UNIVERSITY OF CAPE COAST

RELATIONSHIP BETWEEN ACCOUNTING STUDENTS' LEVEL OF PROFESSIONAL COMPETENCE DEVELOPMENT AND ACADEMIC PERFORMANCE: MODERATING ROLE OF GENDER

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BY

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

SEPTEMBER 2023

DECLARATION

Candidate's Declaration

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

Candidate's Signature: ……. Date: ……

Name: Emmanuel Darko Effah

Supervisor's Declaration

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

Principal Supervisor's Signature: …… Date: ……

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

Name: Dr. Magdalene Brown

ABSTRACT

Graduates who are professionally competent in a particular field of specialization are in high demand due to advancements in the economic market. The study assessed the relationship between accounting students' level of professional competence development and academic performance and the moderating role of gender. A descriptive, cross-sectional survey design was used. A simple random technique helped to select 122 students in total. These students were level 400 bachelor of education (accounting) students. In the study, both primary and secondary data were used. The primary data came from surveys on a 5-point Likert scale, while the secondary data came from the university's academic records. The tools utilised to evaluate the data included mean, standard deviation, independent sample t-test, and PLS-SEM. The study found that students had significant development in technical competence and professional skills. Also, there was no significant relationship between accounting students' level of professional competence development and academic performance, with gender not moderating this insignificant relationship. There was a significant relationship between accounting students' level of technical competence and professional skills. Then there was no significant difference between the gender of students and professional competence development. It was recommended that the Department of Business and Social Sciences Education within the University of Cape Coast should continue to prioritise and enhance the technical accounting curriculum and also collaborate with the student leadership (SRC) to expand their offerings of professional development workshops and networking events. This will help in the continuous development of students' professional competence.

KEY WORDS

Accounting education

International Education Standard (IES)

Professional competence

Professional skills

Technical competence

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DEDICATION

To my late grandfather: Apostle Robertson Aboagye-Darko

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CHAPTER ONE

INTRODUCTION

The evolution and advancements in technology have led to a demand for professionally competent accounting graduates. This demand for professional competence has led to many interventions in accounting education, including the introduction of the International Education Standards. Even with this intervention, there are various arguments and criticisms in the literature that accounting students produced by universities are only equipped with theoretical knowledge but not competent after graduation. This study, therefore, seeks to assess the relationship between accounting students' level of professional competence development and academic performance, with gender as the moderating variable.

Background to the Study

A shift in the labour market's skill demand has emerged over the past twenty years (Webb & Chaffer, 2016). Scholars have emphasised that this shift in demand was a result of technological advancements that have resulted in market globalisation and worldwide rivalry, along with a shift in production demand (Pitan, 2015; Pumphrey & Slater, 2002). The way business transactions are conducted has changed dramatically because of these advancements within the corporate setting, and it has also proposed the need for adjustments to facilitate business transactions to adapt to the evolving needs of stakeholders and clients (Van Ham, 2002). For example, technological advancements have lowered barriers to information readiness, allowing organisations and customers worldwide access to a wide range of information (Albrecht & Sack, 2000). To manage circumstances in this global context and fulfil changing expectations in

commercial transactions, a wider range of professional competencies is required.

The changing environment and innovations in the accounting sector have changed accountants' traditional bookkeeping responsibilities (De Lange, Jackling & Gut, 2006). As a result, accounting education ought to be expanded to help students gain the knowledge and abilities necessary to address organisational transformation. The International Accounting Education Standard Board (IAESB, 2019) defined education “as a continuous effort centred on intellectual advancement, skill sets, and other competencies in individuals” (p. 11), implying that education seems to be a broad platform for acquiring the first spectrum of professional competencies. According to the IAESB, the primary goal of professional accounting education is to "develop the skills and competence of aspiring accounting professionals, as well as develop and maintain professional competence for current accounting professionals." (p. 10). This shows that it is paramount for accounting students to grasp the necessary professional competencies as they go through their accounting education.

The need for students to be equipped with the necessary professional competencies has triggered a lot of interventions in accounting education. One of them is the International Educational Standard (IES), set up by the IAESB to regulate accounting education. Invariably, the IAESB has established a standard that covers professional competence. The board expects aspiring accountants to demonstrate some skills upon completing their accounting programme (IAESB, 2019).

Professional competence is the capacity to do pertinent tasks to a specified degree of proficiency in the real world (Epstein & Hundert, 2002). Professional competence does not come from knowledge and understanding alone. It necessitates the successful use of necessary skills and characteristics, which is mostly feasible after gaining relevant practical expertise. This pertains to the ability to demonstrate a sufficient level of professional and technical competence, morals, and attitudes, as well as the inclination to serve as a qualified accountant who supports the aspirations and requirements of businesses, clients, associates, and the public in the field of accounting (IFAC, 2010). It has to do with the application of technical knowledge (competence), professional skills, attitudes, ethics, and values (IAESB, 2017).

Professional knowledge, technical knowledge, or technical accounting tasks are all terms used to describe technical competence (Guthrie, Evans & Burritt, 2014). It refers to the abilities students should acquire during their degree programme. Students pursuing an accounting degree should have the concepts, standards, principles, facts, and processes necessary to be qualified professional accountants in a more complicated and developing environment. The IAESB (2017) stated that students should gain proficiency in certain areas by the end of their studies. These include auditing and assurance; governance, risk management, and internal control; financial accounting and reporting; management accounting; finance and financial management; taxation; laws and regulations impacting business; economics, business strategy, and management; IT; and the business and organisational environment.

Professional skill is the practice of working and coping with co-workers at a workplace or in a team, relating with clients to retain them, and generally

creating a conducive environment for work (Ravindranath, 2016). According to the IAESB (2017), students are expected to develop intellectual, interpersonal, communication, personal, and organisational abilities. Professional principles, ethics, and attitudes distinguish accounting professionals as members of the profession. They include standard procedures (ethical standards) that are commonly linked with and regarded as fundamental in defining the distinguishing aspects of professional activity. The competency categories and learning objectives that define the professional competence expected by accounting professionals are established by the International Education Standards (IAESB, 2019).

Professional competence has developed to gain importance in various disciplines in academia, particularly in science, technology, engineering, and mathematics (STEM) programmes. The American Chemical Society established chemical education guidelines in 2015, emphasising that programmes given to students should help develop their professional competence by enhancing their problem-solving abilities, communicative skills, collaboration, and ethics (Wenzel, McCoy & Landis, 2015). In the field of engineering, the Accreditation Board for Engineering and Technology (ABET) reinforced technical competence when implementing a new set of six "professional" skills, including communication, teamwork, process skills, engineering between global and community contexts, lifelong learning, and awareness skills (Shuman, Besterfield-Sacre & McGourty, 2005). Following the importance and universality of professional competence, accounting education should be more effective and acknowledge that accounting is an interaction between individual behaviour, operates in a social system, and

requires the integration of accounting education with real-world situations (Boyce et al., 2012).

However, improving graduate professional competence development is one of the major points of contention in the academic and policy discourse around the move from university to the workplace. This has become a goal that institutions of higher learning would like to accomplish (Suleman, 2018). As a result, institutional performance based on graduate employability has created pressure on higher education institutions worldwide to produce graduates who are prepared for the workforce. Wells et al. (2014) found that companies expect graduates to have a wide range of general abilities, yet many graduates feel that their educational programmes did not effectively teach them these skills.

According to most studies, graduates, employers, and academics highlight the lack of professional competence as the most significant deficiency (Jackson & Chapman, 2012; Murphy, 2017; Abayadeera & Watty, 2016). Milner and Hill (2007) argued that tertiary institutions believe there is insufficient time to build general skills in accounting education. The lack of necessary professional competencies for practical application among graduates has raised various concerns (Albrecht & Sack, 2000). According to Smith et al. (2012), higher education's academic standards have worsened significantly in recent years. This suggests that higher institutions have failed to adequately educate students for the changing job market. There is, therefore, a traditional belief that holding a first-class degree certificate (higher CGPA) does not warrant possessing the necessary professional competence the market requires (Aliu & Aigbavboa, 2019). Thus, the degree certificate alone is not indicative of academic success, but only if it is accompanied by the development of

professional competence. Universities, therefore, have a critical responsibility to equip students with professional competencies, and they must collaborate with the accounting profession to overcome this limitation (Ahmad et al., 2022). To fulfil the expanding expectations of the profession and market demands, accounting curricula must be revisited to address concerns connected to course content (Aida, Norailis & Rozaini, 2015).

Statement of the Problem

University students consider academic success to be both a process (the development of professional competence) and an ultimate goal (getting a better class or a higher CGPA) (Cachia, Lynam & Stock, 2018). Thus, accounting students upon graduation are expected to have developed a combination of both subject-specific skills and professional skills aside from obtaining a certificate (Apostolou et al., 2013). It is expected of them to be professionally competent after completion. However, there have been various criticisms about accounting students' skills and knowledge when they first enter the industry (Cory & Pruske, 2012; Bowles, Ghosh & Thomas, 2020). The students have been chastised for their inefficiency on the job due to a lack of appropriate competencies (Heang et al., 2019; Awayiga, Onumah & Tsamenyi, 2010). Various scholars (Behn et al., 2012; Black, 2012; Pitan & Adedeji, 2012) believe a paradigm change is necessary in the field of accounting education as a whole since modern programmes have failed to accommodate an increasingly diverse global economy. As a result, higher education only produces students who are theoretically sound and occasionally have excellent academic performance but fail to deal with industrial problems due to a lack of specific professional competencies. This lends credence to the argument that accounting

degree programmes do not equip graduates with the appropriate professional competencies. The concern is that if accounting graduates lack critical professional competencies, it could profoundly undermine public confidence in the accounting profession's ability to provide reliable, transparent financial information that is vital for investment decisions, organisational management, and economic stability.

Chaffer and Webb (2017) conducted a study that revealed that accounting trainees do not perceive themselves as professionally competent. They believed that they had not gained the necessary professional competencies. Their findings corroborated those of Crawford et al. (2013) and Bui and Porter (2010). Students identified resource management, presentation, and oral communication abilities, as well as the capacity to take a holistic and global vision for an organization, as areas of weakness from their study. According to Stephenson (2017), graduate accounting students consider themselves unprepared for the job market at the end of their courses. They are unsure if they possess the necessary abilities to be successful in the employment market.

However, Keneley and Jackling (2011) performed a study in Australia and discovered that students saw their accounting degree as equipping them with the ability to engage in logical thinking, problem-solving, and adaptability to unfamiliar circumstances. Donelan and Reed (1992) conducted an earlier investigation, and the findings were likewise favourable. More than two-thirds of 228 graduate students acknowledged that the accounting programme aimed to provide them with broad skills like creativity and independent thinking, along with the capacity to navigate complex situations. There appears to be

inconsistency among students regarding their professional competence development, and this has created confusion as to whether higher institutions are producing the required accounting graduates for market engagement. Resolving the uncertainty and conflicting perspectives surrounding the professional competence of accounting students is of paramount importance; neglecting to address this issue could severely tarnish the reputation and trustworthiness of the accounting profession, both within Ghana and on a global scale. Such a failure would pave the way for disastrous repercussions across economic, financial, and societal spheres, potentially hindering the country's progress and stability for an extended period.

Several studies in Ghana (Kwarteng & Mensah, 2022; Kwarteng & Servoh, 2022; Orchill, 2018; Awayiga et al., 2010) have attempted to gauge the development of students' professional competence, but either they limited the implications of their findings or tended to rely on alternative methods of assessment. Awayiga et al. (2010) frequently simply looked at graduates' professional and IT abilities without taking into account the other components of professional competence. Furthermore, they only conducted the research at the University of Ghana, which led them to recommend that the study be repeated at other institutions in different locations. Orchill (2018) did not specifically ask students for their opinions on the development of professional competence; rather, he solely reviewed the accounting programme.

In Cape Coast and within the University of Cape Coast, Kwarteng and Mensah (2022) simply evaluated the development of these abilities without considering the connection between the competence developed and students' academic achievement. Additionally, Kwarteng & Servoh (2022) only sought

to demonstrate the connection between students' competence and work performance rather than determining the relationship with their academic performance. In Ghana, there is a research gap in understanding the relationship between professional competence development and students' academic performance. A comprehensive investigation is needed to bridge this disconnect and provide insights into how the acquisition of professional competencies influences students' overall academic success within the Ghanaian context.

Professional competence has been shown to have a greater impact on the performance of students. According to Obilor (2019), time management is the foundation of academic achievements. Students who perform academically are not only intelligent, but they also manage their time well. It is very important to begin the semester with greater expectations. But to achieve those expectations, it is paramount to make judicious use of time. This suggests that there might be a relationship between professional competence development and academic performance.

Ezeah and Achonwa (2015) asserted that research often treats gender as a binary variable, merely categorising individuals based on their biological sex without considering its wider implications. However, Anyalebechi (2016) contended that social factors create gender and inequalities, which in turn influence employment and the corporate world. Consequently, the gender of students may moderate the relationship between professional competence and academic performance. The study therefore assessed the relationship between accounting students' level of professional competence development and academic performance, with gender as a moderating variable.

Purpose of the Study

The general purpose of the research was to assess the relationship between accounting students' level of professional competence development and academic performance, the moderating role of gender.

Objectives of the study

To accomplish the general purpose, the following specific objectives were set:

1. to assess Accounting students' level of technical competence development.
2. to assess Accounting students' level of professional skills development.
3. to determine the relationship between Accounting students' level of professional competence development and their CGPA.
4. to determine the moderating effect of gender on the relationship between Accounting students' level of professional competence development and their CGPA.
5. to determine the relationship between Accounting students' level of technical competence and professional skills development.
6. to determine the difference between the gender of Accounting students and their level of professional competence development.

Research Questions

The following research questions were formulated to guide the study:

1. What is the level of Accounting students' technical competence development?
2. What is the level of Accounting students' professional skills development?

3. What is the relationship between Accounting students' level of professional competence development and their CGPA?
4. What is the moderating effect of gender on the relationship between Accounting students' level of professional competence development and their CGPA?

Research Hypotheses

1. ***H_o*:** There is no statistically significant relationship between accounting students' level of technical competence and professional skills development.

   ***H_1*:** There is a statistically significant relationship between accounting students' level of technical competence and professional skills development.
2. ***H_0*:** There is no statistically significant difference between the gender of accounting students and the level of professional competence development.

   ***H_1*:** There is a statistically significant difference between the gender of accounting students and the level of professional competence development.

Significance of the Study

The significance of this research lies in its thorough approach to assessing the professional competence development of accounting students. The research acknowledges that achieving success in the accounting business requires a comprehensive set of talents, including both technical competence and professional skills. Undoubtedly, technical competence, which involves the understanding and implementation of accounting principles and standards, is

vital. Nevertheless, accountants must possess professional skills such as effective communication, analytical thinking, and the ability to solve complex problems to succeed in the ever-changing corporate landscape of today.

Furthermore, the research aims to provide significant insights into the relationship between professional competence development and academic achievement, as well as the possible impact of gender on this relationship. Gaining insight into these interrelationships will help to enhance educational approaches and curriculum development, ensuring that accounting programmes adequately equip students for the challenges of the field. Moreover, analysing the relationship between technical competence and professional skills would help identify areas that need improvement and underscore the need for a comprehensive approach to accounting education.

Also, the study would have significant consequences for the implementation of accounting education in terms of practice, research, policy, and decision-making. For lecturers, the study would guide the creation and execution of educational programmes that successfully combine technical competence with the cultivation of professional skills. Customizing instructional approaches, course material, and assessment procedures can address any gaps or deficiencies, ensuring accounting students receive a comprehensive education that prepares them for success in their field.

Moreover, the study would enhance the existing body of research on accounting education and the development of professional competence. Researchers may use the study as a foundation to investigate other elements that can impact the development of professional competence, such as instructional methodologies, learning settings, or cultural circumstances. This information

may be used to guide evidence-based strategies and policies that promote the ongoing enhancement of accounting education programmes.

Specifically, the accounting departments within the University of Cape Coast would be adequately informed of whether the accounting programme they offer conforms with international standards and ways to entrench the development of professional competence in the university system. This would help them create guidelines, standards, or accreditation requirements that highlight the significance of incorporating both technical competence and professional skills development in accounting curricula. Implementing this measure would provide a uniform and excellent education for accounting students at all schools, thus improving the overall competitiveness and prestige of the accounting profession.

