in the teaching process is planned in accordance with the recommended sequences, namely, the topical sequencing and the spiral sequencing as illustrated on figure 3 below.

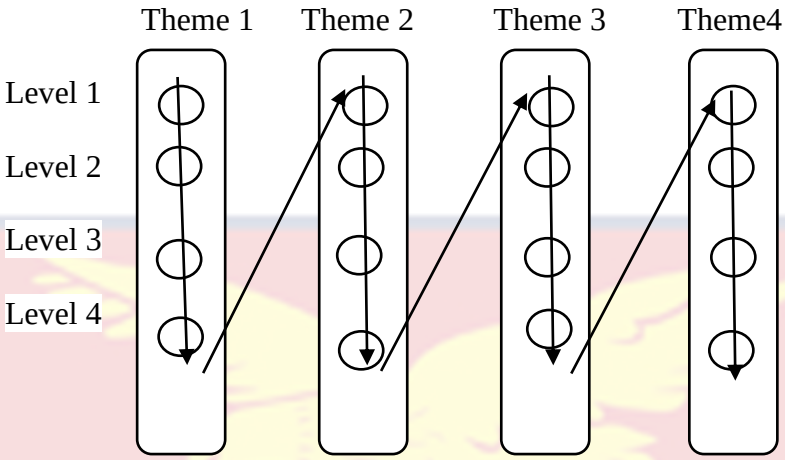

Figure 3: The topical sequence of the elaboration theory

The diagram above explains the sequencing of the content of an instructional material. The ovals in each topic represents the level of difficulty or broadness of the content arranged from the first level, being the less difficult of the material to level four being the most difficult level of the material. Topics are the arrangement of the subject or material from year one to year five such that each material goes through instruction from year one.

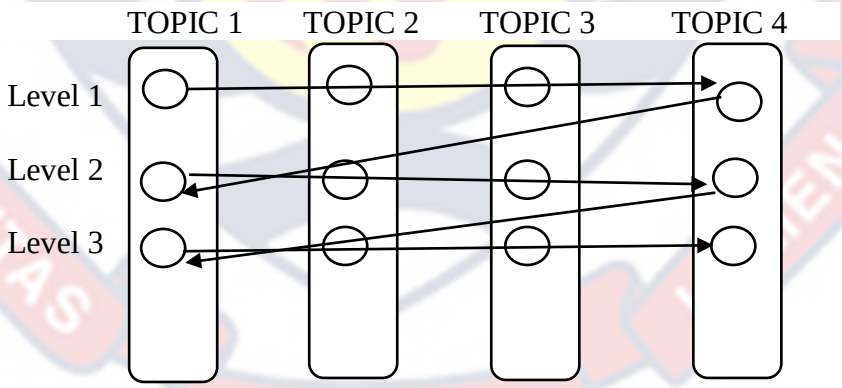

Figure 4: The spiral sequence of the elaboration theory

The spiral sequence of the theory suggests that all less-challenging phases of a discipline are considered at level one and as time passes the next phase of the discipline are all also considered before the individual moves into studying the most challenging phase. This implies that a more challenging

level is considered after a less challenging level is fully taught. This continues until the entire content of the material is delivered to the learner. According to the theory, this sequential procedure of arranging the content of a material helps the learner shapes the cognitive ability to develop systematically and permits easy and consistent assimilation of any future material over time (C. M. Reigeluth, 2018).

Referenced to the elaboration theory in both the topical and the spiral models, the need to acquire a previous knowledge of a subject is necessary for the individual to progress onto managing a more challenging task and therefore perform better in the future. Thus, in relation to this study, students on accounting degree programme at bachelor level are recommended, by this theory that, they are required to have a stock of prior knowledge, particularly in accounting at the pre-tertiary level in order to have a firm grip on the discipline at the tertiary level. It is also necessary for the building of a formidable retentive cognition which serves as the cornerstone for excellent performance of the student on the accounting degree programme (Reigeluth & Kim, 1993; Reigeluth, 2018).

The second of the cognitive theory used in this study as a guide was Credited to Piaget (1936). The Piagetian theory concerns the development of the cognitive prowess of man. The basis for this theory was to describe the process of maturity of children into adulthood and how they use elements in the environment to construct meanings of happenings of everyday life which they confront.

Biologically, the theory elucidates how children are able to appreciate the quantitative values of problems they face and come out with the appropriate solutions to them and the explanations they provide in occasions

when their responses to such problems which rationality are incorrect. Being the first to consider how human thinking ability develops, the theory theorizes that the nature of such explanations from children is the boundary between a child and an adult in terms of how they reason and expounds that the development of the cognitive ability goes through three major constituents, namely, the 'schemas', 'the processes of adaptation' and the 'stages of cognitive development'(McLeod, 2018). Schemas are described as the mental capacity that permits the individual to make a meaning of his or her worldview. This part of human presumably operates to allow the recognition and usage of relevant previous knowledge about a specific material and fashions out present circumstance as well as using the previous and the current knowledge to make a formidable disposition for the future. Thus, the schemas function as an intellectual platform which prompts the learner the manner in which any external force approaching the learner must be responded to (Wadsworth Jr, 2004). This cognitive indicator develops as the learner grows from infancy to a matured person and works well in the 'process of adaptation' which has the 'equilibrium' and 'accommodation', working through 'assimilation', depending on the nature of the external information the individual encounters (Piaget, 1936, 1952). This is found on the figure 5 below.

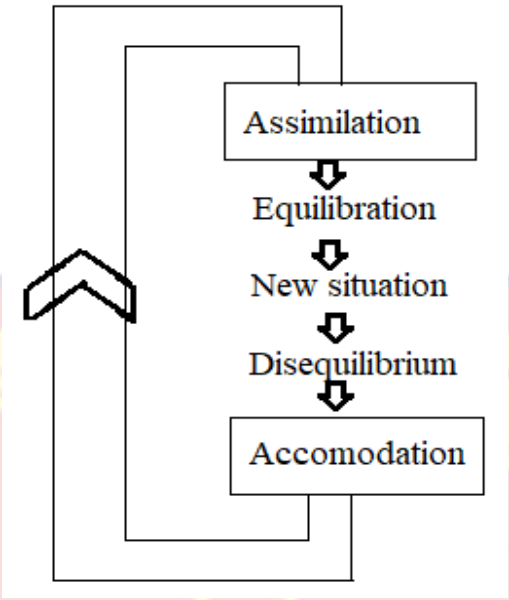

Figure 5: The Piagetian Theory

The individual cognitive ability is assumed to be in equilibrium when upon assimilating the information, there is a harmonization between the innate cognitive prowess and the external information received and that the individual is able to explain the meaning of such information. If on the other hand the schema finds it difficult explaining the new information, a disequilibrium occurs and the cognitive prowess accommodates it until it is able to make a meaning of such information (Barrouillet, 2015; Kazi & Galanaki, 2019; Piaget, 1983).

According to Piaget, the growth of the cognitive system of the individual goes through a four-stage system, namely the 'sensorimotor stage, the Preoperational stage, Concrete operational stage and the Formal operation stage' and form the basis for the adaptation process (Piaget, 1983). The first stage is characterised by the individual possessing the elementary construction of the world around and when such individual makes the effort to comprehend issues as they occur. In the preoperational stage, the individual strives not just to understand issues but also moves into assign reasons to such occurrences

through deep and rational thinking whilst the individual grows the cognitive ability into using the proceeds from the former stage to reasoning and finding avenues to practice it. In the last stage of the cognitive development, the individual is now able to reason logically to provide answers and solution to problems which might arisen from the concrete operational stage thoughts. Thus, the student's transition from pre tertiary level to the tertiary level occurs between the level of practicing occurrences and that of providing answers to problems. By implication, the student must have the cognitive knowledge of the discipline so that such individual would be able to confront the more challenging issues in the discipline (Lazarus & Thomas, 2010).

In application to the research phenomenon, when the individual has a prior accounting knowledge which is in consonants with the new information students encounter in their university studies, they are able to equilibrate and perform better. However, when students' background contradicts with the new courses in the university, implying that they do not have a prior accounting or business background, such students would have to accommodate such new information until such a time that the existing knowledge could adapt to the situation (Scardamalia & Bereiter, 2010). If they are not able to accommodate the new content of the courses in accounting, assimilation becomes a challenge and in such a case performance of such students becomes abysmal.

However, it is asserted that the development of the cognitive structure of the individual cannot only be a function of the occurrences of new information and the maturity process, but also that the learner and the instructor must both team together to make it happen. The instructor's active involvement in the process permits the learner to explore new information and

puts the information found into test before ultimate growth can occur. Therefore, the success of the student from the pre-tertiary to tertiary is not guaranteed solely by the prior-knowledge of the student.

The last philosophy of the cognitive theory was the relevance theory. The originators of the theory of relevance of learning, Sperber, Cara and Girotto (1995) developed their position in terms of the relevance of information that the opinions of any individual and how such individual analyses any current information accounts for which information would be regarded as relevant and which one would be irrelevant in different circumstances (Mercier, 2017; Sperber, Cara, & Girotto, 1995). That is, if on the reception of an external information the existing state of the cognition changes and the old or existing one loses its effectiveness, giving way for the recognition of the newly formed material then the external information is considered relevant and therefore it is stored in the mental faculty (Allott, 2013; B. Clark, 2016).

According to the researchers, the processing of any new material is done based on the existing thoughts and inferences as well as the time it will take for the processing of the information for the purpose of permitting comprehension and paving way for a decision to be made. Using a simple scenario of an individual making a journey and inquiring when the vehicle would be ready, they posited that the less the time used cognitively to comprehend and arrive at a conclusion the higher the relevance of the external information submitted for processing. On the contrary, the theory advances that if it takes so much time to understand and process the external information submitted to the mental stage of the individual then the information would be regarded as irrelevant (Sperber et al., 1995). In such a

case, it may not even be possible to arrive at a definite conclusion so as to make a decision (Clark, 2013; Tooby & Cosmides, 1992, 2016). The understanding of the relevance theory is that for the processing of any new material to be possible, there should be an existence of some thoughts which would have to be consistent with the new material. In that instance the effort of the mental faculty to process the new material would be less and so comprehension and performance would be enhanced. However, the theory suggests that any inconsistent new or external material with the existing beliefs of the individual would not permit performance.

This implies that students of accountancy in the university should necessarily have a prior knowledge in accounting so that the university-level accounting material to be presented in the form of lectures would be consistent with the existing knowledge. It is only on this grounds that performance would be enhanced. Admitting a student without prior accounting knowledge to pursue accounting degree programme would only result in abysmal performance.

The Conceptual Framework

Introduction

It has become extremely necessary for researchers to concentrate much on how the knowledge in accounting and its related subjects at the pre-university level affect the performance of university students at the bachelor degree level. In line with the cognitive process advocated by the constructivism school of thought, the individual is able to explain any information using the existing knowledge available.

It stands tall to say that in the event of any new information the individual would be able to apply what is already known as the basis to deduce

its meaning and to direct attention to where such information would be relevant to the individual and society as a whole (Kwan & Wong, 2015). A lot of research conducted on the subject matter make the acknowledgement that what is already known in a discipline of a student has a great impact of the performance of such student (Hailikari, 2010; Hailikari, Tuononen, & Parpala, 2018). There exists a relationship between the various types and stages of learning and what is already known by students such that the combination of the two opens doors for the student to develop a knowledge which is quite different from the already existing knowledge and the one received from any instructional activity (Asikainen, Hailikari, & Mattsson, 2018). In addition to changing their opinions about the environment in which learning takes place, prior knowledge also fashions out the way students learn (Binder et al., 2019; Phu, 2019). This presupposes that prior knowledge of any subject is a function of the extent to which students are able to do analytical thinking and come out with good and detailed new knowledge which is highly required in institutions of higher learning (Cuthbert, 2005; Duff & McKinstry, 2007). Thus, for any degree programme, if the students has no or little knowledge before embarking on the programme, the possibility of such student dropping out or completing with a low class of degree would be very high (McGivney*, 2004; Sosu & Pheunpha, 2019).

Though the assessment of one's background knowledge on a discipline does not always contribute to the academic achievement of the individual, it is part of the process of selecting students for some programmes and that there occurs difficulties in the area of what should be evaluated and how the evaluation should be done (Neumann, Parry, & Becher, 2002). If the value on what is already known is considered deeply, it will offer the chance to improve

the strategies used in learning, craft educational materials for instruction as well as providing a platform for choosing learners for a specific programme of learning. Developing a platform for assessing the suitability of applicants for degree programmes and the role that previous knowledge of students in the pre-university courses and programmes play in the assessment basis of this study with the key objective of accentuating the need for relevant previous knowledge and how it contributes to academic performance of students at the terminal level.

The devotion of this part of the study is to examine in detail the extent to which prior knowledge of various types are capable of making students perform in their university academic programmes. Ideally, it lays emphasis on the term prior knowledge as a concept and explain the necessary tenets. Specifically, it also expounds on the various components or variables which form part of the prior knowledge in accounting programme at the pre-university level which are considered necessary for continuing study of accounting degree programme in the university. The framework on figure 6 below shows the interrelatedness of the various backgrounds and how they converge to produce academic results.

