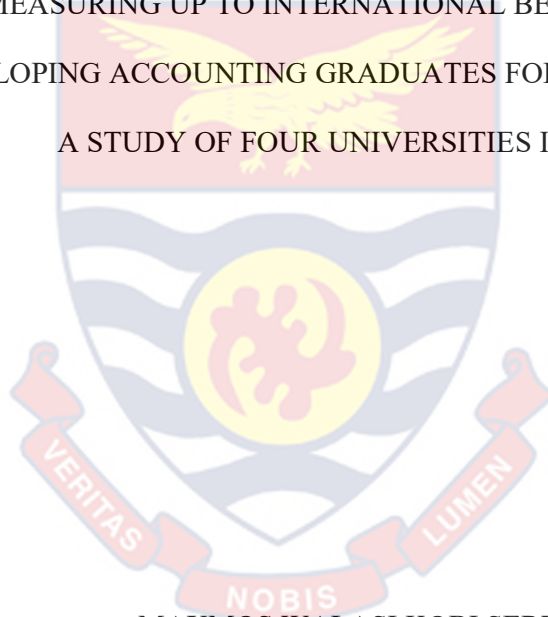


UNIVERSITY OF CAPE COAST

MEASURING UP TO INTERNATIONAL BENCHMARKS IN  
DEVELOPING ACCOUNTING GRADUATES FOR THE JOB MARKET:  
A STUDY OF FOUR UNIVERSITIES IN GHANA

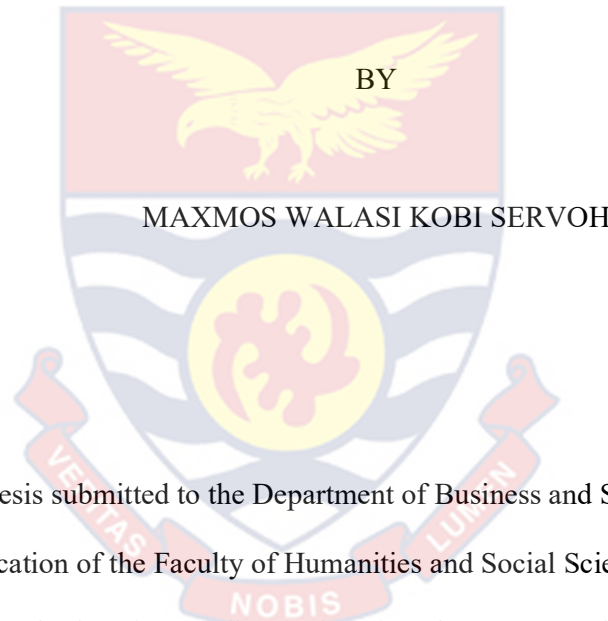


MAXMOS WALASI KOBI SERVOH

2022

UNIVERSITY OF CAPE COAST

MEASURING UP TO INTERNATIONAL BENCHMARKS IN  
DEVELOPING ACCOUNTING GRADUATES FOR THE JOB MARKET:  
A STUDY OF FOUR UNIVERSITIES IN GHANA



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

AUGUST, 2022

## DECLARATION

### Candidate's Declaration

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

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

Name: Maxmos Walasi Kobi Servoh

### 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 Tufuor Kwarteng

## ABSTRACT

The study examined how universities in Ghana develop the professional competencies of accounting graduates and how these competencies contribute to their job performance. A mixed-method approach that employed the embedded design was used to execute the study. The conceptual content analysis was used to analyse documents from fourteen universities in Ghana, America, Asia and Europe. Also, the explanatory correlational design was used to collect and analyse quantitative data. Through the census approach, data was gathered from 115 accounting graduates working in accounting and audit organisations. The results show that universities in Ghana, like universities in other continents, placed much emphasis on developing graduates' technical competence with moderate and little emphasis on professional skills and professional values, ethics, and attitudes, respectively. However, education provided in Ghana did not give students the opportunity to undertake practical job-related activities as other universities did. Again, there were differences in the competencies developed in students. Besides, all the competencies significantly influenced job performance; yet continuing professional development served as a partial mediating variable for the competencies and job performance except for professional skills and job performance. Developing all competencies of accounting graduates with comprehensive practical experience was recommended. Moreover, graduates and employers are advised to ensure they roll out Continuing Professional Developments to sustain the skills acquired by graduates in school so as to scale up their job performance.

**KEYWORDS**

Technical Competence

Professional Skills

Professional Values Ethics and Attitude

Continuing Professional Development

Job Performance

Accounting Curriculum



## ACKNOWLEDGEMENTS

I am grateful to my supervisor, Prof Joseph Tufuor Kwarteng, for his direction throughout this work. He indeed made my work easier by giving expert suggestions, showing fervent interest and motivating me to finish this thesis on time. I really appreciate his efforts. The additional directions given by Prof. Enu-Kwesi and Mr Richard Nkrumah in the initial stages of the work cannot be overlooked. Hence, I am thankful to them.

I also appreciate Dr (Mrs) Philomina Araba Sam, Mr Antwi Agyapong, Ms Adwoa Oforiwaa, Mr Yohannes Kuvor Awunyo, Ms Enerstina Otoo and Mr Richmond Amponsah for their help and unflinching concern throughout my work. Without them, this work may not have been a success.

To my colleagues Mr Kennedy Kofi Tabi Ekyem, Ms Mabel Abla Hlordo, and Mr Maclean Bajepong Bitakan, I am so grateful for the support. You have been wonderful comrades. The ears you made available to listen to my ideas meant a lot to me. Without it, this work may not have been accomplished.

My final thanks go to my backbone (my family), the Gyimah's, my church (CCCM-UCC) members, and anyone who has contributed to the success of this work in any way. May the living God bless you.

## DEDICATION

To the Servoh family (Justice, Comfort, Richard, and Mawufemor).

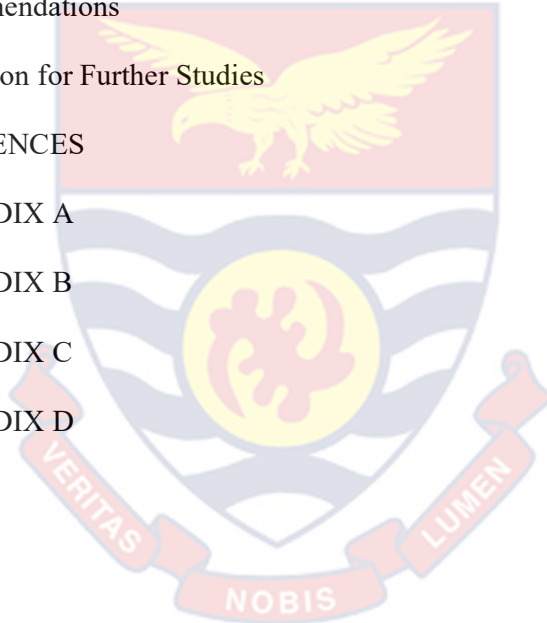


## TABLE OF CONTENTS

	Page
DECLARATION	ii
ABSTRACT	iii
KEYWORDS	iv
ACKNOWLEDGEMENTS	v
DEDICATION	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF ABBREVIATIONS	xii
<b>CHAPTER ONE: INTRODUCTION</b>	
Background to the Study	1
Statement of the Problem	4
Purpose of the Study	7
Objectives of the Study	7
Significance of the Study	9
Delimitation of the Study	10
Limitations	10
Operational Definition of Terms	11
Organisation of the Study	11
<b>CHAPTER TWO: LITERATURE REVIEW</b>	
Introduction	13
Theoretical Review	13
Conceptual Review	20

Conceptual Framework	27
Empirical Review	28
Chapter Summary	43
CHAPTER THREE: RESEARCH METHODS	
Introduction	44
Research Paradigm and Approach	44
Research Design	44
Population	46
Respondents and Participants	47
Sample Size and Sampling procedure	48
Data Collection Instrument	49
Validity and Reliability of Instrument	50
Data Collection Procedure	52
Data Processing and Analysis	53
Ethical Consideration	63
Chapter Summary	64
CHAPTER FOUR: RESULTS AND DISCUSSIONS	
Introduction	65
Demography of Respondents	65
Main Results	67
Convergence between Universities' Focus and IES Requirements	68
Differences in the Levels of Competencies Developed in Accounting Graduate	89
Accounting Graduates' Competencies and their Job Performance	94

Mediating role of Continuing Professional Development (CPD) on the competencies and job Performance nexus	99
Chapter Summary	103
CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	
Introduction	104
Summary of the Study	104
Conclusions	107
Recommendations	109
Suggestion for Further Studies	110
REFERENCES	111
APPENDIX A	123
APPENDIX B	124
APPENDIX C	125
APPENDIX D	131



## LIST OF TABLES

Table		Page
1	Universities Included in the Study	48
2	Summary of Data Analysis Techniques	55
3	Full Collinearity VIFs	57
4	Outer Model Specifications	58
5	Heterotriat-Monotrait (HTMT) Ratios	61
6	Multicollinearity Between Latent Constructs (VIFs)	62
7	Demography of Respondents	66
8	Courses Offered in Accounting Programmes	71
9	Test for Normality	89
10	Friedman Test	90
11	Wilcoxon Signed Ranks Test	91
12	Objective Three Inner Model Specifications	94
13	Objective Four Mediation Results	99



**LIST OF FIGURES**

Figure		Page
1	Conceptual Framework	28
2	Adaptations to the IES	69
3	Objective Three Path Model	97
4	Mediating effect of CPD in TC-JP nexus	100
5	Mediating effect of CPD in the PS-JP nexus	101
6	Mediating effect of CPD on PVEA-JP nexus	101



### LIST OF ABBREVIATIONS

CPD	- Continuing Professional development
IAESB	- International Accounting Education Standard Board
ICAG	- Institute of Chartered Accountants, Ghana
IES	- International Education Standards
IFAC	- International Federation of Accountants
IPD	- Initial Professional Development
PLS-SEM	- Partial Least Squares Structural Equation Modelling



## CHAPTER ONE

### INTRODUCTION

Universities are deemed to be the powerhouse that produces a highly skilled workforce for every nation. However, there have been railing accusations against universities of their inability to develop graduates who possess the required competencies for some time now. In response, International Accounting Education Standard Board (IAESB) has developed International Education Standards (IES) to guide competency development in accounting education. This study, therefore, explores the conformity of accounting curricula of universities in Ghana to the IES requirements and international standards. It also explores what the curricula focus should be through exploring the relationship between competencies and job performance while assessing the mediating role of continuing professional development (CPD).

#### **Background to the Study**

The role of education is to develop learners' competencies with respect to knowledge, skills, and attitudes. This is evident in the fact that various educational reforms in Ghana have prioritised citizens' holistic training and development to meet the demands of the nation's job market (Adu-Gyamfi et al., 2016). Also, the human capital theory and Campbell's model of job performance have both stressed the instrumental role that education needs to play to successfully develop graduates who will be useful to their organisations and countries at large through a good job performance (Becker, 1993; Campbell, Gasser, & Oswald, 1996; Mincer, 1974; Schultz, 1961). Accounting education also resonates that education must render accounting graduates competent enough to perform their job (Fung, 2017; Spencer et al., 2012; Vannatta, 2014;

Zraa et al., 2011). As such, a functional curriculum must be used in accounting education to develop competent graduates who possess accounting knowledge, skills, and attitude (Ackah et al., 2014).

The International Federation of Accountants (IFAC), a global authority in accountancy made of more than 175 member countries and associate organisations representing almost 3 million accountants, charged one of its subsidiaries to develop an effective curriculum guideline. This curriculum is expected to equip accounting graduates with the necessary competencies required of an accountant. Rising to the call, the International Accounting Education Standard Board (IAESB) has set International Education Standards (IES) that will develop the professional competencies of prospective professional accountants (IAESB, 2017). These standards describe the structure and content of the accounting curriculum spelling out the expected learning outcomes in two main dimensions. The first dimension prescribes the Initial Professional Development (IPD), which consists of technical competencies, professional skills, as well as professional values, ethics, and attitudes (IAESB, 2017). The second dimension also prescribes the Continuing Professional Development (CPD), the required learning experience for accounting graduates to maintain and enhance their professional competencies after completing the IPD.

The theoretical, conceptual and empirical evidence have suggested interrelation among the initial professional development, graduates would obtain from school, the continuing professional development they may have to engage in after school, and the job performance they would be able to put out when employed. The IPD graduates may develop from the universities has the

tendency to determine the extent of and the kind of CPD graduates would have to engage in to fine-tune their competencies for the job they are to perform (IAESB 2017). The gap between the IPD and the job expectation is to be filled with CPD. Therefore, once the IPD and the CPD has been adequately rolled out, one can only be sure of utmost job performance when graduates' are employed.

In history, Anyane-Ntow (1992) recounts that universities have been substantially responsible for producing account officers for the job market even from the early stages. This narrative has not changed as universities are increasingly providing accounting education. Since its introduction in 2015, the IES is expected to be incorporated by Ghanaian universities when developing accounting graduates (IAESB, 2017). Being a member of the IFAC through the ICAG, Ghana has adopted the IES and has always expected universities to apply them to develop the professional competencies of accounting graduates. This expectation was later strengthened by the Memorandum of Understanding (MoU) universities in Ghana and ICAG, have signed to apply these IES in developing their curricula (ICAG, 2019). Also, a committee has been established to monitor the implementation of the MoU to ensure that universities comply with IES requirements in the provision of accounting education (ICAG, 2019).

However, the autonomy of universities grants them the luxury to determine which aspects of the IES to focus on (Busuioc et al., 2019). When universities concentrate on some parts of the entire IES/curriculum, it may cause them to downplay the totality of development in the accounting graduates. Determining what to include and exclude from the accounting curricula would have ramifications on the kind of competencies accounting graduates shall

possess after their accounting education. Researchers and stakeholders have, therefore, advocated that universities should endeavour to holistically develop competencies of accounting graduates, especially through the thorough application of IES (Georgiou, 2018), because of the critical role accountancy plays in an economy (Fung, 2017; Spencer et al., 2012; Vannatta, 2014).

The accounting profession is integral to the development of any economy (Hakim, 2016) because accountants are key partakers in reaching sustainable development goals through quality reporting (Stanescu, 2018). The Association of Chartered Certified Accountants (ACCA) (2012) also assert that effective financial reporting and auditing can help improve a country's economy. Thereupon, the peculiarity and relevance of the accounting profession to every nation warrants that special attention is given to the curriculum used to develop accounting graduates, so they function effectively. Universities in Ghana should necessarily have a good curriculum focused on developing the required competencies in students to elicit good job performance when they graduate (Becker, 1993; Campbell et al., 1996; Hidayat & Budiartma, 2018). With this holistic development in place the job market would confidently absorb graduates into their organisations knowing that they would be able to deliver to expectation.

### **Statement of the Problem**

According to Baah-Boateng, (2015) graduate unemployment occurs as a result of the schools' failure to adequately develop students to meet the job market demands. Monga (2019) illuminates the problem by decrying the poor quality of education in African universities (including Ghana), mainly due to obsolete curricula. This causes incompetence in graduates (including

accounting graduates), resulting in a yawning gap between academia and the job market. Accounting graduates from universities of African descent may, consequently, not be able to perform their job to the level that will be desired by their employers (Khan, 2018; Abas & Imamm 2016). Despite the efforts of the accounting fraternity to bridge the gap through the adoption of IES that was carefully designed from the job description of an accountant, some studies (Andrews & Higson, 2008; Siegal et al., 2010) have suggested that the disparity persists due to what universities decide to focus on when developing the competencies of the graduates.

An investigation into how the content of the universities' accounting curricula harmonises the IES would help identify the current focus of universities in their quest to develop accounting graduates for the job market. Some studies (Al-Jalili, & Dhanoon, 2010; Mohammad, 2016) have been conducted to assess the extent to which universities implement their curricula to converge with the IES. These studies have revealed that universities overemphasize some competencies and ignore others, leading to variations in the graduates' developmental levels across the various competencies (Mustafa & Shittu, 2012; Mensah, 2020). However, there is scanty (Adaboh, 2014; Mensah, 2020) empirical literature in the Ghanaian context that brings to light how the focus of universities converges with the IES requirements. None of these studies has made comparisons among universities in different continents to see the nuances and similarities while identifying the conformity to the IES requirements.

It will be inadmissible to recommend sustainable solutions to bridge the gap between academia and the job market without empirically identifying how

the competencies influence the job performance of accounting graduates. Therefore, studies (Wade & Parent, 2002; Khan, 2018; Hanafi & Ibrahim, 2018) have investigated employees' competencies and performance relationships. However, just a handful of studies (Mensah, 2020; Lim et al., 2016) have been conducted in the accounting education context to guide the universities and students to emphasise various competencies. The statistical approaches these studies applied to explore the relationship were primarily descriptive and not rigorous enough to deal with the constructs' composite nature. This somewhat renders such findings not convincing enough to rely on for curricula decision making. There is a need to employ a rigorous regression statistics to stronger evidence about such relationship in relation to the accounting profession.

Even though the IAESB (2017) suggests CPD to be a relevant intermediary factor to obtain the desired job performance from accounting graduates, the literature has rarely explored its contribution. The few studies (Nassazi, 2013; Barzegar & Farjad, 2011) predating this claim by the IAESB, only explored the direct relation of CPD to job performance. Also, some authors (Oliveira & Da Costa, 2014; Oliveira & Holland, 2007; Khan, 2018) have questioned the relationship between competencies and job performance, stating other relevant factors, including on-the-job training/CPD that could influence such a nexus. It, therefore, becomes necessary to explore further how CPD could mediate the competencies and job performance nexus.

### **Purpose of the Study**

The study aims to examine how universities in Ghana measured up to international benchmarks in developing accounting graduates for the job market. It also aims to investigate how the competencies developed through universities curricula combines with continuing professional development to influence accounting graduates' job performance.

### **Objectives of the Study**

Specifically, the study seeks to:

1. investigate if the accounting curricula of universities in Ghana converge with international benchmarks (IES and accounting curricula of leading universities).
2. determine whether there are differences in the levels of development of professional competencies that accounting graduates have obtained from the universities.
3. examine the influence of the accounting graduates' competencies on their job performance.
4. examine the mediating role of CPD in the relationship between accounting graduates' competencies and job Performance.

### **Research Question**

To address the first objective, the question below was crafted for guidance:

1. how do universities in Ghana's accounting curricula compare with international benchmarks (IES and accounting curricula of leading universities)?

## Research Hypotheses

The following research hypotheses guided the study as they address the following objectives of the study:

1. H1: there is statistically significant differences in the levels of development of professional competencies accounting graduates obtained from the universities.

2. H2: there is a statistically significant positive influence of accounting graduates' competencies on their job performance.

H2a: there is a statistically significant positive influence of technical competence on accounting graduates' job performance.

H2b: there is a statistically significant positive influence of professional skills on accounting graduates' job performance.

H2c: there is a statistically significant positive influence of professional values, ethics, and attitudes on accounting graduates' job performance.

3. H3: CPD significantly mediates the relationship between accounting graduates' competencies and their job performance.

H3a: CPD significantly mediates the relationship between technical competence and job performance of accounting graduates.

H3b: CPD significantly mediates the relationship between professional skills and job performance of accounting graduates.

H3c: CPD significantly mediates the relationship between professional values, attitudes, and ethics and job performance of accounting graduates.

### Significance of the Study

In response to the needs mentioned above, the study first investigates the focus of universities' curricula through the lens of IES requirements. The study also contributes to solving the problem by identifying the relevance of the competencies through an assessment of the relationship between competencies and job performance while catering for CPD as a mediating factor in the nexus.

This study introduces some novelty to the accounting education literature. It is the first attempt to compare how universities in IFAC member countries adapt accounting education curricula to IES. It also provides ready evidence to confirm or disconfirm whether Monga's (2019) assertion that the curricula of African universities are poor and obsolete is inclusive of accounting education programmes. The findings help to suggest some recommendations that would be of help to accounting education and how to solve the problem which have been identified.

Accounting education stakeholders such as universities, the Institute of Chartered Accountants-Ghana (ICAG), employers, and learners who become employees can benefit from the results of this study. Universities and accounting education policymakers can identify where they are lagging so they can improve on them. This will help improve the university curricula and the approach employed to develop accounting students. ICAG is also fed with evidence of universities compliance with IES pronouncements to review their regulatory actions. With knowledge of university focus, employers can know how to conduct on-the-job training for freshly employed accounting graduates. Finally, learners can identify the areas to prioritise from the onset of their accounting programmes to supplement the focus of the universities.

### **Delimitation of the Study**

The study was delimited to selected institutions considered as traditional universities in Ghana. The study was centred on only undergraduate programmes and curricula. The constructs of the study are also delimited to the framework provided by IAESB; hence only the IPD dimensions (technical competence, professional skills as well as professional values, ethics, and attitudes) and the CPD prescribed in the IES were considered. This study is also delimited to the contribution education makes to graduates' performance (social productivity) through their competencies.

The study was also delimited to accounting graduates employed in accounting/auditing organisations and directorates. This was because their major mandate was to render accounting services. So, they appear to be where accounting graduates with the genuine desire to become accountants could be found in their numbers.

### **Limitations**

The first limitation of the study is that graduates measured competencies that were developed some period before the data was collected. The period in between could lead to forgetfulness on the part of the graduates. This may cause them to rely on selective memory to respond to the items. However, this challenge is mitigated to the barest minimum by using familiar phrases and unambiguous questions to solicit the needed responses. It is believed that this would help improve the recollection ability of the graduates to give the most valid answers. Besides, the maximum year gap of three years is not long enough to cause complete forgetfulness among graduates.

Another limitation is the assumption that the universities' documents would completely reflect universities' focus when training accounting graduates. This might not entirely be the case. For instance, a department may decide to prepare a comprehensive curriculum but implement something different. However, it has always been the case that universities go by what has been documented, making it appropriate to go by the above assumption. Also, the responses given by graduates on the competencies provided more insight for validation of evidence found in the universities.

### **Operational Definition of Terms**

**Accounting Education:** Accounting programmes offered in universities, e.g., Bachelor of Commerce in Accounting, Bachelor of Business Administration (Accounting), to develop accounting professionals.

**Curriculum:** the content of a programme in terms of courses offered, the teaching methods, and all the formal academic activities students experience as a result of enrolling in a programme in the university.

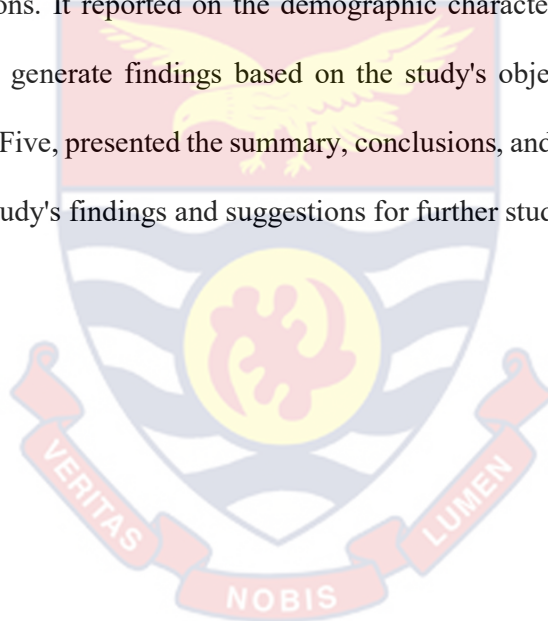
**Accounting Graduates:** Students who have completed any three-year or four-year accounting programme in the university.