The study would also provide a noteworthy contribution to the existing literature in the field of accounting education, with a focus on closing the divide between industry and education. By surveying accounting students, this study would contribute to the existing research by investigating the extent to which accounting education enhances their professional abilities. The research will make an empirical contribution that will help establish finality as to whether accounting students have the required professional competence (job-related skills). It would also provide a basis for further studies in the area.

Delimitation

According to the IES, professional competence is made up of technical competence, professional skills and professional attitudes, ethics, and values. However, for this study, professional competence was made up of technical competence and professional skills. The questionnaire was restricted to the

learning outcomes specified in the International Education Standards. The study was restricted to students in their last year of the Bachelor of Education programme, at the University of Cape Coast. The University of Cape Coast was selected due to its status as a prominent public university in Ghana.

Limitations

The University of Cape Coast's level 400 Bachelor of Education accounting students were the sole focus of the study. While this focused approach allowed for an in-depth examination of this specific cohort, it also introduced certain limitations. Firstly, the study findings may not be generalizable to other levels or programmes within the accounting discipline or to accounting students at different institutions. Each level of study and programme may present unique challenges and opportunities for professional competence development, which were not captured in this study.

Furthermore, employing a closed-ended questionnaire as the main approach for gathering data may have limited the comprehensiveness and subtlety of the received responses. Close-ended questions, although beneficial for quantitative analysis, might restrict participants' capacity to articulate their experiences, viewpoints, and opinions in their own language.

Furthermore, the study's focus on academic performance as measured by CGPA may not fully capture the multifaceted nature of professional competence development. While academic performance is undoubtedly important, other factors such as practical experience, networking opportunities, and personal growth may also play significant roles in shaping students' professional readiness upon graduation.

Definition of Terms

Professional Competence: The development of technical competence and professional skills makes up professional competence within the study

Technical competence: The eleven (11) subject areas that students are to develop as stipulated by the International Education Standard (IES)

Professional skills: This is made up of intellectual skills, personal skills, interpersonal and communication skills, and organisational skills

International Education Standard (IES): The standard that is set by the International Accounting Education Standard Board (IAESB) to regulate accounting education

B. Ed Accounting: An education programme that is run by the department of business and social sciences education at the University of Cape Coast

Respondents: The B. Ed Accounting final year students who took part in the study.

Organisation of the Study

The research was divided into five chapters. Chapter One addressed the background of the study, the problem statement, the purpose of the study, the research questions, the significance of the study, the delimitation, the limitations, the definition of terms, and the organisation of the study. In Chapter Two, the conceptual framework of the study and pertinent literature were examined. Chapter Three addressed research design, population and sampling procedures, data collection instrument, data collection protocol, data processing, and analysis. The findings were discussed in the fourth chapter, while the final chapter, Chapter Five, provided a summary, conclusions, recommendations, and areas for further research in light of the study's findings.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

This section deals with the literature review. It comprises a conceptual review and framework, an empirical, and a theoretical review. The conceptual review is concerned with describing the elements involved and exploring key concepts around which the study was built, the empirical review is concerned with the various articles and writings connected to the study, and the theoretical review discusses the major theories that relate to the study.

Theoretical Review

This section of the literature reviewed the consensus theory and the human capital theory, two well-known theories that provide frameworks for understanding how higher education contributes to the production of marketable graduates with the professional competencies required for success in the labour market.

Consensus Theory

According to Gordon (2013) and Paterson (2017), education is seen as a pathway to mobility and wealth, while employability is seen as a supply-side issue in a globalising society. Globalization increases the likelihood of a high-wage, high-skill economy for countries that invest in their citizens' education and training. Because of this, personnel investment is required (Becker, 1975). Supporters of the consensus theory see the improvement of technology as a source of professional upskilling, increasing productivity, and freeing up jobs (Bell, 1974).

Consensus theory, according to Brown, Hesketh and Williams (2003), highlights what social groupings have in common. The consensus approach emphasises societal stability and educates community members about shared norms and values (Jonck & Van der Walt, 2015). This theory is founded on the idea that investing in human capital through the development of professional competence will assure graduates' employability and speed up their career growth (Selvadurai, Choy & Maros, 2012). It is necessary to shift away from conventional mass production of standard commodities and towards a new type of competition focused on innovation and creativity as a result of the globalisation of financial markets and the expansion of transnational businesses (Brown et al., 2003). In response to this growing need for a skilled workforce, countries have increased public and private investment in human capital and expanded higher education institutions. According to this, students should have the necessary skills to be creative.

According to a widely accepted hypothesis, developing professional competencies in students at the university would increase their employability and help them advance in their careers (Selvadurai et al., 2012). To improve graduates' employability, institutions are encouraged to include professional competencies in their curricula (Mncayi, 2016). Universities should prioritise this kind of inclusiveness since the labour market no longer requires only academic knowledge.

Amidst the helpful perspectives on how to improve professional competence, consensus theory is not without controversy. It does not take into account the reality that some people's job prospects worsen while others improve (Brown et al., 2003). Additionally, employability is assumed to be a

skill set challenge that ought to be handled in accordance with employer skill expectations, while universities and graduates bear the entire responsibility for improving employability. According to Brown et al. (2003), the main problem with the consensus theory is that it assumes employability is something that happens on the supply side, and that people can get good jobs if they get the right skills. Because institutions are unable to generate marketable graduates due to poor educational quality, companies must be involved in the generation of employable graduates. As a result, universities are not solely responsible for producing marketable graduates. Several stakeholders, including the government, companies, and the community, must create circumstances that promote the development of skilled and productive graduates, particularly for previously disadvantaged persons.

Human Capital Theory

Human capital refers to the skills and information that people develop through their commitments to education, on-the-job mentorship, and other forms of experiences (Rauch & Rijsdijk, 2013). The original purpose of human capital theory was to comprehend the commercial importance of education (Becker, 1975). Theorists favour higher education as a means of enhancing socio-economic values (Becker, 1975). According to the theory, education and training are critical for students to gain the competence they need to be effective employees. White (2017) supported this assertion by stating that there is a direct and positive relationship between an individual's level of education or training and their productivity in the job. White argued that an individual's level of education or training directly impacts their productivity at work. Furthermore, the likelihood of achieving success in the job market is positively correlated

with the level of education or training. In light of this, an individual will not be able to be productive in the workplace with just a higher education degree or other types of training.

The human capital theory often reflects that education and skill development may lead to steady employment. Reddy et al. (2016) asserted that education contributes to long-term economic growth and well-being. People are thought to perform well at work, reduce unemployment and the likelihood of living in poverty, and be able to earn more money if their skills and knowledge are developed (Neary, Dodd & Hooley, 2016). As a result, it follows that graduates must be well-prepared by obtaining education and training to be competitive in their careers. This view posits that students should acquire knowledge and skills through higher education courses. Once employed, the graduates' abilities will allow them to quickly contribute to the open labour market. The central tenet of the theory asserts that a graduate's education and training significantly influence their output capacity. According to Lourens (2016), education and training enable people to have long-term subjective well-being in addition to financial gains. As a result, more money is being spent on education and training because many individuals anticipate finding a job right away after graduating (Artess, Mellors-Bourne & Hooley, 2017).

Several people have objected to the human capital theory. According to White (2017), determining how lifelong learning impacts an individual's employability is a difficult undertaking. The amount of time a person spends on education and training does not correlate with the level of competence they acquire from it. An individual can obtain a three-to-four-year degree, but

without the necessary skills and competencies, they will not succeed in the labour market. A qualification is merely a starting point for developing talents.

Furthermore, a well-defined familial history and socioeconomic standing might assist individuals in gaining access to employment that would otherwise be difficult to obtain (Crawford et al., 2014). As a result of these socioeconomic discrepancies, individuals do not enjoy ready access to the labour market, even if they have comparable abilities and expertise (Jackson, 2016). As a result, despite having the necessary education, graduates lacking influential social connections are likely to have difficulties finding work.

The mere presence of jobless graduates runs counter to the widely held belief that education expenditures are positively correlated with high production. Educational investments do not ensure employment (Christie, 2019). In addition, several additional aspects should be taken into account, including the socioeconomic situation and family history. There is a lot more to consider than just the association between education and employment, even though it is substantial. The several aspects listed above should be taken into consideration, as they significantly affect how graduates fare in the job market.

Justification for the use of the Consensus and the Human Capital Theory

Consensus Theory and Human Capital Theory offer helpful perspectives for analysing the connection between education, professional skill development, and employability. The theories provide valuable insights to help navigate the study's objectives. The consensus theory, as outlined by scholars such as Gordon (2013) and Paterson (2017), highlights education's importance in facilitating social mobility and economic success. Investing in human capital by developing professional competence can improve graduates' employability and

career growth opportunities. This supports the study's objective of assessing the level of accounting students' technical competence and professional skills development. The study would investigate these characteristics to determine how well educational institutions are preparing students with the essential skills needed to succeed in the workforce.

The consensus theory emphasises the significance of societal stability and common standards and values (Jonck & Van der Walt, 2015). This means that boosting professional competence among accounting students is believed to improve their employability and contribute to the social goal of cultivating a skilled and productive workforce. This is in line with the examination of the relationship between accounting students' professional competence growth and their academic success (CGPA).

In addition to the consensus theory, Becker (1975) proposed the Human Capital Theory, which emphasises the economic significance of education and training. The thesis posits that by enhancing education and skills, investing in human capital may lead to heightened productivity, expanded employment opportunities, and augmented income (Reddy et al., 2016; Neary et al., 2016). The study aims to investigate the correlation between the degree of professional competence growth among accounting students and their CGPA. This research is based on the concept of Human Capital Theory, which suggests that education and training enhance individuals' abilities and employment opportunities.

Despite their limitations, these theories provide significant theoretical frameworks for understanding the role of education in developing professional competence, enhancing employability, and exploring the potential influence of socio-economic factors on career outcomes. The study seeks to offer significant

insights into the relationship between professional competence development, academic achievement, and the moderating influence of gender on accounting students. It adheres to the ideas of consensus theory and human capital theory, which are crucial for equipping graduates for prosperous employment in the accounting field.

Conceptual Review

This pertains to the perceptions of others and involves explaining the parts of the study as well as examining the fundamental principles on which the investigation is based. Regarding the aforementioned assertions, an examination of literature was conducted on the following topics:

1. Accounting education in Ghana
2. Purpose of accounting education
3. The International Education Standard
4. The Concept of Professional Competence
5. Professional Competence Development
6. Justification for the Use of Technical Competence and Professional Skills to Assess Professional Competence Development
7. Professional Competence Assessment
8. Professional Competence and Academic Performance
9. Role of Universities in Professional Competence development

Accounting Education in Ghana

According to Sinclair (2015), accounting education is a framework for providing graduates with the insights necessary to handle the impediments of the accounting profession. Others define it as a mechanism to bring forth graduates with the competencies required to succeed in the accounting

profession (Jackson, 2016; Jackson & Chapman, 2012). Cheng (2007) also defined accounting education. Accounting, in his opinion, is the business language that educates stakeholders' interests and is the driving force behind a national economic growth plan. In addition, he emphasized the importance of accounting education as a service that aims to disseminate knowledge, particularly financial and accounting data, to assist consumers, investors, businesses, and governments in making informed decisions. This suggests that accounting education has been characterised as teaching students how to accumulate, record, and summarise data, as well as how to report, analyse, and audit the outcome to improve company decision-making.

Accounting education in Ghana is considered important for economic development because accounting processes play a significant part in all facets of business development and decision-making. The post-independence era brought the need for local training workers to acquire the management skills required to manage state-owned enterprises and structures. Ghana's first president, Kwame Nkrumah, required indigenous training to advance his vision of industrialization and economic growth. Accounting was considered one of the key management skills with which this vision could be achieved. This helped establish a management college in Achimota to train project workers in public administration and the commercial sector in 1959. The college was concerned with conducting all administrative-related tests set up in the UK. However, in 1962, the government approved a proposal to establish a management school at the University of Ghana to offer management qualifications, including accounting (Awayiga et al., 2010).

In 1963, the Institute of Chartered Accountants, Ghana (ICAG) was established to provide professional accounting education and lessen the country's dependence on external accountants. The Institute of Chartered Accountants Act, of 1963 provides legal authority for ICAG to regulate accounting degree programmes. According to the Act, membership in the ICAG is made as follows:

1. those who have passed the ICAG examination and completed the course training time;
2. Members of any accounting authority authorized by The ICAG Council. Such members usually apply for membership and once accredited they become members of ICAG.

The provision of accounting education in Ghana can be divided into three stages. This includes high schools, degrees and diplomas, and professional degrees. Design, as well as teaching accounting at second-cycle institutions, is under the jurisdiction of the Ghana Education Service (GES). Students who offer an accounting programme take courses such as principles of accounting, costing, and business management as compulsory subjects, excluding economics, French, or elective mathematics. These subjects introduce students to those basic lessons to help them understand accounting's roles and responsibilities and prepare them for future degrees and technical programs. Ghana's secondary education is a three-year programme that culminates in a final test and the awarding of the West African Secondary School Certificate Examination (WASSCE) Certificate. Admission to business programmes at the university level requires the successful completion of WASSCE certifications (Mbawuni & Nimako, 2015).

The National Council for Tertiary Education (NTCE) is responsible for overseeing the numerous accounting degrees (undergraduate, postgraduate, and certificates) provided by tertiary institutions in Ghana. All of these programmes are subject to national authorization procedures and approval by the NCTE, which ensures that the content is up-to-date and relevant for future economic development. In higher education, polytechnic institutions (now technical universities) offer diploma and certificate courses in accounting with degrees such as the Diploma in Business Studies (DBS), Diploma in Business Administration (DBA), and Higher National Diploma (HND). Traditional institutions also provide accounting degrees and certificate programmes with various titles. This means there is no standardised name for the numerous accounting degrees given by Ghana's institutions. Regardless of the name, these degree programmes all feature a core of accounting studies that are supplemented by other business-related disciplines, including taxation, commercial law, quantitative methods, corporate finance, auditing and assurance, and entrepreneurship (Awayiga et al., 2010).

Purpose of Accounting Education

Ultimately, a formal education should help students become competent in their chosen professions. The IFAC International Education Standards for Professional Accountants state that the main objective of accounting education is to provide individuals with the necessary knowledge and skills to excel in the field of accounting. In order to demonstrate proficiency in their position, a competent accountant must possess the necessary knowledge and abilities, which encompass values, ethics, and attitudes. Education, according to IFAC, is an organised process intended for acquiring and developing knowledge,

skills, and abilities for the individual; it is a common process but not only practised in the field of education (IFAC, 2015).

Accounting education's ambitions seem to be to prepare and introduce a highly structured educational package that will equip students to excel in their careers and competently fulfil their duties (Scribner, 1995). According to Awayiga et al. (2010), the focus is on contemporary higher education and the critical demands of accounting students for them to perform their allocated and properly planned work schedules. Because accounting tasks are sometimes tedious, students ought to develop great analytical abilities that will help them meet the complicated demands of industry. Bayerlein and Timpson (2017) also saw accounting education as an avenue to bring forth graduates who are capable of doing complicated accounting duties. This was confirmed by Pan and Perera (2012), as well as Kutluk and Gulmez (2012), who argued that accounting education is a structured process to generate trained accountants who are well-equipped to meet market or company demands.

It is not sufficient to provide students with merely theoretical knowledge. Accounting education should equip students with some important competencies such as problem-solving, information technology, time management, teamwork, and communication skills, in addition to providing them with basic accounting knowledge to help them create, measure, and analyse information for decision-making (Yücel, Saraç & Çabuk, 2012). Similarly, according to Blackmore, Gribble, and Rahimi (2017), accounting education's objective is to equip professionals with the requisite competencies that will help them provide meaningful information to end users. Tyurina and Troyanskaya (2017) asserted that the primary goal of modern accounting

education is to teach students how to utilise computers and other resources, such as software, to generate financial data and reports. In addition, Khemiri (2021) argued that the accounting programme should help aspiring accountants by teaching them to think critically about business management.