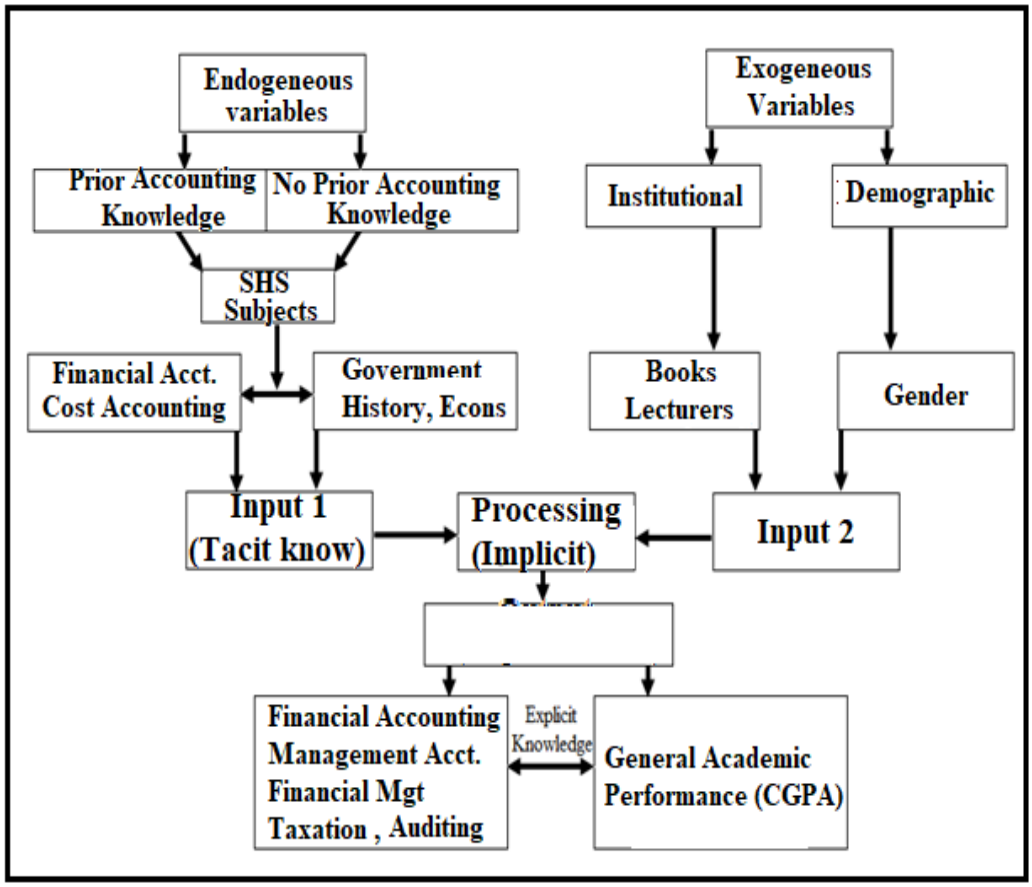

Figure 6: The conceptual framework by Author

The framework of academic background of university and how it relates to academic performance in the university advances the linkages between the dependent variables and the independent variables, and such linkages are explained in the sessions below.

The Concept of Prior Knowledge

Knowledge is a common term across several facets of life. It is the hallmark of all that is done in any endeavour. A prior knowledge is described as the basis for undertaking any present activity and for this reason, this part of the chapter was devoted to discussing the term 'prior knowledge'. The study is centred on prior knowledge and its impact on academic performance and therefore it is necessary to consider what constitute knowledge so that prior knowledge can truly be described. It is therefore important to look at the

different forms of knowledge and analyse how they come about. The different forms in which the concept 'knowledge' is established provide explicit consequences in studies in education.

Knowledge

A number of writers have focused on giving a precise definition to the term knowledge yet no precise explanation has successfully been surfaced because knowledge appears to have different forms and its being used in different contexts (Keddie, 2019; Lehrer, 2018; Rumelhart & Ortony, 2017). This means that the term is being used in many research work across various disciplines and it is on this grounds that the term becomes virtually common to mention when talking about the work of the cognitive aspect of the individual engaged in any learning activity (Alexander, Schallert, & Reynolds, 2009).

A classical explanation to what constitutes knowledge was given by Ayer and Marić (1956) who held that knowledge is linked to a statement of fact. Research suggests that knowledge is likened to a statement that is purported to be factual without any trait of doubt of any kind that could emerge from any intriguing source, be it personal or from an abstract point (Ayer and Marić, 1956). For a fact to be knowledge, it must meet some two conditions; the necessary conditions and the sufficient conditions. The necessary condition is that, the fact which is described as knowledge must come from a common true source. Thus, the statement pronounced is supposed to be true from the point of view of the one who made it and the one to who the statement was made (Ayer & Marić, 1956).

The sufficient condition for a statement to be qualified as knowledge is that, it must be a factual statement and be a whole truth in all respect. That means the statement must be held by all third parties that, they are in fact sure

of the existence of such facts. It follows from the above, that knowledge is a statement which is factual and which has been made by one person and holistically accepted by other people as true. Thus, it starts from one person, goes through diagnoses in other people who would agree to it and then knowledge emerges.

Contemporarily, Bender & Fish (2000) posited that "Knowledge originates in the head of an individual (the mental state of having ideas, facts, concepts, data and techniques, as recorded in an individual's memory) and builds on information that is transformed and enriched by personal experience, beliefs and values with decision and action-relevant meaning". This means that knowledge is a functional element which permits facts to be known by the individual using the mind and which serves as the machinery for the individual to make daily decision and act upon what has been decided (Bender & Fish, 2000; Tooby, Cosmides, & Price, 2006).

Source of Knowledge

Though knowledge occurs among groups, individuals and societies, it emanates from external of such units. This means that knowledge can be made available to the units of people from external sources. When any information turns out to be knowledge to the individual, it is kept in the cognitive part of the individual and this is distributed to other individuals and societies (Muhammed & Zaim, 2020; Slors, 2019, 2020).

Classes of Knowledge

There are a countless number of research work on knowledge with almost all making attempt at classifying the term 'knowledge', culminating in a lot of classifications depending on the direction of each study and the

philosophy of the researcher (Flores, 2019; Maton, 2013; Matos & Rovere, 2020). Though differences in classification of knowledge exist in these studies they can all be grouped under tacit knowledge, implicit knowledge and explicit knowledge (Anand & Singh, 2011; Asbari, Wijayanti, Hyun, Purwanto, & Santoso, 2019).

Tacit Knowledge

A tacit knowledge is the type of knowledge that is concealed in the individual, veiled in the structure and making it difficult to be made known in a formally way (Wong & Radcliffe, 2000). This type of knowledge, according to researchers, is situated inside the brain of the individual and it is extremely difficult to be transmitted to another person. It manifests itself through the actions of the individual and can be acknowledged in the form of the exhibition of a person's experience, worldview and talents. Tacit knowledge permits the storage of any piece of information for a long time and demonstrates it as and when it is required (Burke, 2020; Maurseth & Svensson, 2020). The structure of tacit knowledge as expounded below was developed by Anand & Singh (2011)

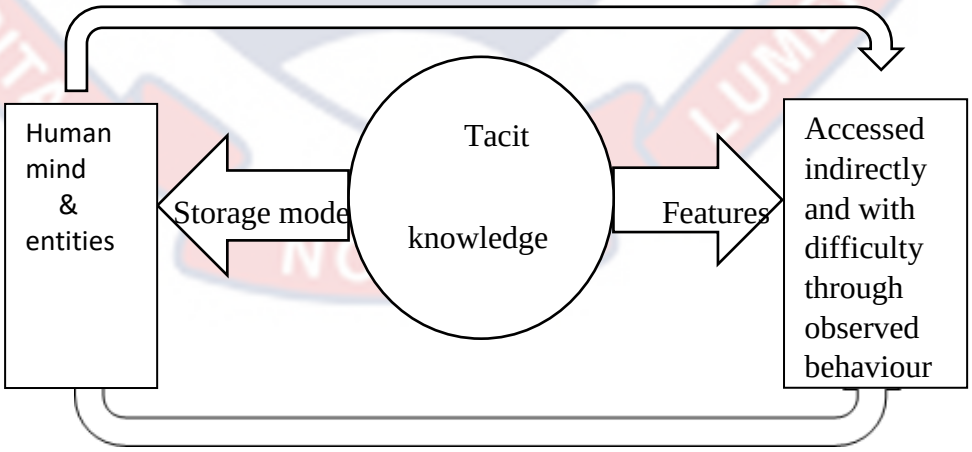

Figure 7: Tacit Knowledge

According to the originator, tacit knowledge is hidden in the brain of the individual and stored there. Over time and when necessary, it is accessed and identified not in written form but in the form of exhibition of behaviour. Without tacit knowledge, the possibility of the individual to make knowledge known for a long time and placing value and significance on it in the reflection of any current situation would be difficult (Asbari et-al, 2019).

By implication, the tacit knowledge is the knowledge gained at the pre-university level which serves as a springboard for much understanding of content of materials delivered in the university. Thus, without the appropriate tacit knowledge, the accounting knowledge at the Senior High School level, thorough understanding of accounting courses would be a challenge to learners (Asbari et-al, 2019).

Implicit Knowledge

An implicit knowledge is the type of knowledge that expresses the tacit knowledge in the individual to people outside of the individual. It is made known through the exhibition of actions and other activities such as signs, dancing, eating, facial expressions which can then be interpreted by other people (Oseledchik, Ivleva, & Ivlev, 2017). To perform any activity of the day, the person would have to use the implicit knowledge as the basis for it and it is usually the yardstick for anything that had to be mentioned and communicated for others to understand. Implicit knowledge is routed in the beliefs and the worldview of the individual which forms definition of how the individual is and how reasoning takes place by the individual over time and from day to day (Plaks, 2017; Sessa & London, 2015).

Summarily, the implicit knowledge of every individual describes how such person perceives things and forms opinions about the existing and get

things done (Meyer, Streeck, & Jordan, 2017). Implicit knowledge is explained on the figure below as postulated by Anand et-al, (2011)

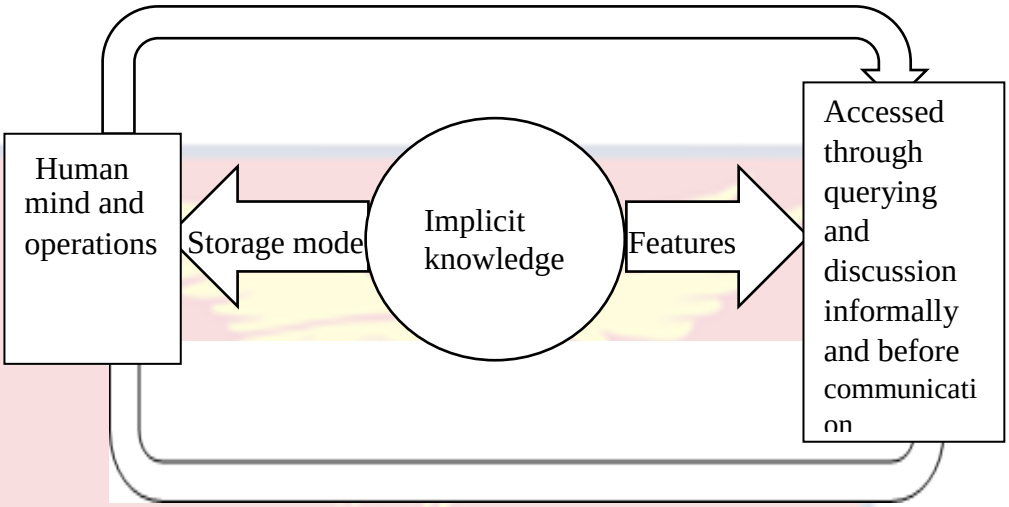

Figure 8: Implicit knowledge

From the diagram, the researchers displayed that implicit knowledge is the cognitive state of the individual and can be made known through the use of discussions and communicated to others informally. Only after it has been made known is when others would be able to take cognisance of what the individual possesses.

It could be elicited from the explanation that the individual's implicit knowledge is a manifestation of what has been learnt from a given phenomenon or circumstance. In reference to the prior knowledge and how it results in academic performance of the students, the implicit knowledge constitutes what has been learnt from the materials presented in the university which explains the nature of embodiment of student at the time. Thus, the tacit knowledge gained from the pre-university is applied to in the university to produce the implicit knowledge of the students.

Explicit Knowledge

Whilst an implicit knowledge displays the product of the tacit knowledge, an explicit knowledge meant to be expressed linguistically and

could be transferred to other people or society (Kljajic-Dervic & Biloslavo, 2015). It is a reflection of actual pronouncements on physical elements, instrument features and other practical facts encountered daily and periodically (Agar & Smith, 2016). The concept of explicit knowledge can be made known through the use of written text, figures, charts and other factual tables which can be understood (Buehl, 2017). The structure of explicit knowledge was illustrated by Anand & Singh (2011) as shown on Figure 3 below.

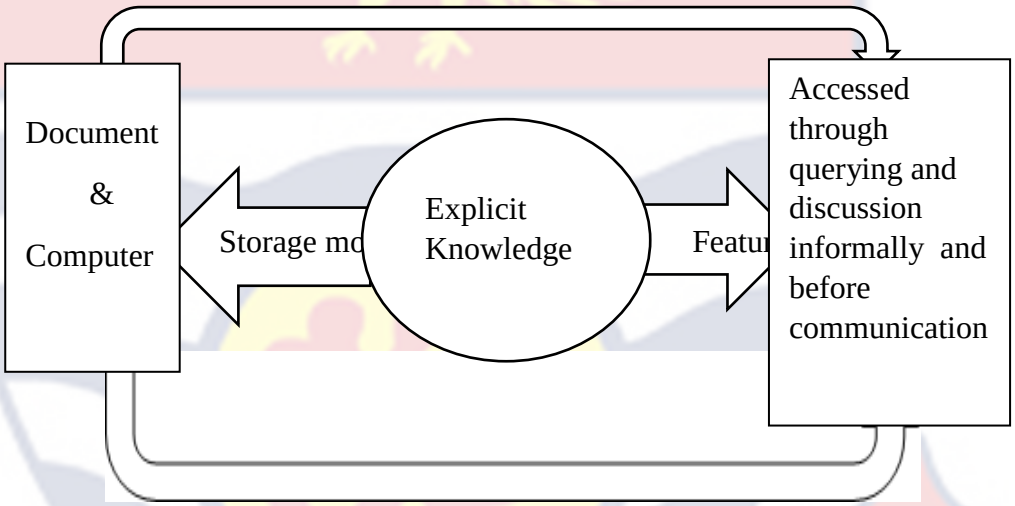

Figure 9: Explicit knowledge

In line with how the researcher projected, an explicit knowledge once it is made available it is presented in the form of a document or stored on the memory of a computer and could be accessed by another individual through discussions and interrogations in a formal way. Tacit knowledge, implicit knowledge and explicit knowledge are the bedrock of knowledge acquisition and assimilation which define the actual personality of any individual (Bennet, Bennet, & Avedisian, 2015). This implies that the explicit knowledge the final personality the student acquires from the university and which would then be used in the world of employment or any endeavour in the world. The explicit knowledge then becomes the academic

performance of the student which is proxied as the cumulative grade point average. In the case of individual courses, it is the grade scored in the course in examination. A good amount of explicit knowledge is an indication of a brilliant student. On the contrary, when the explicit knowledge is not good, it shows that the individual is not able to perform in terms of both the individual courses as well as the overall cumulative grade point average.