**Competencies:** Technical competence, professional skills, and professional values, ethics, and attitudes accounting graduates possess or should possess.

### **Organisation of the Study**

The study has been divided into five chapters. Chapter One presented the background to the study, statement of the problem, the purpose of the study, research question, research hypotheses, significance of the study, delimitations, limitations, and concluded with the organisation of the study. The next part, Chapter Two, reviewed the theories that underpinned the study. Also, concepts

and the conceptual framework that gave meaning to relationships among constructs of the study were reviewed and presented. The chapter also presented the empirical evidence from related literature detailing earlier findings to put the study in perspective. Chapter Three also discussed the research methods employed in the study. It began with a brief introduction, the research approach, research design, population, sample and sampling procedure, research instrument, data collection procedure, and data analysis procedure. Chapter Four focused on the results from the analysis of the data collected and their discussions. It reported on the demographic characteristics and discussed the result to generate findings based on the study's objectives. The last chapter, Chapter Five, presented the summary, conclusions, and recommendations based on the study's findings and suggestions for further studies.



## CHAPTER TWO

### LITERATURE REVIEW

#### **Introduction**

This chapter presents a review of the theoretical framework, conceptual framework, and related empirical works of the study. Two relevant theories underpinned the study as they explained the relationship among the constructs of the study. A conceptual review of the IES framework was presented. Empirical literature was also reviewed based on the objectives of the study.

#### **Theoretical Review**

Under this section, the human capital theory and the Campbell theory of job performance were reviewed to establish the theoretical relationship among constructs in the study. Both theories suggest that competencies are the antecedents to graduates' job performance and are developed through higher education.

#### **Human capital theory (HCT)**

The human capital theory traces its source back to the empirical works of Schultz (1960), Becker (1964; 1993), and Mincer (1974). The theory generally postulates that firstly, individuals, households, organisations, and governments invest in education to build the human capital of individuals, which is in the form of knowledge, skills, attitudes, and other competencies. Secondly, the developed human capital/competencies are expected to bring financial rewards/returns for individuals and households. At the same time, organisations and governments receive returns in the form of productivity and economic growth, respectively. In explaining this economic benefit, Becker (1993, p.19) asserted that “schooling raises earnings and productivity mainly by

providing knowledge, skills and a way of analysing problems”. Knitting these postulations together, the basic assumption of the theory is that education provides competencies while the competencies ensure returns in the form of financial benefits and job performance/productivity. Consequently, three main variables could be identified in the HCT as education, human capital/competencies, and productivity/job performance. However, another variable (healthy lifestyle) is subtly featured in theory to predict productivity and returns.

### ***Education in the human capital theory (HCT)***

Since the early 1950s, economists increasingly gave much attention to the role of education in an economy upon realising that human capital is a created factor of production in the form of knowledge and skills, but not a homogenous and straightforward factor (Pejovic, 1966). True to this, Becker (1993) opined that the provision of senior high or tertiary education is the most important investment that could be made in a person since it develops the competencies that make the individual resourceful. Gillies (2017) also opined that HCT recognises education as a relevant tool to bring about a result of productivity or economic growth. Becker (1993; 1975) further maintained that education is the major contributor to job performance because of its direct and continuous effect on forming knowledge, abilities, character, culture, aspirations, and achievements. Consequently, for decades now, governments, families, and individuals have invested in education to reap the crucial benefits education brings to individuals, organisations, and the nation (Becker 1993).

Education, in the HCT, was described in two primary forms, i.e., education derived from schooling and education derived from on-the-job

training (Becker, 1993). Education derived from schooling is characterised by formal training and knowledge from educational institutions such as universities and senior high schools. As used in HCT, on-the-job training also refers to the education that workers receive while employed on the job (Becker, 1993). Additionally, the concept of education/schooling in HCT was originally measured in terms of the financial investment made in education. Not limited to that, other measures have been proposed and used such as the number of years spent in school (Psacharopoulos, 1973; 1981; Becker 1993); type of academic certificate (Chia, 1990; Becker 1993); or the quality of the education gained (Card & Krueger 1992). Most often than not, in the application of the HCT, education has been measured using a person's academic certificate or the amount of time spent in school (Becker, 1975). Very few studies have applied the quality or content (curriculum) of education graduates have imbibed.

#### ***Returns on competencies/education (Productivity)***

The HCT, in its original form, conceptualised returns from investment in education in the form of wages and other financial benefits derived from employment. HCT assumes that higher and better education reaps higher financial benefits (Becker, 1993; Becker, 1975; Schultz, 1960). According to Marginson (2019), this is true because higher education improves competencies to perform more complex tasks or assume higher responsibilities that come with higher financial returns. The concept of returns on investment in education was broadened to include social productivity in the subsequent publications of Becker (1993). The social productivity concept was used to capture the benefits the society (nation or organisation) gains from investment in education.

According to Becker (1993), education is useful if the competencies developed can increase the performance/productivity of the trainees.

### *Critiques of human capital theory*

There have been various critiques against the human capital theory regarding its underlying assumptions, statistical approach, and comprehensiveness. Among the various critiques, a few are elaborated here. First, the empirical works of Becker and Schultz largely focused on the financial returns of education, with very little attention given to other forms of benefits (job performance/social productivity) that education provides. It was rightly put when Quiggin (1999, p.131) argued that:

“In narrow versions of the human capital model, knowledge and skills are valued instrumentally, insofar as they contribute to increased productivity and hence, other things being equal to higher earnings. However, the human capital model may be interpreted more broadly to encompass learning that does not contribute to higher market earnings. A knowledge of, and capacity to appreciate, literature, for example, provides a future consumption stream not reflected in market earnings. However, because monetary returns are easier to measure, most empirical studies have focused on monetary returns rather than broader definitions of the benefits of education”.

Also, the underpinning assumption of the direct and sole effect of formal education investment on the returns of education has been challenged by the likes of Oliveira and Da Costa (2014), Oliveira and Holland (2007), and Khan (2018). According to Oliveira and Holland (2007), the antecedent of job performance cannot be limited to the competencies gained in school. They argue

that on-the-job training and experience create a competency they refer to as “structural capital”, which is crucial to job performance.

### ***Implications of the HCT to this study***

Borrowing from HCT, accounting education is responsible for the competencies that are developed in accounting graduates. The concepts of IPD and CPD used in this study represent the concepts of education derived from schooling and education derived from on-the-job training. Finally, in line with the HCT, this study thrives on the assumption that investment into quality accounting education or the use of quality curriculum is likely to develop quality competencies that would eventually ensure productivity and job performance among accounting graduates.

### **Theory of job performance**

The theory of job performance was propounded by Campbell (1990) and associates (Campbell et al., 1996; Campbell et al., 1993). The theory was first developed through a study (Project A) designed for the US navy to serve as selection criteria for the service (Campbell 1994; Campbell et al., 1993).

To Campbell et al. (1996; 1993), performance is a behaviour or action exclusively relevant to the organisation's goals. In their argument, performance is not the consequence of action; it is the action itself. The theory, in its conception, characterised job performance as a multidimensional construct. Campbell et al. (1993) suggested that job performance is composed of eight factors, cutting across all kinds of jobs. However, the relevance of each dimension differs across jobs. The factors as proposed by Campbell et al. (1993, p.41) are “(1) job-specific task proficiency; (2) non-job-specific task proficiency; (3) written and oral communication task proficiency; (4)

demonstration of effort; (5) maintenance of personal discipline; (6) facilitation of peer and team performance; (7) supervision/leadership; and (8) management/administration”.

However, Williams and Anderson (1991) proposed five main indicators that seem to summarise Campbell et al. (1993) eight factors. This makes it more convenient to measure the job performance of individuals. They developed the indicators from the same concept of job performance as used by Campbell et al. (1993). The five items were deemed appropriate after a factor analysis proved to be the best measures out of 21 tentative items (Williams & Anderson, 1991). As such, the empirical work of Ishola et al. (2018) employed these items to measure the job performance of accountants in Nigeria successfully.

Having conceptualised job performance, Campbell et al. (1993) further postulated three determinants of an individual's job performance. These are; declarative knowledge (i.e., knowledge about facts and things); procedural knowledge and skill (i.e., cognitive skill, interpersonal skill); and motivation (i.e., combined choice effect of expending effort, choice of effort level to be expended, and choice to persist in the expenditure of that level of effort). An empirical study by McCloy, Campbell, and Cudeck (1994) validated this postulation through confirmatory factor analysis. The antecedents are elaborated further.

### ***Declarative knowledge***

This is knowledge of facts, principles, and procedures—knowledge that might be measured by paper-and-pencil tests (Campbell & Wiernik, 2015; Motowidlo & Kell, 2013). This explanation resonates with the concept of technical competence as explained in the IES, being one of the dimensions of

Initial Professional Development (IPD). The concept of technical competence is subsequently discussed under the conceptual review.

### ***Procedural knowledge and skill***

This also refers to the services of actually doing what should be done. It is the combination of knowing what to do and being able to do it. It includes skills such as cognitive skill, psychomotor skill, physical skill, self-management skill, and interpersonal skill and might be measured by simulations and job sample tests (Campbell & Wiernik, 2015; Motowidlo & Kell, 2013). The concept of procedural knowledge and skills also reflects the concept of professional skills as used in the IES.

### ***Motivation***

This is the combination of choice to exert effort, choice of how much effort to exert, and how long to continue to exert effort. (Campbell & Wiernik, 2015; Motowidlo & Kell, 2013). Similarly, the concept of professional values, ethics and attitudes as employed in the IES could also be likened to motivation as explained in the theory of job performance.

According to Campbell (1993), the individual differences in personality and interests are presumed to combine and interact with education, training, and experience to shape declarative knowledge, procedural knowledge and skill, and motivation. Thus, individual differences in cognitive ability and personality should only indirectly affect performance mediated by knowledge, skill, and motivation. The point here is that knowledge, skills, and motivation should influence one's job performance when individual differences and interests are held constant or treated as control variables.

### *The implication of the theory of job performance to the study*

This study applies the postulation of the theory of job performance, which states that the three competencies (knowledge, skill, and motivation) could determine the job performance of individuals when their interests are held constant. This study delimited the population to graduates employed in accountancy-related jobs after school to control for graduates' interest. The rationale is that pursuing accountancy after completing school means the graduates seem to have a steadfast interest in accountancy. This makes "interest" a homogenous factor among the population used for the study. Therefore, it is safe to explore the relationship between accounting graduates' competencies and their job performance without worrying about the confounding impact of graduates' interest on the relationship.

### **Conceptual Review**

This section discusses the constructs in the study with reference to the IES provided by the IAESB (2017). It begins with an overview of the IES and brings the three main dimensions of the Initial Professional Development into explicit cognisance. Also, the concept of continuing professional development (CPD) is adequately explored.

### **Overview of international education standards (IES)**

The IES are the learning outcomes for accounting education. They have been given and coded in the form of standards by the IAESB. As explained earlier, the IAESB is an independent subsidiary of the IFAC with the duty of developing standards that will guide the teaching and learning and curriculum of accounting education (IAESB, 2017). These standards apply to all member countries of the IFAC (including Ghana). By extension, universities/education

providers, employers, regulators, government authorities, accountants, and prospective accountants in Ghana would have to use the standards (IAESB, 2017). The current edition of the IAESB framework, which took effect from July 2015, prescribes eight main standards, namely; Entry Requirements to Professional Accounting Education Programs (IES 1), Technical Competence (IES 2), Professional Skills (IES 3), Professional Values, Ethics, and Attitudes (IES 4), Practical Experience (IES 5), Assessment of Professional Competence (IES 6), Continuing Professional Development (IES 7), Professional Competence for Engagement Partners Responsible for Audits of Financial Statements (IES 8).

However, IES 2, 3, and 4 capture the professional competence to be developed through initial professional development (IPD), and IES 7 captures the continuing professional development needed for terminal proficiency on the job. These were the relevant IES to this study as they prescribe the exact learning outcome/competencies that accounting education needs to provide as well as how graduates will maintain such competencies. According to IAESB (2017), these professional competencies in the learning outcomes of accounting education create the base upon which accounting graduates can effectively perform their role as professional accountants. The demands and concepts of the four relevant IES to this study are subsequently reviewed.

### **Technical competence (IES 2)**

Technical competence is the first professional competence prescribed by the IAESB. This IES establishes the learning outcome regarding how accounting graduates should apply accounting knowledge to a required level (Busuioc et al., 2019; Crawford et al., 2014; IAESB 2017). The learning

outcome of technical competence has been grouped into eleven main subjects/courses. These courses include financial accounting and reporting, management accounting, financial management, taxation, audit and assurance, governance, risk management and internal control, business laws and regulations, information technology, business/organisational environment, economics, and business strategy/management. The eleven subjects stated may not necessarily be the exact descriptions used by the various universities and jurisdictions, but the contents must be the same (IAESB, 2017). Also, the sequence of those courses may vary across universities. However, universities are required to provide technical competence in three main levels, namely foundation, intermediate, and advanced. According to IAESB (2017 p. 41- 42);

“Learning outcomes at the foundation level relate to work environments that are characterized by low levels of ambiguity, complexity, and uncertainty. Learning outcomes at the intermediate level relate to work environments characterized by moderate levels of ambiguity, complexity, and uncertainty. Learning outcomes at the advanced level relate to work environments that are characterized by high levels of ambiguity, complexity, and uncertainty”.

The learning outcome of each of the eleven subjects should not be limited to the content and pedagogy used for that subject. The outcomes should be able to transcend the other subjects prescribed for technical competence. Hence the learning experiences of technical competence are integrated so that lessons drawn from one subject must be applicable in another.

### Professional skills (IES 3)

IES 3 specifies the professional skill as the second competence to be provided through accounting education. After going through accounting education, the IPD, the graduate is expected to exhibit professional skills in four main ways. According to IAESB (2017, p. 47), graduates should possess and apply intellectual, interpersonal/communication, personal and organisational skills.

*“Intellectual* relates to the ability of a professional accountant to solve problems, to make decisions, and to exercise professional judgment.

*Interpersonal and communication* relates to the ability of a professional accountant to work and interact effectively with others. *Personal* relates to the personal attitudes and behaviour of a professional accountant. The graduate should be able to manage and control his/herself appropriately.

*Organisational* relates to the ability of a professional accountant to work effectively with or within an organisation to obtain the optimal results or outcomes from the people and resources available.”

Professional skills, if possessed, would help promote the credibility of the accountancy profession, enhance the quality of work accountants, and protect the public interest. These skills are also expected to be fused with the other relevant competencies required of an accounting graduate. The skills enable accounting graduates to perform their role as account officers to an acceptable level (Busuioc et al., 2019; Crawford et al., 2014; IAESB 2017). Evidence of this skill in an accounting curriculum is the presence of teaching and learning contents and methods that promote the development of such skills.

For instance, the frequent use of group study will help improve teamwork and interpersonal relationship among accounting graduates (Asare, 2016).

In developing this competency through accounting education, the curriculum should not be limited to a particular course. The need and quest to develop such competence in graduates through the universities should be evident in the content and teaching/learning experiences (i.e., the pedagogy) employed during classroom interaction. Besides, the academic environment should foster the development of such competencies (IAESB 2017).

#### **Professional values, ethics, and attitudes (IES 4)**

This competency explains the characteristics that help identify an individual as a member of the accounting profession. The characteristics include the principles of conduct (e.g., ethical principles) generally associated with and considered essential in determining the distinctive features of professional behaviour (IAESB 2017). This attitudinal competency, just like the other competencies, would help the accounting graduate/accountant discharge his/her job duties. The competency requires that accounting graduates should be able to firstly identify ethical issues in situations and, secondly, apply the appropriate attitude, values, and ethics in such cases (Busuioc et al., 2019).

According to IAESB (2017), one who has competency in professional values, ethics, and attitudes should exhibit professional scepticism, ethical principles, and commitment to the public interest. This competence borrows its content from the International Ethics Standards Board for Accountants (IESBA) prescription. According to IESBA (2015), professional values, ethics, and attitudes can be summarised into one's commitment to five main principles:

integrity, objectivity, confidentiality, professional competence/due care, and professional behaviour. According to IESBA (2015):

*Integrity* expects that accounting graduates would have and be committed to the attitude of straightforwardness and honesty. *Objectivity* requires that the graduates be developed and not allow bias, conflict of interest, or undue influence of others to override their professional or business judgments. *Professional Competence and Due Care* requires that the accounting graduate develop the value to continually maintain professional knowledge and skill at the level necessary to ensure that a client or employer receives competent professional service based on current developments. An accounting graduate should be disposed towards acting diligently and in accordance with applicable technical and professional standards when providing professional services. *Confidentiality* refers to accounting graduates developing respect for the confidentiality of information acquired from professional and business relationships and should not disclose any such information to third parties without proper and specific authority unless there is a legal or professional right or duty to disclose. The confidential information acquired due to professional and business relationships should not be used for the personal advantage of the professional accountant or third parties. *Professional Behaviour* also explains the attitude of accounting graduates in terms of complying with relevant laws and regulations and avoiding any action that discredits the accounting profession.

For an accounting education curriculum to effectively develop professional attitude, ethics, and attitudes, the cultural and national values should be factored in. The curriculum should also include a mixed learning and

development approach. Specifically, there should be a structured learning programme and a practical experience component in the curriculum (IAESB 2017). According to IAESB (2017, p 62), to appropriately develop this competency, the learning experience should include but not limited to:

“Role-playing; discussion of selected readings and online materials; analysis of case studies that involve business situations involving ethical dilemmas; discussion of disciplinary pronouncements and findings; seminars using speakers with experience of corporate or professional decision making; and use of online forums and discussion boards”.

### **Continuing professional development (CPD) (IES 7)**

Unlike the other IPD discussed, the seventh IES prescribes the continuing professional development that accounting graduates need to possess after gaining or developing their initial professional competencies through university education (IPD). CPD aims to maintain the professional competence required to keep providing high-quality services (job performance) to clients, employers, and other stakeholders and consequently strengthen public trust in the profession and graduates (IAESB, 2017). The responsibility to maintain one’s professional competency lies with the graduates/accountant, even though the seventh IES is addressed to the IFAC member body.

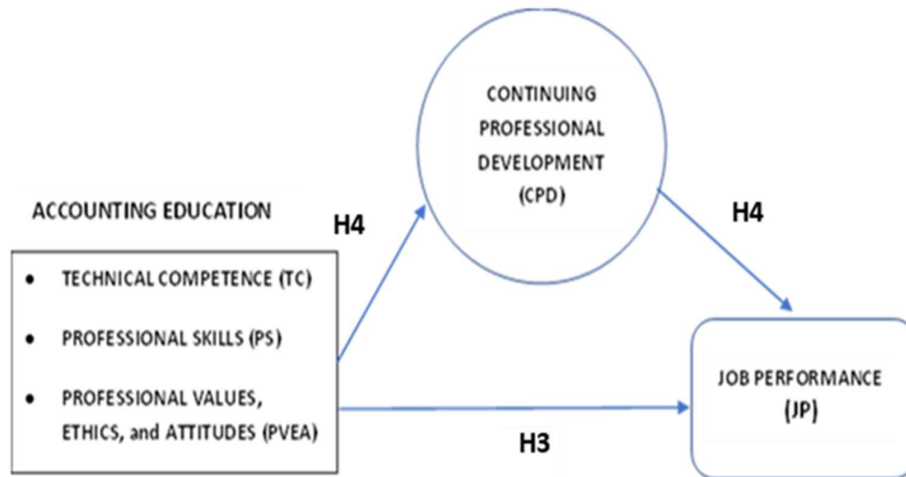
The CPD can be attained through practical experience and training on the job. According to IAESB (2017), mentoring/coaching, observation, feedback, reflection, networking, and self-directed/unstructured gaining of knowledge can all contribute to an effective CPD. Three main approaches (input-based, output-based, and mixed approach) can be used to measure the CPD of accounting graduates (IAESB, 2017). The input approach evaluates the

volume of learning activities the accounting graduate has partaken in so far. Also, the output approach is concerned with demonstrating the CPD that has been attained. The mixed approach is the combination of the two measures.

The CPD, as the name suggests, is the continuation of the IPD and hence its contribution to the job performance needs to be examined critically. Being a continuation means that there should first be an IPD. Therefore, CPD cannot stand on its own to influence one's job performance (IAESB, 2017). The framework explains that CPD sharpens and refines all the three main competencies and other competencies developed during the university's accounting education process. According to IAESB (2017, P.91), "Undertaking CPD does not, by itself, guarantee that all professional accountants will provide high-quality professional service at all times". It is, thus, logically deduced and argued from the above statement that CPD might function better as a mediator for the relationship between the initial professional competencies and the job performance of accounting graduates.

### **Conceptual Framework**

In Figure 1, the conceptual framework depicts the overall assumption and arguments of the study. It is understood from the framework that accounting education is the leading provider of the competencies required of accounting graduates. The universities would adequately develop the competencies of accounting graduates through their accounting curriculum that conforms to the requirement of IES. Also, some competencies are likely better developed than others due to the curricula focus of the Ghanaian universities.



*Figure 1: Conceptual Framework*  
Source: Author's Construct, 2021

Another assumption is that higher competencies should lead to higher job performance. The competencies developed in the graduates in the form of technical competence, professional skills, and professional values, ethics, and attitudes would influence the graduates' job performance. Finally, the continuing professional development that accounting graduates attain is expected to mediate the relationship between their competencies and job performance.

### Empirical Review

This section reviews related empirical studies that have been conducted on accounting education. The review is presented under four main subheadings that address the various objectives of the study. The review explicitly discusses how the focus of universities accounting education conforms to the requirement of IES, the level of competencies developed in accounting graduates by the universities, the relationship between such competencies and job performance, and finally, the role of CPD in one's job performance.

### Universities' focus and IES requirements

Jackling and De Lange (2009) saw the need to investigate whether accounting graduates meet the expectations of employers in Australia. The first objective of their study examined the focus of Australian accounting education for graduates. The researchers solicited data from 174 graduates of a university in Australia. The study quantitatively used mean to analyse the graduates' perception of the university's focus when training accounting graduates. Two of the dimensions (technical competence and generic/professional skills) of accounting education were employed and, therefore, did not fully apply the IES model to determine the focus of the universities. As such, the study could not provide evidence on the kind of emphasis the university places on professional values, ethics, and attitudes dimension when training accounting graduates. However, some references were made to the provision made in the IES to determine the focus of the university. Jackling and De Lange found from their study that much emphasis was placed on the technical competencies at the expense of generic skills (professional skills). This could translate into the conclusion that the curriculum did not fully converge with the requirements of IES and the expectations of employers.