According to the preceding debate, the purpose of accounting education is enormous. It entails providing students with the necessary professional competencies and equipping them with basic accounting knowledge. Additionally, it involves supplying the necessary workforce to handle the constantly evolving tasks that accountants and accounts officers must perform to ensure the smooth operation of businesses. Lastly, helping students acquire good jobs after their programme of study.

The International Education Standards (IES)

The International Education Standards (IESs) outline the principles that guide professional accountants. According to the standard, "education is a coherent and systematic procedure steered at expanding knowledge, skills, and other capabilities" (IAESB, 2015, p. 11). Academic settings typically do not implement this process. This standard was introduced to regulate accounting education, with the first six levels being released in 2003, the seventh in 2004, and the eighth in 2006.

The revised Level 1 Criteria for Entry to Professional Accounting Education Programme was released in early 2014 to help protect the public interest by establishing appropriate requirements for entry into accounting education, thereby benefiting prospective students and allowing them to make informed career decisions (IAESB, 2015). There are now eight IES covering various categories.

1. Entrance criteria to an accounting education programme.
2. Accounting professional education programme content.
3. General education and professional skills.
4. Professional ethics, beliefs, and attitudes.
5. The required professional experience.
6. Professional competence Assessment.
7. Continuing professional development
8. Competence for engagement partners accountable for Audits of Financial statements

The merits of these standards lie in curtaining global disagreements about the required qualifications of accounting professionals, facilitating international travel and accounting professional communication, and aiding in the settlement of concerns with institutional compliance with the most significant standards in terms of their effect on the quality of educational consequence (IFAC, 2010).

The Concept of Professional Competence

One of the most serious and decisive issues of the future has to do with the issue of education. The development of the educational system is directly related to the grooming of highly trained, competent professionals who add value to the country's socioeconomic development. Currently, the industry demands not only the accumulation of specific knowledge but also the development of students' professional competence required for topic acquisition.

A professional is traditionally defined as someone who works in a specific field. A professional, according to Wilson et al. (2013), is someone who

is designated as a part of a community that is regulated by values and a code of ethics. The fact that a professional receives compensation for their specific knowledge or experience sets them apart from labourers or untrained amateurs. Wilson et al. further stress that a professional is someone who demonstrates specialised experience and understanding within a given community.

As a result of psychological research, competence gained traction in the sphere of education. Competence, as defined by psychologists, is the ability to deal with ambiguous situations, communicate in unexpected situations, take a different path in negotiations with competitors, have a plan of action when performing ambiguous tasks, use contradictory information, and continuously develop processes. Competence is the blend of knowledge, skills, and attitudes students must possess to execute their professional obligations (Asmarani, Sukarno & El Widdah, 2021). Syarifudin (2014) also defined competence as a person's fundamental attributes that have a direct association with the standard requirements of effectiveness and superiority in a specific work or scenario. This suggests that competence helps in revealing how one reacts or thinks in a wide spectrum of situations, endures for a long time, and lasts for a longer period. Therefore, for students to be more competent, they must gain a higher level of cognitive development to be able to think about and apply what they've learned.

According to Toshtemirovich (2019), professional competence is the mastery of knowledge, skills, and abilities required for the execution of activities by a professional. It also concerns the knowledge, skills, and abilities that enable an expert to engage in professional activities and put them into practice. Professional competence entails the assimilation of integrated

knowledge and activities in each separate direction, as well as the attainment of specialised knowledge and skills by an expert. Toshtemirovich further argued that professional competence is demonstrated in complicated processes when an individual can perform ambiguous tasks, use conflicting information, and have an action plan for an unexpected event. Professionally competent specialists continue to expand their knowledge, absorb new information, deeply understand the objectives of the period, pursue new insight, process it, and apply it effectively in their practical actions.

According to the International Accounting Education Standard Board (IAESB), professional competence is the capacity to execute a task according to a set criterion in a work context. A professional accountant must display the appropriate knowledge, skills, and attitudes. For this study, professional competence was defined as the development of technical skills (competence) and professional skills.

Technical Skills (Competence)

Technical competence refers to the capacity to employ professional insight when performing a duty. IES 2 outlines the competencies that are essential for developing professional accountants. The content of the learning results for technical competence in the most recent edition is summarised in this study. This summary helps with content analysis to determine how the students have developed themselves in the subject areas. Therefore, the study concentrates on the following technical competence and primary information gained from the IES2 (IAESB, 2017).

a. Accounting, finance, and related knowledge: Accounting, finance, and related knowledge form the technical basis for a fruitful professional

accounting career. The mix of topics may vary depending on the industry or region where people work. To meet constantly changing demands, there have been modifications in the accounting curriculum. The curriculum is expanding with new topics, and the relative importance of various themes is changing. To satisfy the demands of their specific surroundings, various stakeholders must seek to integrate new topics or alter their existing programmes (Awayiga et al., 2010).

b. Organisational and business professional knowledge: Organisational and business intelligence constitute the framework where professional accountants operate. Professional accountants must be well-versed in the operations of businesses, governments, and non-profit organisations. Organizational and business knowledge pertains to the formation, funding, and management of firms, as well as the global conditions in which they operate.

c. Professional knowledge in information technology: Technological advancements have transformed the role of the professional accountant. Professional accountants use IT controls and information systems, but they also participate in the evaluation, creation, and administration of such systems as part of a team (Awayiga et al., 2010).

According to IAESB (2015), the following are the technical competence areas that must be developed at the end of the learning outcome:

1. Auditing and Assurance
2. Governance, Risk Management and Internal Control
3. Financial Accounting and Reporting
4. Management Accounting

5. Finance and Financial Management
6. Taxation
7. Laws and Regulations Impacting Business
8. Economics
9. Business Strategy and Management
10. Information Technology
11. Business and Organisational Environment.

Professional Skills

The International Education Standard (IES 3) outlines the necessary professional skills that students must exhibit. Professional skills are the intellectual, interpersonal, personal, organisational, and technical abilities an accountant combines with technical knowledge and professional ideals, ethics, and attitudes to manifest professional competence. The categories include;

a. Intellectual skills: These pertain to the capacity to think critically, solve issues, and use excellent judgment.
b. Interpersonal and communication skills are those that connect to a professional accountant's capacity to collaborate and communicate efficaciously.
c. Personal skills influence the attitudes and conduct of professional accountants
d. Organisational skills relate to the professional accountant's capacity to work efficaciously within the organization (IES, 2019).

Professional Competence Development

The requirement nowadays is not just about gaining specialised knowledge but also about the construction and development of professional

competence in students through an innovative approach. As a result, the IAESB has established a set of professional competencies that accounting students must develop by the end of their studies (IAESB, 2017). These include:

Interpersonal and Communication Skills

Accountants who possess interpersonal and communication skills are better equipped to collaborate with their peers and facilitate the simple transmission and receiving of information, as well as form-critical judgements and make effective decisions (IFAC, 2010). Communication with others to reduce anxiety or develop trusting connections are examples of interpersonal skills that are primarily relational and process-oriented (Duffy et al., 2004). Communication skills include the capacity to explain concepts effectively, express perspectives with clear words, communicate directives clearly, and influence people through speaking talents (Zubaidah, 2016).

According to the International Education Standard (IES, 2019), professional accountants must possess the following interpersonal and communication skills: cooperating and working in teams to achieve the organization's goals; communicating clearly and concisely in official and unofficial circumstances (both verbally and in writing); demonstrating knowledge of ethnic diversity in communication; using effective interviewing and listening processes; using negotiating abilities to obtain agreements; interacting with experts to lessen or resolve disputes, solve issues, and maximise possibilities; and presenting ideas and convincing others to endorse and commit to them.

The attainment of interpersonal and communication skills is of great importance to the world and work. According to Kavanagh and Drennan (2008),

communication is one of the talents that employers look for in accounting students before they enter the sector. This was reinforced by Tysiac and Drew (2018), who found that communication is a critical ability graduates must have to handle the challenges of technological innovation. The emergence of technology has taken over ordinary accounting tasks; as a result, accountants should focus on offering expert guidance (Hood, 2018). As a result, students must communicate effectively and share experiences with others when advising, consulting, or proposing a course of action. This is because a lack of communication skills will result in information misinterpretation, damaging the firm's profitability.

When accounting students enter the profession, they must also be able to work effectively as a team. According to Ghani, Rappa and Gunardi (2018), teamwork is now seen as a critical skill by employers because it makes it easy for students to collaborate with others from multidisciplinary and cross-functional areas. This makes it easy to realise the goals of the organisation within the current complex market conditions. Furthermore, in accounting practice, teamwork is seen to impart effective client connections as well as trust-building and performance outcomes (Tempone et al., 2012). Therefore, the development of interpersonal and communication skills has a stronger influence on the accounting profession's career. Because it goes a long way towards defining how you deal with clients, work with individuals, and even solve problems. As a result, a significant effort must be made to ensure that this ability is incorporated into the accounting curriculum.

Intellectual Skills

Intelligent skills enable the resolution of problems and the application of judgments. Deep analysis, problem-solving, and analytical thinking are some of these skills (IFAC, 2010). They help to develop individual awareness to think, transform, and solve problems encountered intelligently, quickly, and directly, both personally and in the environment. Accountants must have the following intellectual skills, according to the International Education Standard: the ability to store, retrieve, edit, and understand personal information; the capacity to study, research, think rationally, comprehend cause and effect, and analyse critically; and the ability to discover and solve complicated and uncommon situations.

Several studies have established the relevance of intellectual skills in accounting education (Crawford et al., 2013; Howcroft, 2017; Kavanagh & Drennan, 2008). According to Kavanagh and Drennan (2008), the cultivation of critical thinking and problem-solving skills can be utilised within career-related difficult situations that will make students more employable. As far as career prospects are concerned, the development of these skills will place them above their peers. The Bedford Committee, as cited by Orchill (2018), also proposed technological improvements in the use of accounting analysis and general information integrated with the training process. In addition, decision-making and the use of judgement are considered to be important supporting skills to create proficient distrust (IFAC, 2015). This suggests that developing this skill will make accounting students more critical in their examination of situations, which will improve the productivity prospects of university accounting students in the long run.

Personal Skills

Personal skills allow for individual learning and personal development by combining abilities such as self-control, initiative, and self-study skills (IFAC, 2010). This ability is linked with accountant attitudes and behaviours, such as self-control, initiation, autonomous learning, prioritisation, anticipation, adjustment to change, and application of professional and ethical standards (Zulfikar, Arianto & Tarmizi, 2013). Personal skills required by professional accountants, according to the International Education Standard (IES, 2019), are: to demonstrate a commitment to lifelong learning; use expert doubts by asking questions; and criticism of all scrutiny; set lofty personal objectives and track performance through criticism and meditation; manage time and resources to gain commitment; anticipate barriers and strategic solutions; and stay open to new prospects.

One of the most significant characteristics of accountants is their ability to self-learn (Paisey & Paisey, 2007). This is due to the frequent adjustment of an accountant's technical requirements in response to the emergence of new technical laws and recommendations. Accountants must improve their skills in responding to changes in positions as they progress in their careers, in addition to learning new regulations. The accountant's job may change in response to changes in corporate processes (Howieson, 2003) or to professional and job changes. This means that accountants get into a lot of work after qualifying and, as a result, should learn the specialised information needed for each new role they play; developing personal talents will help them achieve this goal (IFAC, 2010).

Organisational and Business Management Skills

To complete tasks and fulfil duties inside an organisation, one needs organisational and business management skills, which are connected to how one develops abilities in environmental analysis, performance measurement, decision-making, job design, and accountability reporting (Darius, 1970). Organisational and business management skills relate to achieving results through accessing and utilising cultural influence and creating and activating networks inside organisations (Tan & Laswad, 2018). It covers strategic decision-making, resource planning, planning and control, and other abilities (Zulfikar et al., 2013). The organisational and business management skills required of professional accountants according to the International Education Standard (IES, 2019) are: performing tasks following established procedures; evaluating individuals' and teams' performance to determine compliance with the organisation's quality standards; using strategic skills to support and develop others' abilities; delegating authority effectively; influencing peers to support corporate objectives; and using the appropriate strategies to increase performance, success, and outcome.

Accounting students ought to equip themselves with a broad business outlook along with political consciousness and international awareness. They are expected to have broad industry experience and leadership skills, along with the capacity to meaningfully contribute to the improvement of their working surroundings (Russell, Hancock & McCullough, 2007). Possessing leadership skills will help them display confidence, collaborate, and take initiative. According to Müller and Turner (2007), accounting students should be competent at motivating team workers to dwell on accomplishing objectives,

taking duty for actions, and facilitating the necessary changes to bring improvement. Accountants have a larger role than just keeping the books by assisting in strategic planning and other management choices. Organisational and business management skills will therefore be required to ensure that the accounting students become integral members of managing the organisation.

Accounting, Finance, and Related Knowledge

The shift in market demand for competent professionals has altered accounting and finance professionals' roles. Accounting, finance, and related knowledge are the bedrock of the accounting profession, and with regular interaction with other sectors within the organisation, accountants need to be equipped with sound decision-making, negotiation, and strategic-thinking competencies (Getahun & Mersha, 2020). Accounting, finance, and related knowledge provide a deep insight into accounting, auditing, and tax, including the evolution of the accounting profession and accounting theory, as well as the content, ideologies, structure, and purpose of reporting for international and domestic use. This also covers the procedures for locating, gathering, summarising, verifying, evaluating, and interpreting financial information. It entails the capacity to analyse facts, make decisions, assess risks, and solve actual problems (Awayiga et al., 2010).

Accounting, finance, and related knowledge are must-have skills for a successful career. Students must be well equipped with the International Financial Reporting Standards (IFRS). IFRS has to do with various regulations and their implications in various scenarios. Because of this, the students need to possess memory skills that will help them become experts in the field. Moreover, due to constant changes in IFRS, it is, therefore, necessary for the

student to deal with any accounting standard that may be required (Awayiga et al., 2010; Getahun & Mersha, 2020).

Organisational and Business Professional Knowledge

Organisational and business knowledge is concerned with understanding the fundamental functions of organisations plus other essential forces having various effects on them (Awayiga et al., 2010; Battistella, De Toni & Pillon, 2016; Davis & Lopuch, 2016). It is related to the process of conceptualising the basic internal workings of the organisation as well as the economic, social, cultural, psychological, and technological elements that impact those workings. In addition to this, it is important to recognise the interpersonal dynamics that exist inside the company. According to Masai et al., as cited by Orchill (2018), organisations are complex in totality, so accounting students ought to have the necessary knowledge and skills to interact with various people and systems within the working environment.

Information Technology Professional Knowledge

Accounting students who have an understanding of IT are better equipped to make informed decisions about the design, implementation, and evaluation of IT and related systems (Awayiga et al., 2010). This means accountants must have adequate knowledge of the use of Microsoft Office Suite (Word, spreadsheet), database packages, and entry-level accounting packages. Businesses and accounting firms are increasingly turning to automated accounting systems. As a result, it's important to have a solid grounding in a wide range of programmes, such as those connected to finance, Microsoft Excel, and a data modelling application. Accountants should be able to modify, extract, and examine each of their data independently, as well as frequently use diverse

tools in unison to provide a comprehensive view of an organization's finances (Getahun & Mersha, 2020).

Therefore, for the study, the various competence areas that must be developed by students are summarized in Table 1.

Table 1: Professional Competence

Competence and skills	Areas	
Technical Competence	• Financial accounting and reporting • Management accounting • Finance and financial management • Taxation • Audit and assurance • Governance, risk management, and internal control	• Business laws and regulations • Information technology • Business and organisational environment • Economics • Business strategy and management
Professional Skills	• Intellectual Skills • Interpersonal and Communication skills • Personal Skills • Organisational Skills	

Source: Adapted from IAESB, 2017: 34-38 and 171-176; IAESB, 2019

Justification for the Use of Technical Competence and Professional Skills to Assess Professional Competence Development

Accounting is based on objective ethical principles and regulations, emphasising the necessity of technical competence. The International Financial Reporting Standards (IFRS) and Generally Accepted Accounting Principles (GAAP) provide a comprehensive framework for financial reporting and analysis. As stated by Kieso et al. (2019), students must possess a comprehensive knowledge of accounting principles, patterns, and procedures. As a result, assessing students' technical competence is critical because of their fundamental role in forming informed judgments and producing precise fiscal reports.