Prior Knowledge

Studies show that students get equipped with some knowledge even before they are admitted into any level of their academic ladder, defining the nature of the perception and recognition of issued in the world around them (Nichols, 2017; Zelalem, 2020). In most cases, the success of the student becomes a function of the sort of knowledge he or she has before embarked on any specific academic environment (Diaz, 2017; Folsom, Yoder, & Joslin, 2015; Iqbal, Wilson, & Thomas, 2017). The possession of this knowledge links the individual to the new material and beliefs to be presented for learning and assimilation of any new information from which a new knowledge would be achieved (Sjödin, Frishammar, & Thorgren, 2019).

Acquisition and assimilation of prior knowledge in respect of any discipline is fundamental and cuts across all facets and levels of the discipline in question as well as any related field of knowledge. As the level of emphasis and difficulty increases, the application of prior knowledge becomes very significant as the learner needs to recollect what is already known in order to build on to understand the task on hand (Berkenkotter & Huckin, 2016; Buehl, 2017). In cases where the leaner finds it difficult to recollect this existing knowledge gained from previous studies and activities, the instructor becomes the activating instrument by engaging in relevant activities to stir up the

memory of the learner in order to build the current knowledge intended for such individual (Tarchi, 2015).

However, when students enter onto a programme without any knowledge already known on the new programme, they find the material presented to them highly challenging and the success of such students then depends on how quickly they would be able to adapt to the new situation by learning from their peers who have the prior knowledge (Chevalier, Parrila, Ritchie, & Deacon, 2017; Koh, Lee, & Lim, 2018; Snyder, Sloane, Dunk, & Wiles, 2016).

Gender

Gender of students has been found to be contributing to the extent to which both males and females perform academically at the pre-university level as well as in the university as much as accounting is concerned (Enget et al., 2020; Nouri & Domingo, 2019). In some instances, the extent to which males and females socialise with themselves has influence on how each group are able to tap information, turn it around and based on this, transform it into their own. Such information becomes their examination trigger and they are able to use them well, it results in significant improvement in academic performance. In some Nouri and Domingo (2019) reported that females outperform their male counterparts in accounting programmes in university. However other studies take the stand that there exists a persistent and excellent performance in accounting as a programme of males than females (Fallan and Opstad, 2014). It is therefore imperative to consider gender as one of the determining factors that could contribute to academic performance of university students in the accounting courses. Since gender does not change and cannot be manipulated, it is used in this study as a controlled variable in the analysis.

Institutional factors

Factors beyond the learner has a great influence on the extent to which such a student would be able to study assiduously and perform well in examinations (Almarghani & Mijatovic, 2017). Important among such factors are the availability of a well-stocked library with updated books and articles, proficient staff of qualified instructors who have the patience, interest and knowhow of the teaching strategies in the teaching of courses entrusted to them to teach and space for studying. A well stocked library would enable the students to do research in the courses they may find challenging. Availability of dedicated lecturers would also enhance the learning process of the students and open the gate for relevant questions to beef up the understanding of the content being delivered. In addition, students need space where they would learn and so if this is readily available it would enhance academic performance (Sadeghi, 2019).

Academic Performance

In the educational life of a student, the achievement of scores in semester examinations defines the nature of student such an individual is. If high scores are achieved, such individual is recognized as a high-performing student and a low score points at the individual as a low – performed person. In addition to aligning the cost of educating the individual to the performance achieved, a high or low performance in most cases is an explanatory factor for the students' continuing interest in the field of study as well as the proficiency of such individual (Kanno, 2018; Worrell, Subotnik, Olszewski-Kubilius, & Dixson, 2019).

Therefore when considering students for some programmes of study, the performance indicators of past students before granting admission to such

new students in the pursuant of such programme is analysed (Tovar, 2015; Wechsler, 2017). Research posits that the significant variable considered in the academic environment and in research as a proxy for academic performance of students is the grade point average for each semester and the cumulative grade point average. These are defined as the numerical point used to depict the performance of students in examination of a given university or tertiary institution (Jayanthi, Balakrishnan, Ching, Latiff, & Nasirudeen, 2014). This grading system takes into consideration the performance of students on interim tests and the end of semester examination and calculated as the sum of points scored expressed as a ratio of the total courses taken in the semester by the student. The ratio represented by the grade point average is ranged from zero to four (0 – 4.0), with 4.0 representing the highest grade and 0 being the lowest (Doe, Oppong, & Sarfo, 2018; Jayanthi et al., 2014; Lotsi, 2019; Nketiah-Amponsah, Asamoah, Allassani, & Aziale, 2017b). It therefore suggests that if a student scores a higher score that student is assumed to have performed better academically and if the score of the student is lower it means such student is a lower performer. With this, research has accepted the grade point average as the best performer indicator of students in universities (Afful & Akrong, 2020; Al-Hassan, 2019).

Empirical Evidence

The effect of prior accounting knowledge on academic performance has been an important element in research. Researchers in education attach a high degree of relevance in fostering the requirement for admitting students into tertiary institutions and hence, many studies have been carried out in that respect.

Prior knowledge and Academic performance in accounting related courses

Research was conducted by Abdullahi (2014) on how grades of students in numeracy and accounting at ordinary level of education affect the performance of the students in advanced accounting at college level. The results of this work were based on the answers provided on five assumptions made by the researcher, among which was the effect of mathematics and principles of accounts at ordinary level on scores obtained by students in advanced accounting at college level. Using ex-post factor research and quantitative designs, the results proved that marks obtained for Financial accounting and Cost Accounting at pre-university level had a considerable impact on the performance of students in their college's 'Advanced Financial Accounting' course (Abdullahi, 2014). For a pre-tertiary grade in mathematics, the study stood out that there was also statistical evidence of an impact on the accounting courses in the college but not as high as that of the grades in accounting (Ibrahim & Abdullahi, 2014; Yeboah-Appiagyei, Joseph, & Fentim, 2014).

Attempting to find out which variables explain the academic performance of accounting students at tertiary level, Papageorgiou and Halabi (2014) identified prior knowledge in mathematics and accounting as one of the variables among others. The researchers applied quantitative approach of research to determine the effect of these variables on the performance in tertiary level accounting which was used as a proxy for academic performance of students. The study found that a prior background in mathematics has a positive relationship with the performance of students in tertiary level accounting course. That is, a student with a good mathematical background at

the pre-tertiary level scores high marks in accounting at tertiary level. On the other hand, when a student does not have a good background in mathematics such student is unable to score high marks in accounting at tertiary level. For the pre-tertiary level accounting background, it was found that students with this background are able to perform significantly in the first-year accounting course at the tertiary only. However, students start retrogressing in their scores in the tertiary level accounting courses in the subsequent years (Papageorgiou & Halabi, 2014).

Alanzi and Alfraih (2017) undertook quantitative research purposed at looking at how previous knowledge accrued to a student on high school accounting programme affect the academic performance of students of Accounting in Kuwait. Their study employed a correlation analysis as well as regression analysis based on a sample of 89 students who were found on the accounting degree programme.

The findings from the study suggested that prior knowledge in accounting at the high school level was significant in explaining the performance of students of accounting in university in terms of the marks of students in cost accounting. Specifically, it was found that there was a positive correlation between the prior accounting knowledge accumulated at the high school level and the academic performance of the students at the university level (Alanzi & Alfraih, 2017). That is, the more a student stores more knowledge in accounting at the pre-university level the more such student is able to assimilate the university level accounting instructions and consequently obtain a high cumulative grade point average to graduate with a very good degree.

The high significance of the relationship between the two variables permitted the researchers to make a positive recommendation to school authorities in charge of admission of students onto university programmes to pay particular attention to prior accounting knowledge in their admission process. According to them, if a student is without any prior knowledge in accounting is admitted to pursue an accounting degree programme, such student would find it challenging coming out with a good class of degree than their counterparts with prior accounting background. This was consistent with the work of Rabiner, Godwin, & Dodge (2016) when they set out to probe into what accounts for the success of students admitted to pursue a diploma programme in accounting. The researchers defined academic performance in their study as scores of students in financial accounting. Rabiner, Godwin, and Dodge (2016) surveyed out students and identified five independent variables. These variables were the cumulative grade point average desired, the grade scored at high school and the division of high school of students, age and gender of the students. With grade point average used as a proxy for academic performance, the researchers directed their work using quantitative analysis to determine the significance of one of the hypotheses, that, high school grade has no impact on the performance of students' college accounting programme against the alternate hypothesis that high school grade attained has impact on the performance of college accounting students' performance. The study found that whilst gender and age had no effect on the performance of students, there exist a significant and positive effect of high school grade on the accounting courses and thus pushed up the ultimate academic performance of accounting students pursuing the diploma (Rabiner, Godwin, & Dodge, 2016).

In a study conducted in the southern part of Africa meant to discover how students in tertiary institutions demonstrate their comprehension of accounting as a discipline, Papageorgiou (2017) sampled a total of 3,075 students spanned over a five-year period to find out how the students performance in terms of their contribution of first year accounting lectures was in the wake of their prior knowledge in accounting and other variables. The researcher approached the study with quantitative design, identified the independent variables as race. gender age, prior knowledge in accounting, language and the choice of subject at university level. The dependent variable, academic performance, was defined as the students' contributions at lectures and marks scored in accounting courses in the first-year end of semester's examination. For the analysis, a correlation tool was used to establish the association that would exist between the dependent variable and the independent variables. The findings proved that there was significantly a positive relationship between students' prior knowledge in accounting and their performance in the first year tertiary level lectures and examination scores (Papageorgiou, 2017).

Relationship between prior knowledge and performance in accounting courses

In the wake of changes in the curriculum for students entering tertiary institutions Papageorgiou and Carpenter (2019) undertook a study on how the new prior knowledge of students in accounting impacts on the performance of the first-year university students as compared to the prior knowledge of students based on the previous curriculum. Applying a quantitative method in analysing the situation, it was found that though both curricular have positive impact on the academic performance of students in their first year university

examinations the performance of the students on the new curriculum was better than that of the previous curriculum (E. Papageorgiou & Carpenter, 2019).

In a related circumstance, accounting was taken as a numerate subject and therefore the proposition of the likelihood of mathematics to influence the extent to which Students of accounting could perform creditably was contested by a number of studies among which was the one undertaken by Van der Nest & Bosua (2015). In their work, Van der Nest et al (2015) sought to establish how the mathematical ability of students prior to university explains the performance of such students in their accounting courses in the first year. In the process, they applied a quantitative research design and employed correlation analysis. The findings that emerged was that the possession of mathematical knowledge by way of the score at the pre-university level work correlated strongly with the first year accounting courses in the university (Bosua, 2015; Van der Nest & Bosua, 2015). In the same work, a prior knowledge in accounting was highly correlated with the performance of the students in the accounting courses for the first year in their university programme

In related research, Kurek and Górowski (2020) sought to examine how some identifiable factors such as academic experience, where the high school is located and gender are associated with the students' grade point average in the tertiary institutions. Applying statistical analysis and econometric models, the researchers gathered a sample of 341 from accounting students and applied quantitative approach in performing the analysis. They reported that students with academic experience had the tendency to obtain a lower grade point average whereas gender and school

location have high relationship with grade point average of the students (Kurek & Górowski, 2020).

Consistent to the study by Papageorgiou (2017), Parageorgiou and Carpenter (2019) took a further step to examine the extent to which first year students in university with prior knowledge in accounting understood the material delivered at lectures and how this contributed to their performance as opposed to the students without any prior knowledge in accounting. The study focused on the frequency of attendance of students at lectures and how they cumulatively assimilated the lecture material with a high degree of understanding and how this impact on their marks in the summative assessment process. The a-priori assumption formulated by the researchers for this study was that if students understand the lecture material and are able to demonstrate this in exercises, there would be an enhancement of the cognitive learning process and finally impact on their overall academic performance in examinations. A quantitative research design used incorporated a descriptive statistics, correlation and regression tools to enable the researchers undertake the analysis. The results of the study was that students with prior accounting knowledge understood the lecture materials and that drove up their interest and therefore were regular at lectures. This made such students score high marks in the summative assessment stage test. However, for those without accounting background they were not punctual at lectures because of lack of interest and therefore did not perform well in examination (E. Papageorgiou & Carpenter, 2019).

Prior knowledge and General Performance

Chan (2020) undertook research to investigate whether students background in quantitative discipline has any effect on their general

performance in the university. The study adopted a regression inquiry to analyse the data obtained. It was revealed at the end, there exists a positive association between the background variables and the GPA of such students. However, if students do not have any background quantitatively, the relationship becomes inverse. The regression results also pointed out that when students study quantitative subjects such as accounting and mathematics before embarking on a degree programme, they are generally able to perform significantly well at the end (Chan, 2020).

This findings was consistent with the outcome of a study which was conducted by Tickel and Smyrnios (2005). The authors set out to analyse the continuous and successive performances of accounting students based on their prior knowledge. The high school result was used as the students prior knowledge to assess the impact on academic performance in year one at the university. This was done successively in years two, up to the final year. The results was that the students improve as they progress year by year, and finally, they were able to show an excellent general performans (Tickell & Smyrnios, 2005).

The finding was however inconsistent with Mahboub (2022), a study which examined the variables that influence the academic performance of students in a university based in North East Africa. The researcher used questionnaire to gather data from 232 respondents who were students pursuing a bachelor accounting degree. The variables focused on were gender, attendance in lectures, work, language and prior accounting scores in high school. Using a multiple regression in the analysis, the results showed that of the variables, work, attendance and gender had a significantly positive relationship with academic performance of the students. However, it was

recorded that prior scores in accounting at high school had a significantly negative relationship with academic performance. Thus, prior accounting knowledge does not just influence the academic performance, it actually produces a negative influence (Mahboub, 2022).