In the Jordanian setting, Al Frijat and Shbeilat (2016) conducted a study to identify the role of universities in the trend towards the development of technical competence for accounting learning outcomes in line with the second international standard of accounting education (IES 2). The study applied the mixed-method approach, where a quantitative content analysis was used to analyse the study plan of universities. Also, the study interviewed eight academic staff and accounting students. The study revealed that Jordanian universities do not adequately apply IES 2 whereby a high proportion of

technical competence taught in accounting departments do not comply with the content requirements stipulated in the IES 2. The study also revealed that most educational courses taught in university accounting departments do not incorporate sufficient topics to provide the required knowledge. Some study plans of universities within the study sample have not been consistently and continuously updated and developed. The findings of the study seem to suggest that the universities in Jordan do not adequately focus on the technical competencies provided in the IES when training accounting graduates.

Similar to the study in Jordan, Veneziani et al. (2015) executed another study in Italy. Their study aimed at empirically understanding the focus of Italian universities in the preparation of accountants in the light of the IES 2 provisions. Their study did not include analysis on the focus of Italian universities on the professional skills dimension of the IES requirement. The study used mean and percentages to analyse the credit hours allocated to the courses prescribed by IES in 516 programmes made of 222 undergraduate degrees and 294 master's degrees across universities in Italy. The study revealed that the accounting education provided in Italy placed much focus on technical competencies and very little focus on professional values, ethics, and attitudes. The finding was virtually the same for both masters and undergraduate degrees. The credit hours allocated to technical competencies were approximately 99% and 98% for the undergraduate degree and master's degree, respectively. Consequently, professional values, ethics, and attitudes were allocated only 1% and 2% credit hours in undergraduate and master's degrees, respectively. This finding brought to light that Italian universities do not proportionately focus on the IES provisions.

Low et al. (2013) conducted a study that assessed universities' focus on soft skills when developing accounting graduates in New Zealand. The qualitative approach was used to undertake the study. The snowballing technique was used to select 50 accounting graduates of seven New Zealand universities for semi-structured interviews. Six other representatives were purposively selected from the Big4 accounting firms and the New Zealand Institute of Chartered Accountants (NZICA). Data was analysed through the interpretive approach. Low et al., in their study, conceptualised soft skills as a function of analytical skills, interpersonal skills, communication skills, and others. Their study did not capture the technical competence and professional values, ethics, and attitudes dimension of an accountants' professional competence. The results of the study revealed that, by and large, New Zealand universities adequately focused on developing the soft skills of their accounting graduates. From the findings, their focus on developing soft skills was evident in the teaching/learning approaches used and courses mounted (e.g., project work) in the universities.

Mustafa and Shittu (2012) undertook a study investigating graduates' perception of career success and skill emphasis in accounting programmes in Nigerian higher learning institutions. The study was in two parts. Firstly, the study identified what competencies the universities do focus on. The second part also determined what the universities should focus on. Mustafa and Shittu analysed responses received through questionnaires from 192 graduates (54.8% response rate) who were purposively selected through a snowballing technique. The results showed that tertiary institutions in Nigeria try to develop four main competencies: technical skills, business, computing, and ethical skills,

interpersonal and problem-solving skills; and communication skills. However, the last two competencies could be merged into professional skills as defined in the current study. Also, universities and polytechnics placed much emphasis on technical skills at the expense of the other competencies. This result proved that emphasis on technical skills is an issue in developed countries and in developing economies.

Busuioc et al. (2019) conducted an empirical study to report to the government on gap analysis of accounting and auditing education at Vietnamese universities. The study applied the IES framework to investigate to which extent the Vietnamese universities incorporate the IES requirement. A mixed-method approach was employed as questionnaires, interviews, and focused group discussions were used to collect data from four universities and 21 faculties/schools in Vietnam. It was found from the study that universities had autonomy and for that matter, they placed very little emphasis was placed on the development of ethics. Busuioc, et al (2019, p.9) specifically intimated,

*There is a lack of content coverage of professional ethics, values, and attitudes in the curricula at almost all reviewed universities. In some cases, ethics have been integrated across the curriculum. In other cases, ethics were not covered at all progression levels of the program, although ethical competence is required at every level of the profession.*

Consistent with most findings, it was observed that technical competence remained the main focus of universities in Vietnam while minimal emphasis was given to professional skills.

In the Ghanaian context, Adaboh (2014) evaluated a bachelor's degree accounting programme offered in a Ghanaian private university. One of the

objectives sought the extent to which the programme goals and objectives aligned with the International Education Standards (IES). The study applied descriptive statistics (means scores and standard deviations) to analyse the perception of faculty and administrators in the university. The study revealed that while all the administrators strongly agreed that the university's focus is in line with the IES requirements, 40% of them somewhat agreed. However, 60% of the faculty also strongly agreed to an alignment between the IES and the university's focus. Even though the finding suggests there is convergence, the inquiry was superficial as the study was limited to the goals and did not assess details of the curriculum for adequate information. Besides, some administrators may not know the content of the accounting curriculum to be familiar with IES pronouncement.

The review has shown that universities seem to emphasise the development of accounting graduates' technical competence while the focus on the other competencies is not generally adequate (Mustafa & Shittu 2012; Busuioc et al. 2019; Adaboh 2014). Also, most of these studies (Jackling & De Lange, 2009; Al Frijat & Shbeilat, 2016; Veneziani et al., 2015) did not succinctly apply the IES provisions to determine the focus of universities. Besides, not enough studies have been conducted in the Ghanaian context to gauge the focus of Ghanaian universities and compare them to other leading universities in the light of IES requirements. This study, therefore, contributes to the paucity in literature by applying the three dimensions of IPD as required by the IES to determine the focus of universities in Ghana in comparison to curricula of leading universities in other regional blocks.

### **Competencies developed in accounting graduates**

Chaffer and Webb (2017) evaluated the competency development of accounting trainees in Britain. The study was limited to the professional skills development as prescribed in IES 3. Thus, the study failed to provide empirical evidence on the other two competencies. A sequential mixed-method approach was employed while data was collected through questionnaires from 1496 trainees and interviews from four trainees. It was realised from their findings that trainees were not fully developed in terms of professional skills. However, Chaffer and Webb cautioned that the deficiency should not be solely attributed to the institutions training the graduates. They suggested that all development opportunities be exploited, and trainees should be motivated to help them develop the required competencies. Besides, universities should focus on skills that empirical evidence has shown to be developed through formal education.

Kavanagh and Drennan (2008) investigated the skills and attributes that accounting graduates need, with evidence drawn from students' perceptions and employers' expectations in Australia. As part of the study's objectives, Kavanagh and Drennan explored the competencies that graduating accounting students perceived to have developed through their degree programmes. A mixed-method approach was employed to undertake the study. Also, data was gathered from 322 graduating accounting students and 28 practitioners across organisations that employ accounting graduates. Even though their study did not succinctly apply the dimensions as prescribed in the IES, the categorisation could be analysed to synchronise with that of the IES. Therefore, it was revealed from the study that the universities developed some competencies in students better than they do develop other competencies. The findings of Kavanagh and

Drennan showed that professional skills were better developed in Australian universities. This was followed by developing technical competence and, lastly, professional values, ethics and attitudes. It is, however, worthy of note that generally, students were not satisfied with the level of development derived from the universities' programme/curriculum.

In Egypt, Anis (2017) explored auditors' and accounting educators' perceptions of accounting education gaps and their impact on audit quality. The study employed a quantitative approach in an exploratory survey of 55 accounting educators (i.e., those who taught accounting courses in the three largest public universities in Egypt) and 44 auditors who were registered with the Egyptian Financial Supervisory Authority. In all, 99 respondents took part in the study as they assessed the competencies developed among accounting graduates from Egyptian universities and the constraints identified in adequately developing the competencies in accounting graduates. Data was gathered through questionnaires and analysed with means, standard deviations, and t-tests. First, the study revealed that generally, the student's competencies in accountancy were not adequately developed. That notwithstanding, further analysis of the competency developed in the graduates showed that students were much competent in the knowledge of financial accounting, interdisciplinary perspective. However, they largely fell short of competencies in ambiguity tolerance, statistical analysis, and information technology. Anis also found out that among other constraints, the nature of the accounting curriculum being used, the focus of academic staff, and students' attitudes towards learning contributed to the low competency development among the graduates.

Okoro (2013) conducted a study in Nigeria to assess the accounting competencies possessed by business education graduates to handle entrepreneurial business challenges. A quantitative descriptive survey of 336 accounting graduates was employed to gather and analyse data to address the objectives of the study. The study seemed to have focused on the technical dimension of professional competence for accountancy. The study's findings revealed that out of the 36 technical competencies explored, it was only in three (preparation of tax codes, setting up of a currency, and ability to prepare product categories, and make product transfer) that the business graduates lacked sufficient proficiency. The overall mean of 2.74 and standard deviation of .83 suggested that the respondents had sufficient technical competencies in accounting. This finding supports the overall impression that accounting students are usually developed to be more technical by universities.

In the Ghanaian context, Mensah (2020) carried out a study to assess the suitability of accounting graduates to employment demands. The quantitative study used the descriptive cross-sectional survey design to sample 551 final-year accounting students of selected tertiary institutions as proxies for accounting graduates. Also, 145 accounting employees provided data on the relevance of such competencies to accounting-related tasks. The finding of the study was that first, graduates were sufficiently equipped with competencies in technical skills, professional skills, and professional values, ethics and attitudes. However, further analysis suggested that among the three types of competencies, the students were most proficient in professional skills, followed by professional values, ethics, and attitudes. Employees had the least proficiency in technical skills. These findings sharply contrast the general

impression that accounting graduates are usually developed in technical skills more than the other competencies.

The literature suggests differences in the level of development across the various dimensions of competencies developed in graduates (Chaffer & Webb, 2017; Anis, 2017; Okoro, 2013; Abas & Imam, 2016). It appears that the technical competence is mostly developed in accounting graduates, compared to other competencies. However, other studies have concluded otherwise that professional skills are developed better in accounting graduates (Mensah, 2020). These studies, however, failed to compare all the competencies as precisely prescribed in the IES with rigorous statistics that test for differences in repeated measures to form their conclusions. This study, therefore, finds the differences in professional competencies development as prescribed in the IES by applying rigorous algorithms such as the test for differences of the graduates.

### **Competencies and job performance**

Drawing from the theory of performance, Ahmad et al. (2019) conducted a study in Malaysia to assess the influence of skills, knowledge, and attitude on auditors' work performance. They employed the quantitative approach and used the Sekaran and Bougie sampling technique to select 217 respondents for the study. However, a very low response rate of 12% was obtained as 27 firms responded to the questionnaires. According to them, the low response resulted from the use of email medium to gather the data. It was revealed from the study that skills, attitude, and knowledge had a positive relationship with the work performance of auditors. Professional skills seemed to have the highest correlation with work performance. It was followed by professional attitude and, finally, professional knowledge. The sample size of

the study makes it very difficult to generalise the finding. Also, the variables were quite generic and did not apply the specific components of IES even though they had some similarities. The small response rate, however, makes it difficult to rely on the findings of this study.

Wade and Parent (2002) conducted a job-content analysis of 800 webmasters' positions in Canada outside the accounting context. They identified that organisational skills and technical skills were the main competencies demanded to perform on the job. The organisational skills in their study are similar to "generic/professional skills" as used in this study. The technical skills could also be likened to "technical competence" as used in this study. They further employed a structural equation modelling on 232 webmasters to determine the influence of organisational skills and technical skills on their job performance. The study revealed that both competencies influenced the job performance of webmasters. More specifically, the results proved that organisational skills had the greater influence. Upon that finding, the researchers proposed that educators and employee recruiting bodies should prioritize their focus on organisational skills. This opposed the employers' mundane demand for technical skills and therefore stimulated further research into the phenomenon. The study, however, did not cover the ethical and attitudinal competence of the webmasters to evaluate its relevance to job performance.

Abas and Imam (2016) also conducted an explanatory-correlational study in the Philippines to investigate the influence of graduates' competencies on their job performance. Abas and Imam solicited data from 220 respondents (110 employees and 110 employers/supervisors) from 25 government

institutions with two sets of questionnaires. One set was administered to the employees, while the other set gathered data from the employers. The researchers used 50 out of the 56 items of the employability skills developed by the conference board of Canada in the year 2000. Competencies were examined only from the perspective of employability skills (i.e., professional/generic skills) categorised into three main areas: fundamental skills, personal management skills, and teamwork skills. Their influence on job performance was then tested. The results showed that both employees and employers virtually rated employees' skills as moderate except for personal management skills rated as very competent by fresh employees and moderately competent by the supervisors. Also, all the skills prove to positively and significantly correlate with the job performance of the employees. The result supports the argument that professional skills substantially determine one's job performance.

Afifah et al. (2015) studied the effect of role conflicts, self-efficacy, and professional ethics sensitivity on auditors' job performance. Among the various objectives of their study, relevant to this current work is the third objective that assessed the relationship between professional ethics sensitivity and job performance. Quantitative approach was used to solicit and analyse data from 90 respondents. The study did not capture professional skills and technical competence. Sensitivity of professional ethics was characterised as the ability to recognise ethical issues in situations where auditors must take decisions. The results showed a positive impact of ethics sensitivity on the job performance of auditors. In line with the assumptions of this study, it appears that the ethical dimension of accountants' competencies influences their job performance. They

explained that ethical sensitivity directs the auditors' attitude, behaviour, and actions to carry out their duties.

Hadinsantoso et al. (2017) undertook a study in Indonesia investigating the influence of professionalism and competence on auditors' work performance. Their study conceptualised professionalism as the values and attitudes the auditors dispose towards the work. Competence was also explained to be knowledge, skills, and personal attributes. Employing the quantitative approach, the researchers purposively selected 150 internal auditors from 13 provinces in Indonesia. Data were collected from 123 (82% response rate) respondents with questionnaires and analysed with multiple linear regression, in accordance with the objectives of the study. The results showed that competencies significantly and positively influenced the work performance of auditors. However, professionalism did not influence the work performance of auditors. They explained that professionalism did not have any effect because the auditors were quite indifferent about professionalism. It appears from the study that professionalism barely matters to the workers.

Palmer et al. (2004) conducted a meta-analysis of research papers that identified international knowledge, skills, and abilities relevant for auditors'/accountants' job performance. The big eight white papers from 1989 to the time of the study were analysed using domain-independent perspective comparison. The papers were presented by institutions such as IFAC, the American Institute of Certified Public Accountants, the Institute of Internal Auditors, and the Institute of Management Accountants. The meta-analyses showed that communication skills, interpersonal skills, general business knowledge, accounting knowledge, problem-solving skills, information

technology, personal attitudes and capabilities, and computer skills formed the relevant competencies for an accountant's job performance. These competencies identified by Palmer et al. basically translate into the three main dimensions of professional competencies (i.e., technical competence, professional skills, and professional values, ethics, and attitudes). Therefore, the findings of their study suggested that all three dimensions are significant antecedents for job performance in accountancy. The study, however, failed to indicate the relative relevance of each competence identified.

Hanafi and Ibrahim (2018) studied three Sudanese telecommunication entities to identify how service performance depends on employees' competencies. They employed the quantitative approach and conveniently distributed 384 questionnaires to respondents, out of which 355 (87% response rate) were valid and used for analyses. Employee competencies were conceptualised as knowledge, skills, and attitude. Knowledge was defined to be composed of general knowledge and professional knowledge. The performance of the employees was measured from the customer's perspective. The result showed that there was a significant positive relationship between employee competencies and their performance at work. The study, however, failed to determine the individual relationship between each competency and employees' performance. Thus, it was impossible to make a comparison and conclude on the most influential competency.

The literature suggests a positive relationship between graduates' competencies and their job performance (Ahmad et al., 2019; Wade & Parent, 2002; Afifah et al., 2015). With most of these studies analysed with mean and standard, the findings were not statistically rigorous to be applied widely. The

use of descriptive statistics does not give strong scientific basis for the relationship being explored. Besides, the specific need to assess the influence of the specific competencies as prescribed in the IES on job performance. This study, therefore, applies rigorous regression statistics (PLS-SEM) to present much reliable evidence of the relationship that exists between competencies and job performance of the accounting graduates.

### **The mediating role of continuing professional development (CPD)**

The role of continuing professional development in workers' job performance has been usually expressed as a direct relationship. To begin with, Barzegar and Farjad (2011) explored the effect of continuing professional development on staff performance in a descriptive survey on employees of Foundation Martyrs and Veterans of country. Questionnaires were distributed to 600 participants who were selected through the evaluable non-probability sampling technique. With an 80% response rate and 13 of the responses being incomplete and defective, the researchers analysed the data obtained from 467 respondents. The study conceptualised CPD as the provision and partaking in on-the-job training provided by the organisation. The study revealed that on-the-job training has a positive impact on the performance of the employees. This suggests that CPD has a significant contribution to the job performance of the worker. Even though the study was not conducted on accounting professionals, it gives relevant projections to expect in the case of accounting graduates and their job performance.

The relevance of continuing professional development to the job performance of accounting practitioners was also supported by the empirical study of Kavanagh and Drennan (2008). From their study, the respondents

attested to the essence of CPD to the career success of an accountant as they rated it as one of the essential requirements to be successful in performing accountancy. Nassazi (2013) found that CPD had a direct effect on employee performance.

Even though the literature suggests a positive association between CPD and job performance (Barzegar & Farjad, 2011), the mediating role of CPD has rarely been explored. This is despite the argument made by IAESB (2017) that CPD cannot solely determine job performance. Also, in order to address the critics against a direct relationship between competencies and job performance, this study explores the mediating role of CPD on the competencies and job performance nexus.

### **Chapter Summary**

This chapter reviewed the relevant literature of the study. The review began with the human capital theory that established the significant role of education in the development of competencies of graduates. Campbell's theory of job performance was also reviewed to understand the relationship between competencies and job performance. A conceptual review of the IES requirements followed, leading to the conceptual framework that guided the study. Empirical literature reviews that highlighted the previous related findings were presented to guide the study.

## CHAPTER THREE

### RESEARCH METHODS

#### **Introduction**

This chapter presents the study's procedure to investigate how the universities' curricula foci measure up to international benchmarks when developing accounting students for the job market. This chapter discusses the research approach, research design, population, sample and sampling procedure, data collection instrument, data collection procedures, data processing and analysis, as well as the ethical considerations.

#### **Research Paradigm and Approach**

The study was rooted in the pragmatist paradigm. According to Kivunja and Kuyini (2017), the pragmatist paradigm operates on the belief that knowledge cannot be obtained through a single paradigm, so combining paradigms that may bring the best outcome becomes necessary. In line with this philosophy, the researcher believes in the need to acquire qualitative data from the universities to give deeper insight into the quantitative data that would be obtained from the accounting graduates. Consequently, a mixed-method approach was employed to investigate if universities' foci measures up to international benchmarks when developing accounting graduates' competencies.

#### **Research Design**

This study adopted the embedded design since qualitative analysis served as supportive analysis to dominant quantitative analysis. According to Creswell et al. (2003), the embedded design is a mixed-methods design where data set provides a supportive, secondary role in a study based primarily on the

other data type. This means that qualitative data could either be embedded or nested in quantitative data and vice versa. Specifically, the study's qualitative and quantitative strands used conceptual content/document analysis and inferential statistics. The motivation for qualitative content/document analysis is anchored on the need to investigate the selected universities' written accounting curricula (course outlines, programme brochure, programme details). Content/document analysis describes the prevailing practices and provides evidence on one's interest in a particular topic (Ary et al., 2010; Bowen, 2009). This offered supportive findings on the focus of universities when developing accounting graduates for the job market.

According to Cresswell and Cresswell (2017), there are two types of correlational design, i.e., explanatory-correlational and predictive-correlational studies. While the former seeks to relate certain events and conditions, the latter also aims to predict the causes of variations in a particular construct mainly. The explanatory-correlational research design was employed to deal with the second part of the study. This is because the researcher sought to primarily investigate influence of the competencies on the job performance of accounting graduates by looking at the association between the constructs. Even though inappropriate data can bring about erroneous findings, the explanatory-correlational research design is objective, easy to conduct, and suitable for generalising the relationship between variables when data is rightly ascertained (Cresswell 2009; Cresswell & Cresswell, 2017).

## Population

The study population was made of two main stakeholders among whom relevant data for the study was gathered. These are universities in Ghana and abroad (Asia, America, and Europe) that offer accounting education and accounting graduates (from 2018 to 2020) of universities in Ghana who are freshly employed (including service persons) in selected accounting firms.

Universities in Ghana providing accounting education formed part of the population because the study sought to identify how their curricula focus converged with IES requirements. Also, leading universities in Asia, Europe and America formed part of the study's population to serve as a comparative benchmark for the Ghanaian Universities. Universities offering B.Ed (Accounting), B.Com (Accounting), Bachelor of Administration with Accounting option, Bachelor of Science in Accountancy and their equivalent programmes were all considered part of the study population.

Another cohort that formed part of the population of the study was all 2018 to 2020 accounting graduates from universities in Ghana who are fresh employees or national service personnel in the audit/finance directorates of selected universities (UCC, UG, UPSA, and KNUST) and the big four accounting firms (KPMG, PWC, Ernst & Young, and Deloitte). The 2018 to 2020 cohort of employed accounting graduates have substantially gone through accounting curriculum of universities in Ghana since the IES requirements effectively came into force in 2015. These graduates substantially passed through a curricula that resulted from the IES implementation.

Besides, the selected accounting firms are known to be the biggest accounting firms in the world whiles the directorates perform top notch

accounting services for the universities. It is perceived that utmost accountancy is performed in such institutions; hence the performance of graduates was measured at their fullest level. Also, in these organisations, accounting graduates engaged in accountancy are readily available in their numbers. Preliminary information obtained from the various firms and organisations showed that only 166 accounting graduates fit the description of the population.

### **Respondents and Participants**

All the 166 graduates were involved in the quantitative part of the study. The census of intangibles approach was used to include all 2018 to 2020 accounting graduates who are employees/national service personnel at the various accounting firms. According to Ary et al. (2010), the census of intangibles is used when the researcher intends to measure the unobservable construct of the entire population of a particular study. This approach was adopted because the researcher intended to use all the available respondents, and besides, the numbers were not overwhelming for the researcher to collect data from. Finally, since the employed/national service accounting graduates had supervisors at the workplaces, their corresponding supervisors were automatically included to appraise the job performance of their respective subordinates (graduates). Consequently, 166 questionnaires were sent out to the organisations considered for the study. Responses were obtained from 118 accounting graduates. However, 3 of the questionnaires were incomplete, and hence, they were not included in the study. This placed the response rate at 69.3% of the responses. The high rate of non-response is because of COVID-19 complications. Workers run a shift, and so it was difficult reaching them to take the questionnaires. Besides, time constraints didn't permit the researcher to

monitor their schedule to get all of them. Finally, some of the respondents did not answer the questionnaires because they didn't want to.