Standardised tests and performance assessments can establish the optimal indicators of technical competence and professional skills in accounting (Needles, Powers & Crosson, 2011). The evaluation approaches can consistently and accurately assess a student's knowledge, skills, and capacity to apply general principles to real-life situations. Furthermore, the accounting profession is in a state of perpetual evolution due to the emergence of new laws, regulations, and technology (Sá & Serpa, 2018). Providing technical competence and professional skills to students will keep them informed of the current changes that will help them adapt to these changes and new ways of doing things (Albrecht & Sack, 2000). To remain relevant and competitive in a rapidly changing industry, accounting students must prioritise the enhancement of their technical competence and professional skills.

According to Malloch et al. (2010), students must stay updated with new technology, methods, and fashionable practices to be relevant and competitive

in today's rapidly changing professional environment. It is crucial for students to continuously acquire new skills to keep pace with the constantly changing and advancing nature of various industries. Neelen and Kirschner (2020) argued that students must adapt to the evolving demands of their respective industries. An accountant's time and efforts are best utilised by focusing on developing and refining their technical competence and professional skills. They must provide high-quality services that accurately reflect industry advancements. As a result, students should prioritize acquiring and maintaining up-to-date technical competence and professional skills.

By focusing on enhancing their technical competence and professional skills, they will be able to succeed in their field while also staying informed about and adapting to artistic and societal developments that could impact their positions, principles, and beliefs (Cervero, 2013; Eraut, 2012). Insufficient knowledge and skills might impede accounting students' capacity to provide exceptional services and maintain a competitive advantage in their respective professions. Therefore, it is crucial to prioritise the development of technical competence and professional skills.

Understanding the interdependence of professional values and ethical concerns with technical competence and professional skills is crucial. These impacts influence the practical application of these skills in the real world. However, according to Epstein and Hundert (2002), when assessing the professional competence of students, it is crucial to focus on their technical competence and professional skills. This is because professionals who are well-informed in these areas are better prepared to handle ethical challenges and form opinions that align with their profession's values and morals.

The preceding debate suggests that while professional ethics, values, and attitudes hold significance, they should not serve as the primary criteria for evaluating the development of students' professional competencies. Technical competence and professional skills should be given precedence, as they are directly linked to the ability to provide high-quality services. Furthermore, they are easier to assess and more objective. Experts may enhance public trust, stay updated with advancements in their respective professions, and better serve stakeholders and consumers by focusing on these fundamental qualities. Therefore, the assessment of accounting students' professional competence development relied on their technical competence and professional skills.

Assessment of Professional Competence Development

Upon completion of Initial Professional Development (IPD), the International Education Standard (IES) lays out a checklist of professional competence for entry-level accountants to demonstrate. According to the IAESB (2017), assessment is the evaluation of professional competence acquired through study. A variety of parties can conduct assessments, including IFAC member organisations, companies, universities, and private education providers. The assessor performs several functions to determine whether the accountant has demonstrated an adequate level of professionalism at the end of the IPD. Assessment protects the public purse, increases accountants' professionalism, and increases their work efficiency (IAESB, 2017).

An IFAC member may use the results of several screening activities that took place during the IPD to determine whether professionalism has been attained. The structure of assessment procedures during the IPD may vary. It may include one separate test reviewed at the end of the IPD; a series of tests

conducted across IPDs focusing on specified areas of professional competence; or a series of controlled and experimental job tests across IPDs. These tasks are used to assess specific aspects of a professional's skills (IAESB, 2017).

The tasks can be tailored to a specific area of expertise tested during IPD. Written tests, self-assessments, computer-assisted assessments, employers' skills assessments, and proof-of-portfolio assessments at work completion are all examples of assessment tasks. If the assessment function possesses a balance between depth and breadth, expertise and functionality, and integrates content from different domains used in different contexts and settings, you have a high level of satisfaction. When evaluating the total number of assessment tasks performed across the IPD, a high level of adequacy is important (IAESB, 2017). For this study, the assessment activities that were used included student self-assessment and written texts (CGPA).

Professional Competence and Academic Performance

The development of professional competence can have a positive correlation with students' performance. Various competencies, such as time management, communication skills, the ability to self-learn, and problem-solving skills, can influence learners' educational excellence. According to Obilor (2019), time management is the foundation of academic achievements. Students who perform academically are not only intelligent, but they also manage their time well. It is very important to begin the semester with greater expectations but to achieve those expectations, it is paramount to make judicious use of time. Every activity being undertaken must be regulated by time. When this is not done, the sense of seriousness will be low, and this can also lead to not being able to undertake several duties. Obilor further stated that

time management also aids in the effective and efficient use of available time. This helps to reduce stress and achieve greater success in school and the workplace. Nyatyowa (2017) also stressed that time management makes students more efficient and productive because they are well-organised, focused, and disciplined.

Problem-solving skills are also very instrumental in education. This is because these skills enable students to tackle any issues that confront them in their studies (Mayer & Wittrock, 2006). These issues could potentially hinder their academic performance. As a result, being able to tackle them with problem-solving skills will help them achieve academic excellence. According to Kavanagh and Drennan (2008), the cultivation of critical thinking and problem-solving skills can be utilised within career-related difficult situations that will make students more employable. As far as career prospects are concerned, the development of these skills will place them above their peers. Because of this, guardians, teachers, and educational institutions need to help students be equipped with the appropriate problem-solving skills to influence their academic performance.

Also, communication skills are important abilities for a successful career for students. According to Obilor (2019), communication skills enable students to get more insight from their instructors, aid in building quality friendships, heighten teamwork, improve their social networking, and enhance their professionalism. Thus, good communication leads to strong relationships and fosters confidence, which increases students' academic achievements (Khalidzuoud & Rawyaalshboul, 2018).

Furthermore, the ability to self-learn has a positive impact on students' academic achievement. According to Staats (2018), successful people never cease learning. Due to the rapidly changing environment, those who can sustain themselves are those who have the desire to learn and be open to new things. Constant learning is critical for achieving academic excellence. Students who have the desire to self-learn always pay close attention to both teachers and what is being taught. They tend to ask a series of questions when they are confused, and they also tend to always respond to questions in class. They are always open to learning new things, thereby becoming teachers' favourites and also striving to achieve academic excellence.

According to the preceding opinion, it can be seen that the development of professional competencies in students also has an impact on their academic performance. Therefore, students seeking to achieve higher academic excellence must also endeavour to develop their professional competence (Apostolou et al., 2013). This makes it prudent to determine the relationship between accounting students' level of professional competence development and their academic performance.

The Role of Universities in Professional Competence Development

Universities now have a more complex role that involves the transfer of both subject knowledge and the ability to apply skills in specified areas (Zafeiriou, Nunes & Ford, 2001). Today, acquiring a degree certificate is not enough to qualify someone for a good job in the labour market. Employers seek graduates with the capacity to detect and respond to challenges consistently. They now seek graduates who have a mix of good academic and communication

abilities, writing skills, and good interpersonal relationships (Juhdi, Abu Samah & Yunus, 2004).

Universities, therefore, have a vital role in preparing students to face the professional and personal complexities provided by this extremely complicated society. Professional competence development should be based on well-documented strategies that help educators build the skills they need to put what they have learned into practice. As a result, professional competence development should be founded on strong educational principles, such as contextual teaching (Prawiro, 2020). According to Velasco et al. (2014), professional competence development is not the same as learning academic courses. Therefore, significant steps must be deployed to ensure that teachers help students develop the various competencies while equipping them with the basic knowledge of accounting. To reform education based on competence development, it is necessary to redesign the curriculum and collaborate with academics to transform how learning takes place in the classroom.

Mahrous and Ahmed (2010) asserted that the accounting curriculum can effectively integrate the majority of professional skills. This approach will facilitate the student's acquisition of skills as they progress through the technical competencies. Kavanagh and Drennan (2008) also noted that incorporating a competence development approach allows students to actively participate in learning and acquire skills such as creativity and critical thinking. To achieve this approach, creative instructional techniques such as scenario evaluation, role-playing, knowledge analysis, real company assignments, and technology allocation can be utilised (Lin, Xiong & Liu, 2005). Furthermore, Barth et al. (2007) suggested that adjusting instructional strategies is necessary for the

development of various competencies. This requires a shift towards a different learning culture that promotes self-organization and focusses on competency rather than indoctrination.

Different teaching strategies must be used to equip students with practical accounting expertise. Because of the rapid progress of technology, it is now vital for students to have technical skills (Yücel, Saraç & Çabuk, 2012). For instance, accounting education necessitates teaching students not only basic accounting principles but also how to use digital applications. As a result, accounting instruction must be accompanied by demonstration technology that allows students to engage in interactive learning. Using technology will help students stay updated with the latest developments in a continuous learning approach that extends beyond mere theory.

According to the debate above, institutions can assist students in developing the necessary professional abilities in a variety of ways. Institutions can accomplish this by either restructuring the curriculum to include various competencies, changing various instructional strategies to expose students to the development of various competencies, or deploying new strategies to stimulate the development of both the required knowledge and skills.

Conceptual Framework

The literature review served as the groundwork for the conceptual framework of the study, particularly based on the International Education Standard, the consensus, and human capital theory. The conceptual framework elucidates the two components of professional competence and their relationship to student performance. Gender moderates this kind of relationship.

The two theories examined (consensus and human capital theory) highlighted that education and training help equip students with the necessary professional competencies to help them in their careers. These supported the framework of the IES, which tends to highlight the competencies expected of students after their studies. The students are considered professionally competent when they develop these competencies (IAESB, 2017).

However, the student's performance must reflect these professional competencies, so developing them is not an end in itself. Students' performance must demonstrate their possession of these competencies. Gender as a variable may have a moderating influence on the correlation between developed professional competence and student performance because the goals of these groups would not be the same. One may prioritise grades, while the other may prioritise competence development (Byrne, Flood, & Willis, 2002).

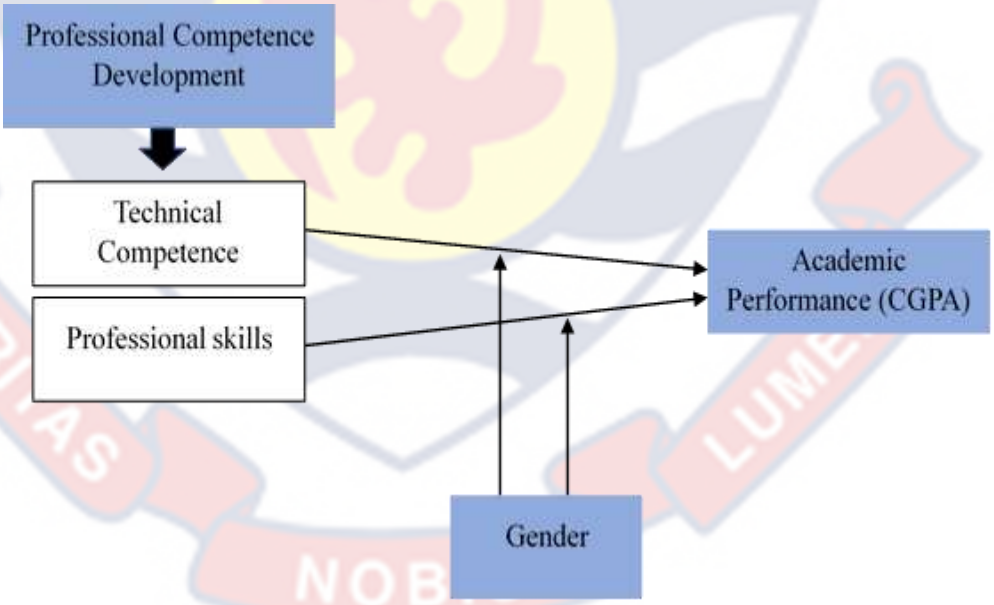

Figure 1: The development of professional competence, its relationship with CGPA with gender as the moderating factor.

Source: Author's Construct

Empirical Review

This section of the literature review assisted in examining various works, journals, newspapers, and articles from related studies that were relevant to the current topic. The study reviewed literature by different authors under each of the research objectives.

Development of Technical Competence

The growth of graduates' technical competency in accounting has been examined by a number of scholars in accounting education. Frijat and Shbeilat (2016) assessed the contribution Jordanian institutions provide to raising the technical competence of accounting students in line with IES 2. To achieve these objectives, a random sample content analysis method was used for ten Jordanian institutions' programmes and curricula, followed by eight discussions with academic staff and accounting students. The study found many significant findings; most notably that Jordanian universities do not adhere to IES 2, leading to a high level of technical skills in the education curriculum that does not meet the demands specified by the standard. It was also discovered that most of the academic courses offered by the accounting departments do not include enough topics to provide the required information. This suggests that although numerous schools provide accounting degree programmes, students seem not to develop the technical competence required by the standard after completing the accounting degree programme owing to non-compliance with the IES 2.

An extensive study by Lim et al. (2016) also yielded a similar result. They examined the challenges that early accounting professionals face. Data was gathered through the use of a questionnaire, with a total sample of 373 selected by deploying the convenience sampling technique. The study

discovered that new graduates into auditing have not fully attained the technical knowledge, have difficulty applying the knowledge acquired in school, and also lack English abilities.

In a further attempt to reveal whether universities equip students with the needed technical competencies, Alzu'bi (2014) conducted another study in Jordan. He looked into the ability of accounting departments at Jordanian universities to graduate skilled accountants through their educational process. The study involved providing questionnaires to 300 accounting graduates. According to the research, the curriculum only offers graduates 67 per cent of the theoretical information they need. This was due to old teaching methods and an inappropriate study plan to address current practical applications. Because they were unable to grasp the complete content of the accounting curriculum, students appear to be technically incompetent in their area of specialisation.

Just as Lim et al. (2016) and Alzu'bi (2014), Nassar, Al-Kadash and Mahd (2013) also used a questionnaire to conduct their study in Jordan and obtained similar results. They studied the different issues inhibiting the growth of accounting education and the accounting profession in Jordan. They distributed a questionnaire to 73 accounting professors. The investigation found that there were gaps in the knowledge students gained at the university due to inefficient teaching methods and the use of outdated accounting curricula.

Research by Yücel, Saraç and Çabuk (2012) in Turkey found a similar result. The purpose of their research was to see how well Uludag University's accounting education met students' expectations. The study deployed the survey design, using a questionnaire to gather data. A total of 245 accounting students were asked to complete the survey. Accounting education at the institution,

according to the students, is inefficient. That is, the programme does not provide appropriate training courses as well as little information about the requisite scope of the accounting profession, making it hard for students to select career choices.

Chen et al. (2009) also uncovered similar results about universities not being able to equip students with the required technical competencies. They conducted their study to identify the most significant information technology competence that accounting graduates possessed. 150 recruiters were given questionnaires that were purely based on the IFAC International Education Guidelines. The various employers stipulated that students had insufficient knowledge of information technology. They see the students as not technically competent in the knowledge of IT that will assist them in advancing in their careers.

However, Sithole (2015) found that universities equip students with the required technical competencies while investigating the accounting knowledge and abilities that companies want, as well as the degree of satisfaction with recent accounting graduates' skills. The study involved completing a questionnaire from 35 employers from a variety of economic sectors in Swaziland, including manufacturing, service, the public sector, and nongovernmental organisations (NGOs). It was discovered that employers require knowledge of computing, written communication, and reporting skills. However, the companies believed the accounting graduates were extremely adept in measurement, financial reporting, and research. The survey also found that although students receive a greater knowledge of Word applications and communications software, they want more spreadsheet and accounting

programme competence from entry-level graduates. Even though businesses expect students to have more professional abilities, the results showed that the accounting curriculum in school assists students in developing some of these competencies (Sithole, 2015).

This backed up Razak's (2016) study, which looked at how Saudi universities developed their curricula in conformity with the International Accounting Education Standards. He used the content analysis approach to examine the university-offered accounting programmes. According to the survey, the majority of Saudi Arabian universities meet the IES standards for units of corporate and business professional knowledge, accounting, finance, and associated technical competence, and digital technologies expertise.

Empirical evidence on the development of technical competence appears to express a unified message. That is, academic accounting programmes do not provide students with the necessary technical skills. Even though they are taught some of the fundamental accounting courses, non-compliance with IES 2 does not allow students to completely grasp the technical competence as defined by the IAESB. As such, it is paramount to assess the accounting students' level of technical competence development.