Perception of Accounting students about accounting degree programme

The perception of students about a particular discipline or profession has the tendency to affect their intention to continue to pursue that profession or not (Owusu, Obeng, Ofori, Osei-Kwakye, & Bekoe, 2018). In Aziz, Ibrahim, Sidik, and Tajuddin (2017), about 7 explanatory variables were assigned to be responsible for determining the extent to which students in a university in Malaysia had the desire to pursue accounting after completion of their bachelor degree programme. The seven variables were further developed into 27 likert scale statements and structured into questionnaire to collect data for analysis. The findings from the analysis revealed that the students declared that the programme was complex and challenging, and therefore they had no intention to continue to any advanced level or pursue it professionally. This finding was found inconsistent with a study conducted in Nigeria by Ademola, Olowookere, and Oladipo (2021). In their study, 150 students pursuing undergraduate programme in accounting were subjected to provide answers from a questionnaire. Using the Spearman correlation and descriptive statistics for the analysis, it came to light that most of the students were interested to pursue accounting to either an advanced level or become professional accountants. According to them, the attached prestige and other factors is the motivating factors moving them towards the likeness for the profession.

The Gap in Literature

The study sought to unearth the relationship between the background of university students pursuing accounting degree at bachelor level and the academic performance of the students in the university. The background of the students captioned in this study was the academic history of the students in terms of the prior university subjects studied by the students whilst the performance was taken as the three-year cumulative grade point average of the students. In all the studies referred to above, they all limited the performance of students to the first year lectures and examinations in tertiary institutions. Where the study holds on a holistic performance, the researchers limited the performance to one university course. In other cases, the studies used prior knowledge of one accounting related course on the performance in terms of first year university performance. However, the cumulative performances in terms of the grade point averages across all the years determine the class of degree the student would graduate with. The prior knowledge in all the accounting and numerate subjects of students have the ability to affect the comprehension in the university materials at lectures and consequently the overall performance of a student completing a degree programme.

However, the empirical literature has not expounded on how such prior knowledge influence all the accounting courses in the university such as financial accounting and Reporting, Cost and Management Accounting, Financial Management, Auditing and Taxation. These are the core courses in any accounting degree programme and it is incumbent on research to have a broader look at it before advancing on to the final grade point average which is used to grade the classes of the degrees. This is a gap in existing research that this study sought to bridge. This study used the background knowledge in all

the high school subjects in the accounting programme namely Financial Accounting, Cost Accounting, Core mathematics, Economics, Elective mathematics and Business management as the explanatory variables and the cumulative grade point average from level hundred to level three hundred as the proxy for academic performance and the dependent variable. The core mandate of the study in the closure of the gap was to examine how the prior knowledge of the accounting students influence the performance of the accounting courses and whether or not a difference exist in the performance in those courses of students with prior knowledge in accounting and those without prior accounting knowledge. This is a gap existing in research that this study sought to bridge. This study used the background knowledge in the high school, the accounting subjects in the business programme namely Financial Accounting and Cost Accounting, as the explanatory variables and the cumulative grade point average from level hundred to level three hundred as the proxy for academic performance and the dependent variable to analyse how the knowledge in these subjects influence the performance in the accounting courses (The academic performance) of the students in the university.

CHAPTER THREE

RESEARCH METHODS

Introduction

The purpose of this chapter of the study is to provide an actual framework of the approaches and strategies employed to undertake the study. It is structured in the order of nine basic headings. This includes the research paradigm underpinning the study and worldview of the researcher which underlies the choice of methods and procedures for the study, the design of the research, the population of the study, and the procedure used in selecting the sample. Other sections include the tools used in the collection of the data and the justification for the reliability of the tools. It also includes the data gathering procedure and the procedure used in analysing the data.

The Research Paradigm

The choice of a paradigm to a researcher and for a study is determined by the belief of the researcher and what is intended to be done (Baker, 2017; Kivunja & Kuyini, 2017). Positivism paradigm advocates a quantitative approach in dealing with the confronted phenomenon because of the stand that reality of the world can be separated from the researcher (Gray, 2013). Cause and effect approach dominates in the research of a positivist, and from the quantitative analysis a generalization is made (Brotherton, 2015).

On the other hand, interpretivist wholly holds the stance that reality is socially constructed and that truth can only be known and learnt from the actions of people, including the researcher. This makes it possible for followers of the interpretivist approach to research adopt the qualitative methods in explaining the social phenomenon encountered (Lindlof & Taylor, 2017). The third variant of the paradigms, the pragmatic approach uses both

the quantitative and qualitative methods in undertaking a study. This is justified by the fact that the school of thought holds the belief that phenomenon can be studied using the combination of quantitative and qualitative methods. Followers of pragmatism explain that as reality is constructed, it lends itself to further explanation and those who face this reality are those who can interpret what they experience (Ihuah & Eaton, 2013; Scales, Sankaran, & Cameron, 2015).

This study focuses on analysing the role a relevant prior knowledge in accounting has on the academic performance of university accounting students. In one part, existing data on the pre-university knowledge was necessary to permit the explanation of academic performance of such students in the university (Brannen, 2017). This required quantitative data and analysis. Since both data are quantitative and the analysis requires the use of hypothesis and tests to make conclusions which could be used for inferences it was deemed fitting to select the positivistic research paradigm for the study.

Research Design

The research design employed for this study was the causal-comparative research design. This is a non-experimental quantitative design and associated with the positivistic research paradigm which was selected to guide the study based on the research hypotheses outlined for the study. This design allows the use of existing or secondary data for the purpose of making a comparison between two groups in terms of performance, quantitatively. All the research hypotheses made use of quantitative data and analysis. The main purpose of the study was to examine the effect of pre-university entry requirements of students had on the academic performance of such students in the universities in Ghana. Specifically, the problem being studied is how the

relevant previous knowledge in accounting programme in a pre-tertiary level affect the performance of students pursuing a bachelor degree programme in accounting in the university in Ghana. This previous knowledge refers to the background of students which are the grades obtained in the subjects studied at the senior high school level. The grades were interpreted numerically and therefore a quantitative data was necessary for the study. The study is aimed at comparing the academic performances of two separate groups, being students who had accounting background and students who did not have any knowledge in accounting. In addition to comparing the two groups, the data was quantitative and meant to provide answers to issues hypothesized. Based on this, the causal-comparative which is a type of quantitative research design was appropriate for the study.

Population of the Study

The population of interest for the study is all university students pursuing a bachelor degree programme in accounting in Ghana. All the universities running bachelor degree programmes in Accounting are found in the Greater Accra region and where the main campus is somewhere, the university has a campus in the Greater Accra region, hence the selection of this region since it would be a representative of the regions in Ghana. There are 16 universities which offer various accounting degree programmes at bachelor level. Among these, 4 are public universities and 12 are private universities. The institution by type is shown on the Table in the appendix section.

The Sample and the Selection Process

Using the structure of programmes in the handbooks of public and private universities, it was discovered that all the bachelor accounting degree

programmes of the universities in Ghana are constituted by accounting related courses which are common to all the universities and other university-specific courses. The Accounting related courses are financial accounting, cost and management accounting, economics, business management, auditing and taxation. A multi-stage sampling method was used to collect the data. The population was constituted by accounting students in all the universities in Ghana, and were drawn from both public and private universities. These were divided into clusters with each cluster represented by the universities in a region. Following this, the greater Accra region (cluster) was selected since it has a large number of both public and private universities.

All the universities in the Greater Accra cluster were found to be homogeneous in terms of the course components in the accounting degrees they offer, a convenience sampling method was used to select the universities from which the sample was taken. The selection of the universities was conveniently done since all the universities or their branches are located in Accra. In all, two public universities and three private universities were selected. Following the selection of the universities, a purposive sampling method was used to obtain the data from the students pursuing bachelor degrees in accounting. The sample was made up of 250 students who were all the accounting students in the universities used for the study at the time of taking the sample.

Out of the 250 respondents, 156 were from public universities and the remaining 94 came from the private universities. In addition to the bio data of the respondents the grades obtained at the West African Senior School Certificate was taken as well as the cumulative grade point average of the students. The CGPA was calculated by the researcher using the grades scored

and the credit hours as indicated on the summary of their academic report. This was compared with the CGPA given by the students for learning and for the purpose of accuracy. These two pieces of information formed the basis for the analysis of the study.

Instrumentation

The instrument used to collect data for this study was a questionnaire. The data collected were the WASSCE results of the respondents. The WASSCE results were graded from A1 to F9 for each subject for the purpose of the analysis and were captured on the questionnaire. A1 the highest grade was weighted 9, B2 was weighted 8, in that order to F9 being the lowest grade which was weighted 1 for the purpose of the study. The questionnaire was in three sections. Section one was for the bio-data of the respondents and the section two was designed for the WASSCE results and the CGPA of the students. Section three was a five-point likert scale questions used to collect the data on the perception of the respondents on accounting programme as a whole.

Reliability of the Instrument

By reliability, a research tool used in collecting the data should exhibits a quality of stability in such a way that the results of the study would be bias-free. In addition to the stability of the instrument, it should also be consistent, such that its usage would achieve a result which would not be significantly different from similar work over time (Faulkner & Faulkner, 2018). The instrument used in the data gathering and the methods used in the analysis of this study was found to be reliable. In testing the reliability of the questionnaire a cronbach alpha value of more than 0.6 was used (Mohamad, Sulaiman, Sern, & Salleh, 2015). The value produced by the cronbach alpha

was .903 and it was therefore concluded that the instrument was well presented, bias-free and very consistent for the study (Bain, 2017).

Validity of the Instrument

In research, the instrument used in gathering data is desired to perform the appropriate function that it is intended to. When this happens, the instrument is described as being valid. Validity is explained as the ability of the instrument to exercise an excellence in the measurement of the characteristic of interest in the study (Anastasi & Urbina, 1997; Whiston, 2012). To determine the validity of an instrument, the data collected from the use of the instrument should make a good, sound and logical interpretation of events in the analysis of the study (Oluwatayo, 2012). Research indicates that there are approximately 18 forms of validity and this study observed 3 namely, the construct validity, the face validity and the content validity (Sürücü & Maslakci, 2020).

A construct validity is the ability of the instrument to measure the concept or phenomenon intended in the study (Bandalos, 2018). This is authenticated by making a test of comparison of similar situation and applying the same instrument. The instrument is said to be constructively valid if it is found to have been able to collect the required data. In this study, the instrument was developed for the purpose of measuring the academic history and the corresponding academic performance of the students pursuing a bachelor degree programme in accounting in the universities. The actual phenomenon is the impact that the background variables of the students have on their performance in the university. This is what was sought by the instrument from start to the completion of the instrument. Section B of the instrument was designed to elicit data on the prior-university background of

the students whilst section C was devoted to finding the academic performance of the students at the university level.

Prior to using the instrument in collecting the data for this study, a pre-test of the instrument was used to collect data for two Senior high schools. The result obtained was that the various variables and questions exhibited both convergent validity and discriminant validity. In order to declare an instrument as having attained construct validity, a number of tests are being used by researchers, including correlation, and factor analysis (Sürücü & Maslakci, 2020). For this study, the factor analysis test was adopted for the establishment of the construct validity of the instrument. To use the factor analysis the condition attached is to assess the adequacy of the sample. The Kaiser-Meyer-Olkin (K.M.O) is the tool used for adequacy test and the condition is that the K.M.O must be between .8 and 1 in order to hold the sample as adequate for the use of the factor analysis method. On the Table 1 below, the KMO was found to be 0.85, indicating that the sample used for assessment was adequate (Shrestha, 2021; Sürücü & Maslakci, 2020). The result of the test is shown on Table 1 below (Brown & Moore, 2012).

Table 1: Factor Analysis

Details on factors	Sample 1	Sample 2
Average Factor Loading	.80	.91
Variance extracted	.90	1.2
Summary:		
Average variance Extracted (AVE)		1.05
Coefficient of Determination (R^2)		.26
K.M.O value		.85

To confirm the validity of the construct, it was necessary to compare the results of the construct in obtaining the data from the original sample for

the study and another High school sample (Sample 2). In the study, factor analysis test was conducted to assess the validity of the instrument.

For construct validity of the instrument to exist, two important conditions must be satisfied; that is,

i. The Average Variance Extracted (AVE) must be equal to, or exceed 50% for convergent validity to be established, and

ii. The average of the variance between the two samples must be greater than the coefficient of determination for a discriminant validity to exist (Shrestha, 2021).

From Table 1, the average of the loading of the factors indicating the probability of the capability of the instrument to capture the appropriate data are 80% and 91% in the two samples. This is an indication that a convergent validity is established. Table 1 also shows that the coefficient of determination was less than the average of the variance between the two samples. This means that a discriminant validity exists.

From the test carried out, both the convergent validity and the discriminant validity were established and therefore it was appropriate to state that the instrument attained a construct validity. Thus, the questionnaire used in gathering the data was good and appropriate to collect the data for the measurement of the construct under examination.

In addition to the pre-test, no other aspect of the subject matter of the study was captured on the instrument and so it was possible to mention that the instrument of the study had attained construct validity. A face validity is the degree of how fitting an instrument is in the measurement of a construct of a research (Turner, 1979). This study sought to find out the extent to which a historic background of students in terms of the subjects studied at the pre-

tertiary level impact on their performance at the tertiary level. The questionnaire was mainly based on this without any deviation. Upon stringent scrutiny, my supervisor approved the content in respect of the items contained in it. It was therefore considered that the instrument passed the face validity condition. According to research, an instrument is deemed as contently valid if the terms or expressions in the instrument epitomizes the construct intended in the study. Thus, the words used in the instrument are a clear revelation of the phenomenon that the study intends measuring (Bollen, 1989). Confirming that an instrument is valid in content is determined by either the content validity index or by using pre-test approach (Dixon & Johnston, 2019).

The researcher in this study adopted the pre-test approach by using the instrument in one of the selected universities which was a representative of the entire sampled institutions. The target of the pretest exercise was to gather at least 30 'valid responses' from the accounting students in the selected university. In order to avoid the presence of Type 2 errors, Sekaran and Bougie (2016) postulated that the size of the sample should not fall below 30 and not go beyond 500. When the pretest was completed, valid responses of 52 and was achieved and therefore considered enough for the analysis of the data. Following the data collection, it was cleaned for corrections and found to have captured all the necessary details capable of being used to analyse the data taking the research objectives into consideration. In summary, the instrument used for collecting was designed to measure the actual construct, ensured that the instrument was fit for the measurement of the construct and the content was observed to describe only the intended phenomenon. Based on these features, it is concluded that the instrument

achieved the required level of validity for the study (Mohajan, 2017; Taherdoost, 2016).