### Sample Size and Sampling procedure

Concerning the qualitative strand of the study, the purposive sampling technique was used to select four universities in Ghana, three in Asia, four in Europe, and three in America to gather data for the study. Four major universities in Ghana that offer accounting programmes were selected because of their supervisory role in developing accounting graduates. Almost all other private universities' business schools in Ghana were under the mentorship of these selected universities as they are the pacesetters in producing accounting graduates. The ten other leading international universities were selected based on their being ranked by Times Higher Education among the top universities offering accounting education globally. Also, the availability of necessary documents on universities' websites influenced the selection of these leading universities. The universities included in this study are presented in Table 1.

**Table 1: Universities Included in the Study**

Continent/Country	University
Ghana	University of Cape Coast (UCC) University of Ghana (UG) University of Professional Studies Accra (UPSA) Kwame Nkrumah University of Science and Technology (KNUST)
Europe	The University of Manchester (TUM) University of Leuven, Belgium (KU LEUVEN) Vilnius University (VU) Neapolis University Pafos (NUP)
Asia	The Hong Kong Polytechnic University (THKPU) Hong Kong University (HKU) National University of Singapore (NUS)
America	University of Minnesota (UoM) University of Arkansas (UoA) Arizona State University (ASU)

Source: Field Survey, (2021)

### Data Collection Instrument

Both primary and secondary data were collected to address the various objectives of the study. The secondary data were the evidence on course outlines, programme brochures, and programme documents obtained from each university's accounting department. The IES framework served as a guide to garner the necessary information from the documents. This provided qualitative data or evidence on the universities' foci to produce accounting graduates. Also, primary data was gathered with the aid of a partly adapted and partly self-developed questionnaire. The questionnaire was an appropriate instrument to collect primary data because Ary et al. (2010) explained that quantitative researchers employ questionnaires for easy and accurate data due to the relatively large number of subjects being used.

The questionnaire had four sections. The first section collected data on the background characteristics of the respondents. The second part also collected data on respondents' perceived competencies developed through the universities' accounting curricula. The indicators that measured the perceived competencies of accounting graduates were self-developed but sourced from the IES framework developed by IAESB (2017). The framework provided the indicators for measuring competencies necessary for accounting graduates to perform on the job market. These indicators were put together to form close-ended items that required responses on a 5-point Likert scale. They were measured on the scale of; 1 = Lowly Developed, 2 = Moderately Developed, 3 = Highly Developed, 4 = Very Highly Developed, and 5 = Fully Developed.

The third part collected data on the continuing professional development (CPD) of graduates. Again, the rubrics for measuring continuing professional

development had been predetermined by IAESB (2017). Accordingly, the researcher developed a 5-point Likert scale to measure the CPD accounting graduates had had since they gained employment. The close-ended items suggested that graduates had gone through some CPD processes upon employment and required responses on the scale of 1 = Slightly Agree, 2 = Moderately Agree, 3 = Agree, 4 = Highly Agree, and 5 = Extremely Agree.

Each respondent's immediate supervisor responded to the final part of the questionnaire as it appraised the job performance of the accounting graduates. The indicators that measured job performance were adopted from a scale developed by Williams and Anderson (1991). The first five items of the 7-item scale were used because the last two items were just repetitions of two of the first five items but stated in the negative. The questions were closed-ended and required responses on a 5-Likert scale of; 1 = Slightly Agree, 2 = Moderately Agree, 3 = Agree, 4 = Highly Agree, and 5 = Extremely Agree.

### **Validity and Reliability of Instrument**

There is a need to prove the validity and reliability of all the information, instruments, and data, whether qualitative or quantitative. The validity of the qualitative data was determined by assessing the source, purpose, and completeness of the documents used for the study. The documents used for investigating the focus of universities when developing competencies of accounting graduates were collected from the Department of Accounting of the various universities involved. This means that the documents were obtained from the right source, making them reliable for use. Besides, the documents obtained were originally purposed to provide information on what accounting courses and accounting programmes entail. This is in direct conformity with the

kind of information needed by the researcher to execute the study. These notwithstanding, the information was comprehensive enough as the researcher was able to obtain all the documents. Specifically, the course outlines, programme documents, and student handouts complemented each other to give a complete insight into the accounting curricula foci. This proved that the quality information obtained was reliable and valid for content analysis to address the study's first objective.

Regarding the quantitative data, the face and content validity of the instrument were ascertained to make sure that the language and items on the instruments meant what the researcher intended to communicate exactly and covered all the relevant areas on the constructs being measured. The issues of face validity and content validity were addressed by consulting the supervisor, who is an accounting academic and involved in developing and assessing accounting curricula for several universities. Also, my colleagues in accounting education and students from the language faculty were consulted to assess the face validity of the instrument. Finally, their opinions and suggestions were duly incorporated to improve the instrument.

Also, the instrument's indicator reliability, internal consistency reliability, convergent validity, and discriminant validity were assessed and reported subsequently under the sub heading "PLS-SEM specifications". The results showed that the items and data are valid and reliable for onward statistical analyses.

Finally, the corresponding supervisors of the freshly employed and national service accounting graduates formed part of the population. They provided valid and objective appraisal of the accounting graduates' job

performance. The supervisors were those under whose direct supervision the accounting graduate worked.

### **Data Collection Procedure**

The data were collected in two phases. The first phase of the data was the collection of secondary data from the selected universities. Beforehand, a request backed by the ethical clearance letter and an introductory letter from the Department of Business and Social Sciences Education-UCC was submitted to the head of the accounting department (HOD) of the four universities in Ghana because the universities in Ghana rarely uploaded the needed information on their websites. In the letter, the purpose of the study was made known to the HODs. After correspondences, dates were scheduled for the researcher to collect the relevant documents on the accounting curricula and course outlines used by the universities to educate the accounting students. Upon collecting the documents, they were checked for completeness to ensure they entailed what the researcher was seeking. All the necessary documents of the ten other universities were obtained from the universities' websites as they were readily available online.

The second phase of data collection was geared towards the competencies and job performance of freshly employed accounting graduates. Before going to the field to collect data, the researcher contacted all the organisations involved through the necessary authorities. An inquiry was made on the processes required to have access to the respondents. The requirements were met and accompanied by an introductory letter from the Department of Business and Social Sciences Education-UCC. The researcher explained the purpose of the study to the respondents before administering the data collection

instrument. The questionnaires were administered in person and through the internet. Hard copies and google data collection forms were created for that purpose. Respondents were given a chance to choose between the two options. Also, respondents working from home due to COVID-19-work rotation were served links of google forms through their emails.

During this whole data collection process, the researcher arduously followed the COVID-19 protocols prescribed by the Ghana Health Service and the Ghana Medical Association to help avoid or reduce the risk of spreading COVID-19. That notwithstanding, protocols prescribed by the organisations were duly complied with. Specifically, face masks were worn, sanitisers were extensively used, and prescribed distance was maintained between the researcher and respondents. In cases where the respondents did not have the necessary protective equipment (face masks and sanitisers), the researcher provided them before interacting with them.

Upon completion and reception, the questionnaires were quickly reviewed for completeness. When missing data were found, the respondent was contacted and humbly asked to provide them. This exercise took place in two months.

### **Data Processing and Analysis**

The study employed content analysis, which is regarded as the systematic and objective technique of identifying unique features of a document to make reasoned inferences (Holsti, 1968). This facilitated identifying key skills and knowledge areas of university accounting curricula focused on when developing accounting students. Also, it facilitated the revelation of specific patterns in the course content of university accounting programmes to foster

comparison. Specifically, conceptual content analysis was employed where IES 2, 3 and 4 were chosen for examination while associated credit loadings were tallied to determine the overall areas of concentration. Through a process of flexible selective reduction, the curricula or course outlines of the selected universities were coded into manageable content categories, i.e., technical competence (IES 2), professional skills (IES 3), and professional values ethics and attitudes (IES 4). By reducing the content of the course outlines to those categories, I could focus on key skills and knowledge areas that informed the research question. The conceptual content analysis was done by hand through a number of decisions and activities.

First, a decision was made to conduct the analysis based on the three broad categories noted above. The second was a decision made to allow flexibility to add to the categories in the process. This decision was made to introduce and analyse new and important material that could have significant implications on the research question. Third, the coding was done for existence but not frequency; however, the credit loadings were tallied. Fourth, titles of courses were pooled under specific categories to identify skill and knowledge areas of concentration in the programmes. The rule here was to read the course outline, not just look at the title, to identify its focus before classifying it. This was necessary to keep the coding process organised and consistent with promoting eventual validity.

The quantitative data were processed and managed with SPSS after being screened to deal with incomplete responses. Data were then analysed according to the objectives of the study. The second objective was analysed with the use of the Friedman Test for repeated measures as the data was non-normally

distributed (see Table 9) . The third and fourth objectives were analysed using PLS-SEM statistics. The Smart PLS software was used to perform PLS-SEM algorithms. A summary of the techniques used to analyse each research objective is presented in Table 2.

**Table 2: Summary of Data Analysis Techniques**

Research Question/Hypotheses	Data Analysis Technique
How do Universities in Ghana's accounting curricula compare with international benchmarks (IES and accounting curricula of leading universities)?	Conceptual content/document analysis
There is statistically significant differences in the levels of development of professional competencies accounting graduates obtained from the universities.	Friedman Test
There is a statistically significant positive influence of accounting graduates' competencies on their job performance.	PLS-SEM
CPD significantly mediates the relationship between accounting graduates' competencies and their job performance.	PLS-SEM

Source: Author's Construct, (2021)

### **Partial Least Squares Structural Equation Modeling (PLS-SEM)**

#### **specifications**

PLS-SEM is a rigorous non-parametric statistical approach that allows the researcher to perform concurrent multivariate analysis of unobservable variables measured with indirect indicators/items while catering for measurement errors (Hair et al., 2016). In the application of PLS-SEM, latent constructs could either be measured reflectively or formatively. The reflective measure is undergirded by the understanding that all indicator items are caused

by the same construct (i.e., they stem from the same domain). In contrast, the formative measure is based on the assumption that “causal indicators form the construct by means of linear combinations” (Hair et al., 2016, p.73). This study employed PLS-SEM because the variables employed were unobservable, latent and reflective, and the data was asymmetrical. According to Wong (2013) and Hair et al. (2016), some specifications need to be considered before and during the analysis of reflective measures and paths in PLS-SEM. These considerations include the sample size, common method bias, measurement model specifications, and structural model specifications.

#### **Sample size specification**

The sample size required to undertake any PLS-SEM statistic is very critical to be considered in a study. The researcher ensured that the quantitative data for the study met this specification. According to Hair et al. (2011), a minimum threshold of sample size needs to be met before applying PLS-SEM statistics to the data. They proposed that the sample size be equal to ten times the largest number of structural paths directed at a latent construct in the study. In this study, the largest number of structural paths directed towards a latent construct in the structural models was five (5). Therefore, the minimum sample size required for this study was  $5 * 10 = 50$ . Not limited to this criterion, Hair et al. (2016) proposed that the theoretical foundations of the model should also be factored in when determining the minimum sample size. The study factored the general requirement for quantitative analysis as well, to analyse data from 115 respondents. This sample size was appropriate because it exceeded the minimum threshold of 50.

### Common method bias (CMB) specification

Another crucial statistical issue that needed to be addressed before the use of PLS-SEM was common method bias. Siemsen et al. (2010) explained that CMB occurs when the arrangement of constructs on a questionnaire or social desirability causes the response to follow a common pattern of variance. The presence of CMB in a study could cause spurious findings leading to type 1 or type 2 errors (Siemsen et al., 2010).

**Table 3: Full Collinearity VIFs**

	CPD	JP	PS	PVEA	TC
CPD		1.327	1.381	1.416	1.29
JP	1.482		1.487	1.466	1.519
PS	2.928	2.966		2.209	2.595
PVEA	2.494	2.426	1.891		2.409
TC	1.986	2.304	1.976	2.13	

Note: CPD= Continuing Professional Development; JP=Job Performance; PS= Professional Skills; PVEA= Professional Values Ethics and Attitudes; TC= Technical Competence

Source: Field Survey, (2021)

To ensure this study was free from CMB, the researcher first encouraged respondents to be sincere when responding. Also, the job performance construct was not measured by the employed graduates themselves but by their supervisors. Finally, the full collinearity test was used to test for CMB because arguments have been made against Harman's single factor test in exploratory factor analysis (Aguirre-Urreta & Hu, 2019; Kock, 2015). The full collinearity test was executed by creating several structural models where each construct served as a dependent variable while the other constructs served as independent variables. The VIFs of all the various models were then assessed with a

maximum of 3.3 threshold (Kock, 2015). The results presented in Table 3 show that the study was free from CMB as none of the values exceeded the threshold.

### Measurements (outer) model specification

The measurement model describes the relationship between constructs and their relative indicators/items (Hair et al., 2016). Before analysing the relationship between the study constructs, the measurement first met four criteria: indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. The outer model results of the study are therefore presented in Table 4.

**Table 4: Outer Model Specifications**

Latent Construct	Indicators	Outer Loadings	CA	Rho_A	CR	AVE
Job Performance (JP)	JP61	.897	.922	.930	.941	.763
	JP62	.894				
	JP63	.898				
	JP64	.905				
	JP65	.766				
Technical Competence (TC)	TAA	.755	.926	.969	.933	.562
	TBL	.778				
	TBOE	.687				
	TBSM	.602				
	TECO	.717				
	TFAR	.868				
	TFM	.834				
	TGRI	.588				
	TIT	.625				
	TMA	.866				
	TTax	.847				
Professional Skills (PS)	PS33	.729	.950	.955	.956	.606
	PS34	.738				
	PS35	.751				
	PS36	.744				
	PS37	.832				
	PS38	.827				
	PS39	.808				
	PS40	.766				
	PS41	.850				
	PS42	.759				
PS43	.815					

	PS44	.772				
	PS45	.767				
	PS46	.727				
Professional, Values, Ethics, and Attitudes (PVEA)	PVEA47	.757	.945	.955	.954	.696
	PVEA48	.786				
	PVEA49	.730				
	PVEA50	.866				
	PVEA51	.871				
	PVEA52	.880				
	PVEA53	.880				
	PVEA54	.866				
Continuing Professional Development (CPD)	PVEA55	.856				
	CPD56	.805	.893	.855	.851	.625
	CPD57	.803				
	CPD58	.758				
	CPD59	.786				
	CPD60	.801				

CA= Cronbach's alpha; CR= Composite Reliability; AVE= Average Variance Extracted

Source: Field Survey, (2021)

### *Indicator reliability*

According to Hair et al. (2019), an indicator is reliable if the latent construct can explain the responses' variations. Statistically, a construct should be able to explain about 50% of the variation in the indicators. This means that the outer loading of the indicator should measure up to .7. However, if it measured up to .4, it was accepted based on the condition that the other estimates were appropriate (Wong, 2013). Items that could not meet this specification were taken out after considering their effect on content validity. From Table 4, the outer loadings generally ranged between .588 and .906. This shows that all the indicators were reliable measures of their respective constructs, confirming the presence of indicator reliability.

### *Internal consistency reliability*

A construct's indicators/measures have internal consistency reliability when the indicators can produce similar scores when measuring that particular

construct. Cronbach's alpha, composite reliability, and rho\_A can all be used to assess internal consistency reliability. However, rho\_A is the most appropriate since it falls between Cronbach's alpha and composite reliability (Hair et al., 2019). Measures that attained rho\_A of .7 and higher were deemed to have internal consistency reliability. As observed in Table 4, all the Cronbach's alpha, composite reliability, and rho\_A values for all the latent constructs ranged above the minimum threshold of .7. This means that the models satisfied internal consistency reliability criteria.

#### ***Convergent validity***

Convergent validity shows the extent to which the latent construct jointly explains the variances of its indicators (Hair et al., 2016; 2019). The average variance extracted (AVE) was used to assess the convergent validity. The AVE was determined by computing the average squared outer loading of each indicator of a latent construct. The construct measures had convergent validity when the AVE was equal to or higher than .5 (Hair et al., 2016; 2019). From Table 4. It is identified that the AVE of each construct was above the minimum threshold. The least AVE was .562, confirming the presence of convergent validity.

#### ***Discriminant validity***

Discriminant validity is the ability of measures/indicators of a particular construct to be the true and only measures of that specific construct (Hair et al., 2016; 2019). This means that no other group of indicators would measure the construct better. Neither would the indicators measure a different construct better than it measures its construct. Even though the Fornell-Larcker cross-loadings criterion could be used to assess discriminant validity, the Heterotriat-

Monotrait (HTMT) ratios were instead used. Recent studies (Hair et al., 2019; Henseler et al., 2015) have proven that HTMT ratios are more reliable. An HTMT ratio lesser than .9 and a confidence interval (CI) ranging between 0 and 1 showed that the measures had discriminant validity. From Table 5, the HTMT ratios, together with their respective confidence intervals, suggest significant discriminant validity among the individual indicators of the various latent constructs.

**Table 5: Heterotriat-Monotrait (HTMT) Ratios**

	HTMT Ratio	Confidence Interval (CI)
PS -> JP	.576	CI <sub>.900</sub> [.452 - .680]
PVEA -> JP	.566	CI <sub>.900</sub> [.465 - .663]
PVEA -> PS	.793	CI <sub>.900</sub> [.690 - .888]
TC -> JP	.464	CI <sub>.900</sub> [.335 - .591]
TC -> PS	.714	CI <sub>.900</sub> [.627 - .782]
TC -> PVEA	.657	CI <sub>.900</sub> [.535 - .756]
JP -> CPD	.408	CI <sub>.900</sub> [.270 - .541]
TC -> CPD	.554	CI <sub>.900</sub> [.425 - .686]
PVEA -> CPD	.388	CI <sub>.900</sub> [.266 - .532]
PS -> CPD	.482	CI <sub>.900</sub> [.352 - .615]

Source: Field Survey, (2021)

### **Structural (inner) model specifications**

The study assessed the postulated paths and hypotheses, having satisfied the measurement models' requirements. They include multicollinearity, path coefficient, coefficient of determination, predictive relevance, and effect sizes.

#### ***Multicollinearity specification***

Multicollinearity occurs when there is a high correlation between the predictor variables of a model (Alin, 2010). Higher correlation between predictor constructs means that those predictors are virtually the same; hence it

will be deceptive to put them together to explain variations in a dependent/endogenous construct. The inner VIFs and Tolerance was used to check for a multicollinearity-free structural model (Becker, Ringle, Sarstedt, & Völckner, 2015; Hair et al., 2016). A VIF is below 5, and Tolerance above .2 proves the absence of multicollinearity. From Table 6, the VIF and Tolerance values proved that the study was free from multicollinearity issues.

**Table 6: Multicollinearity Between Latent Constructs (VIFs)**

	CPD		JP	
	Tolerance	VIF	Tolerance	VIF
PS	1.00	1.000	.344	2.918
PVEA	1.00	1.000	.412	2.558
TC	1.00	1.000	.468	2.190
CPD			.748	1.337

Source: Field Survey, (2021)

#### ***Path Coefficient specification***

The path coefficient was used to assess the individual influence of the exogenous/independent constructs on endogenous/dependent constructs. This was assessed with the Beta ( $\beta$ ) values. A beta value closer to 1 indicated a strong influence, while a value closer to 0 showed little or no impact at a 5% significance level. Because a one-tailed test was performed, the beta coefficients were significant if the t-statistic was greater than 1.65. The path coefficients were presented as part of the results in Chapter Four.

#### ***Coefficient of Determination and other specifications***

The coefficient of determination ( $R^2$ ) was used to assess the predictive power of the model. Stone-Geisser's  $Q^2$  value was also used to assess the predictive relevance of the study. The effect sizes, ( $f^2$ ) and ( $q^2$ ), were used to assess the individual contribution of exogenous constructs to the predictive power and predictive relevance, respectively. According to Cohen (1988), the

values .02, .15, and .35 represent small, medium, and large effects. Effect size values of less than .02 indicated that there is no effect. The values obtained were reported in Chapter Four, being part of the findings of the study.

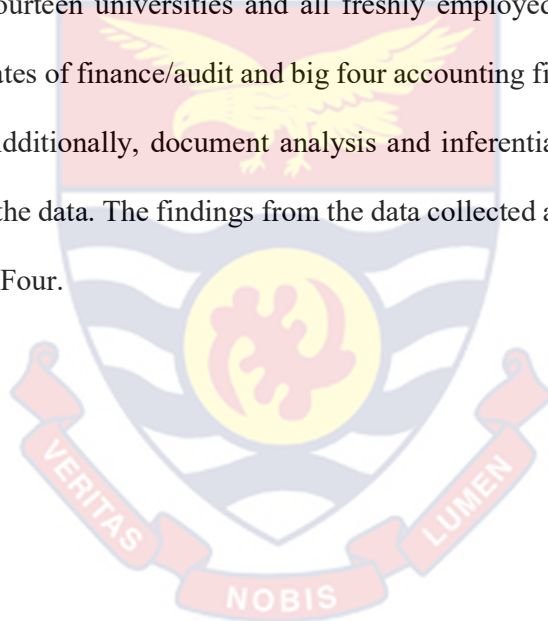
### **Ethical Consideration**

The main ethical issues that pertained to this study were consent, confidentiality, and integrity. It was unacceptable for the researcher to involve any person against the person's will. The researcher sought the consent of all the persons and subjects of the study. Also, confidentiality was largely required of the researcher since the information was gathered from the respondents and subjects of the study. It is highly unethical to disclose such information to a third party, especially without consent. On the other hand, the researcher was hopeful that the respondents would provide truthful responses on the same grounds of ethics to help address the problem at hand.

To deal with these ethical issues, the researcher first sought consent from respondents by asking them to fill a consent form. The consent form was administered after they had orally agreed to partake in the study. It was only after those consent forms were completed that the questionnaires were given to them to complete. The researcher also assured the respondents of confidentiality and anonymity and further advised them to refrain from providing their identification on the administered questionnaires. Before collecting online data, the researcher deactivated the option to trace online responses to the respondents. This secured the anonymity of the respondents. Finally, the researcher entreated respondents to be truthful and provide accurate responses.

### Chapter Summary

This chapter provided an overview of the research methodology employed to execute the study. The research design and the rationale for choosing it was stated and explained. A description of the population and sampling procedures were also highlighted. The chapter detailed both the primary and secondary data that were collected to undertake the study. It also described the questionnaire and the official documents used to collect data for the study. The face and content validity of the instruments were also reported. In all, fourteen universities and all freshly employed graduates employed in directorates of finance/audit and big four accounting firms were involved in the study. Additionally, document analysis and inferential statistics were used to analyse the data. The findings from the data collected are therefore presented in Chapter Four.



## CHAPTER FOUR

### RESULTS AND DISCUSSIONS

#### Introduction

This chapter presents the findings of the study after the data obtained were processed and analysed. The demographics of the respondents are presented first, while the main results are subsequently presented according to the four objectives of the study. The chapter also discusses and interprets the study's findings with reference to the study's empirical literature and theoretical underpinnings. All these were carefully done to help identify the current focus of Ghanaian universities when developing the competencies of accounting graduates and help determine what the focus should be when developing accounting graduates' competencies.