Development of Professional Skills

Many academics have sought to get students' opinions on the development of professional skills. Damoah, Peprah and Brefo (2021) conducted a study in Ghana to determine whether universities equip graduates with the required employable skills by soliciting opinions from employers. The study deployed the survey design and utilised questionnaires to solicit data from the various employers. Employers perceived graduates to possess critical skills,

yet the graduates fail to meet these expectations. This suggests that there is a significant gap between what universities are offering to students and what the market demands.

Mameche, Omri and Hassine (2020) obtained a similar result when they conducted a study in Tunisia to evaluate the professional skills of students using the International Education Standards (IESs). To obtain the perspectives of different respondents, a cross-sectional design was deployed, with questionnaires being used as a data-gathering tool. The research focused on a multi-stakeholder analysis with 419 respondents made up of professors, accounting professionals, and fresh graduates. The findings revealed that Tunisia's accounting education programme facilitated significant intellectual, organisational, and general skill development. However, all respondents agreed that interpersonal and communication skills were the weak link in the accounting education curriculum. The accounting education programme's potential to develop technical, functional, and personal skills also elicited divergent opinions.

Douglas and Gammie (2019) conducted their research in Scotland to determine undergraduate accounting students' professional skills attainment and obtained empirical evidence to support Damoah et al.'s (2021) findings that students do not possess the expected professional skills. They collected data by sending a questionnaire to ICAS Big 4 trainees and conducting interviews with Scottish academics. The pressure on the accreditation of high-level technical content is forcing accounting graduates to make crucial decisions about their professional development. The research indicated that accounting degree providers prioritise human communication and communication skills over

intellectual skills. The learners appeared to be unsure about the progression of their professional skills.

Norman, Latiff and Said (2018) discovered similar results in their investigation into the disparity between employers' and students' assessments of accounting students' abilities. They conducted their research by sending out questionnaires. According to the results, accounting students' performance is subpar, suggesting they are not adequately preparing for the challenges of the professional world. The research also showed that students' communication and analytical skills had not improved.

Douglas (2017) also investigated why major accounting businesses in Scotland do not choose accounting graduates and found a similar result. Non-accounting students believe that the development of their intellectual skills is far greater than that of accounting graduates, while accounting graduates see the growth of their teamwork abilities as superior to those of non-accounting students. Accounting students believed they had not completely acquired their professional skills throughout their time in school. He went on to interview 11 Scottish professors who oversee accounting degrees for more information. Because of the limited space left after fulfilling the normative force of certification, respondents indicated that they needed to prioritise which professional skills to improve. Interviewees demonstrated a preference for interpersonal and communication skills in the remaining unaccredited area, which may hinder intellectual skill development.

In addition, Hakim (2016) found a similar outcome in another research study. He researched accounting students' qualifications and employers' assessments of the skills available in the university accounting programmes.

Their study deployed a quantitative approach, and questionnaires were administered using the convenience sample technique. Data were collected from 70 accounting employees at the entry-level and 70 practitioners. The study pointed out that there was a gap between recruiting companies and fresh employees in terms of qualifications and the importance of skills needed in the field. Graduates suggested the degree programme could not help them gain the necessary abilities.

Moreover, contrasting findings were obtained from the study conducted by Kwarteng and Mensah (2022) on the degree to which universities provide their students with job-related skills. A descriptive cross-sectional design was utilised in the study, and 435 employees and accounting graduates were randomly selected as the sample. First, employees were given questionnaires to collect the skills required for the accounting field, and then graduates of accounting programs were given them to gauge the development of those skills. It was discovered that graduates in accounting think they have mastered two thirds of the eighteen skills that workers feel are essential to the field. The last third of the necessary skills, which are IT skills, were not properly developed by them.

According to Keneley and Jackling's (2011) Australian research, graduates felt their accounting curriculum helped them develop a variety of cognitive talents, including the capacity for logical thought, problem-solving, and adaptability (the top three out of eleven). General cognitive skills scored higher than behavioural abilities, such as teamwork. Donelan and Reed (1992) conducted an earlier investigation, and the findings were likewise favourable. The accounting programme, according to more than two-thirds of 228 graduate

students, equipped them with broad skills such as creativity and independent thinking, as well as the ability to deal with confusing circumstances.

It can be seen from the above empirical studies that students do not perceive themselves to be professionally skilled, according to several pieces of research. Although some of the skills were developed within the programme, the majority of the students seem to agree that the accounting programme does not assist them in developing their professional skills. Therefore, assessing accounting students' level of professional skill development is essential.

Relationship Between Professional Competence Development and CGPA

Several scholars have investigated the relationship between students' CGPA and professional competence development. Tabassum, Akhter and Igbal (2020) examined the relationship between university students' social competency and academic achievement. The sample included 4708 people from various universities in Pakistan. Students' academic achievement was assessed using their CGPA, and data were analysed using percentages, mean comparison, Pearson correlation, t-test, and ANOVA. The perceived social competence scale, in the form of a checklist, was used to assess social competence. It was discovered that there was a perceived significant correlation between the social competence of students and their academic achievement. This means that boasting students' social competence had a greater influence on their academic performance.

Ismail and Ariff Khalid (2020) discovered a similar result. They investigated the relationship between students' CGPA and time management skills. 200 students from three faculties and corresponding departments at the Universiti Teknologi MARA Pahang Branch Raub Campus made up the

sample. Questionnaires were used to collect data, which was then analysed using Pearson's Moment Correlation, ANOVA, and t-test. The study discovered a substantial relationship between time management abilities and students' CGPA.

Shida, Abdullah and Ismail (2018) also found a similar result when they investigated the critical thinking disposition of Malaysian polytechnic students. 194 polytechnic students from the Department of Mechanical and Electrical Engineering took part in the study. To collect data, the engagement, maturity, and innovativeness (EMI) critical thinking disposition evaluation was applied, which was then analysed using SPSS version 21. The study found a significant relationship between critical thinking disposition and cumulative grade point average. Students who possess critical thinking skills appear to function well academically, as evidenced by their CGPA.

Nelson (2008) also conducted an earlier investigation and obtained the same results. He investigated the correlation between students' workplace readiness abilities and their CGPA in information technology and telecommunications. The study discovered a moderate correlation between workplace readiness skills and grade point averages. The association between students' grade point averages and their level of workplace preparation was clear but not very strong.

Noni and Abdullah (2018), on the other hand, found a different result. They examined critical thinking skills and their relationship to the CGPA. The sample consisted of 80 males and 21 females from two engineering departments at Malaysia's Ibrahim Sultan Polytechnic. The study employed the 60-item Malaysian Critical Thinking Skills instrument. SPSS 22.0 was used to analyse

the data. Among the various skills in the study, Spearman's Rho correlation analysis revealed no relationship between student accomplishment and CGPA.

This was supported by Zubairu et al. (2016) in their study. Their study examined the association between academic success and moral abilities with a focus on final-year accounting students at Malaysia's International Islamic University. The students' moral abilities were evaluated using the Muslim Accountant Moral Competency Test (MAMOC), a tool created in collaboration with Islamic accounting academics; their academic success was evaluated using their cumulative grade point averages (CGPAs). The study discovered a negative and insignificant association between these two factors, in contrast to the expected positive relationship.

Olatoye, Akintunde and Ogunsanya (2010) found a similar association between students' creativity and academic performance. Data on the creativity and CGPA scores of 235 randomly selected business administration students from Polytechnics in Nigeria's South Western States were collected using the Student CGPA Information Format (SCIF) and the Nicolas Holt Creativity Test (NHCT). The correlation between creativity and CGPA was very weak and insignificant. As a result, the students' CGPA decreases as their creativity improves (Olatoye et al., 2010).

The aforementioned studies demonstrate that the relationship between professional competence development and student CGPA yields varying results. While some researchers discovered a solid relationship between them, others discovered an insignificant one. Even when a relationship existed, it was either a weak, moderate, or strong connection. As a result, assessing the

relationship between accounting students' level of professional competence development and academic performance is prudent.

Moderation Effect of Gender

The moderating role of gender in the correlation between competences and performance has been the subject of several investigations. Gender and socioeconomic status (SES) were examined by Koyuncu, Bulus, and Firat (2022) as moderators of the association between reading performance and students' metacognitive abilities at the age of fifteen. The sample comprised 6890 Turkish students who took the PISA exam in 2018. The researchers used structural equation modelling to look for moderator effects across various groups depending on gender and socioeconomic status. After controlling other variables, they discovered that both gender and socioeconomic status significantly moderated the relationship between students' metacognitive skills and reading ability. In other words, the relationship between metacognitive abilities and reading success was gender- and socioeconomic background-dependent.

In their study, Somaa, Asghar, and Hamid (2021) found a comparable outcome through a meta-analysis investigating the moderating effects of age and gender on the association between emotional intelligence and academic achievement. The researchers employed the Robumeta package in the R program to conduct robust variance estimation (RVE) in a multilevel meta-analysis. By employing meta-regression and subgroup analysis, the researchers examined the influence of gender on the correlation between emotional intelligence and academic achievement. Their research showed that age did not have an impact on the relationship between emotional intelligence and academic

success, but gender did. That is, the connection between emotional intelligence and academic success was influenced by the gender of the students.

A study by Mahama et al. (2019) found the same thing when they looked at how gender affected the correlation between creative thought and doing well in English and maths in school. The Pearson Product-Moment Correlation and the Andrew F. Hayes Moderation Process were used to test two study theories. The test that was used to collect the information was the Kumar, Kemmler, and Holman (1997) creative styles questionnaire-revised and standardized-type test. The study found a strong link between being creative and doing well in school, but gender played a big role in how the link worked.

Ye, Posada, and Liu's (2018) investigation in China likewise found a comparable outcome. They particularly looked at any variations in the relationship between academic stress and academic self-efficacy between male and female students. 695 Chinese high school students (54 percent of whom were female) were included in the sample and were tested for academic stress and self-efficacy over the course of two academic years. The findings indicated a relationship between lower academic self-efficacy and greater levels of academic stress. The association between academic stress and self-efficacy was also shown to be modulated by gender, with female students showing a larger negative connection than male students.

The same result was also found by Zhang, Ren, and Deng (2020). Using a sample of 1082 elementary school students from Beijing, China, they looked at how gender influenced the correlation between creativity and performance in the classroom. The researchers used the Torrance Test of Creative Thinking Figural Form A to evaluate each student's level of originality. Academic

performance was determined using self-reported grades. The study discovered a substantial positive relationship between creativity and academic success. The researchers did, however, identify gender disparities in how certain components of creativity were associated with accomplishment.

However, a study conducted by Lindberg et al. (2010) unveiled a contrasting result. A meta-analysis was employed to examine gender disparities in existing studies on mathematics performance. 242 studies published between 1990 and 2007 comprised the study's sample. They discovered that males and females demonstrate similar performance in mathematics, with no meaningful gender differences found. The study found no evidence of significant gender differences in mathematical performance using both meta-analytic and national probability sample data, supporting gender similarity in math abilities.

According to the empirical evidence, gender is a significant moderator that commonly modifies the connection between skills and competencies and academic performance between males and girls. However, more investigation into the connections between gender, skills like metacognition and creativity, and subject-specific success is still required. Although gender appears to mitigate certain linkages between skill attainment and achievement, the correlations are complex. More research is necessary to determine when and how gender acts as a moderator to better understand how to assist students academically. As a result, assessing the moderating effect of gender on the relationship between accounting students' level of professional competence development and academic performance is prudent.

Relationship Between Technical Competence and Professional skills

Various scholars have tried to examine the relationship between technical competence and professional skills. When comparing two treatments for juvenile anxiety, modular cognitive behavioural therapy (CBT) and traditional manual CBT, Cecilione et al. (2021) looked at the connection between therapists' technical competence (how effectively they delivered particular CBT procedures) and global competence (general therapeutic abilities like empathy and alliance). 138 kids and teens (7–14) with main anxiety disorders were treated with either modular or traditional CBT. It was observed that therapists providing modular CBT had greater levels of technical skill than those providing conventional manual CBT. However, there was no distinction between the two groups in terms of global competency. The ratings for technical competence and global competence were shown to have a little positive association. Thus, therapists who scored higher on technical competence also scored higher on global competence, but the correlation was weak.

Passow and Passow (2017) similarly found a favourable correlation in their research of engineering students in 2017. What Competencies Should Undergraduate Engineering Programmes Emphasise? was the topic of their systematic review. The study sampled over 300 undergraduates majoring in engineering. After completing technical group projects, students reported improvements in their oral, written, visual, and aural communication abilities. For their projects to be successful, the students had to successfully convey intricate pieces of technical knowledge. Students have more chances to practice their communication skills in technical classes, according to the data. This

indicated that students' communication abilities improved alongside their technical expertise as they worked on team-based projects.

Dunne and Rawlins (2000) made the same finding. Their research focused on how to better connect business and academia by teaching faculty how to foster student collaboration. The survey was given to students after they had completed a semester-long course and a collaborative project. The sample consisted of 177 business students. After working on a group project in an IT class, the business major saw an improvement in her ability to communicate with others. Students said they become better at communicating in writing, speaking publicly, and interacting with others. The technical expertise students earned during the project bolstered their ability to articulate complex ideas. This is evidence that studying a technical subject may help one improve their communication abilities.

Okunuga and Ajeyalemi's (2018) research, however, reached a different conclusion. They investigated the link between what students learn in their first year of chemistry at a Nigerian university and their chances of finding work in a chemical-related field after graduation. A survey questionnaire was sent out to 120 chemists working in 20 chemical-based firms to get their feedback on how well the chemistry curriculum met the demands of the chemical sector. The data was evaluated by means and t-tests for matched samples. The findings reveal that Nigerian universities' chemistry curricula meet the theoretical knowledge needs of chemical-based businesses, but they fail to meet the minimum skill requirements of these sectors. While chemistry majors have a deeper understanding of the field, their practical abilities fall short of what employers in the chemical sector need. This indicates that there was no

correlation between students' increased chemical knowledge and their enhanced competence levels.

The correlation between technical proficiency and professional skills seems to possess intricate and subtle characteristics. Research has shown varying results on the relationship between enhanced technical knowledge and skills and enhanced professional qualities such as communication. Some studies have identified a modest positive correlation, while others have failed to establish any association. In general, the research findings indicate that the development of technical competence does not inherently or explicitly result in enhanced professional skills. Nevertheless, technical education provides opportunities for the application and refinement of professional skills through endeavours such as collaborative projects. The cultivation of technical competence has the potential to enhance the expansion of professional skills within certain contexts. Therefore, assessing the relationship between accounting students' level of technical competence and professional skill development is necessary.

Summary of Literature Review

Theoretical review, conceptual review, conceptual framework, and empirical review were the constituents of this chapter. Some of the concepts reviewed included accounting education in Ghana, the purpose of accounting education, the concept of professional competence as defined by the international education standard, professional competence development, and the role of universities in professional competence development. The consensus theory and the human capital theory were reviewed.

The two theories assume that students must gain the necessary professional competencies to thrive in their employment through higher education. This supports the IAESB's goal of introducing the International Education Standard. The standard stipulates that education is an organized process intended for acquiring and developing knowledge, skills, and abilities for the individual; it is a common process, but not only practised in the field of education.

The empirical review also identified several inconsistencies that require attention. While some studies revealed that students have developed the needed professional competencies through higher education, others also revealed that the students have not been able to develop the needed professional competencies through higher education. Furthermore, the relationship between professional competence development and academic performance also elicited varying responses. In addition, gender moderating the relationship also produced varied responses from different studies. This indicates that the debate about whether higher education fully prepares qualified students remains unclear. The study therefore sought to address this gap and assess the relationship between accounting students' level of professional competence development and academic performance, with gender as a moderating variable.

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter elaborates on the methods for gathering data. It explains the research design, study location, population, sampling strategy, data gathering instrument and procedure, as well as data processing and analysis.

Research Design

According to McCombes (2021), research design is the strategy that assists the researcher in answering a series of questions. It is the framework and approach of an inquiry into a research topic that has been concaved to ensure the research questions are answered and that variances are managed. Therefore, the study design defines how the researcher attempts to accomplish the main research purpose.