Data Collection Procedure

The data of the study was gathered following the procedure as follows. A letter seeking permission to collect data from the students in the selected institutions was obtained from the head of Department, Business and Social Science Education of the University of Cape Coast. Upon the receipt of the introductory letter, the researcher visited the selected schools and presented the letter to the heads of accounting departments. After a thorough discussion with the head of departments the researcher was directed to one of the accounting lecturers in the department to help in the collection of the data. This permitted a thorough explanation and appreciation of the study and that the data when collected would be used for the intended study only. The questionnaire was then distributed to the level 400 students who were present in the specific lecture for completion. With the assistance of the lecturer, the students were made to complete the questionnaire after the lecture and were collected from them after completion. To validate the data given by the students, the WASSCE and summary of Academic record of the students were downloaded by the students and given to the researcher.

With the involvement of the researcher in the administration of the questionnaire and the awareness on the part of the respondents of what was been construct being measured and the explanatory variables there was the probability of a common method biasness (CMB) in the responses. To assess the CMB in the responses, the full collinearity test was adopted by the researcher. The test assesses the extent to which the variables are able to

impact on the dependent variable. This was done by the test of hypothesis below.

H_O: There is a high VIF in at least one of the variables

H_1: There is no variable with a high VIF

Critical VIF = 3.3

Decision rule: Reject H_O if Cal-VIF < Critical VIF, otherwise do not reject H_O.

The construction of the hypothesis revealed the following result as depicted on Table 2 (Kock, 2015).

Table 2 : Full Collinearity Test of Common Method Bias

Question	Tolerance	VIF – Cal
Item 1	0.892	1.121
Item 2	0.828	1.208
Item 3	0.883	1.133
Item 4	0.865	1.156
Item 5	0.93	1.075
Item 6	0.898	1.114
Item 7	0.849	1.178
Item 8	0.896	1.116

From Table 2, the variance inflation factors for all the items on the instrument were less than 3.3 and per the decision rule, the null hypothesis is therefore rejected. It is therefore stated that there was no common method bias in the administration of the instrument and the responses provided by the participant in the research.

Data Cleaning and Preparation

The data collected was observed critically and subjected to cleaning in order to prepare it well for the analysis. The combination of the elective subjects of the respondents, being their academic background was not the same for all of them in terms of the rows. The elective subjects of the students were 4 in each case. However, they pursued different combinations which led to some subjects having few students and based on the recommendation of Howell (2007) such variables were deleted from the data set. For the variables which had few missing data, a pairwise deletion was also made. Having observed the recommendation in Howell (2007), elective mathematics, Christian religious studies (CRS) and Geography were deleted from the data set. Additionally, economics for students with accounting background also had the same problem and so was also deleted. The final data sets for the analysis were, Financial Accounting, Cost Accounting and Business Management for students with accounting background and Economics, History and Government for students without accounting background.

Data Analysis Tools and Procedure

The analysis of the data for this study was made to meet the purpose of the study. This was done in terms of the research hypotheses. The introduction of the analysis expounded on the demography of the respondents. It analysed the number of respondents involved in the study, the type of university they attended and their academic background.

Hypothesis one of the studies was developed to establish whether there was a relationship between the academic background variables of the students and their academic performance in the universities. In response to this hypothesis, the Pearson's correlation matrices were constructed. This tool

displayed the relationship between each of the independent variables representing the prior knowledge (Academic background) and the academic performance (CGPA) of the respondents. Thus, The Pearson's Product Moment Correlation coefficient was an estimate that showed the extent to which the independent variables relate to the dependent variable (Rumsey, 2016). After estimating the coefficient (r), a test of significant was conducted using the t-test to determine how significant the coefficient was. To affirm the relationship, the extent to which prior accounting knowledge significantly influence academic performance of students pursuing Bachelor degree programme in accounting was examined, as stated in hypothesis two. This was done by the construction of a multiple linear regression. The independent variables were the various subjects studied at the senior high school level and the dependent variable was the variable used as a proxy for academic performance (CGPA). The regression coefficients were used to explain how each of the subjects studied impacted on the academic performance (CGPA) of the students. A test of significance of the coefficients was constructed to confirm how significant the coefficients were in explaining the academic performance.

Research hypothesis two was meant to find out whether or not there was a significant difference between the performance of students with accounting background and those without accounting background in accounting related courses such as Financial Accounting, Cost and Management Accounting, Taxation and Auditing. This hypothesis was tested using the independent T-Test on the mean scores of Financial Accounting, Cost and Management Accounting, Taxation and Auditing. These mean scores of the students with accounting background were compared with that of

those without accounting background to find the difference. After the difference was taken the significant level of 5% and the associated p-values of each of the courses was used to conduct the test to find out whether there was a statistically significant difference between the means of scores of students with accounting background and that of those without accounting background. The concern of the research hypothesis three was to find out whether the general performance (CGPA) of students with accounting background was different from those without accounting background. This was done by the use of a t-test. In doing this, the mean estimates of the final grade point averages to find the difference between two means. The analysis also took into consideration the perception of the respondents on how their study of accounting degree had been in terms of the benefits and the challenges they envisaged. This was the hypothesis four of the study and was analysed using descriptive statistics based on the students' responses from a 5-point likert-scale questionnaire.

Ethical Consideration

Conducting any social research requires that the principles of right to participation, anonymity, confidentiality and respect for privacy are observed as guiding procedures so that the rights of the respondents would be protected (Arigo, Pagoto, Carter-Harris, Lillie, & Nebeker, 2018). The data was a secondary and could be accessed online. In Addition to that, the right to participate in the study required that respondents in the study exercised the free will to decide as to whether or not they wanted to be part of the research activity (Garcia-Quiroga & Agoglia, 2020). Responding to this principle, the researcher explained the nature of this study and allowed time for the students to ask questions bordering them. The researcher took time to provide the

required answers. Following this, the students were allowed to make a personal decision whether to join the exercise or not. Therefore, the information contained in this study was provided from the free will of the respondents without any form of coercion.

By anonymity, the identity of the respondents to the researcher should be kept with utmost secrecy. Observing this principle, the questionnaire and the final write-up excluded the source of the information (Nduna et al., 2022). Nowhere in the study was anybody's name mentioned. In order to observe respect for privacy of the respondents, the items on the questionnaire were devoid of questions which could elicit the personal issues of the respondents. The study also upheld confidentiality. The identity of the respondents and the information provided were kept for the purpose of the study only (Surmiak, 2018). The respondents were assured that the information they were providing would not be made accessible to anybody and indeed the researcher adhered to this. Upholding this, the questionnaire in soft copy was kept under a strong password such that accessibility to it was highly impossible.

Summary of Chapter

This chapter described the necessary paradigms from which a choice was made to guide the study. The paradigm chosen was the positivistic paradigm and this suggested the appropriate research design, being the causal quantitative design was advocated for the study. This design made it possible to study groups and assess the extent to which a dependent variable is influenced by an independent variable. The groups in this study were respondents with accounting background and those without background. The study was intended to establish how prior knowledge in accounting influence

academic performance of the respondents in the university. The design adopted was therefore justifiably fitting for the study.

The population of the study was articulated and the pronouncement of the sample and how it was collected was clarified. The instrument used in the data collection was explained alongside its reliability and validity. How the data was collected, how the analysis was done and the tools for that purpose was clearly explained. Justification for the ethical issues and how these were taken care of was elaborated.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

Introduction

This chapter of the study presents the results and the associated discussions. These are in two parts. The first part presents preliminary results and discussions on the demographics of the respondents and the second part presents the results and discussions to address the research objectives.

Demographic background of Respondents

This section of the chapter presents the demographic characteristics of the respondents included in the study. The table 3 below provides this demographic background information of the respondents in the study (Warshawski, 2022). The information contained on the table is in threefold, the type of university from which the students were drawn, whether private university or public university, the gender of the respondents and their pre-university background.

Table 3: Demographic background of respondents

	TYPE OF UNIVERSITY OF STUDENTS				
	PUBLIC		PRIVATE		GRAND
BACKGROUND	MALE	FEMALE	MALE	FEMALE	TOTAL
ACCOUNTING	46	40	32	12	130
NON-ACCOUNTING	35	35	24	26	120
TOTAL	81	75	56	38	250

From Table 3, the respondents were indicated to have been drawn from private universities and public universities since both types of universities offer bachelor degree programmes in accounting. According to the details on Table 3, approximately 63% of the respondents were from public universities in Ghana. This was made of males, constituting 33% and females 30%. On the part of the private universities the respondents drawn were 37% of the total number of the respondents used for the study. It is obvious from the table that more respondents came from the public universities than it occurred on the part of the private universities. On the part of gender, more males and the females from public universities outnumbered the participants in the study from the private universities.

Table 3 also reported the results of the students who had accounting background as against those without accounting background. Of the total of all respondents who had accounting background, 66% were from public universities whilst 34% came from the private universities. In terms of the students without accounting background, 58% were reported to have come from public universities and 42% were respondents from private universities. From the analysis, it implied that in more students from public universities were those with accounting background than those in private universities and the same conclusion was reached on those students without accounting background.

A further look on Table 3, it was found that the male participants from public universities and who had accounting background were 35% as against the males from the private universities with accounting background who were found to be 25%. In the same direction, the female participants from public universities with accounting background who were 31% outnumbered the

female participants from private universities who were found to be 9% of all participants with accounting background in the study. For those without accounting background, the male participants from public universities and those from private universities were equally 29% of the total of those without accounting background. However, the females without accounting background from private universities were more than their counterparts from public universities by 7%. Finally, the table showed that more males than females participated in the study.

Table 4: Scores of students without accounting background

Subject	A1 - C6	D7 - F9	TOTAL
Government	116	4	120
Economics	97	20	117
History	113	0	113
CRS	61	3	64
Geography`	66	2	68

Source: Field work, (2021)

As displayed on Table 4, out of the total number of students who wrote Government 97% scored A1 – C6. Economics was written by 117 students. Out of this, 83% scored A1 – C6 whilst 17% scored D7 – F9 (Ifedayo, Sheriff, & Yetunde).

For History, Christian Religious Studies and Geography, the students who took the papers, those who scored A1 – C6 were (100%), (95%) and (97%) respectively. Whilst no one scored D7 – F9 in History, there were (5%) and (3%) of the respondents who scored D7 – F9 in Christian Religious Studies and Geography respectively.

The results of students with accounting background and pursuing bachelor degree in accounting in the universities in Ghana are presented on

Table 5 (Lingo, 2019). The grades obtained by such students at WASSCE in accordance with the minimum entry requirements of universities in Ghana for the pursuant of a bachelor degree are reported in the table.

Table 5: Scores of students with accounting background

Subject	A1 - C6	D7 - F9	TOTAL
F. Accounting	126	4	130
C. Accounting	119	11	130
Economics	77	0	77
B. management	128	2	130
Elective Mathematics	53	0	53

Source: Field work, (2021)

From Table 5, the total number of students who took part in Financial Accounting, Cost Accounting and Business Management were 130 in each case. Out of this, 97%, 92% and 98% respectively of the total number of those who took the papers scored A1 – C6. For Economics, all the students who sat for the paper scored A1 – C6. Similarly, all the respondents who took Elective Mathematics scored A1 – C6. The students with Accounting background who scored D7 – F9, were (3%), (8%) and (2%) in Financial Accounting, Cost Accounting and Business Management respectively.

Correlation and Regression Analyses

Research hypothesis one was designed to examine whether there was a relationship between prior accounting knowledge of respondents and their academic performance in the university or not. This study used continuous dependent variable and therefore adopted multiple linear regression and Pearson Product Moment Correlation to test the hypothesis. In view of the fact that the academic performance in the study was represented by the

cumulative grade point, it was appropriate therefore to use the aggregate scores of the background of the students. The correlation examined whether or not a relationship exists between prior accounting background and academic performance of the students in the universities. On the other hand, the regression was used to analyse the extent to which prior accounting background influences the students' academic performance.

The Diagnostics

For the purpose of stability and efficiency of the regression results, the study presented the necessary diagnostics. The elements of the diagnostics used to unveil the quality of the research models include the F-statistics, variance inflation factor (VIF), the Shapiro-Wilk test and the Breusch-Pagan/Cook-Weisberg tests.

The F-statistics was used to assess the ability of the regression models to produce efficient coefficients. The variance inflation factor and the associated tolerance levels were used to detect the existence of multicollinearity. In this study, a VIF of five was used as a standard for listing a variable as being correlated with another variable (Baltagi, 2015; Senaviratna & Cooray, 2019). A value less than five posited that there was no correlation between the variable with others whilst a VIF of five indicated that a variable moderately correlates with another variable. When the VIF appeared to be greater than five, it meant that a high correlation existed between two variables (Daoud, 2017).

The Shapiro-Wilk test was used to assess the normality of the residuals and the Breusch-Pagan/Cook-Weisberg test was constructed to examine whether or not there existed constant variances among the residuals (Homoscedasticity). These diagnostics were made for each of the regression

models constructed for the respondents who had accounting background and those who had no accounting background.

Fit of Regression Models

The first of the diagnostics in the construction of a regression models was to ascertain whether or not the intended model was good and fitting that it could produce significant and stable statistical coefficients (Choudhury, Thatoi, Hota, Sau, & Rao, 2019). In doing that, the probabilities associated with the F-stat were supposed to be less than five percent. The occurrence of this renders the model as significant enough that the regressors would possess the ability to explain the dependent variable under study. The test carried out for the fit of the regression models in this study is as follows.

H_O: $\beta i = 0$,

H_1: $\beta i \neq 0$,

Level of significance = 5%.

Decision rule: Reject H_O if Prob > F is less than 5%, otherwise do not reject H_O

From Tables 8 and 10, the probability values (Prob > F) were zero and two percent for the regression models of students with accounting background and those without accounting background respectively. These were less than five percent significance level, and following the rule for the test, the null hypothesis was rejected in each case. The conclusion was that the regression coefficients were significantly different from zero and therefore they could jointly explain the academic performance (dependent variable) in the models.

Multicollinearity

The second of the outlined diagnostics is the test of correlation in the independent variables. The results of the test is set out below on table 6 (Senaviratna, A Cooray, & Statistics, 2019).