#### Demography of Respondents

The demographic information about the respondents is presented in this section. Therefore, four categories of demographic information (Gender, University, year of completion, and Workplace) are shown in Table 7 and discussed subsequently. This background information helps to appreciate the responses and findings obtained. It also serves as evidence of the respondents being the right people employed for the study.

From Table 7, it was realised that males (F=80; 69.6%) dominated the distribution of the respondents. Females (F=35; 30.4%) were the minority of the two categories. This wasn't surprising because most often than not, the students who study accountancy have always been dominated by males. It is only logical to identify that such distribution is reflected in the number of graduates who work in accountancy-related firms and organisations.

**Table 7: Demography of Respondents**

Demography	Subscale	Frequency	Percentage %
Gender of Respondents	<i>Male</i>	80	69.6
	<i>Females</i>	35	30.4
University Attended	<i>UCC</i>	40	34.8
	<i>UG</i>	33	28.7
	<i>UPSA</i>	11	9.6
	<i>KNUST</i>	23	20.0
	<i>Others</i>	8	6.9
Year of Completion	<i>2018</i>	39	33.9
	<i>2019</i>	29	25.2
	<i>2020</i>	47	40.9
Place of Work	<i>Big 4</i>	50	43.5
	<i>Universities'</i>	65	56.5
	<i>DoF</i>		

Source: Field Survey, (2021)

Also, the majority of the respondents (F=40; 34.8%) were graduates of the University of Cape Coast (UCC). There were 33 graduates from the University of Ghana (UG), representing 28% of the respondents who participated in the study. They were the second-highest representation after students from the University of Cape Coast. Kwame Nkrumah University of Science and Technology graduates (KNUST) (23) had the third-highest representation. KNUST's representation was 20% of the total data distribution. Alumni of the University of Professional Studies, Accra (UPSA) were represented by 11 respondents, which is only 9.6% of the data distribution. Students from other universities such as the University of Education, Winneba (UEW), and other private universities were represented by only 8 (6.9%) respondents. They had the least representation.

Accounting graduates who obtained their bachelor's degree in 2018 were represented by 39 respondents. This number is equivalent to 33.9% of the 115 total respondents of the study. They were the second-highest representation.

The 2019 accounting graduates had the least representation of 29 respondents, being 25.2% of the total respondents employed in the study. Finally, the most represented graduates were those who completed in 2020 (47). This representation was 40.9% of the total respondents who partook in the study. The distribution of respondents across the different years of completion was quite balanced as each year group had fair representations. Not of the categories had had representation below 25.

Finally, most of the respondents (65) were accounting graduates who worked in the Directorate of Finance and Audits of Ghanaian universities. They represented 56.5% of the total respondents who were employed in the study. The minority representation were graduates working in the big four auditing firms (PWC, KPMG, EY, and Deloitte). They were 50 (43.5%) respondents out of the 115 total respondents of the study.

The demography of the respondents for the quantitative data obtained is reliable since the information source is predominantly constituted of graduates of the four leading universities whose curricula were considered for document analysis. It gives impetus to relate both sets of data to form conclusions and make logical deductions from the study's findings.

### **Main Results**

This sub-section presents the study's main results in four themes that were couched from the study's objectives. These were the findings obtained from the study. The qualitative results are presented in subheadings, while direct quotes from the documents were presented as evidence. Some important details were as well, tabularized. Quantitative results were also presented in tables and figures.

### **Convergence between Universities' Focus and IES Requirements**

The study's first objective determined how universities in Ghana's accounting curricula compare with international benchmarks. Information such as programme aims, objectives, and structure/components detailed in programme documents and student handbooks were analysed. Also, the objectives of courses, course contents, and teaching methods stated in the outlines of accounting courses were analysed. This information provided a rich and valuable insight to identify the foci of universities in Ghana in comparison with those in America, Asia, and Europe and IES requirements when training accounting students. As argued by Ary et al. (2010) and Bowen (2009), documents give evidence of the prevailing practices and the interest of organisations.

### **Universities' adaptation to IES requirement**

A summary of how universities in Ghana and other parts of the world have structured their accounting education courses to adapt to IES requirements is shown in Figure 2. The bar graph depicts that universities allocated greater portions of credit loadings to develop students' technical proficiencies across the four continents. It is also evident from Figure 2 that the accounting curricula of universities in America, Asia and Europe allocated a larger portion (over 50%) of their credit loadings to technical competence, just as it was observed in the Ghanaian context. The average credit loadings allocated to technical competence were 66.84%, 59.15%, and 51.18% for universities in Europe, Asia, and America. Similarly, in Ghana, average credit loadings allocated to technical competence was 65.41%, the second-highest among the four cohorts.

The second-highest credit loadings were allocated to professional skills as it also averagely ranged from 29.97.04% to 45.47% across the selected universities from the four continents. Among the three competencies prescribed in the IES, professional values, ethics and attitudes were given the least credit loadings. They ranged between 1.65% to 3.31% in accounting programmes offered by universities across the four continents. At face value, there are similarities in the adaptations of the three main competencies (IES 2, IES 3 and IES 4) across the universities accounting education programmes irrespective of where they are delivered. However, Ghana approximated Europe adaptation of the IES more than America and Asia.

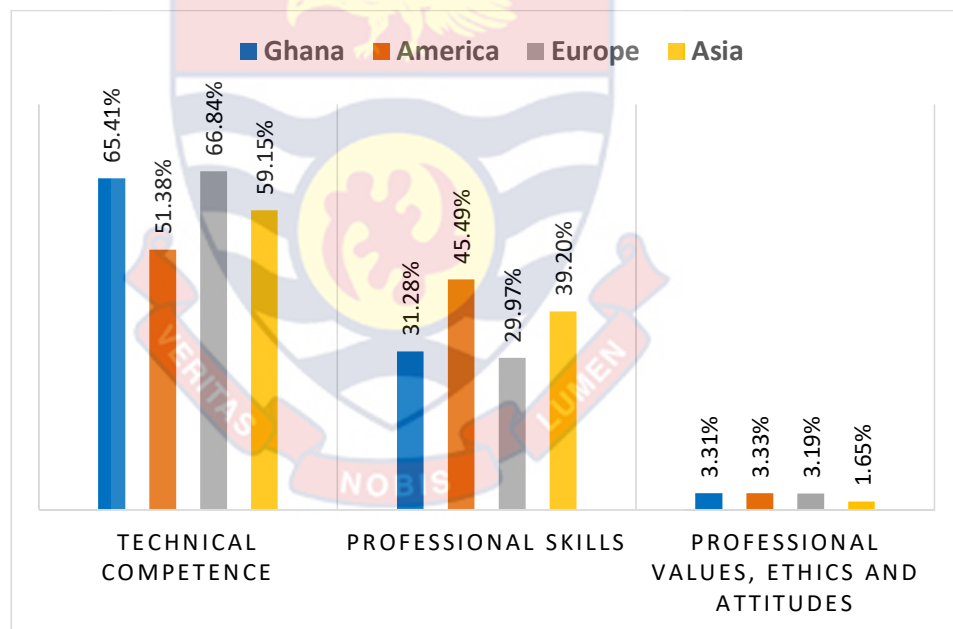


Figure 2: Adaptations to the IES  
Source: Field Survey, 2021.

Details of the universities' curricula are presented in Table 8. They were presented under three different learning categories or outcomes (IESs) to gauge how accounting education in Ghana differed from those offered by universities in America, Asia and Europe. Across the universities, there were courses such as project work and research methods that focused on developing research

skills. The presence of courses such as “Logic and Reasoning” and “Critical Thinking” proved that universities pursue the development of accounting graduates’ logical reasoning skills as required by the IES.

Another observation was that the universities in America, Asia and Europe mostly gave accounting students the chance to choose among alternative courses. But in the Ghanaian context, very little to no chance was given to choose a course of interest. Optional courses range from 0% to 5% of total credit loading in Ghanaian universities, whereas in the universities in America, Asia and Europe, it ranged from 2.44% - 22.5 %. None of the compulsory courses in the Ghanaian context was below 95% of total credit loading. At the same time, among universities in America, Asia and Europe, it ranged between 77% and 97% of the credit loadings (see Appendix D).

Just as it was observed among the universities in Ghana, those in America, Asia and Europe also offered courses related to accountancy such as Marketing, Supply Operation and study of other languages in business. “Marketing” was, however, predominant among the universities in other continents, just as it was in Ghana. They equally sought to broaden the knowledge base to improve the professional skills of accounting graduates. The nuance was that international universities gave students the prerogative to choose the type of course and the semester within which they wish to pursue them. In contrast, universities in Ghana offered such courses in the first two years of the undergraduate accounting programmes.

**Table 8: Courses Offered in Accounting Programmes**

Competence	University	Courses	Credit loadings in %
<b>Technical Competence</b>	UCC	Foundations of Accounting I, Foundations of Accounting II, Financial Reporting I, Financial Reporting II, Financial Reporting III, Computer Applications in Accounting, Cost and Management Accounting I, Cost and Management Accounting II, Advanced Financial Reporting I, Advanced Financial Reporting II, Audit and internal Review, Audit and Assurance Practice, Fundamentals of Business I, Fundamentals of Business II, Public Sector Accounting, Taxation, Quantitative Methods I, Quantitative Methods II, Business Law I, Business Law II, Company and Partnership Law, Principles of Management, Managerial Economics, Organisational Behaviour, Operations Management, Principles of Macroeconomics, Business Finance, Principles of Microeconomics, Applied Macroeconomics, Investment Management, Financial Analysis and Business Valuation, Strategic Management	68.09
	UG	Introduction to Business Administration, Introduction to Public Administration, Introduction to Computing in Business, Principles of Management, Microeconomics and Business, Commercial Law I, Fundamentals of Accounting Methods, Business Mathematics, Macro Economics and Business, Commercial Law II, Introduction to Financial Accounting, Quantitative Methods, Computer Application in Management, Introduction to Financial Reporting, Introduction to Business Finance, Financial Reporting, Auditing, Business Finance, Managerial	63.64

Ghana

	Economics, Company Law, Corporate Reporting and Analysis, Cost Accounting, taxation, Investment Fundamentals, Business Policy, Public Sector Accounting, Management Accounting, Accounting Information System	
UPSA	Introduction to Information Technology, Introduction to Management, Introduction to Business Statistics, Economics for Business, Information Systems, introduction to Business Finance, Legal Environment of Leadership, Global Dimension of Business, Principles of Accounting, Introduction to Total Quality Management, Quantitative Methods, Cost Accounting, Financial Reporting I, Taxation, Managerial Economics, Management Accounting, Financial Reporting II, Computerised Accounting Information Systems, Company and Partnership Law, Audit and Internal Review, Corporate Reporting I, Taxation and Fiscal Policy, Business Policy and Strategy, *Advanced Audit and Assurance/Project Management, Corporate Reporting II, Financial Management, Public Sector Accounting and Finance, Total Quality Management	60.47 - 65.11
KNUST	Business in Ghana, ICT in Business, Business Mathematics, Business Statistics, Introduction to International Business, Business Finance, Microeconomics for Business I, Principles of Accounting I, Quantitative Methods, Principles of Management, Financial Accounting II, Macroeconomics, Management Information Systems, Organisational Behaviour, Intermediate Accounting, Cost Accounting, Operations Management, Business Law, Investment and Portfolio Management, Intermediate Accounting II, Taxation, Management Accounting, Financial	67.13

## Europe

	Management, Company Law, Accounting Information Systems, Auditing and Internal Review, Financial Reporting and Analysis, Performance Management, Strategic Management and Policy, Advanced Accounting, Audit and Assurance, Public Sector Accounting,	
TUM	Financial Reporting, Introductory Management Accounting, Financial Decision-Making, Quantitative Methods for Accounting and Finance, Auditing & Professional Accounting Practice I, Law in a Management Context, Microeconomics 1, Macroeconomics 1, <i>Fundamentals of Management</i> , <i>Fundamentals of Technological Change</i> , Financial Statement Analysis, Business Strategy, Financial Reporting and Accountability, Intermediate Management Accounting, Foundations of Finance B, Business Law 1: Law, Business Liabilities and the Consumer, Principles of Taxation, Business Strategy 2, Business Law 2: Law and the Modern Corporation in an International Context, Contemporary Issues in Financial Reporting and Regulation, Accountability and Auditing, <i>International Finance</i> , <i>Share Prices and Accounting Information</i> , <i>Financial Derivatives</i> , <i>Corporate Governance in Context</i> , <i>Financial Engineering</i> , <i>Corporate Contracting and Managerial Behaviour</i> , <i>Advanced Management Accounting</i> , <i>Business Decision Analytics</i> , <i>Applied Practical Investing</i> , <i>Investment Analysis</i> , <i>Financial Markets and Institutions</i> , <i>Mergers &amp; Acquisitions: Financial Perspectives</i> ,	68.4 - 84.21
KU Leuven	Mathematics for business A, Financial Institutions and markets, Management, Financial Accounting A, Managerial Economics A, Statistics for Business 1,	49.23 - 50.77

---

Mathematics for Business B, Introduction to law, Financial Accounting B, Managerial Economics B, Statistics for Business 2, Personnel and Organisation, Financial Statement Analysis, Corporate law and Accounting, Strategic Management, Macro-economic and Macro-economic policy, Corporate Finance, Operational Management, International Economics, Management Accounting, principles of Taxation, ICT management, *Project Management*, Multinationals and European Institutions

---

VU New Business Creation, Theory of Economics, Business Mathematics, 62.5 - 68.75 Management, Fundamentals of Accounting, Global Business, Fundamentals of Finance, Business Statistics, Information Technologies, Fundamentals of Corporate Finance, Financial Accounting, Business Law, Cost Accounting and Management, International Finance, Fundamentals of Tax Accounting, Accounting for Various Types of Business, Performance Audit, Financial Markets, Business Tax Accounting, Corporate Budget Management, Financial Accounting Information Systems. Securities Management and Accounting, Financial Statements, Accounting in Public Sector, Strategic Management Accounting Systems, Financial Statement Audit, Project Management, Financial Analysis, Management Accounting Information Systems, Audit in the Public Sector, Business Operations Management (5 ECTS), Fundamentals of State Law (5 ECTS), Organizational Behaviour (5 ECTS), Business Strategies (5 ECTS), Property Economics and Evaluation (5 ECTS), Financial Analysis of Public Sector Entities (5 ECTS)

---

NUP	Principles of Microeconomics, Introduction to Business, Introduction to Mathematics, Principles of Business Finance, Principles of Macroeconomics, Principles of Financial Accounting, Statistics I, Principles of Management Accounting, Financial Theory, Principles and Risk of Insurance, Organisational Behaviour, Financial Analysis and Business Valuation, Business Taxation, Business Law, Derivatives Markets, Statistics II, Financial Reporting, Advanced Management Accounting, Information Systems for Accountants, Advanced Business Taxation, Financial Risk Management, Advanced Financial Accounting, Corporate Law, Audit Principles and Procedures, Financial Management, Performance Management, Advanced Financial Reporting, Performance Management II, International Financial Management, Advanced Audit principles and Procedures, <i>Macroeconomics Information Technology Management, Investment Management</i>	69.77 - 86.05
THKPU	Introduction to Economics, Introduction to Statistics for Business, Financial Accounting, Business Information Systems, Management Accounting 1, Intermediate Accounting 1, Business Law, Global Economic Environment, Management and Organisation, Management Accounting 2, Intermediate Accounting 2, Hong Kong Tax Framework, Advanced Financial Accounting, Auditing and Assurance, Accounting Information Systems, Business Finance, Business Analytics, Investments, Company Law, Corporate Finance, Principles of	60.98 - 64.41

---

	Operations Management, Business Valuation, Derivative Securities, Strategic Management,	
HKU	Introduction to financial accounting, Introductory microeconomics, Business statistics, Intermediate financial accounting I, Introduction to management accounting, Business law, Management information systems, Principles of management, Intermediate financial accounting II, Management control, Hong Kong taxation, Company law, Decision and risk analysis I, Auditing, Advanced financial accounting, Introductory macroeconomics, Investments and portfolio analysis, Advanced corporate finance, Risk management, Valuation using financial statements, International financial management, operational and valuation issues in finance institutions,	57.5 - 67.5
NUS	Managerial Economics, Macro and International Economics, Business Analytics – Data & Decisions, Management and Organisation, Financial Accounting, Legal Environment of Business, Accounting Information System, Managerial Accounting, Finance, Asian Business Environments, Operations Management, Strategic Management, Corporate Accounting & Reporting, Assurance and Attestation, Corporate and Securities Law, Taxation, Advanced Corporate Accounting & Reporting, Valuation, Corporate Governance and Risk Management, Integrated Perspectives in Accounting and Business, <i>Managerial Planning and Control</i> , <i>Advanced Assurance and Attestation</i> , <i>Accounting Theory 1</i> , <i>Advanced</i>	50 - 57.5

---

---

*Taxation, Seminars in Accounting, Advanced Assurance and Attestation, Accounting Theory (unrestricted electives)*

UoM	Principles of Microeconomics, Contemporary Management, Calculus I, Principles of Macroeconomics, Business Statistics, Introduction to Financial Reporting, Introduction to Information Technology in Business, Business Strategy, Finance Fundamentals, Intermediate Accounting I, Managerial Accounting in Argentina and Chile, Intermediate Accounting II, Business Communication, Financial-Data Analytics, Fundamentals of Federal Income, Contract Law and Corporate Regulation, Intermediate Management Accounting, Introduction to Taxation of Business, International Accounting, Auditing Principles and Procedures, <i>Elective</i>	51.6 - 57.5
UoA	The Legal Environment of Business, Business Application Knowledge - Computer Competency, Accounting Principles, Principles of Microeconomics, Accounting Principles II, Business Information Systems, Survey of Calculus, Principles of Macroeconomics, Principles of Finance, Intermediate Accounting I, Fundamentals of Taxation I, Accounting Analytics, Intermediate Accounting II, Fundamentals of Taxation II, Management, Accounting Technology, Governmental/Non-profit Accounting, Business Electives, Product, Project and Service Costing, Audit and Assurance Services,	47.5 – 55

---

<b>Professional Skills</b>	<b>Ghana</b>	ASU	Computer Applications and Information Technology, Brief Calculus, Macroeconomic Principles, Mathematics for Business Analysis, Enterprise Process Analysis and Design, Principles of Auditing, Organization and Management Leadership, Business Database Concepts, Taxes and Business Decisions, Business Law and Ethics for Managers, Internal Reporting, External Reporting II, Data Analytics in Accounting, External Reporting I, Fundamentals of Finance, Managerial Accounting I, Uses of Accounting Information II, Financial Accounting I: Uses of Accounting Information I, Microeconomic Principles, Business Statistics	46.25 - 50.42
		UCC	Business Communication, Statistics for business decisions, Business research methods, Project Management, Project Work, Communicative skills I, Communicative Skills II, Information Literacy, Critical Thinking and Practical Reasoning, Human Resource Management, Principles of Marketing, Entrepreneurship and Small Business Management African Studies I, Inter-Faculty Course, African Studies II,	21.28
		UG	Academic Writing, I, Academic Writing II, Science and Technology in our lives, Introduction to Literature, Psychology of Everyday Living, Human Behaviour in Organisations, Research Methods, *Long Essay, Principles of Marketing/Introduction to Electronic Business, Fundamentals of Entrepreneurship/Practice of Insurance Business, *Bank Management/Financial Markets/Public Finance, Monetary Theory, Introductory French/Chinese I, Introductory French/Chinese II, Introduction to African Studies	15.91 – 20.45

Europe	UPSA	Communication Skills, Business Communication, Logic and Critical Thinking, Scholarly writing, principles of Leadership, Research Methods, Internship, Project Work, French Language, Business French, Elements of Marketing, Entrepreneurship Development, *Banking and Investment Analysis/Microfinance Management, Money and Capital Markets	20.9
	KNUST	Communication Skills, Communication Skills II, Business Communication, Logic and Critical Thinking, Introduction to Psychology, Introduction to Human Resource Management, Business Research Methods, Research Project, Introduction to Sociology, French for Communication I, French for Communication II, Introduction to Logistics and Supply Chain Management, Principles of Marketing, Fundamentals of Entrepreneurship	17.48
	TUM	<i>Marketing Foundations, Human Resource Strategy and Practice, International and Comparative Human Resource Management, Developing an Entrepreneurial Mindset</i>	10.53 - 21.05
	KU Leuven	Philosophy, Psychology, Research Methods, Research Methods 2, Introduction to Methods in Operational Research, Research Methods 3, <i>Internship Project</i> , Business Project, Career Development, Management Project 1, Management Project 2, Languages, Languages 2 (English, French, German or Dutch), European Studies, Marketing, Entrepreneurship and Business Planning, <i>Economic History, Business Plan, Management Game, Short mobility Economics and Business</i>	20

Asia	VU	Fundamentals of Academic Research Methodology, Couse Paper, Professional Internship, Bachelor's Thesis, Business Intelligence and Decisions (5 ECTS), Data Analysis and Interpretation (5 ECTS), General Courses (15), Business English 1 & 2, Marketing, Intellectual Property (5 ECTS), Behavioural Pricing/Business Risk Management (5 ECTS), E-Business (5 ECTS), Economics of Social Security (5 ECTS), Labour Economics (5 ECTS)	16.67 - 20.83
	NUP	Computer skills, Research Methods & Research Skills I, Research Methods & Research Skills II, <i>Dissertation, Placement, Introduction to psychology, Business Decision-Making, Sociology and Anthropology</i> , Principles of Marketing, <i>Political Economy, Financial Workshop, Debt Markets, Tourism Marketing, Behavioural Economics</i>	6.98 - 16.28
	THKPU	Introduction to Psychology, Tango Managing Self & Leading Others, Workplace English for Business Students I, Workplace English for Business Students II, Service-Learning, Chinese Language Communication for Business, Capstone Project, Freshman Seminar, Healthy Lifestyle, CAR C, LCR-English, LCR-Chinese, LCR-English II, Introduction to Marketing, ,	19.51 - 21.95
	HKU	Academic communication for business and economics, Accounting data management and analytics, Science, Technology, and Big Data, Core University English, Practical Chinese and Hong Kong society, Global Issues, "China: Culture, State and Society, Introduction to marketing, Mathematical finance, Alternative investments, Regulatory, Green finance and impact investing, Real estate finance	5 - 12.5

NUS	Business Communication, Honours Dissertation, Field Service Project, Internship, Thinking and Expression, Quantitative Reasoning, Asking Questions, <i>Unrestricted electives</i> , Singapore Studies, Human Cultures, Marketing, ( <i>unrestricted electives</i> )	17.5 - 32.5
UoM	Analysing Business Problems Using Excel, Introduction to Psychology, Career Skills, Human Resource Management and Strategy, LE (Writing Intensive - Lower Division), LE (Writing Intensive - Lower Division), LE (Literature), International Experience, LE (Physical Sciences), LE (Biological Sciences), LE (Arts/Humanities), LE (Diversity and Soc Justice US), LE (Technology and Society) LE (Historical Perspectives), Supply Chain and Operations, Principles of Marketing, <i>Elective</i> ,	17.5 – 20
UoA	Composition I, Public Speaking, Freshman Business connection, Composition II, Data Analysis and Interpretation, Managing People and Organizations, Science, Fine Art/Humanities, History, Finite Mathematics, Integrated Supply Chain Management, Business Electives	13.3 - 20.83
ASU	Student Success in Business 1, Composition. Composition 2, Psychology, Introduction to Career Development, Internship, Senior Career Transition Management, Capstone Course, Problem Solving and Actionable Analytics, Organization and Management Leadership, Business Writing, Junior Networking Foundations, Communication in Business and the Professions, Intermediate Career	19.17 - 26.7

			Management, Humanities, Arts and Design (HU) AND Historical Awareness, Cultural Diversity in the U.S, Natural Science, Global Supply Operations, Marketing and Business Performance,	
<b>Professional Values, Ethics, and Attitudes</b>	<b>Ghana</b>	UCC	Business Ethics and Corporate Governance	2.13
		UG	Social Responsibility and Ethics	2.27
		UPSA	Introduction to Environmental Management, Business Ethics,	4.65
		KNUST	Corporate Social Responsibility, Corporate Governance,	4.2
	<b>Europe</b>	TUM	Professional Accounting Practice I, Professional Accounting Practice II,	5.26
		KU Leuven	Economics and Ethics, Economic Sociology	3.08
		VU	Corporate Social Responsibility and Ethics,	2.08
		NUP	Corporate Governance & Ethics	2.33
		<b>Asia</b>	THKPU	Corporate Social Responsibility
	HKU		Seminars	5
NUS	Leadership and Ethics		2.5	
<b>America</b>	UoM	Corporate Responsibility and Ethics,	2.5	
	UoA	Social Issues,	2.5	
	ASU	Business and Society, Business Law and Ethics for Managers,	3.75 - 6.25	

Source: Field Survey, 2021.