The study employed the descriptive cross-sectional survey method. According to Aggarwal (2008), a descriptive survey focuses on providing answers to questions such as who, how, what, why, which, when, and how much. This was chosen as the preferred design for the study. Also, Aggarwal claimed that this kind of design focuses on the acquisition of data regarding prevailing circumstances to describe and analyse them. It allows the researcher to gain significant information about a phenomenon's current condition. The descriptive cross-sectional survey design, according to Creswell and Creswell (2017), entails gathering information from a cohort of people to characterise their traits, actions, or opinions. This might aid in giving a thorough knowledge of how the student's competence is improving. Furthermore, it can be employed with greater assurance concerning certain topics of special interest or

importance to the researcher. The descriptive design may also be used to ask specific follow-up questions and clarify unclear issues (Cohen, Manion & Morrison, 2007).

Despite these advantages, Creswell and Creswell (2017) asserted that errors and shortcomings in educational research arise from various sources, including the initial identification and definition of problems, demographic and sample selection, item construction, and data processing. Descriptive analysis usually limits common practice to a unique group of observers and does not make judgements beyond that group (Gall, Gall & Borg, 2007). As a result, descriptive surveys focus on determining a population's position about specific characteristics. Cohen et al. (2007) asserted that the precise wording of questions or claims in descriptive surveys makes it challenging to confirm significant differences in respondents' answers. Another concern with descriptive surveys is that they can yield unreliable answers because they investigate confidential, intimate, and emotional topics about which respondents may not be completely honest.

The study deemed the descriptive cross-sectional survey methodology the best for assessing the relationship between accounting students' level of professional competence development and academic performance, with gender serving as a moderating variable, despite these drawbacks. This is because specific information on the traits, actions, and attitudes of respondents may be collected using the descriptive survey methodology. This made it easier to have a thorough knowledge of how the accounting students' professional competence was developing. Additionally, it enabled the use of a range of data-gathering

techniques, such as questionnaires, to provide a clearer understanding of the level of accounting students' professional competence development.

Additionally, statistical techniques examined the quantitative data. This made it possible to spot sequences and characteristics in the data, which shed light on how the students' professional competence was developing. The instrument was administered to the level 400 accounting education students within the Department of Business and Social Sciences Education.

Study Area

Cape Coast University was the area chosen for the research. As a university college connected to the University of Ghana, Legon, Cape Coast University was founded in the tenth month of 1962. To address the personnel requirements of the country's hastened education programme, the university was founded with the master purpose of producing certified instructors for second-cycle schools and the Education Ministry. Midway through the 1990s, this initial commitment was altered, and as a result, the university expanded and diversified its degree offerings to meet shifting demands (Devex, 2023).

The university is currently made up of five colleges, which include Agriculture and Natural Sciences, Humanities and Legal Studies, Health and Allied Sciences, Education Studies, and Distance Education. One of the newly established faculties at the College of Education Studies is the Faculty of Humanities and Social Sciences Education. At the moment, the Department of Arts Education and the Department of Business and Social Sciences Education are the two academic departments.

The Department of Business and Social Sciences Education offers programmes that range from undergraduate to postgraduate. Bachelor of

Education in Accounting is one of the programmes that is being run at the undergraduate level. The programme is a four-year degree programme with the award of a degree certificate at the end of the fourth year after passing all the necessary courses. Participants were Bachelor of Education in Accounting students.

Population

Population, as defined by Akinade and Owolabi (2009), refers to the complete collection of observations from which a sample is selected. According to Popoola (2011), it can be defined as a collection of elements or objects that are part of a study. According to Creswell and Creswell (2017), a population is a group of humans or objects that a researcher aims to study and draw conclusions from. The study population consisted of final year accounting students from the University of Cape Coast. The IAESB has established rules for the education of professional accountants and individuals desiring to become accountants. A potential accountant is defined as an individual who has initiated an accounting education as part of IPD, which they can pursue through higher institutions. Accounting students met the criteria and were therefore selected as the target population.

Accounting students within the University of Cape Coast can be categorised into B.Com accounting students and B.Ed. accounting students. The target population was all final year accounting students, including both B.Com and B.Ed. accounting students. However, the accessible population consisted of final year B.Ed. accounting students in the Department of Business and Social Sciences education. Therefore, final year B.Ed. accounting students made up

the study population. The total number of final year B.Ed. accounting students was 122.

Sample and Sampling Procedures

According to Cohen et al. (2007), a sample can be defined as the learning process that is based on the population of the study. Sampling is often feasible and enables the quick and cost-effective collection of data. Purposive sampling, a non-probability sampling technique, was utilised to select final-year Bachelor of Education accounting students. As Creswell and Creswell (2017) explained, "purposive sampling is used to select individuals and sites for study because they can purposefully inform an understanding of the research problem and central phenomenon in the study" (p. 156). The rationale behind this choice was to ensure that the participants had sufficient knowledge and experience in their accounting studies to provide meaningful insights into the research problem.

To further strengthen the sampling process, simple random sampling, a probability sampling technique, was deployed to select 122 level 400 bachelor of education accounting students. Simple random sampling is a method where "each member of the population has an equal chance of being selected" (Creswell & Creswell, 2017, p. 150). This sampling approach helped to reduce bias and increase the representativeness of the sample, allowing the researcher to make more generalizable inferences about the larger population of accounting students.

Cohen et al. (2007) defined random sampling as the process of selecting a sample in which each member of the population has an equal and independent chance of selection. The researcher utilised simple random sampling to provide each level 400 bachelor of education accounting student with an equal and

unbiased opportunity to be part of the study, thereby improving the validity and reliability of the results. By combining purposive sampling with simple random sampling, the researcher achieved a balance between selecting informed and pertinent final-year students and reducing biases by randomly selecting a portion of those respondents. Below is the distribution of the sample.

Table 2: Sample Size Distribution

Gender	Sample
Male	82
Female	40
Total	122

Source: Field work, 2023

Data Collection Instrument

The research utilised both primary and secondary data. Primary information was gathered utilising questionnaires (Appendix A) administered to the accounting students while the secondary data (students' CGPA) was derived from the University's Academic Records.

The reason why students' CGPA was used as secondary data is that even though examinations may not be an accurate assessment of knowledge or educational abilities (Newell-Jones, Massey & Osborne, 2005), according to Hashim (2012), employers utilise academic achievement, such as cumulative grade point average, to screen fresh graduates for interviews. This suggests that, while companies desire graduates with the necessary professional competence, CGPA is used when sieving fresh graduates for interviews. Thus, while graduates are striving to develop their professional competence, they must simultaneously strive to improve their academic performance after graduation. Therefore, using CGPA as secondary data helped in determining whether

students have been able to attain higher academic performance while developing their professional competencies.

A closed-ended questionnaire was the primary technique for assembling the primary data. Questionnaire was chosen for diverse reasons: it is effective when assessing and obtaining other relevant content from respondents; it is cost-effective; it is simple to perform; it can be administered to groups; it can reveal information on the respondents' internal meanings and thinking capacity; the purported anonymity of responders is probably high, encouraging free and honest involvement; Closed-ended questions can give a researcher with precise information; they can also be simply evaluated; and they are typically viewed as valuable for both exploratory and confirmatory reasons (Kothari, 2004).

However, according to Bowling (2005), there are several disadvantages to the use of questionnaires. The responses may be discriminating and incomplete; respondents may omit essential information, and open-ended details might signal disparities in written and verbal abilities. Overall, questionnaires were the most appropriate instrument to suit the study's needs. This is due to the number of respondents, the complicated issues to be addressed, the time allotted, and the extensive analysis that follows.

The questionnaire was constructed based on the review of literature and the International Education Standards (IES). The questionnaire item format was based on the IES 2 and IES 3, which stipulate the specific competence areas with their degree of proficiency. The questionnaire was in three sections: Section A, Section B, and Section C. Section A sought responses on the demographic characteristics which consisted of two items: gender and age. Section B elicited responses on accounting students' level of technical

competence development. It was made up of eleven (11) subject areas stipulated by the IAESB. Section C elicited responses on accounting students' level of professional skills development and it consisted of 12 items. In all the questionnaire had 25 items. Sections B and C were assessed on a 5-point Likert scale with items ranging from no development to full development where respondents were to tick the most appropriate level for each subject and statement. The learning outcomes listed in the standards functioned as the basis for the Section B and C items.

Test for Validity and Reliability

Thirteen (13) level 400 Bachelor of Education (accounting) students piloted the questionnaire. It consisted of nine males and four females. This consisted of 10% of the actual sample size that was involved in the study. This was in line with Hertzog (2008), who suggested that a pilot test should typically include a sample size of 10 to 40 participants, which is usually deemed suitable for most investigations that use quantitative methods.

The responses to the pilot test were received and checked to make sure they were complete, coded, and analysed using the computer programme Statistical Package for Social Sciences (SPSS Version 22). The reliability of the instrument was assessed, and the alpha value obtained was .749 (no of items = 25). Cohen, Manion and Morrison (2010) deemed this type of reliability coefficient high and appropriate, indicating the instrument was reliable for data collection in the study. To determine the reliability of each sub-scale on the questionnaire, Cronbach's alpha was computed. The subscales in question were related to the development of technical competence and the development of professional skills. Table 3 shows the reliability coefficients for each subscale.

Table 3: Reliability Coefficient of the Sub-Scales on the Questionnaire

Sub-scale	Reliability Coefficient
Development of technical competence	.840 (No of items = 11)
Development of professional skills	.791 (No of items = 12)
Reliability coefficient for sub-scales	.832 (No of items = 23)

Source: Field work, 2023

Both the face and content validity were determined by the researcher's supervisors. The supervisors judged the questionnaire to be valid in terms of face and content validity, adhering to the standards issued by the IAESB. Reliability was also conducted after the main data collection process. The reliability coefficient was .923 for the data collection instrument. This implied that the items were sufficient enough to trust the results.

The professional competencies that were assessed were also subjected to a normality test. This was to determine which type of test statistic to use in data analysis. For data to be normally distributed, the mean, median, and mode are expected to be equal or approximately equal when descriptive statistics are used. The data obtained on professional competence had a mean of 3.98, a median of 4.00, and a mode of 3.87. This shows that the mean, the median, and the mode are approximately equal; therefore, descriptive statistics can be used in the data analysis.

The quantile-quantile plot (Q-Q plot) was generated to confirm the normality implied by the mean, median, and mode. This plot was designed to give a visual display of the observed data relative to the predicted normal diagonal distribution line. Figure 2 displays the normality plot for the assessed professional competence.

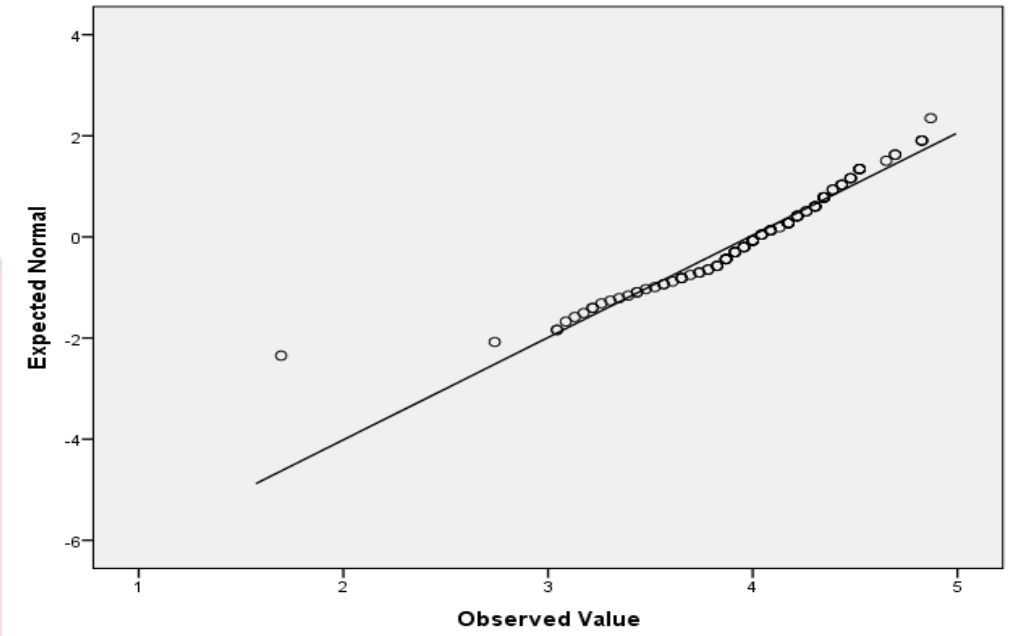

Figure 2: Q-Q plot of Professional Competence

Source: Field work, 2023

According to the normal Q-Q plot above, the observed scores were near the diagonal sloping line, with minor defects at the tails. This showed that the variable was normally distributed (Freund, 1992).

Data Collection Procedures

The introductory letter of the research (Appendix B) was issued by the Department of Business and Social Sciences Education. Prior to obtaining the introduction letter, the work was submitted to the Institutional Review Board at the University of Cape Coast for approval of Ethical Clearance. An Ethical Clearance Letter (Appendix C) was subsequently acquired. Due to the demanding task of distributing questionnaires to students, the researcher sought the assistance of two trained field assistants to help collect data for the study. The researcher administered the instrument with the assistance by trained research assistants. This helped to make clarifications of unclear questions. To

complete the survey before lectures, approval from the lecturers was requested. The consent was requested a week or two and this aided the lecturer to pre-inform the students about the exercise. The respondents' privacy and confidentiality were guaranteed. The researcher explained to the respondents why they should participate in the activity and encouraged them to give honest answers. The researcher also ensured respondents that their replies were used strictly for scholarly purposes. After twenty minutes given to the respondents, the researcher together with the research assistants collected the completed questionnaire. Respondents whose questionnaires were not ready were given an extra five minutes to make completion. In all 105 questionnaires were collected which gave a response rate of 86.06%. The return rate of the questionnaire is shown in table 4.

Table 4: Return rate of the Questionnaire

Gender	Instrument Administered	Returned Rate
Male	82	70 (85.4%)
Female	40	35 (87.5%)
Total	122	105

Field work, 2023

Data Processing and Analysis

The questionnaires were collected from the field and individually reviewed for completeness. The reliability and validity were assessed and determined. The data was analysed with the Statistical Package for Social Sciences (SPSS) software and Smart PLS 3. Data were analysed using both descriptive and inferential statistical tests (frequency, mean, standard deviation,

and Pearson's Product Moment Coefficient test). The data results were evaluated in accordance with the study's research questions.

Research questions one and two were scored on a five-point Likert scale and categorised as "no development = 1," "insignificant development = 2," "partial development = 3," "significant development = 4," and "full development = 5." The data was then examined using mean and standard deviation. The mean was used to measure students' level of development on each item on the questionnaire, while the standard deviation was utilised to examine answer consistency.

The Partial Least Square Structural Equation Model (PLS-SEM) with Smart PLS software was used to determine the relationship between accounting students' level of professional competence development and academic performance, as well as the moderating effect of gender on the relationship between these variables. Tables were used to present the research results. Table 5 demonstrates how the data for the study questions/hypotheses were analysed.

Table 5: Data Analysis Plan

Research Questions/ Hypotheses	Data Analysis Tool
What is the level of accounting students' technical competence development?	Mean and Standard Deviation
What is the level of accounting students' professional skills development?	Mean and Standard Deviation
What is the relationship between accounting students' level of professional competence development and their CGPA?	PLS-SEM

Table 5 continue

What is the moderating effect of gender on the relationship between accounting students' level of professional competence development and their CGPA?	PLS-SEM
There is no statistically significant relationship between accounting students' level of technical competence and professional skills development.	PLS-SEM
There is no statistically significant difference between the gender of accounting students and the level of professional competence development	Independent Sample T-test

Source: Researcher's construct

Ethical Considerations

The researcher took the following actions to guard and respect the rights of the study participants: The accounting students received a guarantee that the study would not be included in their academic assignments, which would affect their assessment. The data collection instrument employed codes instead of names to protect the respondents' anonymity. Respondents were contacted individually, and each respondent received thorough information about the research verbally. The respondents were also allowed to inquire about the study and request clarification. It was made clear to the individuals who took part in the survey that their involvement in the investigation was fully optional and that nobody was mandated to take part.