Table 6: Multicollinearity

Factor	VIF	Tolerance (1/VIF)
AS1	1.00	1.00
AS2	1.21	.833
X1	1.00	1.00
X2	1.30	.77

From the table 6, the variance inflation factor (VIF) of the aggregate score of students with accounting background was less than 5 and a tolerance level equal to the maximum limit. This implies that there was no presence of multicollinearity. Similarly, the VIF of the aggregate score of students without accounting background was also less than 5 with a maximum level of tolerance. In the case of the gender of the respondents, the VIF were both less than 5, indicating the absence of multicollinearity. With the absence of multicollinearity, the coefficients were good and efficient for the regression analysis and could be used for inferences (Senaviratna & Cooray, 2019).

Normality

On the part of normality of the residuals, the null hypothesis was that the residuals were normally distributed at 5% level of significance whilst the alternate hypothesis was that the residuals were not normally distributed. The decision rule was to reject the null hypothesis if the probability value was less than 0.05. The Shapiro-wilk test carried out for normality of the residuals produced a probability value of 26%. This was more than 5%, hence, the null

hypothesis could not be rejected. It could therefore be said that the residuals were normally distributed at 5% level of significance. The Shapiro -Wilk test was used to test the normality of the residuals.

The hypothesis tested was as follows.

H_O: The residuals are normally distributed.

H_I: The residuals are not normally distributed.

$\alpha = 0.05$.

Decision criteria: Reject H_O if prob > z is less than the α level, otherwise do not reject H_O.

From Table 7, the probability value was 24% which was greater than the α level of 5%. The null hypothesis could not therefore be rejected. The conclusion was that the regression residuals are normally distributed at the significance level of 5%.

Homoscedasticity

Examining the variability of the residuals, the Breusch-Pagan / Cook-Weisberg test was carried out. The null hypothesis was that the residuals have constant variances (homoscedastic) whilst the alternate hypothesis stated that the residuals do not have constant variances (hetereoscedastic). With the significance (α) level of 5%, the decision criterion was to reject the null hypothesis when the Prob > chi2 was less than the α level of 5%. The probability value from the test run was 46%. From this, the null hypothesis could not be rejected and it was concluded that the residuals had constant variances (homoscedastic). Consistent with Nwaobia and Ihejieto (2020) these diagnostics indicated that the model used for the regression for students who had accounting background was efficient (Nwaobia & Ihejieto).

Relationship between prior accounting knowledge and academic performance in accounting courses

Research hypothesis one was formulated to assess whether or not there exists any relationship between the background of the students and the extent to which they perform in the Accounting and its related courses in the university. The hypothesis was crafted as follows:

There exists a statistically significant relationship between prior knowledge in accounting and academic performance in the university?

To test this hypothesis, the Pearson's correlation matrices on Tables 7 and 9 on pages 79 and 83 respectively were constructed using the data for the students who had accounting background and those without accounting background, with a significance level of 5% (0.05) (Kim, 2019). Thus, the students with accounting background from private universities were added to that of public universities. Similarly, the students without accounting background from private universities were also added to that of public universities to arrive at the total of 250 respondents. For the purpose of analysis in this study, the examination of prior knowledge in accounting and how it influences academic performance is done using the aggregates of the scores of the academic backgrounds. This means that the pre-university grades at West African School Certificate Examination were aggregated and matched with the cumulative grade point averages to perform both the correlation analysis and the regression in providing the report for research hypothesis 1. In addition to the academic background, gender was used as a control variable in each of the cases for the analysis.

The definitions of terms used for the matrices are as follows.

$CGPA_1$= Cumulative Grade Point Averages of students with accounting background

$CGPA_2$ = Cumulative Grade Point Averages of Students with no Accounting background

AS_1 = Aggregate score in WASSCE of Students with Accounting background.

AS_2 = Aggregate score in WASSCE of Students without Accounting background.

X_1 = Gender of Students without Accounting background.

Table 7: Correlation matrix : Students with Accounting Background

	Y_1	X_1	AS_1
Y_1	1		
X_1	.11(.14)	1.00	
AS_1	.36(.00)	-0.03	1

The matrix spelt out on Table 6 comprises the cumulative grade point average for students who had a prior accounting background as the dependent variable and the aggregate score of students who had accounting background as the independent. variable. Gender is used as the control variable in the model. From the matrix, the Pearson correlation coefficient is stated with the significant values of the variables in the parenthesis. It occurred that there was a significant positive association between aggregate scores of the students with a background in Accounting and Academic performance, ($r(128) = .36$, $p < .05$) .

The Pearson correlation matrix also showed that there exists a positive relationship between gender and Academic performance ($r(128) = .23$, $p > .05$

). However, as the p > .05, it means that the relationship between gender and academic performance was not significant and that, gender was not statistically strong enough to affect academic performance of the respondents.

This was consistent with Abdullahi (2014) which stated that the background in terms of prior knowledge in a subject or course is a better determinant for performance in any advanced course.

Thus, the extent to which the students possess and maintain the knowledge acquired in accounting at senior high schools has the tendency to impact positively on how well they perform in the universities (Senaviratna & Cooray, 2019).

Regression model of students with prior accounting background

The model for this regression for students with accounting background is stated as $Y1 = \beta0 + \beta1\ AS1 + \beta2\ X1 + \varepsilon1$

In the model, Y_1 is used for cumulative grade point average of students with accounting background, AS_1 stood for aggregate score in the WASSCE of students who had accounting background, X_1 for Gender (Control variable) whilst ε_1 represented the error term of the model. With the error term, the model is stochastic and can hardly be used for inference. However, the expected value of the error term of the model is zero and therefore the model becomes deterministic which can be used to make inference. The results of the regression is presented on the Table 8 (Raza, Furqan, & Ilham, 2022).

Table 8: Regression results of students with prior accounting background

Observation = 130		df	= 128
SSR	= 14.9	SER	= .12
R2	= .15	Prob > F	= .00
Adj R2	= .15	Normality test (Prob >Z)	= .26
F(2, 127)	= 10.88	Homoscedasticity test (Prob > Chi2)	= .84

Y_1	Coeff	Std Error	t-Stat	P>T	VIF	1/VIF
Intercept	2.53	0.13	19.00	0.00		
X_1	0.09	0.06	1.50	0.14	1.03	.97
AS_1	0.04	0.01	4.46	0.00	1.02	.98

The results of the regression indicated, as shown on Table 7, that, 15% of the variation in the Academic performance (CGPA) was explained by prior knowledge in Accounting (R^2 = .15, F (2,127) = 10.88, p < .05). It was also found that the aggregate score which stood for the background of the students' prior knowledge was significant in effecting a change in Academic performance of the students (B_1 = .04, p < .05). This statistic indicates that for every unit measure of change in the capability of a student who had a prior knowledge in accounting the significant change that results in the performance in the university is .04 units.

With the positive value, it means that if a student applies the prior knowledge gained in accounting from senior high school in the university, it will significantly result in an improvement in the student's cumulative grade point average by 4%. This is consistent with Papageorgiou and Carpenter

(2019), a study in which the researchers found that a well-stocked prior knowledge in accounting has the tendency to affect positively and significantly in the grade point average of students in universities studying Accounting. The result is also in consistent with the topical sequence of the elaboration theory. According to the Reigeluth (2018), accounting is structured in sequence with an elementary sequence containing less challenging teaching material and advanced sequence serving as a top up of the elementary sequence and containing a more challenging content material. Thus, in order to understand and perform at the advanced content, learners are to have a firm grip on the elementary sequence. However, Table 7 showed that gender was not significant in effecting a change in the Academic performance of the students ($B_1 = .09$, $p > .05$). The statistic suggests that the gender of an individual does not significantly affect the academic performance of such individual. This result was found to be inconsistent with Nouri and Domingo (2019), who reported from their study that gender of an individual has the tendency to impacts positively in students' academic performance in the university.

On the part of the students who had no accounting background but who were pursuing the accounting degree programme, the following correlation matrix shows the association between their background which for the purpose of this study was taken as the aggregate score of their WASSCE examination and their academic performance which was the cumulative grade point average.

Table 9: Correlation matrix : Students without Accounting Background

	Y_2	X_2	AS_2
Y_2	1		
X_2	-0.011(.9)	1	
AS_2	0.013(.83)	-0.007	1

The values as set out in the matrices in Table 9 are in line with Rumsey (2016). From Table 9, the correlation coefficient for the students background and academic performance was .013. This revealed that there is a positive association between the prior knowledge the students and their Academic performance, but the relationship was found to be not significant ($r(118) = .013$, $p > .05$). The coefficient of determination was .02%. This meant that though the background of students without accounting knowledge had the tendency to contribute .02% positive change in Academic performance as a result, such impact was not significant. This was consistent with Alfan and Othman (2005), who stated that prior knowledge of a discipline other than accounting has a direct association with academic performance in accounting at the degree level though, the relationships are usually not significant. By implication, the extent to which the respondents possess and maintain the knowledge gained other than accounting at senior high schools influences positively but insignificantly on how well they perform in the universities. The table also showed that there was a weak and negative relationship between the gender and Academic performance and the relationship was not significant as well ($r(118) = -.011$, $p > .05$). This result was supported by the coefficient of determination which also reported that only .01% of the

variation in the Academic performance turned out to be a result of the gender of the students without accounting background (R^2 - = .0001), meaning that only .01% variation in the academic performane was as a result of the gender of the students.

Regression model of students without prior Accounting background

The model for regressing the academic performance (dependent variable) on the academic background (independent variables) of the students without prior accounting background was stated as $Y_2 = B_2 + B_3AS_2 + B_4X_2 + Ɛ_2$. In the model, Y_2 was used to represent Academic performance of students who had no accounting background. AS_2 stood for Aggregate score of students without accounting background and X_2 was used for the Gender of the students with no accounting background. In the model $Ɛ_2$ stood for the error term and Bi are the regression co-efficient.

The regression results of the performance of students who had no accounting background is displayed in Table 10 (Raza et al., 2022).

Table 10: Regression results of students without prior accounting background

Observation = 120		df	= 118
SSR	= 17.85	SER	= .19
R^2	= .0.00	Prob > F	= .02
Adj R^2	= -.02	Normality test (Prob >Z)	= .24
F(2, 118)	= .03	Homoscedasticity test (Prob > Chi2)	= .36

Y_2	Coeff	Std. Err.	T	P>t
Cons	3.19	.017	-.18.41	0
AS_2	-.003	.14	-.21	.9
X_2	-.01	.08	-.13	.9

Table 10 presents the regression results of students in universities who were pursuing bachelor degree in accounting but who had no accounting background from senior high school. It was stated on the table that the background of those without accounting background and gender could not jointly provide a significant variation between the prior knowledge and academic performance of the respondents (R^2 = 0, F(2,118) = .97, p > .05). This result indicates that none of the changes in the academic performance of such students could be as a result of the variation in the joint variations in their background.

The results pointed out that prior knowledge of the students without accounting background were not significant in explaining their academic performance. In specific terms, the aggregate score of the students without accounting background at WASSCE had a retrogressing influence in the academic performance (B3 = -.003, p > 0.5). The results of the regression also provided that gender was also not significant in affecting the Academic performance of the respondents (B4 = -.01; p > 0.5).

Thus, when students do not have any prior knowledge in Accounting before entering university to pursue an accounting degree programme there is a possibility that such students would not perform well (Rossouw & Brink, 2021).

Differences in performance in Accounting courses.

Accounting related courses such as Financial reporting, Management accounting, Financial management, Taxation and Auditing are considered as elective courses and critical to the bachelor accounting programmes. Among the questions raised in this study is whether or not the performances in accounting courses in the universities vary between students with prior

accounting knowledge and those without prior accounting knowledge. To address this question, a t- test was conducted to test significance between two mean scores, one for the respondents who had prior accounting background and the other belonging to those who had no knowledge in accounting prior to entering university.

The study sought to find out the entry requirements in terms of the background of the students for the admission of students onto accounting degree programmes in universities in Ghana. For the purposes of presentation of results, the respondents with Accounting background were abbreviated as AST and the students without Accounting background was shown as NAST. The students on bachelor accounting degree programmes come from both Accounting and General Arts backgrounds. Students with Accounting backgrounds (AST) have prior knowledge in financial accounting and cost accounting together with other numerate subjects at senior high schools. However, the General Arts students have no accounting background, yet they gain admission to pursue bachelor degree in accounting in the universities in Ghana. In the light of the various academic backgrounds, it became necessary to check how different the performance of students with prior accounting background from their counterparts who had no prior background in accounting and its related courses.

Assumptions

Testing to ascertain the difference two population means, it is assumed that the following exist;

i. that the samples are independent of each other,

ii. that the variances of the two populations are homogeneous, and

iii. that the samples are normally distributed.

Test of difference between two means – the assumptions.

The purpose of this study was to ascertain the extent to which the background of Accounting students in the universities in Ghana affect their academic performances. The academic performances of the accounting courses for both the students with accounting background are tested for their means to analyse the equality between the two means. In order to carry out the test, the following assumptions are necessary and have to be tested. These assumptions are;

- that the samples from which the means were extracted are independent of each other,
- the means have equal variances (homogeneity), and
- the samples are normally distributed.

The Test of Independence of Samples

. In order to ascertain whether or not the samples from which the means were calculated were independent, the chi-square test was used. Sample for the students with accounting background was used as sample 1 (AST) whilst that of those without accounting background was made sample 2 (NAST). The calculated chi^2 was estimated using the formula below and the results displayed on Table 11 (Anderssen, Sivertsen, Lønning, & Malterud, 2020).

$\chi 2 = \sum(O-E)^2$; where;

$\chi 2$ = Calculated chi square;

O = Observed means of each row

E = Expected means of each row

With the degrees of freedom equal to (r-1) x (c – 1), where r represents total number of rows and c stood for total number of columns, the test was carried out as follows.