### **Further areas of departure of accounting education in Ghana relative to competitive offerings in America, Asia and Europe**

Additional evidence from the content analysis revealed that beyond the nuances in the programme structure and contents, accounting education offered in Ghana differed markedly from universities in America, Asia and Europe. The points of contrast have been pooled under two themes. These are related to the aims of accounting education delivery; and emphasis on theory and/or practice.

#### ***Ghana aims at employment; America, Asia and Europe look at professional progression***

The general aims stated in the programme documents of the accounting programmes suggest that universities factor in the development of accounting students' professional competence in accordance with IES to for the purpose of gaining employment. The aim of one accounting programme is stated as

*The overall aim of the programme is to provide accounting and business education that develops accounting personnel with the requisite technical knowledge, skills, character and abilities fit for prudent steward of resources for private and public sectors of the economy. (a University in Ghana)*

Another example of an objective of accounting education from a university in Ghana had documented, “*Graduates of the programme will be able to prepare and present financial reports in accordance with International Financial Reporting Standards and the institutional, legal, and regulatory framework of Ghana*” (a University in Ghana). These results suggest that accounting programmes offered by universities in Ghana focus much attention on developing the technical competence of accounting graduates.

In terms of the conformity of goals to IES requirements, a competitive offering outside Ghana articulated that its accounting programme

*... prepares students for a professional qualification in accounting and provides the broad-based education necessary for progressing towards a leadership role in the financial sector. ... Graduates of the degree are eligible to obtain maximum exemptions from professional examinations organised by the Association of Chartered Certified Accountants (ACCA) and need to take only five papers. (a University in Asia)*

***Relative to America, Asia and Europe, accounting education in Ghana is bookish***

A paramount observation made from the document analysis was how the universities in Ghana have trivially partnered with the industries to give their graduates a practical experience of the lessons they gathered in the classroom. Evidence from the document analysis showed that only one of the four universities in Ghana emphasised the need for accounting students to complete a three-credit-hour practicum in industry. There was no deliberate official partnership between the university and firms where the students were to enrol to develop practical work-related experiences. However, the universities in America, Asia and Europe seemed to be very intentional about collaborating with the industries to help the accounting trainees with the needed competencies to function well on the job market.

The universities in America, Asia, and Europe created a maximum of one-year internship programmes where students practised what they gained from the classroom to get a deeper understanding of the subject matter. For instance, an accounting programme in Europe has been designed to “... provide

*... [students] with a fast track to an accountancy qualification and the four-year degree offers ... [students] the opportunity of a full-year paid work placement in ... [their] third year of study". It has Special features where it "provide ... [students] with the opportunity to meet companies who offer internships through the UPP, such as Ernst & Young, Goldman Sachs, Grant Thornton, Mazars and PwC. The course integrates study of the theory and practice of accounting..."*

Notwithstanding the above evidence, another university in its programme document described the focus of a particular course (Work-Integrated Education, WIE) as a mandatory component of the curriculum. It is *work-based learning experiences which take place in an organizational context relevant to a student's future profession, or the development of generic skills that will be valuable in that profession". An essential and compulsory component in the Faculty's BBA education, WIE facilitates the integration of knowledge, skills, and competencies between the classroom and the real world, thus equipping students with valuable work experience as well as practical readiness for full-time (a university in America).*

Another university in Asia stated that *"The learning outcomes and learning objectives set out represent a balance between the continuing need for practicality in programmes and the pressing need for whole person development of students."* These shreds of evidence show that accounting education offered by universities in Ghana are overly focused on theory relative to competitive offerings across the globe. Therefore, students are denied

opportunities for practical experiences in university accounting education in Ghana.

### **Discussion of objective one result**

Evidence from the programme structures of the universities revealed that all the 11 courses/subjects suggested in the IES to be taught to develop technical competence are largely incorporated by all the universities selected from the four continents. Courses are structured in a way that they span across the three-to-four-year study period. The fundamental proficiencies are studied in the first and second years. The intermediate proficiencies are studied in the second and third years, while the advanced proficiencies are studied in the third and final years. The general aims of accounting programmes suggest that the universities consider developing accounting graduates' professional skills. However, for all the universities from the four continents, the average credit loadings allocated to courses on professional skills did not support the intended programme aims. Despite the quest to project it, credit loadings allocated to professional skills were second to what was allocated to technical competence.

The objectives of the accounting programmes rarely addressed the development of professional values, ethics, and attitudes. Credit loadings and several courses allocated to developing professional values, ethics, and attitudes further show how meagre attention and focus are given to developing this competence. None of the universities apportioned more than 4% credit loadings to courses that addressed this competence even though there are traces of ethics, values, and attitudes in other technical competence courses such as Advanced Financial Reporting and Auditing.

Discussions of case studies are employed when delivering courses on ethics. However, other profound methods such as role-playing and seminars on ethics, values, and attitudes were not used as delivery methods among the universities. Albeit the universities incorporate almost all the learning outcomes of this competence as required by the IES, they allocated limited credit hours to achieve them. Despite the universities being intentional about the development of professional values, ethics, and attitudes, judging from the time/credit allocation and the fact that not all accounting courses emphasise it, the reasonable conclusions are that universities do not place much emphasis on the development of professional values, ethics, and attitudes in the curriculum. This finding corroborates those of Veneziani et al. (2016) and Busuioc et al. (2019) that universities place very little emphasis on developing accounting graduates' professional values, ethics, and attitudes.

Generally, there were more similarities than differences in developing students' professional skills among Ghanaian universities and leading international universities across the globe. Some similarities are identified in the credit loadings, course contents and program goals. Just like in the universities in Ghana, the leading international universities in America, Asia, and Europe have equally not the quest to develop accounting students' professional skills. Universities' moderate focus on professional skills corroborates the findings of Low et al. (2013) in New Zealand to some extent. In New Zealand, it was found that much focus is given to the development of professional skills. However, professional skills development in Ghanaian universities does not have as much attention and focus as technical competence. This may influence the relevance

students would attach to such skills and how they may develop and use such competencies in their works.

From the preceding paragraphs, universities' undergraduate accounting curricula across Ghana, America, Asia, and Europe could be argued to generally converge with the IES requirements. This supports the findings of Adadoh (2014) that the general aims of the accounting programme were in line with the IFAC requirements. Beyond Adadoh's superficial finding, a detailed analysis brought to light the focus on each competency. The courses and objectives of the programmes reflect the IAESB's guidelines. This was in contrast with the situation in Jordan, where Al Frijat and Shbeilat (2016) found that Jordanian universities did not use enough courses and topics to adequately cover the demands of the IES. However, this current study ascertained that while the universities highly focused on technical competence, they moderately focused on professional skills when developing accounting graduates. This finding corroborates the studies of Jackling and De Lange (2009), Mustapha and Shittu (2012), as well as Busuioc et al. (2019) that observed that universities focus on developing technical skills of students at the expense of the other required competencies.

All the findings obtained so far applied to the delivery of accounting education across the four continents studied. However, the only point of departure for accounting education delivered by universities in Ghana is seen in the attempt to give students ample time and opportunity to undergo practical hands-on training in the industry. Whereas universities in America, Asia and Europe intentionally allowed students to do a practical internship with notably credible accounting firms globally, universities offering accounting education

in Ghana failed to emphasise this in their curriculum even though the programmes aims at employment. Thus, undergraduate accounting students in Ghanaian universities are denied the opportunity to build on those skills acquired from the school. It should be noted that students are not only developed through and by the school environment but also through internships in the industries. For this lack of internship opportunities, Monga's (2019) assertion may hold to some extent but not to be blown out of proportion that Africa's entire university curricula are obsolete and poor and fail to measure up to international benchmarks.

### **Differences in the Levels of Competencies Developed in Accounting**

#### **Graduates**

The second objective investigated whether there are differences in the competencies developed in accounting graduates, having identified the university's focus through the content analysis of university documents. The responses gathered from graduates' self-report on competency development were subjected to a normality test to decide on the appropriate statistical approach to perform the test for differences. The results from the test for normality are presented in Table 9.

**Table 9: Test for Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Stat.	Df	Sig.	Stat.	Df	Sig.
Technical Competence	.093	115	.017	.974	115	.026
Professional Skills	.103	115	.004	.977	115	.047
Professional Values, Ethics, and Attitudes	.064	115	.200	.977	115	.049

Source: Field Survey, (2021)

The Kolmogorov-Smirnov test in Table 9 showed that the data distribution for professional values, ethics, and attitudes was not statistically

significantly different from a normal distribution,  $KS(115) = .064, p = .20$ . This suggests that the distribution is normal/symmetrical for professional values, ethics, and attitudes. However, the Shapiro-Wilk test for professional values, ethics, and attitudes  $W(115) = .0977, p = .049$  was significant, meaning the data is not normally distributed. Ogunleye et al (2018) suggest that the Shapiro-Wilk test should be considered above the Kolmogorov-Smirnov test. Therefore the distribution was considered asymmetrical. In the same direction, professional skills ( $W(115) = .0977, p = .047$ ) and technical competence ( $W(115) = .0974, p = .026$ ) were all statistically and significantly different from a normal distribution. The data was asymmetrical. Therefore, the non-parametric equivalent of the repeated measures ANOVA, the Friedman Test, was used to test for differences. The results are presented in Table 10.

**Table 10: Friedman Test**

Professional Competence	Mean Rank	Percentiles		
		25 <sup>th</sup>	50 <sup>th</sup> (Median)	75 <sup>th</sup>
Technical Competence	1.62	2.970	3.320	3.880
Professional Skills	1.99	3.140	3.640	4.070
Professional Values, Ethics, and Attitudes	2.49	3.330	3.670	4.220
N		115		
Chi-Square ( $\chi^2$ )		35.473		
Df		2		
Asymp. Sig.		.001		

Source: Field Survey, (2021)

The Friedman test was used to explore if there are differences in the three professional competencies that have been developed in accounting graduates. Therefore, the hypothesis “*H1: Accounting graduates’ professional competencies significantly vary across technical competence, professional skills, and professional values, ethics, and attitudes*” was supported. There were

statistically significant differences in graduates' perceived development across technical competence, professional skills, and professional values, ethics, and attitudes ( $\chi^2(2) = 35.473, p < .01$ ). This means that accounting graduates believe they possess different levels of development in the three competencies after completing their respective accounting programmes. Subsequently, a post hoc analysis was performed to obtain the details of the existing differences. Results of the post hoc analysis are presented in Table 11.

**Table 11: Wilcoxon Signed Ranks Test**

	PS – TC	PVEA – PS	PVEA - TC
Z	-3.978	-5.379	-3.676
Asymp. Sig. (2-tailed)	.001	.001	.001

PS= professional skills; TC= technical competence; PVEA=professional values ethics and attitudes

Source: Field Survey, (2021)

Post hoc analysis with Wilcoxon signed-rank tests was used to explore the exact differences. Consequently, there was a need to apply Bonferroni adjustment on the significance of results gotten from Wilcoxon tests. This was done by dividing the initial significance level (in this case, .05) by the number of Wilcoxon tests performed. The new significance level was now  $.05/3 = .017$ . This means that if the p-value is larger than .017, the results are not statistically significant.

The Median (Inter Quartile Range) of perceived development levels for technical competence, professional skills, and professional values, ethics, and attitudes were 3.32 (2.97 to 3.88), 3.64 (3.14 to 4.07), and 3.67 (3.33 to 4.22), respectively. From Table 11, professional skills developed in accounting graduates were statistically and significantly higher than technical competence ( $Z = -3.978, p < .017$ ). Also, professional values, ethics, and attitudes was more

developed in accounting graduates than professional skills ( $Z = -5.379$ ,  $p < .017$ ). Finally, professional values, ethics, and attitudes was statistically and significantly developed in the graduates than the development of technical competence ( $Z = -3.676$ ,  $p < .017$ ).

The findings suggest that professional values, ethics, and attitudes was the most developed competence in graduates. This was followed by professional skills, and finally, graduates suggested that technical competence was the least developed after their university education.

### **Discussion of objective two results**

The median values for all the three competencies measuring above 3.0 indicated that the universities in Ghana have adequately developed all the competencies of accounting graduates. This buttresses the initial finding that universities in Ghana structure their curriculum to conform with the required standards. The results of this study are consistent with the findings of Okoro (2013) and Mensah (2020). They found that graduates were adequately equipped with the required accounting competencies. However, there are differences in graduates' level of development across the three competencies (IES 2, 3, and 4). The differences across graduates' level of development in the three competencies vindicate the position held in some previous studies (Chaffer & Webb, 2017; Kavanagh & Drennan, 2008).

The finding that technical competence was the least developed competence out of the three supports the finding of Mensah (2020). He realised that Technical Skills are the least developed and professional skills are the most developed. Developing technical competence without the use of practical experience would make it difficult to attain the utmost development. Inasmuch

as universities would try to give practical lessons in the classroom, technical skills cannot be completely developed without practical industry experiences. Unlike technical competence, there can be adequate practical experience for developing values and generic skills in the school environment. This probably explains why accounting graduates' professional values, ethics and attitudes and professional skills were developed more than their technical competence. Contrary to this, Anis (2017) found that graduates in Egypt are more developed in Financial Accounting (technical Competence) than in performing analysis (professional skills).

This study identified professional values, ethics, and attitudes to be the most developed. Kavanagh and Drennan (2008) also had a different dimension to the differences in graduates' competencies. They found that professional values, ethics, and attitudes was the least developed competence in the Australian accounting graduates. Graduates perceiving professional values, ethics, and attitudes as their most developed competence is likely to be a result of how the universities have superficially incorporated this competence into their accounting curricula. Therefore, the graduate will measure their competence based on the meagre scope of knowledge the universities have made available to them as the standard. They are, therefore, likely to think they are mostly developed in professional values, ethics and attitudes. Also, religious factors and moral advice usually given by some teachers may have contributed to graduates' development in this competency.

The findings in this objective bring to cognisance that accounting graduates are likely to possess higher development in some competencies than others due to the structure and content of the curriculum. However, the cause of

such differences cannot be tied solely to the universities' efforts but other relevant factors that were not incorporated in this study (Anis, 2017). Other factors such as students' attitudes towards learning and availability of resources could also contribute to the variation in graduates' development.

### Accounting Graduates' Competencies and their Job Performance

The third objective of the study explored the relationship between graduates' competencies and their job performance. This helped to identify the competencies that are actually translated into job performance. Having presented the outer model measures and multicollinearity in Chapter Three already, results on the relationship from the inner model were assessed and discussed. The discussions excluded the control variables (gender and year of completion) as they had no significant impact on job performance. Besides, they were not constructs of interest in the relationship. The results are subsequently shown in Table 12 and Figure 3.

**Table 12: Objective Three Inner Model Specifications**

Exo. Construct	Beta ( $\beta$ )	SD	t-stat	P-value	$R^2$	$f^2$	$Q^2$	$q^2$
TC -> JP	.177	.096	1.841	.033	.363	.022	.269	.012
PS -> JP	.255	.125	2.037	.021	.363	.035	.269	.020
PVEA->JP	.224	.111	2.017	.022	.363	.031	.269	.025
Gender->JP	.091	.083	1.140	.135				
YoC->JP	-.023	.072	.323	.373				

CPD= Continuing Professional Development; JP=Job Performance; PS= Professional Skills; PVEA= Professional Values Ethics and Attitudes; TC= Technical Competence; SD= standard deviation

Source: Field Survey, (2021)

### Path coefficient assessment

The path coefficients ( $\beta$ ) were examined to determine the answers to the hypothesised relationships. Three hypotheses (H2a, H2b, and H2c) were tested, and the findings are as follows:

***H2a: Technical competence positively influences accounting graduates' job performance***

The results in Table 12 and Figure 3 show that technical competence (TC) had a positive and significant influence on accounting graduates' Job Performance ( $\beta = .177$ ;  $t = 1.841$ ;  $p=.033$ ). This means that if accounting graduates' technical competence is well developed, they are more likely to perform their jobs well as accountants. Hence, this hypothesis was supported.

***H2b: Professional skills positively influences accounting graduates' job performance***

Also, as observed in Table 12, the hypothesis was supported because professional skills had a positive and significant influence on the job performance of accounting graduates ( $\beta = .255$ ;  $t = 2.037$ ;  $p=.021$ ). This means that possessing higher professional skills will result in higher Job Performance among accounting graduates.

***H2c: Professional values, ethics, and attitudes positively influences accounting graduates' job performance***

Finally, the results presented in Table 12 suggest that professional values, ethics, and attitudes significantly and positively influences accounting graduates' job performance ( $\beta = .224$ ;  $t = 2.017$ ;  $p=.022$ ). This indicates that accounting graduates are more likely to perform their jobs well in accountancy or auditing when they possess higher professional values, ethics, and attitudes. Consequently, this hypothesis was also supported.

**Explanation of variance in the endogenous variable**

The variance in the endogenous construct was assessed by examining the coefficient of determination ( $R^2$ ). This also provided information on the

predictive power of the model. The results in Table 12 shows that the exogenous constructs moderately and significantly explained the variance in the endogenous construct ( $R^2=.363$ ). This means that about 36% variation in accounting graduates job performance (JP) was accounted for by the three professional competencies (TC, PS, and PVEA). About 64% of the variations are probably explained by other factors not incorporated in this study.

### **Effect sizes of the exogenous constructs**

Having identified the model's predictive power, Cohen's (1998)  $f^2$  criteria were used to determine each exogenous variable's contribution to the predictive power. It was evident from Table 12 that technical competence (.022), professional skills (.035), and professional values, ethics, and attitudes (.031) all had small effect sizes. This means that none of the exogenous constructs can singularly predict the job performance of accounting graduates. They would all have to be present concurrently to influence job performance effectively.

### **Predictive relevance (cross-validated redundancy)**

Once the predictive power has been determined, it was equally pertinent to determine the predictive relevance of the model. Therefore, Stone-Geisser's (Geisser, 1974; Stone, 1974)  $Q^2$  was used to assess predictive power, whereas  $q^2$  was used to assess the individual contribution of the exogenous constructs to the predictive relevance. As observed from Table 12, the model has predictive relevance since Stone-Geisser's value ( $Q^2=.269$ ) is higher than 0. Also, technical competence ( $q^2=.012$ ), professional skills ( $q^2=.020$ ), and professional values, ethics, and attitudes ( $q^2=.025$ ) all had small effect sizes. The small effects on

the predictive relevance proved the concurrent need for all three professional competencies to significantly predict accounting graduates' job performance.

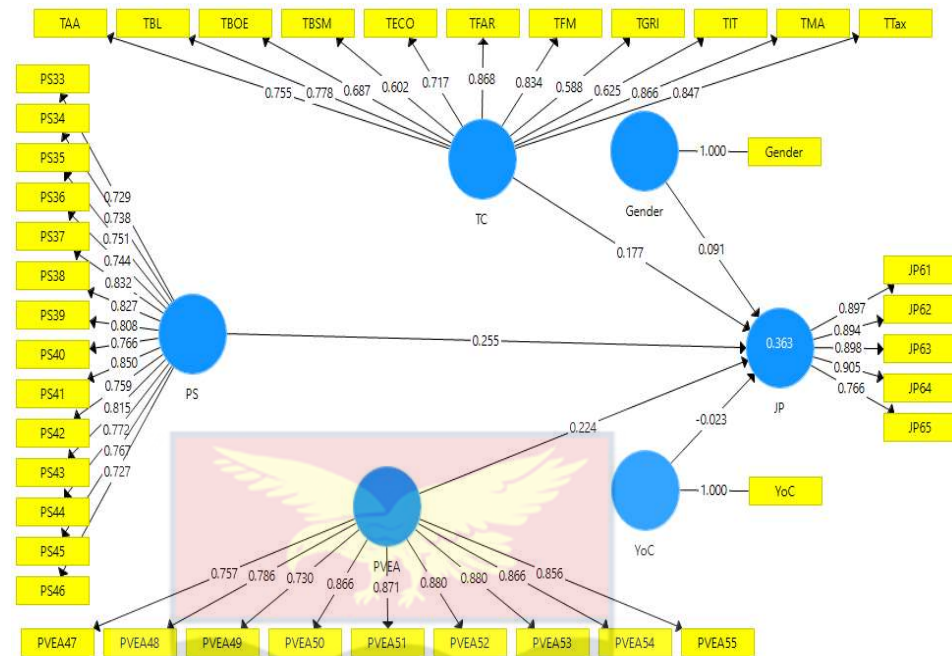


Figure 3: Relationship between competencies and job performance

Source: Field Survey, 2021.

### Discussion of objective three result

The overall impression from the findings is that all three competencies are relevant antecedents of accounting graduates' job performance. The findings also support the proposition made by IAESB (2017) to universities for the effective development of accounting graduates. This illustrates the need to fully develop accounting graduates in all facets to become extremely effective and efficient in their workplaces, especially in accounting-related jobs.

The findings obtained generally corroborate arguments advanced by the theories and empirical findings that have been presented in the literature. Just as both human capital (Schultz, 1960; Becker, 1993; Mincer, 1974) and job performance (Campbell et al., 1996; Campbell et al., 1993) theories postulated

the influence of knowledge, skills, and attitude on the performance and productivity of workers; this study has also confirmed the relationship.