Chapter Summary

A descriptive cross-sectional survey research method was used for this study. Data collection, processing, and analysis were all covered in this section, along with the research methodology, population, sample, and sampling method. A questionnaire with no room for free-form responses was utilized. The instrument's biggest shortcoming was that it did not allow for respondent autonomy in the form of free-form responses to questions.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

The data are showcased and analyzed in this chapter. The study gathered both primary and secondary data. The primary data was gained by administering questionnaires to the students, while the secondary data was obtained from the student's academic records. The students were provided with one hundred and twenty-two (122) questionnaires, of which 105 were retrieved, representing 86.06% of the total responses. Descriptive and inferential statistics were implemented to analyse the data. The results were presented and the findings were discussed in the context of the research questions and hypotheses of the study.

Demographic Characteristics of Respondents

This section displays the respondents' demographic information. This covers gender and age. The characteristics of the respondents provided an in-depth insight into the category of students who participated in the research as well as their maturity level. Table 6 displays the findings of the students' background information.

Table 6: Accounting Students' Characteristics

Variable	Subscale	Freq. N = 105	%
Gender	Male	70	66.7
	Female	35	33.3
Age	20-22 years	21	20.0
	23-25 years	50	47.6
	26-28 years	20	19.0
	Above 28 years	14	13.3

Source: Field work, 2023

The data in Table 6 demonstrates that male students (66.7%) dominated the study. This dominance might be a signal that male students at UCC dominate female students, which is a common occurrence in Ghana's educational institutions. According to the UCC summary statistics for 2022 published on the university's website, the number of male students admitted constituted 52.40% of the total enrolment number of 78485. This supports the idea that male students dominate female students. This inequality can be caused by a variety of factors, which can include cultural beliefs and practices and poverty. Some communities in Ghana continue to reinforce gender stereotypes and limit educational opportunities for girls due to their cultural beliefs. For example, girls are expected to focus on household chores and childcare over their education, coupled with early marriages and pregnancy.

These cultural beliefs create some significant barriers to girls' education, particularly in the rural areas of Ghana. Poverty is another cause of gender inequality in the education system. Families who are unable to afford school

fees tend to prioritise a boy's education over a girl. In recent years, the government of Ghana has tried to implement a variety of measures that can help curb this inequality. Some of these measures include the free SHS education system, the adoption of affirmative action policies that aim to increase female representation in various sectors of society, and the implementation of community sensitization programmes by various NGOs and civil societies aimed at creating awareness of the importance of educating the girl child. Therefore, the dominance of male students in the study may significantly influence the research findings.

On age, the majority (n = 50, 47.6%) of the respondents were between the ages of 23 and 25, followed by those between the ages of 20 and 22 (n = 21, 20.0%) and 26 to 28 (n = 20, 19.0%). Only 14 students were over 28 years old. This demonstrates that the students' levels of maturity varied and that they may have had different learning experiences. As a result, each age group will have a unique perspective on their level of professional competence development.

Discussion of Results

Before proceeding to analyze the study's data, a decisive rule for the means and standard deviation that was employed for the analysis was created. Data for research questions one and two were collected on a 5-point Likert scale ranging from "1 as no development, 2 as insignificant development, 3 as partial development, 4 as significant development, and 5 as full development". The correlation threshold that was used to analyze research questions three, four, and hypothesis one is shown in Table 7.

Table 7: Correlation Threshold

Correlation Coefficient (Absolute value)	Interpretation
Up to 0.2	Very weak correlation
Up to 0.5	Weak correlation
Up to 0.7	Moderate correlation
Up to 0.9	High correlation
Above 0.9	Very high correlation
Equal to 1	Perfect correlation

Source: Researcher's Construct

Research Question One: What is the level of Accounting students' technical competence development?

This research question focused on assessing the level of accounting students' technical competence development in the eleven subject areas stipulated by the International Education Standard that measure technical competence. Students were asked to assess themselves on a Likert scale of 1 (no development) to 5 (full development) on how the accounting education programme has equipped them to be competent in those subject areas. The responses were analysed using the mean and standard deviation. The mean was used to ascertain the level of technical competence development, while the standard deviation was used to provide information on the congruence of the responses. The results are displayed in Table 8.

Table 8: Level of Accounting Students' Technical Competence Development

Subject Area	Mean	SD	Mean Interpretation
Taxation	4.08	.80	Significant development
Management Accounting	4.08	.69	Significant development
Economics	4.08	.84	Significant development
Business laws and regulations	4.05	.79	Significant development
Financial Accounting and Reporting	4.02	.77	Significant development
Finance and Financial Management	3.94	.71	Significant development
Business and organisational environment	3.85	.87	Significant development
Business strategy and management	3.73	.93	Significant development
Audit and assurance	3.72	.81	Significant development
Information Technology	3.68	1.02	Significant development
Governance, risk management, and internal control	3.51	.88	Significant development
Average Mean/ SD	**3.89**	**.83**	Significant development

Source: Field work, 2023

Table 8 displays the results of accounting students' technical competence development in various topic areas. The highest mean score was 4.08, earned by taxation, management accounting, and economics, with SDs of 0.80, 0.69, and 0.84, respectively. This shows that the students have developed significant technical competence in taxation, management accounting, and

economics. This suggests that they are up-to-date on all filing standards and national tax compliance since they are knowledgeable about taxation. Additionally, they are capable of preparing direct and indirect taxes for both individuals and corporations, and they are well-versed in the different problems related to non-compliance with tax by neither individuals nor organisations.

Students with significant development in management accounting suggest that they can use the right procedures to assess costs, make wise judgements, and provide reports to back up those decisions. Significant developments in economics, suggest that the students have a solid understanding of the principles of micro- and macroeconomics.

With a mean of 4.05 and a standard deviation of 0.79, the students have made significant developments in business laws and regulations. This demonstrates that students have an appropriate understanding of the rules and laws binding various types of entities, as well as an in-depth knowledge of the rules governing the setting in which accountants work. Students also have significant development in financial reporting and accounting. They can prepare financial statements using a variety of accounting principles and standards, and they are well-versed in report interpretations.

Taking a critical look at Table 8, the students have significant developments in the following subject areas: finance and financial management (M = 3.94, SD = 0.72), business and organisation environment (M = 3.85, SD = 0.87), business strategy and management (M = 3.72, SD = 0.93), audit and assurance (M = 3.68, SD = 1.02), information technology (M = 3.68, SD = 1.02) and government, risk management, and internal control (M = 3.51, SD = 0.89).

Students having significant development in finance and financial management means they can assess cash flows, apply capital budgeting strategies to evaluate capital investment decisions and use the right procedures to estimate a corporation's cost of capital. A solid understanding of globalisation, including its significance and the numerous contexts that also provide a challenge to international commerce, is a prerequisite for developing competence in the business and organisational environment. Additionally, a significant development in business strategy and management entails that the students have learned about the various organisational designs, the numerous variables that affect business strategies, and the methods that may be employed to carry out a corporation's plans.

The students have made significant developments in audit and assurance, demonstrating their ability to conduct a financial statement audit and their understanding of the numerous risks and procedures involved. Additionally, they have made significant developments in their understanding of the many good governance concepts as well as how to evaluate organisational risk and internal controls. The students have also made significant developments in the field of information technology. Even though the responses from information technology differ from one another per standard deviation, they believed they had developed subject-matter expertise.

The overall mean average indicates that accounting students have significantly developed their technical competence in a range of academic areas. This outcome demonstrates that the university's accounting education programme meets the IES 2 criteria. This suggests that the institution has designed the curriculum in a way that will enable students to completely acquire

the different technical competencies outlined in the standard. This supports the conclusions of research by Razak (2016), who evaluated the level of Saudi institutions' adherence to International Accounting Education Standards (IAES) in curriculum development. According to the report, the majority of Saudi Arabian universities meet the IES standards for the technical information technology unit, organisational and business professional information units, finance and associated technical information units, and accounting units.

This study's findings on significant technical competence development also support research by Sithole (2015), who examined the competencies of new accounting graduates as well as the knowledge and skills that businesses require in employees. The survey found that the various employers believed that the accounting graduates were exceptionally skilled in measuring, financial reporting, and research. Additionally, the study revealed that students had more training in word processing and communications software. Even though employers anticipate greater professional skills from students, the findings indicated that the accounting curriculum in schools helps students develop most of their technical competence.

This study’s findings, however, appear to contradict the findings of Frijat and Shbeilat (2016); and Alzu'bi (2014). Frijat and Shbeilat (2016) and Alzu'bi (2014) discovered that the universities' failure to comply with the IES2 prevented the accounting programme from providing students with the necessary technical capabilities. This study also yielded different results from the research done by Chen et al. (2009). Chen et al. sought to identify the most important information technology proficiency attained by accounting graduates. Chen et al. discovered that the majority of the different employers agreed that

students had insufficient information technology competence. In conclusion, accounting students have significant technical competence in various content areas.

Research Question Two: What is the level of Accounting students' professional skills development?

The goal of this research question was to assess the level of accounting students' professional skill development. Professional skills have been categorised into four levels according to the standard, and from the four levels, 12 skill sets were deployed to assess the student's level of professional skills development. This was assessed on a Likert scale of 1 (no development) to 5 (full development). Table 9 displays the results of the responses.

Table 9: Level of Accounting Students' Professional Skills Development

Abilities	Mean	SD	Mean Interpretation
Be able to work with others	4.28	.78	Significant development
Apply leadership skills to influence others toward organisational goals	4.21	.65	Significant development
Communicate clearly and concisely both vocally and in writing	4.20	.66	Significant development
Manage time and resources to achieve personal commitments	4.20	.64	Significant development
Anticipate challenges and plan potential solutions	4.08	.77	Significant development

Table 9 Continue

Apply reasoning, critical analysis, and innovative thinking to solve problems	4.08	.69	Significant development
Execute tasks by following desired procedures	4.07	.67	Significant development
Demonstrate a commitment to lifelong learning	4.05	.71	Significant development
Apply delegation skills to deliver assignments	4.03	.77	Significant development
Use negotiation skills to reach solutions and agreements	3.99	.74	Significant development
Evaluate information from a variety of sources and perspectives through research, analysis, and integration	3.87	.69	Significant development
Interact with experts to lessen or resolve disputes	3.83	.77	Significant development
Average Mean/SD	**4.07**	**.71**	Significant development

Source: Field work, 2023

Table 9 shows that the first skill with the highest mean was the ability to work with others. This indicates that the students have made significant development in their ability to work with others. Teamwork is one of the qualities that is required wherever one finds himself or herself. According to Ghani, Rappa and Gunardi (2018), companies today view teamwork as a vital

ability since it allows students to cooperate effortlessly with individuals from interdisciplinary and cross-functional sectors. This makes achieving the organisation's goals under the present difficult market conditions simple. Furthermore, teamwork has been shown in accounting practice to contribute to successful customer interactions as well as trust-building and performance results (Tempone et al., 2012). As a result, acquiring this skill can help students have a better career, no matter where they end up.

With a mean and standard deviation of 4.21 and 0.65, respectively, students have significant development in the application of leadership skills. Having leadership skills implies that they can manage an organization or any situation in which they find themselves. They will be capable of demonstrating confidence, teamwork ability, and initiative if they have leadership skills. Accounting students, according to Müller and Turner (2007), must be capable of inspiring and inciting team members to concentrate on attaining objectives, accepting responsibility for actions, and enabling the required changes to bring about progress. All of this is possible if one exhibits leadership abilities. Therefore, honing this skill will enable them to actively participate in managing the company where they work.

Time and resource management, as well as the ability to communicate, had a mean of 4.20 and standard deviations of 0.66 and 0.64, respectively. This means that the students have made significant development in these skills. An essential talent in this modern age is communication. One of the top skills that employers look for in accounting students before they enter the field, according to Kavanagh and Drennan (2008), is communication. Tysiac and Drew (2018) advanced this point by stating that communication is a crucial skill that

accounting students need to possess to tackle the difficulties of technological innovation. Technology has replaced ordinary accounting chores, so accountants should focus more on providing advisory and consulting services. The skill to communicate with clients to advise, consult, and suggest a course of action is something that accounting students must develop.

Students having significant development in time management implies that they are well-disciplined and self-motivated. This suggests that they are typically good at evaluating the importance and urgency of tasks, determining which activities are most valuable to spend time on, and making trade-offs when necessary. Furthermore, the students' commitment to developing not just their time management skills but also their resource management abilities implies that they can effectively plan, allocate, monitor, and optimise the utilisation of various resources efficiently and productively. Managing resources entails ensuring that no waste causes the business or person to lose money. When combined, significant development in the ability to manage time and resources will help students gain the trust of their employers while also elevating them above their counterparts.

Table 9 also revealed that the students have significant development in the ability to anticipate challenges and plan potential solutions and the ability to apply reasoning, critical analysis, and innovative thinking to solve problems. These abilities had the same mean of 4.08 and standard deviations of 0.79 and 0.69, respectively. These two abilities complement each other. Anticipating challenges and planning solutions will require the application of critical analysis and innovative thinking. This ability is required in all aspects of human life. Individuals with these talents may make well-informed decisions that benefit

the company. According to Kavanagh and Drennan (2008), critical thinking and problem-solving skills may be used to make students more employable in tough career-related situations. Students having significant development implies that they have increased readiness to face complex situations with composure and skill. This suggests that the students have a strong desire for continuous learning and self-improvement, always seeking to acquire new information and effectively adjust to changing circumstances. This implies that developing these skills will make accounting students more critical in their assessment of situations, thereby increasing their productivity.

Additionally, with a mean score of 4.07 and a standard deviation of 0.67, the students have significantly developed the ability to execute and perform tasks by following desired processes. Being able to carry out tasks following the methods specified has to do with discipline. This means that the students have learned to discipline themselves in any task they undertake.

Table 9 also shows that students have significant development in demonstrating a commitment to lifelong learning (M = 4.05, SD = 0.71). This suggests they have developed the capacity to encourage themselves to learn on their own. The capacity to self-learn is one of the most important aspects of the accounting profession. The reason is that the technical demands of an accountant are frequently altered as new technical regulations and suggestions emerge. Accountants must increase their ability to adapt to position changes as they advance in their careers, in addition to learning new legislation. Changes in business procedures or professional and career changes may cause the accountant's role to shift. This suggests that accountants encounter a variety of tasks upon qualification and, consequently, must acquire the specific knowledge

necessary for each new role they undertake. As a result, their ability to demonstrate a commitment to continuing learning will help them achieve this goal.

The students also have significant development in the following skills: the ability to apply delegation skills to deliver assignments (M = 4.03, SD = 0.77); the ability to use negotiation skills to reach solutions (M = 3.99, SD = 0.74); the ability to evaluate information from varied sources (M = 3.87, SD = 0.69); and the ability to interact with experts to resolve disputes (M = 3.83, SD = 0.77).

Delegation is critical for a multitude of reasons. As a leader, you cannot accomplish everything on your own. Delegating gives your subordinates more control, fosters confidence, and supports professional development. It also instructs the leader on how to choose the most qualified and prepared person to execute jobs or projects. Delegation can also show that you value your subordinates' skills and trust in their judgment. It also allows your employees to discover new skills and attain expertise, equipping them with more responsibility in the future. Therefore, acknowledging that they have acquired these skills will benefit the students' careers.

The importance of reaching an agreement through negotiation cannot be overstated. The ability to negotiate is essential for rising in one's career, resolving differences of opinion, and adding value to contracts. When differences of opinion arise in personal or professional relationships, the temptation to avoid confrontation to preserve the status quo is strong. Nonetheless, awful disagreements may be turned into productive conversations while sustaining good ties. One cannot overstate the wealth of negotiation skills

in these circumstances. As a result, developing this skill will assist students in maintaining positive relationships both personally and within any organization in which they find themselves.

According to Table 9, the average mean of the various skills that were assessed to determine the accounting students' level of professional skill development was 4.07. This indicates that accounting students have significant professional skills development after going through the accounting education programme. This suggests that they have developed essential professional skills such as teamwork, leadership, communication, critical thinking, problem-solving, task execution, lifelong learning, delegation, negotiation, information evaluation, and dispute resolution. This study finding is well grounded in literature, as many scholars (Kwarteng & Mensah, 2022; Keneley & Jackling, 2011; Donelan & Reed, 1992) contend that higher education programmes have been able to equip students with essential professional skills. This shows that the accounting programme being run by the university adheres to IES 3, which talks about professional skills.