H_O : Sample 1(AST) was independent of Sample 2

H_1 : Sample 1(AST) was not independent of Sample 2

$\alpha = 0.05$

Decision rule : Reject H_o if the calculated $\chi 2$ is greater than the critical value; otherwise, do not reject H_o

Table 11: Test of Independence

O	E	E-O	$(O-E)^2$
2.81	2.83	-0.02	0.00048
2.73	2.72	0.01	0.00007
2.96	2.97	-0.01	0.00005
2.74	2.73	0.01	0.00007
2.86	2.85	0.01	0.00017
2.85	2.83	0.02	0.00048
2.71	2.72	-0.01	0.00007
2.97	2.96	0.01	0.00005
2.72	2.73	-0.01	0.00007
2.83	2.84	-0.01	0.00017
		$\sum (O - E)^2$	= 0.0017

From table 11 the Critical value ($\chi_{0.05}$, df= 4) was 9.488 and the $\chi 2$-cal was 0.0017

Decision : since the $\chi 2$-cal is not greater than the critical value, the null hypothesis could not be rejected.

Conclusion: The samples from which the means were taken are independent of each other.

The Test of Homogeneity

For the homogeneity of the population variances, an F-test of significance was conducted for each of the accounting courses. Given that Where S^2_1 is used for the variance of the means for group of students without accounting background and S^2_2 for the variance of the means for group of students with Accounting background, the procedure for the test was as follows.

H_o: $S^2_1 = S^2_2$ or $S^2_1 / S^2_2 = 1$

H_1: $S^2_1 \neq S^2_2$

$\alpha = 0.05$

Decision rule : Reject H_o if F-value is less than 0.05; otherwise, do not reject H_o.

Table 12: Test of Homogeneity

COURSE	F- value
Financial Accounting	1.65
Management Accounting	1.08
Financial Management	1.37
Taxation	1.35
Auditing	1.17

The results of the test is displayed on Table 12 (Bull et al., 2021). From table 12 it is observed that all the F-values for all the courses are greater than 0.05. In accordance with the rule for decision, it was concluded that the variances for the population from which the sample for students with Accounting background and that of the students without accounting background are equal.

The third of the assumptions tested for the difference between two means of the accounting courses which was the bedrock of this study was the test of normality of the distributions of the sample means of the courses involved. On the part of the raw data for both students who had accounting background and those without accounting background, the respective data were large and therefore conform to the central limit theorem. According to the theorem, the sample distribution of the sample means approaches normal when the sample size increases and approaches the population (Cranier, 2022; Kwak & Kim, 2017; Stamatopoulos, 2022). In line with this theorem, the assumption of the normality of the distribution of the data was upheld. The sizes of each of the samples used for this study exceeds 30 and in accordance with Boddy (2016), the samples, being 120 and 130 respectively for students without accounting background and those with accounting background, were considered large and therefore the distribution of the sample means are normally distributed. This implies that the populations from which the samples were taken were normally distributed as well.

To authenticate the normal distribution of the populations, the Shapiro-Wilk W test it was conducted to test the hypothesis that the populations from which the samples were taken were normally distributed as against the alternative that the populations were not normally distributed (Hanusz & Tarasińska, 2015).

The normality test was carried out as follows.

H_O The populations are normally disturbed

H_1 : The populations are not normally disturbed.

$\alpha = 0.05$

Decision rule : Reject H_O is P-value is less than the alpha value

Table 13 : Shapiro Wilk W test of Normality

For both groups the p-values were greater than the significant level

Sample Type	(Prob > z)
Students with Accounting	0.6
Students without Accounting	0.5

(Alpha). Therefore, the null hypothesis could not be rejected. It was therefore concluded that the populations from which the samples were drawn were normally distributed.

Difference between Means

From the tests carried out on tables the three assumptions on the test between means were satisfied and that the test carried out is displayed on Table 14 (Apostolou, Dorminey, & Hassell, 2020).

Table 14: Difference in performances in Accounting courses

Course	Observation		Mean Scores			Std. Dev.		P	t
	AST	NAST	AST	NAST	DIFF	AST	NAST		
F. Accounting	130	120	2.81	2.85	-.04	.60	.77	.64	- .25
M. Accounting	130	120	2.73	2.71	.02	.78	.81	.80	.22
F. Management	130	120	2.96	2.97	-.01	.51	.60	.91	-.11
Taxation	130	120	2.74	2.72	.012	.66	.77	.89	.14
Auditing	130	120	2.86	2.83	.03	.58	.63	.74	.33

The tool used to assess the difference between the performances of students with accounting background (AST) and those without accounting background (NAST) was the independent t-test with the associated probabilities. The values from the test were used to determine the significance of the difference between the two means of the students' performances. With Mean (AST) representing the mean performance of students with accounting

background and Mean (NAST) representing the mean performance of students without accounting background, the test process for each of the courses was carried out as follows;

H_O : Mean (AST) – Mean (NAST) = 0

H_1 : Mean (AST) – Mean (NAST) ≠ 0

Level of significance (α level) = 0.05 (5%)

Decision criteria: Reject null hypothesis (H_O) if Pr (T > t) is less than the alpha level (α), otherwise do not reject H_O.

The first of the courses listed on Table 14 is Financial Accounting/reporting. The independent – samples t-test was carried out to assess how different the mean score of students who had accounting background from the students without prior accounting knowledge. The test revealed that there was no significant difference between the mean score of students with accounting background (M = 2.81, SD = .60) and the mean score of respondents without accounting knowledge (M = 2.85, SD = .77). This result indicates that there was no significant difference between the performance of students with accounting background and those without accounting background (t (248) = .25, p = .64).

On the part of Management Accounting, the test compared the score of students with accounting background (M = 2.73, SD = .78) and their counterparts who had no accounting background (M = 2.71, SD = .81). This mean score shows that there was no difference between the mean scores of students with prior accounting knowledge and respondents without any accounting background (t (248) = .22, p = .80). Thus, for the students with prior accounting knowledge, their performance in Management Accounting is

not statistically different from the performance of students without prior Accounting knowledge.

The mean scores in Financial Management for students with accounting background (M = 2.96, SD = .51) was compared with that of students without Accounting background (M = 2.97, SD = .60). The test revealed that there was no significant difference between the two mean scores (t (248) = .11, p = .91). This result makes a submission that the performance of students with prior accounting knowledge in terms of Financial Management was no different from the performance of students without prior accounting knowledge.

For Taxation, the results produced no significant difference between the performance of students with prior accounting knowledge (M = 2.74, SD = .66) and the students who had no accounting background (M = 2.72, SD = .77). The test results (t (248) = .14, p = .89) supported the stand that the difference between the performance of students with accounting background and those without accounting background was not significant. The test conducted also compared the results of the students with accounting background (M = 2.86, SD = .58) and those without accounting background (M = 2.83, SD = .63) in terms of Auditing with the test result being t (248) = .33. p = .74. This comparison revealed that the performance of the students in Auditing was statistically the same. Thus, the performance in Auditing, of students with accounting background was not different from that of students without accounting background.

Difference in General Performance in Accounting courses

Reflecting on the academic background and how it impacts on their performance in accounting courses, a further analysis was made regarding the

general performance of the students in the accounting courses. The mean of all the means in the accounting courses of the students with accounting background was taken and the same was done for the students without Accounting background for testing whether there exists a significant difference in the general performance in terms of the Accounting courses. Performing the t-test, the following hypothesis was formulated.

H_O : General Mean (NAST) = General Mean (AST)

H_1 : General Mean (NAST) ≠ General Mean (AST)

Level of significance (α level) = 0.05 (5%)

Decision criteria: Reject null hypothesis (H_O) if the probability value (Pr(T > t) is less than the significance level (α); otherwise do not reject H_O.

Table 15: Differences in General Performance in Accounting Courses

TYPE OF STUDENT	MEAN	STD. DEV
Students with Accounting background (AST)	2.816	.73
Students with Accounting background (NAST)	2.819	.64
Difference in General means	-.003	.68
T- value	- .08	
P- value	.94	

From Table 15, the difference between the mean performances of the students with Accounting background and those without Accounting background is very small (Chen & Yang, 2019). In terms of the significance of the difference, It could be said that there is no significant difference between the general performance of the students with Accounting background (M = 2.819, SD = .64) and those without Accounting background (M = 2.816, SD = .73). This assertion is confirmed by the response of the test criterion for accepting or rejecting the null hypothesis. From the test, the probability of

rejecting the null hypothesis was not satisfied. The p-value was greater than the level of significance and therefore the null hypothesis could not be rejected. That is, there is no significant different between the general performance of the students with Accounting background and those without Accounting background in the Accounting courses (t (1248) = -.08, p = .94). This finding is in violation with the behaviourist and the cognitive theories which stipulate that with a prior knowledge and experience in any endeavour, the individual stands a better chance of performing a given activity with excellence. In the cognitive dispensation, Reigeluth, (2018) outlined in the Elaboration model that a general or whole knowledge is divided into levels and therefore a knowledge in the preceding level serves as a platform for understanding the advanced level and perform well in the end. The result of this test as captured on Table 13 is in sharp contrast with this theory. It is also found to be inconsistent with Papageorgiou and Carpenter, (2019) who reported from their study that a prior knowledge in accounting results in a good general academic performance of students. This implies that irrespective of the Accounting background of a student, the performance could go any direction. It was however found to be consistent with Hepworth, Littlepage and Hancock (2018) which stated that the background of a student has no significant effect on the general academic performance of that student.

Differences in Overall Performances of Students

Hypothesis three was meant to investigate whether the performances of the accounting students in the universities are different in terms of those with prior accounting background and those without accounting background. The hypothesis is stated as follows.

There is a statistically significant difference between the academic performance of accounting students with prior accounting background and those without prior accounting background in the universities?

The difference between the means of the cumulative grade point averages which was used to represent the academic performance of the students with the various backgrounds was examined. The results of the test on the difference between academic performance (mean of the grade point averages) of students with prior accounting background (AST) and the students without prior accounting background (NAST) is shown on Table 15 (Chen & Yang, 2019).

Table 16: Differences in General performances of students

Variable	Obs	Mean	Std. Err.	Std Dev.	95% Conf. Inter
AST	130	3.11	0.03	0.34	3.06 - 3.17
NAST	120	3.15	0.04	0.43	3.07 - 3.23
COMBINED		3.13	0.02	0.39	3.08 - 3.18
Difference		-0.04			

Diff = mean (AST) – mean (NAST). degrees of freedom = 248 t = -.7

Ho: diff = 0 Ha: diff ≠ 0 Pr(T > t) = 0

Decision rule: Reject Ho if p-value was less than the level of significance (5%).

An independent t-test carried out to compare the general performance of students with prior Accounting background (M = 3.11, SD = .34) and those without Accounting background (M = 3.15, SD = .43) suggested that the performances were not different from each other, significantly. The conclusion was that there was no significant difference between the performance of students with accounting background and the performance of

the students without accounting in the universities (t (248) = -.7048, p = .48). This finding was found inconsistent with Papageorgiou and Carpenter, (2019). The researchers suggested, based on their research finding, that understanding the content of accounting courses which results in general performance of the students differ significantly between students with accounting background and those without accounting background. They concluded that students with accounting background have a higher level of understanding of the content than the students with no accounting background and therefore the performances differ. Students with accounting background were found to have outperformed those without accounting background.

Students' Perception about the Bachelor Accounting Degree Programme

The study also sought to examine how accounting students perceive accounting programme in the universities and whether their perception is a contributor to their academic performance. The perception of the respondents stems from personal attitude to study, to the availability of study resources and other support services. This study uncovered how students perceive the role that availability of study materials such as books and articles used in the pursuit of the courses involved in the accounting degree programme (P1). It also delved into how students think about support services of lecturers available to them and how they think that accessing these support services may impact on their studies (P2). The students made a perception about the extent to which accounting courses had contributed to their cumulative grade point averages (P3). As to whether or not accounting is challenging or not (P4) was another factor mentioned by the students. The results on table 17 are the responses of the students for the questions formulated as displayed using a

five-point likert scale (Sakkir, Dollah, Ahmad, & Education, 2020). The responses of students in the study were rated as follows:

1. = strongly disagree 2. = disagree 3. = Moderately Agree

4. = agree 5. = strongly agree

Table 17: Perception of Students

Thought	Strongly disagree	Disagree	Mod agree	Agree	Strongly Agree	Mean	SD
P1	41	48	63	91	7	2.9	2.9
P2	49	62	70	46	23	2.73	2.73
P3	37	74	83	43	13	2.68	2.68
P4	36	90	50	48	26	2.75	2.75

The extent to which a programme becomes challenging to students is revealed through the students perception on how study materials are available have been impacting in the performance of past students. Another subject of perception of students is comments made by the past students on the instructors' willingness and ability to teach and render good support services to make the content being delivered easily assimilated and satisfying. The aftermath of this analysis is the performance of the students in question (Paolini, 2015). A good performance reveal that the student had the study materials and the delivery by the instructor was excellent. On the contrary, a bad performance is an indication that there is lack of materials as well as bad delivery of the instructor. When these three issues are prevalent, the student logically considers the programme as challenging (Paolini, 2015). From the table, the responses for the various responses were from strongly disagree to strongly agree with the weight allotted from 1 to 5. The intervals were constructed using the range of the various responses.

The range was 4 (5 – 1) and dividing the range by the number of responses being 5 gives a width of 0.8. This was used to construct the interval for each of the responses (Willits, Theodori, & Luloff, 2016). The scores to the questions in respect of the responses were the number of respondents who gave the specific responses. For all the four questions, the averages fell within the interval of 2.61 – 3.40. This could be interpreted that the respondents from both with accounting background and those without accounting background moderately agreed to all the questions posed to them. Thus, specifically for question one, the respondents claimed that they moderately agreed that they had access to accounting books and books of related courses. With this, if accessibility of the materials was a problem, then it could be obvious that their performance would not be high. However, if students had access to the instructional materials easily, it would facilitate a joyous learning and would result in a good performance of the students. The results displayed on table 17 was consistent with Colvard, Watson, and Park (2018), a study conducted in the universities and colleges in America on how instructional materials impact on the students success both on course basis and generally on a grade point average basis. The researchers found that students who have easy access to instructional materials are capable of performing better than those without instructional materials (Colvard, Watson, & Park, 2018). However, this findings presented on Table 17 was inconsistent with Ogweno (2015), a study which found that students without study materials rather had higher scores on the average than those with the study materials (Alfordy & Othman, 2021; Ogweno, 2015).