Moreover, the findings substantiate empirical studies by Ahmad et al. (2019), Hadinsantoso et al. (2017), and Plamer et al. (2004) as they all revealed that the competencies are significant predictors of job performance. Like the findings of this study, Ahmad et al. observed that all the three competencies (skills, knowledge, and attitude) are relevant antecedents of auditors' job performance. Even in a study outside the accounting context, Wade and Parent (2002) have established a relationship between professional skills and job performance. The findings of this study are also consistent with that of Abas and Imam (2016). They found a significant and positive relationship between graduates' employability skills and their job performance.

The specific significant relationship between professional values, ethics, and attitudes also agrees with the finding of Afifah et al. (2015). They realised a positive impact of ethical sensitivity on the job performance of auditors. They explain that the sensitivity directly informs their actions (job performance) as auditors. In the same vein, professional values, ethics, and attitudes has the tendency to determine how graduates will perform their duties when they are employed.

These findings affirm the need for universities to entirely focus on developing all the competencies of accounting graduates to make them efficient and effective when performing their duties as accountants, auditors, or tax officials. Not only would they need to have the technical know-how, but also, they would have to know the best way to relate and interact with colleagues while they predispose themselves to the best attitudes towards the job.

### Mediating role of Continuing Professional Development (CPD) on the competencies and job Performance nexus

Having identified the relationship between graduates' competencies and their job performance, the study explored the mediating role of CPD on the relationship. The results from the structural equation model were used to evaluate the mediating roles of continuing professional development in each relationship. There was a mediating effect if the indirect effect were significant. The mediating effects were either partial or full based on the significance or insignificance of the direct relationship between the predictor and dependent constructs. The results are presented in Table 13 and Figure 4, 5 and 6.

**Table 13: Objective Four Mediation Results**

Hypotheses	Variables	Indirect Effects			Direct Effects	Mediation Type
		Beta ( $\beta$ )	T Stats	P-value.		
H3a	TC -> CPD -> JP	.091	1.812	.035	Significant	Partial mediation
H3b	PS -> CPD -> JP	.067	1.388	.083	Significant	No mediation
H3c	PVEA -> CPD -> JP	.073	2.042	.021	Significant	Partial mediation

Source: Field Survey, (2021)

Hypothesis 3 predicted that CPD mediated the relationship between professional competencies and job performance of accounting graduates. Specifically, the three hypotheses (H3a, H3b, and H3c) were tested, and the findings were as follows:

***H3a: CPD significantly mediates the relationship between technical competence and job performance of accounting graduates***

The results in Table 13 shows that continuing professional development significantly and partially mediates the relationship between technical

competence and job performance of accounting graduates ( $\beta = .091$ ;  $t = 1.812$ ;  $p = .035$ ) since there is a direct relationship between technical competence and job performance. This partial mediating effect suggests that CPD strengthens the impact of technical competence on accounting graduates' job performance.

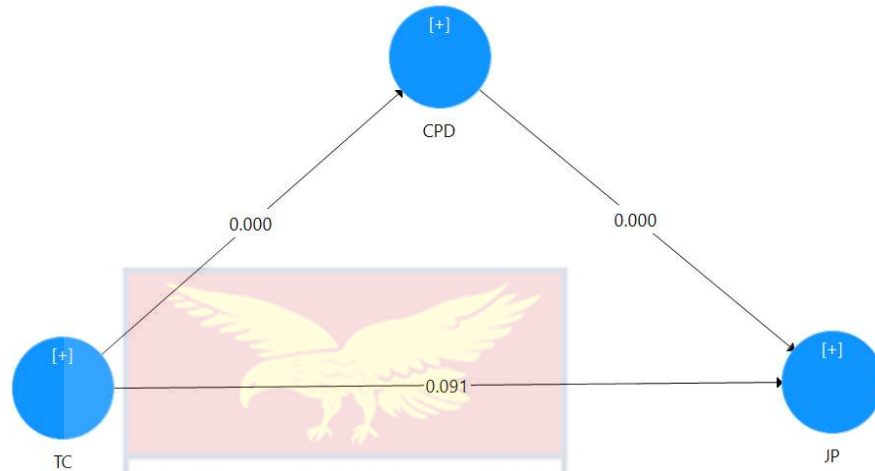


Figure 4: Mediating effect of CPD in TC-JP nexus  
Source: Field Survey, 2021.

***H3b: CPD significantly mediates the relationship between professional skills and job performance of accounting graduates***

The second hypothesis under the fourth objective of the study explored the mediating effect of continuing professional development in the relationship between professional skills and accounting graduates' job performance. Observations from Table 13 and Figure 5 shows that the hypothesis was not supported because CPD does not significantly mediate the relationship ( $\beta = .067$ ;  $t = 1.388$ ;  $p = .083$ ). However, there was a significant direct relationship between professional skills and job performance. This suggests that professional skills may not necessarily require CPD before they can be relevant for performing one's job.

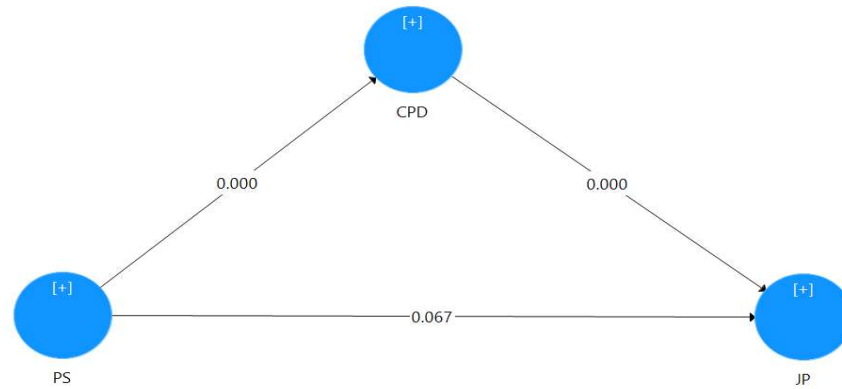


Figure 5: Mediating effect of CPD in the PS-JP nexus  
Source: Field Survey, 2021.

***H3c: CPD significantly mediates the relationship between Professional Values, Ethics, and Attitudes and job performance of accounting graduates***

The last hypothesis of the study explored the mediating effect of continuing professional development in the relationship between professional values, ethics, and attitudes and job performance of accounting graduates. The results from Table 13 and Figure 6 show that CPD had a significant partial mediating effect in the relationship ( $\beta = .073$ ;  $t = 2.042$ ;  $p = .021$ ). The hypothesis was supported. This suggests that if graduates are committed to developing their professional values, ethics, and attitudes through CPD, they are more likely to perform their job well.

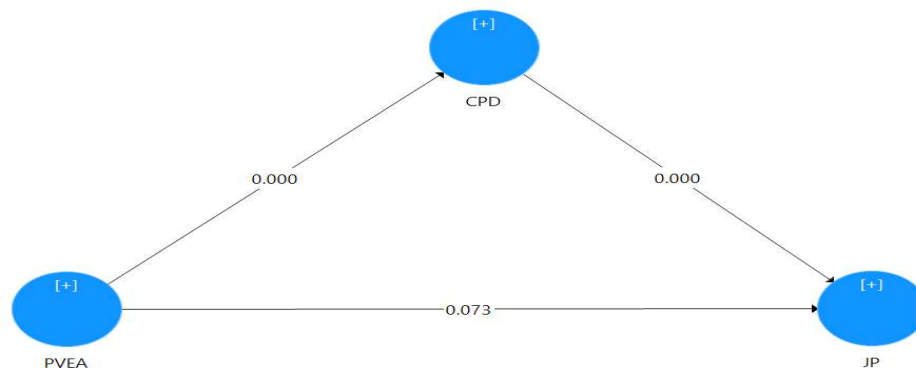


Figure 6: Mediating effect of CPD on PVEA-JP nexus  
Source: Field Survey, 2021.

### Discussion of objective four result

The mediating role of continuing professional development (CPD) has been primarily established in this study as it was found to be significant in two of the three relationships. First, it significantly mediated the relationship between technical competence and job performance and between professional values, ethics, and attitudes and job performance. This proves the relevance of CPD and the need to engage in on-the-job training to make these competencies stay relevant to accounting graduates' jobs.

The findings of Barzegar and Farjad (2011) and Kavanagh and Drennan (2008) suggested that CPD is a relevant contributor to workers' job performance. Nassazi (2013) also discovered a direct effect of CPD on the job performance of individuals. The finding of this study supports this position existing in the extant literature. This finding, however, gives new insight as to how CPD can influence the job performance of accounting graduates. As argued by some critiques of the human capital theory (Oliveira & Da Costa, 2014; Oliveira & Holland, 2007; Khan, 2018), CPD proved to be a factor that can influence the relationship between competencies and job performance of accounting graduates.

However, the mediating role of CPD in the relationship between professional skills is found to be insignificant. This may be because the study participants have had a maximum of three years, with the majority being below three years at the post. The Experiences they may have gathered might not be significant enough to improve their existing competence in professional skills to mediate the relationship eventually. Even though the mediating effect was not significant, the coefficient obtained suggested a positive mediating effect.

Consequently, the importance associated with CPD by the IAESB (2017) is once again vindicated by the findings of this study, hence must be taken seriously.

### Chapter Summary

The chapter presented results obtained from the study. It was revealed that universities in Ghana, just like other leading international universities, place much emphasis on developing some competencies than others. Unlike the international universities, universities in Ghana failed to adequately incorporate practical experience, which is critical to developing the competencies. Ironically, graduates believed that professional values, ethics, and attitudes was the most developed competence after their university education. This was followed by professional skills and then technical competence. Moreover, all three competencies proved to be significant determiners of accounting graduates job performance. Finally, the results suggested that continuing professional development mediates the relationship between professional competencies and job performance except for professional skills and job performance nexus.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Introduction

This chapter summarises the study and reflects on the key findings of the study. It also draws conclusions based on the results of the research and makes specific recommendations to improve practice and inform policy. Finally, suggestion for future research is made based on the limitations and delimitations of the study.

#### Summary of the Study

This section is divided into two. The first part summarised the research process, whereas the second section summarised the key findings of the study.

#### Summary of the research process

The overarching purpose of the study was in two folds. First, the study sought to investigate the current focus of universities in Ghana when developing accounting graduates. Second, it sought to identify what should be the focus when developing accounting graduates. The provisions in the IES served as a reference point for this investigation. For that matter, the purpose was achieved through addressing four research objectives which sought to:

1. investigate if the accounting curricula of universities in Ghana converge with IES(IPD)/international requirements.
2. determine the variations in accounting graduates' professional competencies obtained from the universities.
3. examine the influence of the accounting graduates' competencies on their job performance.

4. examine the mediating role of CPD in the relationship between accounting graduates' competencies and job Performance.

The study employed a mixed-method approach that stemmed from the pragmatist paradigm. The embedded research design was employed to collect and analyse data. Specifically, the conceptual content analysis and explanatory-correlational research designs were used to address the qualitative and quantitative strands of the study. Through the design, qualitative data in documents such as students' handbooks, programme documents and course outlines were gathered from the fourteen universities that were purposively selected. These documents were analysed to provide an understanding of the IES compliance of universities in Ghanaian. Also, responses were collected through questionnaires from 115 accounting graduates who were selected through the census approach from accounting firms. The quantitative data were analysed with statistics such as Friedman Test and Partial Least Squares, Structural Equation Modelling. This was used to respond to objectives two, three, and four.

### **Summary of key findings**

The following key findings were obtained from the study:

1. Universities in Ghana generally incorporate the IES when developing the competencies of accounting graduates. This was similar to the practice of leading international universities in other continents to a large extent. Specifically, there is much emphasis placed on the development of technical competence. Also, moderate emphasis is placed on developing professional skills, whereas a bit of emphasis is set on developing accounting graduates' professional

values, ethics, and attitudes. Also, universities in Ghana have failed to incorporate practical functions in their curricula to give accounting students the practical experiences to help develop their competencies well despite being prescribed in IES 5. Leading international universities have harnessed this critical approach to developing competencies among graduates.

2. There were statistically significant differences in the competencies developed in accounting graduates. The Accounting graduates' professional values, ethics, and attitudes was the most developed competency from their university education. This was followed by professional skills. Technical competence happened to be the least developed competency among accounting graduates. It is, however, worthy to note that these differences were not overwhelming.
3. The study also revealed that all the three professional competencies (technical competence, professional skills, and professional values, ethics, and attitudes) were significant antecedents to accounting graduates' job performance.
4. The study finally revealed that continuing professional development (CPD) significantly mediated the positive nexuses between technical competence and job performance as well as professional values, ethics, and attitudes and job performance. CPD, however, did not mediate the relationship between professional skills and job performance.

## Conclusions

Ghana's accounting education mutually adapts and reflects IES 2, 3, and 4, and for that matter, it is competitive enough and thus not considered inferior. However, it fails to give students ample time and opportunity to develop practical job-related competencies and experiences that are normally imbibed on the job through internship programmes. By implication, graduates of accounting programmes offered in universities in Ghana may find it a bit difficult to adapt to the work environment when they eventually find a job after school. Therefore, the learning curve and associated productivity may be delayed with accounting graduates employed from a university in Ghana compared to those who graduate from universities across America, Asia and Europe. This is only a fraction of the competencies that students are required to develop. Hence, a blunt statement that undergraduate accounting curricula in Africa, including Ghana, is poor and obsolete is unfortunate. Accordingly, Monga's (2019) finding does not hold for accounting education offered in Ghana.

The universities in Ghana's general efforts to incorporate all the competencies prescribed in IES is commendable and a step in the right direction. However, it appears worrying if some competencies are given a higher premium over the others. Logically, all competencies cannot be given the same attention, but if the gap in attention is huge, as observed in this study, it may create imbalanced development in accounting graduates. The finding suggests that institutions are usually interested in teaching facts and knowledge at the expense of attitudes and generic skills.

The graduates paradoxically indicated that their level of development in professional values, ethics, and attitudes was the highest. This is puzzling because the initial finding tells that universities place much emphasis on developing technical competence. However, this paradox could be explained by the lack of practical experience in the curricula of the universities in Ghana because technical skills can be fully developed if only there is an avenue to practice in the field (industries). Also, students may expect to acquire the technical and professional skills fully from school even though the contents are bulky compared to professional values, ethics, and attitudes. Extra efforts will be required of the accounting students to develop these skills.

The finding that all the IES prescribed competencies are significant determinants of accounting graduates' job performance is very important. This finding was very conclusive, especially as it affirms the need to possess all the competencies concurrently to significantly influence the graduates' job performance. It would be detrimental to develop some professional competencies at the expense of the other competencies, given the collaborative nature of the competencies.

It is also conclusive that the overall development of an accounting graduate cannot be achieved and maintained only through higher education. Continuing professional development is proven to be relevant to the job performance of accounting graduates. The role it plays cannot be undermined in any way. The employers and the graduates themselves have some crucial roles to play, judging from the fact that CPD is the responsibility of employees and employers.

## Recommendations

With reference to the findings that have been identified from the study, the following recommendations are made:

1. It is suggestive that to make accounting education in Ghana fully functional, there must be a deliberate allocation of curriculum space to practical on-the-job training, and a conscious effort is made to establish a memorandum of understanding with relevant industry players to accommodate students, supervise, and assess them to give feedback to faculty to ensure remediation and possible curricular modification. Also, universities should strike a balance in their focus when developing the competencies of accounting graduates. Specifically, the efforts to develop professional values, ethics and attitudes should be reviewed and improved upon. This is necessary in times that corruption has been identified as the bane to a nation's development. It is therefore instructive for the universities to allocate more curriculum space to ethics intervention to develop the morality of students.
2. Stemming from the fact that technical competence was the least developed, students are encouraged to supplement the universities' efforts to help increase their development in this dimension of professional competence. This can be done through personal studies.
3. Accounting education should not in any way give students the impression that some competencies are relevant than others. Faculties of the universities should instead encourage students to commit to developing all the competence as much as they can

adequately. Students should allocate equitably study time and resources to developing all the three competencies.

4. Accounting graduates are advised to embrace lifelong learning through CPD. This will help keep their competencies relevant to the job market. They would be able to adapt to any form of change in administering their duties. Employers should also champion the course of CPD in their respective organisations to always keep their employees relevant. Finally, schools, employers, and accounting learners should periodically abreast themselves with any updates proposed by the IAESB to guide their CPD activities.

#### **Suggestion for Further Studies**

Future studies can broaden the scope of this study by including other relevant factors of job performance that may be psychological. The scope could also be broadened in terms of the population. Other private universities could be included. Similar study on the relationship between competencies and job performance can be conducted in other regions where practical experience is used to train accounting students. Further studies could specifically explore why the university's focus did not match the competency development in accounting graduates by performing deeper investigations on practical experience as provided in IES 5.

## REFERENCES

- Abas, M. C., & Imam, O. A. (2016). Graduates' Competence on Employability Skills and Job Performance. *International Journal of Evaluation and Research in Education*, 5(2), 119-125.
- Ackah, C., Adjasi, C., Turkson, F., & Acquah, A. (2014). *Education, skill, and earnings: Further evidence from Ghana (Issue 16)*. <http://www.wider.unu.edu/stc/repec/pdfs/wp2014/WP2014>
- Adaboh, S. (2014). *An Evaluation of the Bachelor Degree in Accounting Program in a Ghanaian Private University*. [Doctoral Dissertation, Andrews University]. Andrews University Digital Commons <https://digitalcommons.andrews.edu/dissertations/177>
- Adu-Gyamfi, S., Donkoh, W. J., & Addo, A. A. (2016). Educational Reforms in Ghana: Past and Present. *Journal of Education and Human Development*, 5(3), 158-172.
- Afifah, U., Sari, R. N., Anugerah, R., & Sanusi, Z. M. (2015). The effect of role conflict, self-efficacy, professional ethical sensitivity on auditor performance with emotional quotient as moderating variable. *Procedia Economics and Finance*, 31, 206-212. [https://doi.org/10.1016/S2212-5671\(15\)01222-8](https://doi.org/10.1016/S2212-5671(15)01222-8).
- Aguirre-Urreta, M. I., & Hu, J. (2019). Detecting Common Method Bias: Performance of the Harman's Single-Factor Test. *ACM SIGMIS Database: the DATABASE for Advances in Information Systems*, 50(2), 45-70.

- Ahmad, S. R., Hariri, H., Zawawi, S. N. H. M., & Hassan, R. (2019). Determinants of auditors' work performance. *International Journal of Financial Research*, 10(3), 230-238.
- Al Frijat, Y. & Shbeilat, M. (2016). Jordanian Universities and Their Role in the Trend towards the Development of Technical Competence for Accounting Learning Outcomes in Line with IES #2. *Accounting and Finance Research*, 5(2), 20-31.
- Alin, A. (2010). Multicollinearity. *Wiley Interdisciplinary Reviews: Computational Statistics*, 2(3), 370-374.
- Al-Jalili, M., & Dhanoon, A. (2010). The use of international education standards for the professional accountants in the development of accounting curriculum for the bachelor's degree in Iraq. *Rafidain Development Journal*, 32(99), 1-33.
- Andrews, J., & Higson, H. (2008). Graduate employability, “soft skills” versus “hard” business knowledge: A European study. *Higher Education in Europe*, 33(4), 411–422.
- Anis, A. (2017). Auditors’ and accounting educators’ perceptions of accounting education gaps and audit quality in Egypt. *Journal of Accounting in Emerging Economies*, 7(3), 337-351.
- Anyane-Ntow, K. (1992). Accounting Education and Certification in Ghana. In *International Handbook of Accounting Education and Certification*, (pp. 55-69). Pergamon.
- Ary, D., Jacobs, L. C., Razavieh, A., & Sorensen, C. (2010). *Introduction to research in education* (7th ed.). Belmont, CA: Thomson.

- Asare, P. Y. (2016). *Assessment of business students' preference for cooperative learning: A survey study at the University of Cape Coast*. [Master's Thesis, University of Cape Coast]. University of Cape Coast Institutional Repository. <http://hdl.handle.net/123456789/3212>
- Association of Chartered Certified Accountants (ACCA). (2012). The role of accountancy in economic development. *This Paper, Prepared for the High-Level Meeting on Accounting for Development in Doha, Qatar, on 22 April 2012*, 1–12.
- Baah-Boateng, W. (2015). Unemployment in Ghana: A Cross-Sectional Analysis from Demand and Supply Perspectives. *African Journal of Economic and Management Studies*, 6(4), 1-16.
- Barzegar N. & Farjad S (2011). A Study on the Impact of on-the-job training Courses on the Staff Performance (A Case Study). *Procedia - Social and Behavioural Sciences*, 29, 1942 – 1949.
- Becker, G. (1974). *Human capital: A theoretical and empirical analysis* (2nd ed.). New York: Columbia University Press.
- Becker, G.S. (1993). *Human capital: a theoretical and empirical analysis with special reference to education*. Chicago: University of Chicago Press.
- Becker, J. M., Ringle, C. M., Sarstedt, M., & Völckner, F. (2015). How collinearity affects mixture regression results. *Marketing Letters*, 26(4), 643-659.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative research journal*, 9(2), 27.

- Buckley, K. & Krachman, S. B (2016) Patterns in Student Self-Report and Teacher Report Measures of Social-Emotional Mindsets, Skills, and Habits. *Transforming Education*, 1, 1-23.
- Busuioc, A., Borgonovo, A. J. M., & Mai, T. T. P. (2019). *Vietnam Corporate Accounting Education in Universities*. Washington, DC; The World Bank.
- Campbell, J. P. (1990). *Modeling the performance prediction problem in industrial and organizational psychology*.
- Campbell, J. P., Gasser, M. B., & Oswald, F. L. (1996). The substantive nature of job performance variability. In K. R. Murphy (Ed.), *Individual differences and behavior in organizations* (pp. 258–299). San Francisco, CA: Jossey-Bass
- Campbell, J. P., McCloy, R. A., Oppler, S. H., & Sager, C. E. (1993). A theory of performance. In N. Schmit & W. C. Borman (Eds.), *Personnel selection in organizations* (pp. 35-70). San Francisco: Jossey-Bass.
- Campbell, J., P. & Wiernik, B., M (2015). The Modeling and Assessment of Work Performance. *Annual Review of Organizational Psychology and Organizational Behavior*, 2, 47-74.
- Card, D. & Krueger, A. B. 1992, Does school quality matter? Returns to education and the characteristics of public schools in the United States. *Journal of Political Economy*, 100(1), 1–40.
- Chaffer, C., & Webb, J. (2017). An evaluation of competency development in accounting trainees. *Accounting Education*, 26(5-6), 431-458.
- Chia, T. T. (1990). *Returns to higher education in Australia*. PhD thesis, Australian National University.

- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Crawford, E.R., Rich, B.L., Buckman, B. & Bergeron, J. (2014) 'Antecedents and drivers of employee engagement' in Truss, C., Delbridge, R., Alfes, K., Shantz, A. and Soane, E. (eds) *Employee engagement in theory and practice*. Oxon: Routledge, pp. 57-81.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approach*. Sage publications.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., & Hanson, W. E. (2003). Advanced mixed methods research designs. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 209–240). Thousand Oaks, CA: Sage.
- Freedman, D. B. (2008). Is the medical undergraduate curriculum fit for purpose? *Annals of Clinical Biochemistry* 45(1), 1–2.
- Fung, D. (2017). *Connecting academic learning with workplace learning*. In *Connected Curriculum for Higher Education*. London: UCL Press.
- Georgiou, A. (2018). The accounting education of graduates: is it meeting the needs of employers? Evidence from Cyprus. *Iranian Journal of Accounting, Auditing, and Finance*, 19(1-2), 23-50.
- Ghartey, J. (1992). Evolution, problems, and challenges of accountancy education and certification in Ghana. *International Handbook of Accounting Education and Certification*, (pp. 37-54). Pergamon.

- Gillies, D. (2017). Human capital theory in education. *Encyclopedia of educational philosophy and theory*, 1-5.
- Hadisantoso, E., Sudarma, I. M., & Rura, Y. (2017). The Influence of Professionalism and Competence of Auditors towards the Performance of Auditors. *Scientific Research Journal (SCIRJ)*, 1, 1-14.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152.
- Hair, J. F., Risher J. J., Sarstedt, M., & Ringle C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24.
- Hair, J. F., Risher J. J., Sarstedt, M., & Ringle C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24.
- Hakim, R. R. C. (2016). Are Accounting Graduates Prepared For Their Careers? A Comparison of Employees' and Employers' Perceptions. *Global Review of Accounting and Finance*, 7(2), 1-17.
- Hanafi, H. M., & Ibrahim, S. B. (2018). Impact of employee skills on service performance. *International Journal of Science and Research*, 7(12), 587-600.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43(1), 115-135.
- Hidayat, R. & Budiartma, J (2018). Education and Job Training on Employee Performance. *International Journal of Social Sciences and Humanities*, 2(2), 171-181.

- Holsti, O. R. (1968). Content analysis. *The handbook of social psychology*, 2, 596-692.
- ICAG (2019). *Attestation of ongoing SMO compliance*. Accra, Ghana: IFAC.
- International Accounting Education Standard Board [IAESB] (2017). *Handbook for International Pronouncement*. IFAC.
- International Ethics Standards Board for Accountants (IESBA) (2015). *International Ethics Standards Board for Accountants Fact sheet*. New York, USA: IFAC.
- International Ethics Standards Board for Accountants. (2011). *A Proposed Definition of Professional Accountant* (Issue January).
- Ishola, A. A., Adeleye, S. T., & Tanimola, F. A. (2018). Impact of educational, professional qualification and years of experience on accountant job performance. *Journal of Accounting and Financial Management*, 4(1), 32-44.
- Jackling, B., & De Lange, P. (2009). Do Accounting Graduates' Skills Meet The Expectations of Employers? A Matter of Convergence or Divergence. *Accounting Education*, 18, 369-385.
- Kavanagh, M & Drennan, L. (2008). What Skills and Attributes Does an Accounting Graduate Need? Evidence from Student Perceptions and Employer Expectations. *Accounting and Finance*, 48(2), 279-300.
- Khan, S. (2018). Demystifying the impact of university graduate's core competencies on work performance: A Saudi industrial perspective. *International Journal of Engineering Business Management*, 10, 1-10.

- Kivunja, C., & Kuyini, A. B. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of higher education, 6*(5), 26-41.
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration, 11*(4), 1-10.
- Kwarteng, J., T. (2018). Accounting Teachers' Quality of Use of Pre-Tertiary Accounting Curriculum in Ghana's Secondary Schools. *African Journal of Teacher Education, 7*(2), 67-90.
- Lim, Y. M., Lee, T. H., Yap, C. S., & Ling, C. C. (2016). Employability skills, personal qualities, and early employment problems of entry-level auditors: Perspectives from employers, lecturers, auditors, and students. *Journal of Education for Business, 91*(4), 185-192.
- Low, M., Samkin, G., & Liu, C. (2013). Accounting Education and the Provision of Soft Skills: Implications of the recent NZICA CA Academic requirement changes. *e-Journal of Business Education & Scholarship of Teaching, 7*(1), 1-33.
- Marginson, S. (2019) Limitations of human capital theory. *Studies in Higher Education, 44*(2), 287-301. DOI: 10.1080/03075079.2017.1359823
- McCloy, R. A., Campbell, J. P., & Cudeck, R. (1994). A confirmatory test of a model of performance determinants. *Journal of applied psychology, 79*(4), 493-505.
- Mensah, E., K. (2020). *Suitability of Accounting Graduates to Employment Demand*. Unpublished Master's Thesis, Department of Business and

- Social Science Education (DOBSSE), University of Cape Coast. Cape Coast, Ghana.
- Mincer, J. (1974). *Progress in Human Capital Analysis of the distribution of earnings*. National Bureau of Economic Research.
- Mohammad, F. (2016). The Compatibility between Accounting Education in Sudanese Universities with The Requirements of Contemporary Business Environment and The International Federation of Accountants from the Perspective of Employers and Teaching Staff. *Arab Journal for quality assurance in higher education*, 9(23), 191-213.
- Monga, C. (2019). Jobs: An African manifesto. In C. Monga, A. Shimeles, & A. Woldemichael (Eds.), *Creating decent jobs strategies, policies, and instruments* (pp. 2-52). Abidjan: African Development Bank.
- Mustafa, M O A., & Shittu A. J. K. (2012). Graduates' perception of career success and skill emphasis in accounting programme in Nigerian institutions: An exploratory study. *Journal of Business Management and Accounting*, 2(2), 49 – 64.
- Nassazi, A. (2013). *Effects of Training on Employee Performance. Evidence from Uganda*. [Thesis, University of Applied Sciences].
- Ng, T. W. H., & Feldman, D. C. (2009). How broadly does education contribute to job performance? *Personnel Psychology*, 62, 89–134.
- Okoro, J. (2014). Assessment of Accounting Competencies Possessed by Postgraduate University Business Education Students to Handle Entrepreneurship Business Challenges in Nigeria. *World Journal of Education*, 4(1), 1-10.

- Oliveira, T.C. & Da-Costa, J.F. (2014) Gaining or losing? Projective identification, professional identities, and new public management. In: Machado, C. and Davim, J.P. (eds) *Work organization and human resource management*. Switzerland: Springer Publishing.
- Oliveira, T.C. & Holland S. (2007) Beyond human and intellectual capital: profiling the value of knowledge, skills, and experience. *Comparimento Organizacionale Gestado*, 13(2). 237–60.
- Palmer, K. N., Ziegenfuss, D. E., & Pinsker, R. E. (2004). International knowledge, skills, and abilities of auditors/accountants. *Managerial Auditing Journal*, 19(7), 889-896.
- Psacharopoulos, G. (1973). *Returns to Education: An International Comparison*. Elsevier, Amsterdam.
- Psacharopoulos, G. (1981). Returns to education: An updated international comparison. *Comparative Education*, 17(1), 321–41.
- Quiggin, J. (1999). Human Capital Theory and Education Policy in Australia. *The Australian Economic Review*, 32(2), 130–44.
- Rahman, W., Rahman, K., & Rahaman, M., M. (2021). Exploring the Effective Teaching Methods for Accounting in Secondary Schools: A Case Study. *IOSR-JHSS*, 26(4), 50-57.
- Schultz, T. (1961). Investment in Human Capital. *The American Economic Review* 51(1), 1–1
- Schultz, T. W. (1960). Capital formation by education. *Journal of political economy*, 68(6), 571-583.

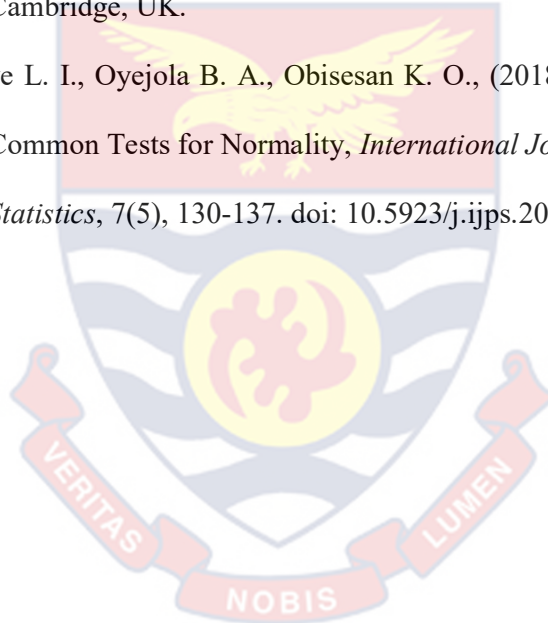
- Siegal, G. J., Sorensen, J. E., Thomas, K., & Richtermeyer, S.B. (2010). The ongoing preparation gap in accounting education: A call to action. *Management Accounting, 11*(3),41–52.
- Siemsen, E., Roth, A., & Oliveira, P (2010). Common Method Bias in Regression Models with Linear, Quadratic, and Interaction Effects. *Organizational Research Methods 13*(3) 456-476.
- Spencer, T. D., Detrich, R., & Slocum, T. A. (2012). Evidence-based practice: A framework for making effective decisions. *Education and treatment of children, 35*(2), 127-151.
- Stanescu, G. (2018). The Role of the Accounting Profession in Achieving the Objectives of Sustainable Development. *Analele Universității Constantin Brâncuși Din Târgu Jiu: Seria Economie, 1*(3), 117–122.
- Tanner, D. & Tanner, L. N. (1975). *Curriculum Development: Theory into Practice*. New York, NY: Macmillan.
- Tremblay, K., Lalancette, D., & Roseveare, D. (2012). *Assessment of Higher Education Learning Outcomes*. OECD.
- Vannatta, S., C. (2014). Teaching to the Test: A Pragmatic Approach to Teaching Logic. *Education and Culture, 30*(1), 39-56.
- Veneziani, C., Teodori, M., & Bendotti, G. (2015, April). *The role of the University in the education of accountants in Italy and the degree of the IES 2 application*. 38th EAA Annual Congress, Glasgow.
- Wade, M. R., & Parent, M. (2002). Relationships between job skills and performance: A study of webmasters. *Journal of Management Information Systems, 18*(3), 71-96.

Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of management*, 17(3), 601-617.

Wong, K. K. (2013). Partial Least Squares Structural Equation Modeling (PLS-SEM) Techniques Using SmartPLS. *Marketing Bulletin*, 24(1), 1-32.

Zraa, W., Kavanagh, M., & Hartle, T. (2011, June). *Teaching accounting in the new millennium*. 2011 Cambridge Business and Economics Conference Proceedings, Association for Business and Economics Research, Cambridge, UK.

Ogunleye L. I., Oyejola B. A., Obisesan K. O., (2018). Comparison of Some Common Tests for Normality, *International Journal of Probability and Statistics*, 7(5), 130-137. doi: 10.5923/j.ijps.20180705.02



## APPENDIX A

## UNIVERSITY OF CAPE COAST

## INSTITUTIONAL REVIEW BOARD SECRETARIAT

TEL: 0558093143/ 0508878309

E-MAIL: [irb@ucc.edu.gh](mailto:irb@ucc.edu.gh)

OUR REF: UCC/IRB/A/2016/1017

YOUR REF:

OMB NO: 0990-0279

IORG #: IORG0009096

21<sup>ST</sup> JUNE, 2021

Mr. Maxmos Walasi Kobi Servoh

Department of Business and Social Sciences Education  
University of Cape Coast

Dear Mr. Servoh,

## ETHICAL CLEARANCE - ID (UCCIRB/CHLS/2021/23)

The University of Cape Coast Institutional Review Board (UCCIRB) has granted Provisional Approval for the implementation of your research The Focus of Ghana Universities When Developing the Competencies of Accounting Graduates. This approval is valid from 21<sup>st</sup> June, 2021 to 20<sup>th</sup> June, 2022. You may apply for a renewal subject to submission of all the required documents that will be prescribed by the UCCIRB.

Please note that any modification to the project must be submitted to the UCCIRB for review and approval before its implementation. You are required to submit periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

Yours faithfully,

Samuel Asiedu Owusu, PhD

UCCIRB Administrator

## APPENDIX B

## UNIVERSITY OF CAPE COAST

COLLEGE OF EDUCATION STUDIES

FACULTY OF HUMANITIES &amp; SOCIAL SCIENCES EDUCATION

## DEPARTMENT OF BUSINESS &amp; SOCIAL SCIENCES EDUCATION

Telephone: +233-(0)3321 35411 / +233-(0)3321

CAPE COST EXT: (268), Direct: 35411 PRIVATE MAIL

Telegrams' &amp; Cables: University, Cape Coast

Dept. Telephone: 0209408788

E-mail : [dbase@ucc.edu.gh](mailto:dbase@ucc.edu.gh) Date: 22<sup>nd</sup> June, 202132480/3 UNIVERSITY OF  
BAG

Our Ref:

Your Ref:

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

INTRODUCTORY LETTER

Mr. Maxmos Walasi Kobi Servoh is an M.Phil Accounting Education student of this Department and as a requirement for the programme, he is working on the research topic: "The Focus of Ghanaian Universities when Developing the Competencies of Accounting Graduates".

The study is to investigate the competencies (technical skills, professional skills and professional ethics/attitude) that Ghanaian universities focus on when training accounting graduates. Also the study seeks to investigate how the competencies of the graduates could influence their job performance in the job market. We would be grateful if you could give him the necessary assistance to enable him complete the research.

In case he flouts any ethical requirement as the study may necessitate, kindly get in touch with his supervisor, Prof. Joseph Tufuor Kwarteng, on 0243822873 or through e-mail [jtkwarteng@ucc.edu.gh](mailto:jtkwarteng@ucc.edu.gh). You may also get in touch with the Department on 0209408788 or through [dbsse@ucc.edu.gh](mailto:dbsse@ucc.edu.gh).

Thank you.

Yours faithfully,

Dr. Bernard Yaw Sekyi Acquah

Head

**APPENDIX C**

UNIVERSITY OF CAPE COAST

COLLEGE OF EDUCATION STUDIES

DEPARTMENT OF BUSINESS AND SOCIAL SCIENCES EDUCATION

**QUESTIONNAIRE**

This questionnaire is being used to solicit data on accounting graduates' perception of Initial Professional Development (IPD) from the University. The study is being conducted in partial fulfilment of the requirement for a Master of Philosophy Degree in Accounting Education. I humbly seek your maximum cooperation. Besides, you are fully assured that all the responses would be handled with absolute confidentiality. Thank you for your co-operation.

**SECTION A (Background Characteristics)**

1. Kindly indicate your gender. Male [ ] Female [ ]
2. Which University did you complete?.....
3. Which year did you complete? .....
4. What programme did you read in the University?.....
5. Which organisation do you work in or do your service?.....
6. In which year did you start working or doing your service in this organisation? .....

**SECTION B**

ACCOUNTING GRADUATE'S INITIAL PROFESSIONAL

DEVELOPMENT (IPD)

The following statements relate to the initial professional competencies developed in graduates through the university curriculum. Please indicate the extent to which your professional competencies were developed by your

university's curriculum by ticking [] the appropriate box. Indicate your opinion based on the following scales; **1** = Lowly Developed, **2** =Moderately Developed, **3** = Highly Developed, **4** = Very Highly Developed and **5**=Fully Developed

	<b>Technical Competencies Developed by university curriculum.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
7.	Application of accounting principles to transactions.					
8.	Application of IFRSs and other relevant standards to transactions.					
9.	Preparation of single and consolidated financial statements.					
10.	Interpretation of financial statements and related disclosures					
11.	Performance of variance analysis and inventory management					
12.	Performance of budgeting and forecasting					
13.	Application of quantitative techniques to analyse cost behaviour.					
14.	Comparison of financial instruments, bond, equity, and treasury.					
15.	Performance of ratio analysis, trend analysis, and cash flow analysis					
16.	Evaluation of components used to calculate the cost of capital.					
17.	Explanation of taxation compliance and filing requirements					
18.	Preparation of direct and indirect tax calculations for individuals and organisations.					
19.	Explanation of tax planning, tax avoidance, and tax evasion.					

20.	Description of objectives and stages of auditing financial statements					
21.	Application of standards and laws/regulations to an audit process					
22.	Assessment of material misstatement risk and its impact.					
23.	Analysis of components of governance framework					
24.	Explanation of laws and regulations governing the different forms of legal entities					
25.	Explanation of laws and regulations for accounting operations					
26.	Use of information technology to perform business analytics.					
27.	Description of economic, legal, political, social, technical, international, and cultural forces of a business.					
28.	Description of fundamental principles of micro/macroeconomics					
29.	Explanation of macroeconomic indicators' effect on business activity.					
30.	Explanation of perfect competition, monopolistic competition, monopoly, and oligopoly					
31.	Explanation of various organisational structures					
32.	Explanation of how theories can improve individual, teams, and the organisational performances					
	<b>Professional Skills Developed by University Curriculum</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
33.	Capacity for research					
34.	Capacity for logical and analytical reasoning					
35.	Ability to identify and solve an unstructured problem in unfamiliar settings.					

36.	Ability to obtain, organise and understand information from human, print, and electronic sources.					
37.	Commitment to lifelong learning					
38.	Management time and resources to achieve personal goals					
39.	Application of open mind to new opportunities.					
40.	Ability to complete tasks and assignment before deadlines					
41.	Ability to motivate yourself as well as your colleagues					
42.	Skill to influence others towards a common goal					
43.	Tolerance to work in teams towards a common goal					
44.	Tolerance to interact with culturally and intellectually diverse people.					
45.	Ability to communicate ideas clearly					
46.	Skill to make a presentation to a group of colleagues, superiors, or subordinates.					
	<b>Professional Values, Ethics and Attitude developed by University Curriculum</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
47.	A questioning mindset to assess financial information					
48.	Attitude of making conclusions based on facts.					
49.	Ability to explain the nature of ethics					
50.	Ability to identify ethical issues					
51.	Application of integrity in my duties					
52.	Application of objectivity in my duties					
53.	Ability to exhibit due care in all my tasks.					
54.	Application of the principle of confidentiality in my duties					

55.	Exhibition of accounting professional behaviour anywhere I find myself.					
-----	---	--	--	--	--	--

### SECTION C

#### ACCOUNTING GRADUATES' CONTINUING PROFESSIONAL DEVELOPMENT

The following statements are about the continuing professional development graduates have gone through since employment or the start of national service. In this section, kindly indicate your level of agreeableness to the following activities **since you were employed/began service**, by ticking [] the box that applies to you. Indicate your opinion based on the following scale; **1** = Slightly Agree, **2** =Moderately Agree, **3** = Agree, **4** = Highly Agree and **5**=Extremely Agree

	<b>Continuing Professional Development Activities</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
56.	I participate in conferences and seminars on accountancy.					
57.	I usually do Self-directed learning on accountancy					
58.	I read professional literature or journals for application in the professional accountant's role.					
59.	I receive professional development support from a mentor/coach					
60.	I have had on-the-job training					

**SECTION D****ACCOUNTING GRADUATE'S JOB PERFORMANCE**

This section appraises the job performance of accounting graduates. This is to aid the researcher undertake the study “**Focus of Ghanaian universities when developing competencies of accounting graduates**”. This section needs to be answered by the graduate's immediate supervisor. In this section, kindly indicate your level of agreeableness to the job performance of the accounting graduate being appraised by ticking [√] the box that applies. Indicate your assessment based on the following scale; **1** = Slightly Agree, **2** =Moderately Agree, **3** = Agree, **4** = Highly Agree and **5**=Extremely Agree

	<b>Graduate's Job Performance</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
61.	He/she adequately completes assigned duties					
62.	He/she fulfils responsibilities stated in the job description.					
63.	He/she adequately perform tasks expected of him/her					
64.	He/she meets the formal performance requirement of the job					
65.	He/she engages in activities that will directly affect his/her job performance at work.					

**Thank you for your cooperation.**

**I am grateful!**

## APPENDIX D

University		Technical Cr Ldns		Professional Cr Ldns		Ethics Cr Ldns		Total Cr Ldns		
		Compulsory	Optional	Compulsory	Optional	Compulsory	Optional	Compulsory	Max Opt	All
UCC	Total Cr Ldns	96	0	42	0	3	0	141	0	141
Percentage %	Min – Max	68.09		29.78		2.13		100%	0%	100%
UG	Total Cr Ldns	84	0	39	6	3	0	126	6	132
Percentage %	Min – Max	63.64		30.95 - 35.71		2.27		95.45%	4.55%	100%
UPSA	Total Cr Ldns	78	6	39	6	6	0	123	6	129
Percentage %	Min – Max	60.47 - 65.11		31.70 - 36.59		4.65		95.35%	4.65%	100%
KNUST	Total Cr Ldns	96	0	42	0	6	0	144	0	144
Percentage %	Min – Max	67.13		29.17		4.2		100%	0%	100%
TUM	Total Cr Ldns	260	60	40	60	20	0	320	60	380
Percentage %	Min – Max	68.4 - 84.21		10.53 - 26.31		5.26		84.21%	15.79%	100%
KU LEUVEN	Total Cr Ldns	96	3	84	9	6	0	186	9	195
Percentage %	Min – Max	49.23 - 50.77		43.08 - 47.69		3.08		95.38%	4.62%	100%
Vilnius University	Total Cr Ldns	150	15	70	15	5	0	225	15	240
Percentage %	Min – Max	62.5 - 68.75		29.17 - 35.42		2.08		93.75%	6.25%	100%
NUP	Total Cr Ldns	90	21	12	18	3	0	105	24	129
Percentage %	Min – Max	69.77 - 86.05		9.30 - 23.26		2.33		81.4%	18.6%	100%
THKPU	Total Cr Ldns	75	3	42	3	3	0	120	3	123
Percentage %	Min – Max	60.98 - 64.41		34.14 - 36.59		2.44		97.56%	2.44%	100%
HKU	Total Cr Ldns	138	24	66	18	0	0	204	36	240
Percentage %	Min – Max	57.5 - 67.5		27.5 - 35		0		85%	15%	100%

NUS	Total Cr Ldns	80	12	40	24	4	0	124	36	160
Percentage %	Min – Max	50 - 57.5		25 - 40		2.5		77.5%	22.5%	100%
UoMennisota	Total Cr Ldns	62	7	45	10	3	0	110	10	120
Percentage %	Min – Max	51.6 - 57.5		37.5 - 45.83		2.5		91.67%	8.33%	100%
Uni of Arkan	Total Cr Ldns	57	9	39	12	3	0	99	21	120
Percentage %	Min – Max	47.5 - 55		32.5 - 42.5		2.5		82.5%	17.5%	100%
Aizona State Uni	Total Cr Ldns	55.5	5	49	11	4.5	3	109	11	120
Percentage %	Min – Max	46.25 - 50.42		40.83 - 50.00		3.75 - 6.25		90.83%	9.17%	100%