Responding to question two, the students moderately agree that instructors were helpful in making the material presented at lectures satisfying

and assimilating. This meant that the lecturers delivered their materials well, but not in accordance with the needs of the students. This was found to be consistent with MacSuga-Gage, Simonsen, and Briere (2012), which summarised that the competence and alacrity of the lecturers to ensure that students comprehend the materials presented at lectures has a great impact on the performance of the students particularly when the students have little prior background in the specific programme (Macsuga-Gage, Simonsen, & Briere, 2012). From the response of the students, those who had no background in accounting found it extremely difficult to understand than those with accounting background because lecturers performed with the assumption that students at their lectures had prior accounting background. Hence, the difficulty faced by students without accounting background (Hammer et al., 2010).

For question three, it was moderately agreed by the respondents that the level of their cumulative grade point averages was due to their performances in courses other than accounting and its related courses. This could be explained that most of the students performed well in accounting and its related courses. However, if this is linked to question three then it means that the students did intensive personal studies. They did not rely on what was presented at lectures fully, instead, they strived hard personally to study and understand the course outline items and this helped them to achieve the level of performance they had (Zandi, Shahabi, & Bagheri, 2012).

Finally, the students responded that on the average, the accounting programme and the study of accounting is moderately challenging. Students had little access to course materials in terms of books and articles to read, lecturers did little to make teaching materials understandable. Consequently,

they reported that they had to do continuous personal study to improve on their performance. Indeed, the students were not wrong too to say that the programme is somewhat challenging. This is in consistent with the three responses already discussed and with Ferreira and Santoso (2008). Involving both graduate and undergraduate students in their study to investigate how students performances were affected by their perceptions, the researchers found that negative perception of the students results in negative performance (Ferreira & Santoso, 2008).

Chapter Summary

The chapter looked at the relationship between students' academic background and their performances in the university, how such background contributed to the performances. It also pursued the difference between the performances of students with accounting background and that of those without accounting background as well as the perception of the students on accounting degree programme.

Dealing with the extent to which the students' prior knowledge contributed to their academic performances, it was found that accounting background of students had a significant role in the changes that occurred in their academic performances in the university. On the other hand, the study found that the non-accounting subjects pursued by students at the senior high school do not contribute significantly to students' academic performance in the university. These findings are consistent with both the cognitive theories and the behaviourist theories. Both theories assert that prior knowledge of any endeavour of any individual or a group of individuals accounts for how well such people perform in their current activities.

The chapter also delved into finding out whether the academic performance of students who have prior accounting knowledge was different from those without accounting background prior to entering university to pursue a bachelor degree programme in accounting. It was established that there is no significant difference between the performances of the two groups of students pursing the programme.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATION

Introduction

This final chapter of the study is composed of the description of the process of the research, the summary of the findings of the study and the conclusions reached which served as the basis for the recommendations advanced to permit policy formulation by policy makers and other stakeholders. Centred on the various limitations and the delimitations of the study, the chapter also advances appropriate suggestive issues for which further research can be made into, in future.

Summary of the Research Process

The study was carried out to purposely examine how academic history, by way of the programmes pursued by the students prior to gaining admission into university to pursue a bachelor degree in accounting contributed to their performances in the university.

To achieve this purpose, the researcher sought to address the following research objectives;

1. To analyse whether there was a significant correlation between academic history of accounting students and their future performances in the university
2. To analyse if the academic performances in accounting and its related courses in the universities vary between students with prior accounting knowledge and those without prior accounting knowledge.
3. To determine if any, the significant difference between the general performances between students with prior accounting knowledge and those without prior accounting knowledge in Ghana.

4. To find out the extent to how students on Accounting degree programme in general perceive the programme.

The design advocated for the study was the causal-comparative research design, a quantitative method which stems from the orientation of the postivitism paradigm. With this method, a quantitative data in the form of grades obtained in the WASSCE by the respondents as well as their cumulative grade point averages which were taken as the academic performances in the university were gathered using a questionnaire. Part of the questionnaire was also used to collect data on how the respondents perceive the accounting degree programme at to whether it is challenging or not based on their background. The collected data was analysed using the Pearson Correlation and the multiple regression tools were used to address objective 1. Comparison of the performances of the two groups of respondents was made using the t-test to address objectives 2 and 3..

Summary of the main findings of the study

1. Among all the students on the accounting programme, those who had prior knowledge in accounting and other related subjects were more than those students pursuing bachelor degree programme in accounting but had no background in either accounting or its related subjects.
2. There was a positive relationship between the academic background, being the programme pursued at the senior high school and academic performance of both students in the university who had accounting background and those without accounting background. A further result from the regression proved that with the exception of financial accounting in the accounting programme and history and government in the non-accounting programme at the senior high school level, the rest of

the subjects were not statistically significant in explaining the cumulative grade point averages of the students.

3. There is no significant difference in performances in financial accounting and its related courses for the students with prior accounting knowledge and those without any accounting background. As confirmed by the t-test, the students with no accounting knowledge prior to entering university performed the same in the university as that of the students who studied accounting at the senior high school prior to their admission onto the bachelor degree programme in the university
4. Generally, there was no significant difference between the overall academic performance of students with prior accounting background and the performance of the students without prior accounting background. Thus, the overall cumulative grade point averages of students with accounting background is statistically the same as that of the students who had no accounting background prior to their admission onto the accounting degree programme.
5. The students without prior accounting background were able to attain their current state of cumulative grade point average as a result of some other subjects on the degree programme, and not accounting and its related courses. To those students, accounting and its related courses played a little role in making them achieve their current status in academics. However, the students who had accounting background prior to entering university, their understanding of the basic terminologies and principles of accounting and the related courses at senior high school level pushed them into studying all the courses well. To them, the discipline, style and method of assimilation familiar to them in the study

of accounting and other courses prior to joining university played a significant role in their pursuit of the bachelor accounting degree.

Conclusion

Bachelor degree in Accounting programme run by universities in Ghana is a training programme meant to train accounting personnel for the economy. It behoves on the universities to admit qualified applicants. However, universities in Ghana admit applicants without giving attention to their academic background. Consequently, both students with prior accounting knowledge and those without accounting background are admitted to pursue the programme leading to the suspicion that students with prior accounting knowledge would perform better than those without any accounting knowledge.

The analysis provided that there was no difference between the performance of the students with accounting background and that of those without accounting background in respect of accounting courses in the university.

The regression analysis also revealed that prior knowledge in the accounting programme at the senior high school level plays a significantly little role in the performance of students pursuing accounting degree programme at bachelor level in the university. Though students without relevant prior knowledge in accounting had good scores in the performance of accounting and other related courses in the university, the extent to which their background contributes to their performance was not statistically significant.

Generally, the academic performance of all the students were found to be statistically the same irrespective of their background. This implies that the cumulative grade point averages of students who had prior accounting

knowledge was not significantly different from that of those students who did not have any background in accounting or had not studied accounting before at the senior high school.

It is conclusive therefore to place on record, that the admission of students to pursue bachelor degree programme in Accounting as it stands at the moment is not erroneous. Until drastic changes are effected in the curriculum of the bachelor degree programme in Accounting to render the applicant without prior accounting knowledge, the universities are correct in their judgement to admitting students onto the accounting programme even though the applicants may not have any prior knowledge in Accounting

Recommendations

On the basis of what has emanated from the study, it is worth making the following recommendations.

1. From the regression analysis carried out, it occurred that the extent to which the background of the non-accounting students influences their academic background was not significant to affect any change in academic performance. It is therefore recommended that the programmes run by the Ghana Education Service through the various senior high schools should be restructured. It is also necessary that the general art programmes must include principles of accounts at its basic level in order that the students would be familiar with basic accounting principles and gain much skills in its study if they end up opting for accounting programme in the university. This would prepare the students psychomotor skills at that stage of their learning process to make them appreciate and familiarize themselves with the real-world business situations. By this, they would be able to come out with

problems around them and provide the appropriate solutions to them. Since business mathematics is made up of accounting and other accounting-related topics in quantitative form, the subject is suggested to be made an elective or a core subject in the general art programme. This would ensure that the students would prepare themselves to perform creditably in the university if they decide to embark on a degree in accounting. It would also help them to meet real business situations and problems as they progress at a higher level and would have been prepared to provide the solutions pragmatically without having to be bordered by detail in the problems they may face.

2. Critically looking at the accounting programme at the senior high school,

   the analysis revealed that even though the prior accounting knowledge of the students provided a significant change in academic performance, the extent of the change was very small (.04). It is recommended that the accounting programme at the senior high school should be looked at more critically to expose the students to more accounting issues so they can apply them in the university for a higher performance.

3. As much as there is a possibility of General arts students to pursue accounting degree programme in the university, it is recommended that good career counselling units must be instituted at Junior high schools and Senior high schools. The units should be charged to provide pre-programme selection career counselling with the involvement of the parents or guardians of the students. The counselling conducted would unearth the academic strengths and weaknesses in the numerate subjects at that level to permit appropriate selection of programme to

pursue at the senior high level. To top up the counselling at the junior high school, the stakeholders at senior high schools must stimulate the students learning by further counselling so that those desiring to pursue accountancy as a profession in the university would attach great importance to acquiring good foundation in accounting and other business subjects for a better application on the accounting degree programmes in the universities. At the senior high school level, the counselling should be done progressively throughout the entire study period prior to completion.

4. In addition to the availability and the state of their libraries, both senior high schools and universities must have in their stocks fundamental accounting textbooks and journal articles accessible to students concerned. It should be noted that this would be a stimulating catalyst particularly for those students who had little or no accounting background. Consequently, a good paring of knowledge and skills would emerge between the admitted students who had accounting background at the senior high school and those who had no prior knowledge and did not pursue the business accounting programmed at the senior high level.

Contribution to Research

This academic work contributes to knowledge by filling in the research gap it purported to close. Existing studies do not focus on the extent to which the accounting background of students contributes to performance in the specific accounting courses in the universities. This work has expounded on the gap and has brought to the fore that even though students may have

different background, their performances in the accounting courses in the universities are not statistically different.

Suggestion for Future Research

1. A comparative study should be carried out on the impact of prior accounting knowledge on the academic performance on other disciplines.
2. A replication of the topic on nation-wide universities.
3. A further study should be conducted on the topic using other methods of analysis rather than the quantitative approach.
4. Comparative analysis of performance of students with accounting background in public universities and private universities.

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APPENDIX A - QUESTIONNAIRE

THE UNIVERSITY OF CAPE COAST

COLLEGE OF EDUCATION STUDIES

DEPARTMENT OF BUSINESS AND SOCIAL SCIENCES

EDUCATION

QUESTIONNAIRE FOR BACHELOR ACCOUNTING DEGREE

STUDENTS IN UNIVERSITIES IN GHANA

QUESTIONNAIRE

This questionnaire is designed to solicit your responses to help in a research meant to analyse the role that academic history of students play on the academic performance of Accounting students of public and private universities in Ghana. Please be assured that any response you provide will be treated with extreme confidentiality and will be used for academic purposes only. Thank you for agreeing to participate in the exercise.

Section A

1. Gender of student Male ☐ Female ☐
2. Which sector is your University? Public ☐ Private ☐
3. Which year did you enter the University? (YYYY) _____
4. Which programme did you pursue at SHS?

Science ☐ G.Arts. ☐ Business ☐ H. Econs. ☐

Other (specify)……..

Section B

Academic history of students (WASSCE results of students)

GRADE	WEIGHT
A	9
B2	8
B3	7
C4	6
C5	5
C6	4
D7	3
E8	2
F9	1

(Note: Write 9 for A1, 8 for B2 etc. Enter 0 if you did not study the course. Use this to answer questions 6 and 7).

5. Accounting programme : What grade did you obtain in WASSCE for the following subjects?

SUBJECT	GRADE OBTAINED	WEIGHT
a. Financial Accounting		
b. Cost Accounting		
c. Economics		
d. Business management		
e. Elect. Mathematics		

6. Non Accounting programme : What grade did you obtain in WASSCE for the following subjects.

SUBJECT	GRADE OBTAINED	WEIGHT
a. History		
b. Geography		
c. Government		
d. Christian Rel. Studies		
e. Literature in English		
f. French		
g. Others:		

Section C : Academic performance of University Accounting students

Below are the accounting courses in accounting degree programme pursued by students at various universities in Ghana. Please write as appropriate the grade obtained against each course the credit hours, the grade obtained from level 100 to 300 (1 for A, 2 for B+, etc.)

A = 4.0 B+ = 3. B = 3.0 5C+ = 2.5 C = 2,0
D+ = 1.5 D = 1.0 F = 0

7. What were your scores in the following courses at the various Levels

Course	Credit hours	Grades Obtained L 100	L 200	L 300
Financial accounting				
Cost/man. Accounting				
Financial management				
Taxation				
Auditing				

Please indicate the other courses you read apart from the ones above and write the grades obtained in each case

Course	Credit hours	Grades Obtained L 100	L 200	L 300

Section D

Students perception on the study of Accounting and its relative courses.

1 = Strongly disagree (Asbari et al.) 2 = Disagree (D) 3 = Neutral (N)
4 = Agree (A) 5 = strongly agree (Asbari et al.)

8. To what extent do you agree with the following statements?

	ISSUES	. SCORES SD	D	N	A	SA
P1	Supporting materials (Books and articles) affect performance in Accounting					
P2	There is an assertion that Accounting Lecturers delivery affect performance					
P3	CGPA of Accounting students is due to courses other than accounting					
P4	Studying accounting is very challenging					

APPENDIX B - TYPES OF UNIVERSITIES IN ACCRA

Universities offering Bachelor Accounting Degrees in Accra

TYPE OF UNIVERSITY	NUMBER
PUBLIC	4
PRIVATE	12
TOTAL	16

Universities in Greater Accra offering bachelor Accounting degrees

NAME OF UNIVERSITY	UNIVERSITY TYPE
Accra Institute of Technology	Private
Accra Technical University	Public
Ashesi University	Private
Central University	Private
Dominion University College	Private
Ghana Baptist University College	Private
Ghana Technology University College	Public
Jayee University College	Private
Knutsford University College	Private
Lancaster University, Ghana	Private
Methodist University College	Private
Regional Maritime University	Public
University of Ghana Legon	Public
Valley View university	Private
Wisconsin International University College	Private
Zenith University College	Private

Source: *African Tertiary Institutions, tertiaryinstitutions.com*