However, other studies (Hakim, 2016; Douglas & Gammie, 2019) found that students have not been able to develop the professional skills required. The enormous evidence from the literature, including this study, that students have significant development in professional skills cannot be underestimated in establishing that students have essential professional skills through higher education. Findings from this study support the ongoing debate about whether higher education institutions are equipping students with the required professional skills.

The purpose of research questions one and two was to assess the variables used to determine the level of accounting students' professional competence development. With the average mean of research question one being 3.89 and the average mean of research question two being 4.07, it can be said that accounting students have significant development in professional competence. This implies that the students have been able to develop both technical competence and professional skills through the accounting education programme. This implies that the university's accounting education programme fully complies with the International Education Standard (IES). The university has structured the accounting education programme to assist students in enhancing their professional competence. This study's findings add to existing evidence in the literature (Mameche, Omri & Hassine, 2020) that argues that higher educational institutions have been able to equip students with the needed professional competencies.

Research Question Three: What is the relationship between accounting students' level of professional competence development and their CGPA?

This research question was focused on determining whether there is any relationship between accounting students' level of professional competence development and their CGPA. This was to determine whether the students have been able to improve their performance as they have also developed professional competence. The CGPA of students was obtained from the student records of the University of Cape Coast after going through the needed protocols. The Smart PLS 3 was used to determine the results. The results are displayed in Table 10 and Figure 3.

Table 10: Relationship between Accounting Students' Level of Professional Competence Development and their CGPA

Construct	Beta (β)	SD	T-stat	P-Value	VIF	R^2	F^2
PC-> CGPA	0.284	0.167	1.701	0.090	1.000	0.080	0.087

Source: Field work, 2023

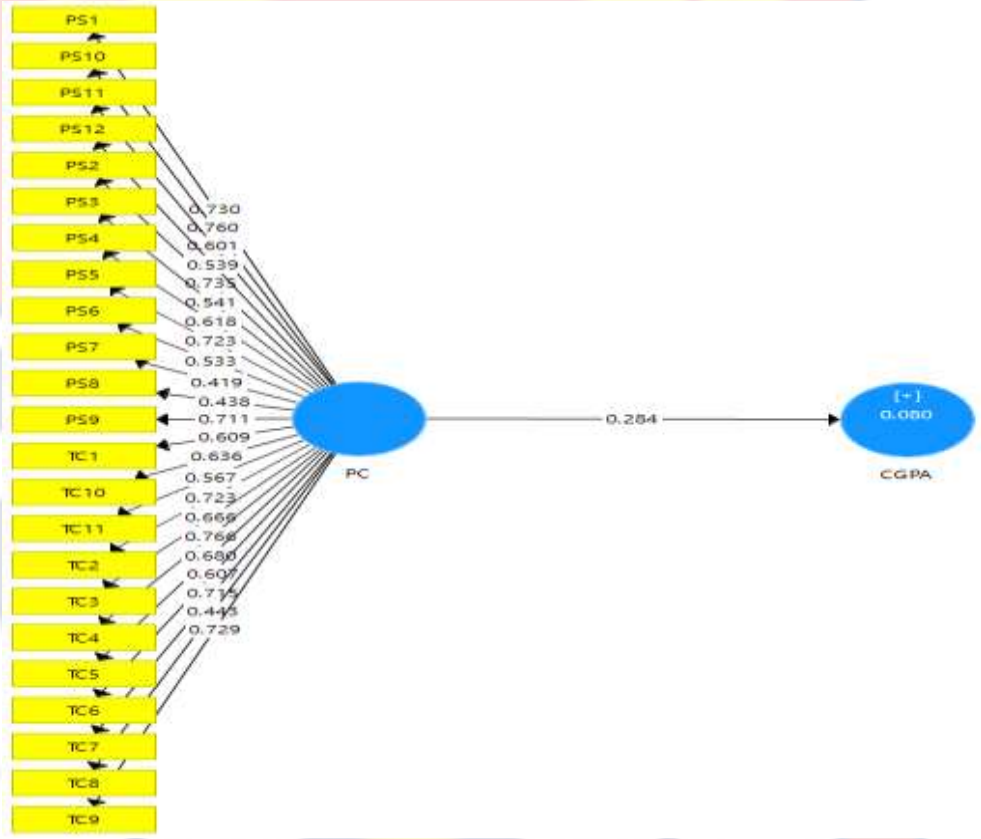

Figure 3: Path model for the relationship between Professional Competence and CGPA

Source: Field work, 2023

The results in Table 10 and Figure 3 show that accounting students' level of professional competence development had an insignificant relationship with their CGPA (β =.284, t = 1.701, p = 0.090). The beta value of 0.284 indicates a positive relationship between students' professional competence development and their CGPA. This suggests that as professional competence development

increases, students' CGPA also tends to increase. However, the p-value of 0.090 is slightly above the conventional threshold of 0.05, which suggests that the relationship is statistically insignificant at the desired level of significance. The R square value of 0.080 indicates that students' professional competence development explains 8% of the variance in their CGPA. This means that other factors beyond professional competence development influence students' academic performance.

This study's finding of an insignificant relationship tends to counter various studies (Tabassum et al., 2020; Ismail & Ariff Khalid, 2020; Shida et al., 2018) in the literature that argued that students' professional competence development has a significant relationship with academic performance. This insignificant relationship implies that professional competence development may influence CGPA through intricate pathways or in conjunction with other factors not accounted for in the current study. For instance, students with heightened professional skills might exhibit enhanced self-discipline, better organisational abilities, or stronger collaboration tendencies, which could indirectly foster academic excellence.

To probe further, the two variables used to assess professional competence were also examined to determine whether there is any relationship between them and academic performance. Therefore, the relationship between technical competence and academic performance and the relationship between professional skills and academic performance were also examined. Table 11 and Figure 4 display the results.

Table 11: Relationship between Accounting Students' Level of Technical Competence, Professional skills development and their CGPA

Construct	Beta (β)	SD	T-stat	P-Value	VIF	R^2	F^2
TC->CGPA	0.154	0.144	1.068	0.286	1.830	0.080	0.014
PS->CGPA	0.157	0.173	0.903	0.367	1.830	0.080	0.015

Source: Field work, 2023

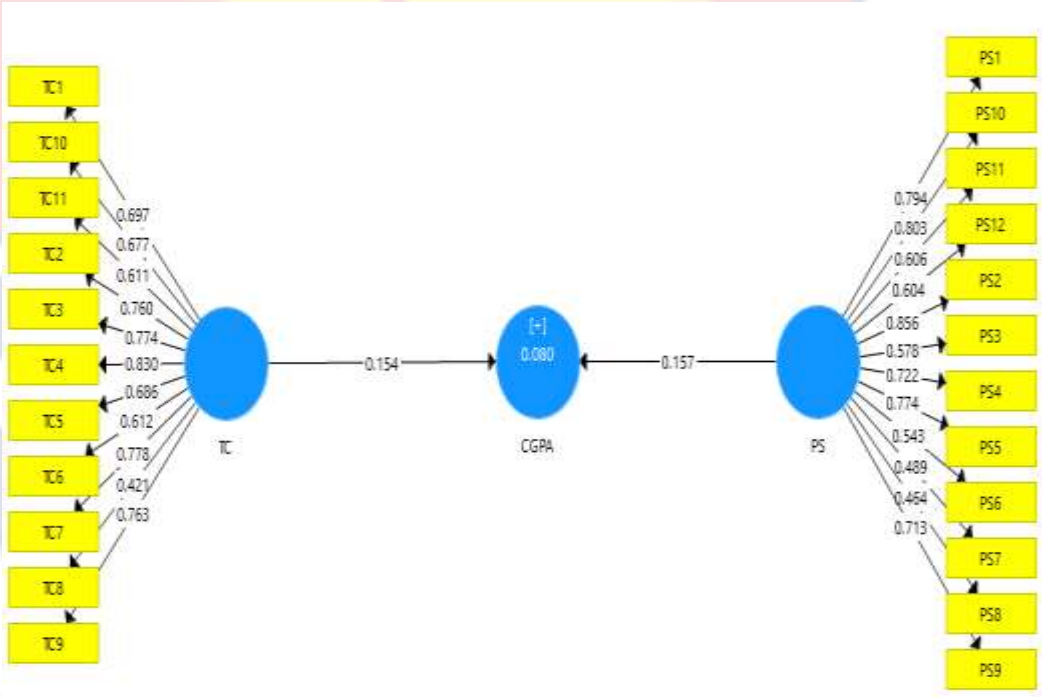

Figure 4: Path Model for TC, PS, and CGPA relationship

Source: Field work, 2023

The results in Table 11 and Figure 4 indicate that accounting students' level of technical competence development has an insignificant relationship with their CGPA (β = .154, t = 1.068, p =.286). It also shows that accounting students' level of professional skills development has an insignificant relationship with their CGPA (β =.157, t =.903, p =.367).

Research Question Four: What is the moderating effect of gender on the relationship between accounting students' level of professional competence development and their CGPA?

This research question was focused on assessing whether gender has any moderating effect on the relationship between accounting students' level of professional competence development and their CGPA. This was done to determine whether the strength or direction of the relationship between the two variables varies depending on gender level. The predictor was students' professional competence development; the moderator was gender; and the criterion variable was CGPA. The moderation was conducted with the Smart PLS 3. Table 12 and Figure 5 present the results of the gender moderation analysis on the relationship between accounting students' level of professional competence development and their CGPA.

Table 12: The moderating effect of Gender on the relationship between Accounting Students' level of Professional Competence Development and their CGPA

Construct	Beta (β)	SD	T-stat	P-Value	VIF	R^2	F^2
Gender->CGPA	-0.065	0.081	0.804	0.422	1.000	0.080	0.004
Gender*PC	-0.042	0.108	0.389	0.697	1.000	0.047	0.001
PC->CGPA	0.197	0.104	1.897	0.058	1.000	0.047	0.038

Source: Field work, 2023

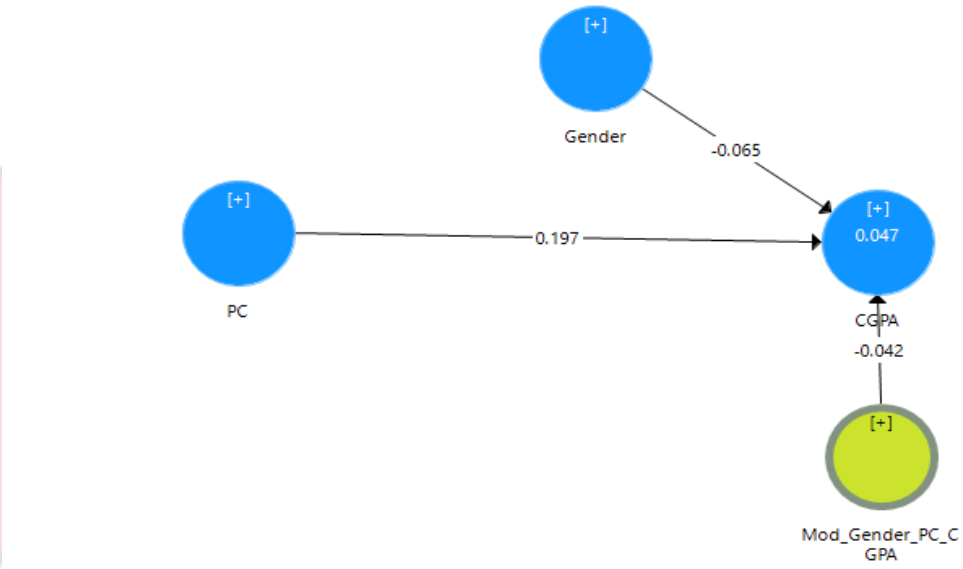

Figure 5: Path model of Moderation effect of gender

Source: Field work, 2023

The results of the moderation analysis showed that gender is not a significant moderator in the relationship between accounting students' level of professional competence development and their CGPA (β = -0.042, t = 0.389, p = 0.697). The beta value of -0.042 indicates that gender has a very weak negative moderation effect on the relationship between students' professional competence development and their CGPA. However, the p-value of 0.697 suggests that the moderation effect is not statistically significant. The R-square value of 0.047 indicates that the model, which includes gender as a moderator, explains approximately 4.7% of the variance in students' CGPA.

The insignificant moderation effect of gender on the relationship between students' professional competence development and their CGPA suggests that gender does not play a significant role in influencing the impact of professional competence development on academic performance. Other

factors, such as motivation, study habits, or individual learning styles, may have a stronger influence on students' CGPA (Credé & Kuncel, 2008).

This study's findings align with the study of Lindberg et al. (2010). They used a meta-analysis to analyse gender differences in recent studies of mathematics performance. They discovered that males and females demonstrate similar performance in mathematics, with no meaningful gender differences found.

On the other hand, the findings of this study contradict the research of Mahama et al. (2019). They examined the moderating effect of gender on the correlation between creative thinking and academic achievement in English and mathematics. The study found a strong link between imaginative thinking and academic achievement, with gender playing a substantial moderating role.

This study finding also contradicts the findings of the Koyuncu et al. (2022) study, which focused on socioeconomic status (SES) and gender characteristics as moderators in the association between students' metacognitive abilities and reading ability. Upon considering additional factors, the results revealed that SES and gender moderated the relationship between metacognitive abilities and reading.

Somaa et al.'s (2021) study on how age and gender moderate the relationship between emotional intelligence and academic success also contradicts this study's findings. Their study revealed that, whereas age did not affect the association between emotional intelligence and academic achievement, gender did. In other words, whether students were male or female altered the relationship between emotional intelligence and academic achievement.

Hypothesis 1: There is no statistically significant relationship between accounting students' level of technical competence and professional skills development.

A hypothesis was formulated to ascertain whether there is a relationship between accounting students' level of technical competence and professional skill development. This was to determine how one's development affected the other's development. A Smart PLS 3 analysis was conducted to assess the relationship. The analysis involved the estimation of path coefficients, significance testing, and bootstrapping to determine the robustness of the findings. Table 13 and Figure 6 present the results.

Table 13: Relationship between Accounting Students' Level of Technical Competence and Professional Skills Development

Construct	Beta (β)	SD	T-stat	P-Value	VIF	R^2	F^2
TC -> PS	0.708	0.066	10.681	0.000	1.000	0.502	1.007

Source: Field work, 2023

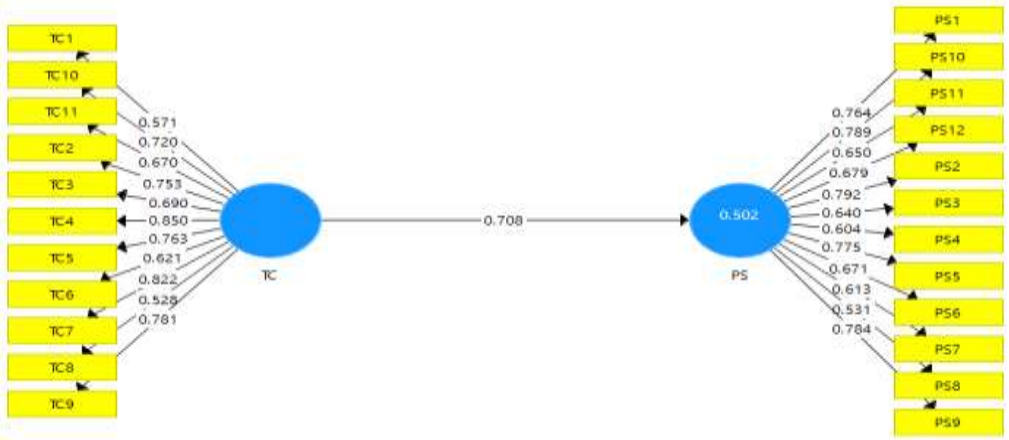

Figure 6: Path model for Technical Competence and Professional skills relationship

Source: Field work, 2023

The results in Table 13 and Figure 6 indicated that there was a moderate positive and significant relationship between accounting students' level of technical competence and professional skills development (β =.708, t = 10.681, p <.001). This suggests that as students tend to develop their technical competence, they also develop their professional skills. The variance in the endogenous construct was assessed by examining the coefficient of determination (R2). This also provided information on the predictive power of the model. From Table 13, the R-square value of 0.502 suggests that approximately 50.2% of the variation in professional skills can be explained by technical competence. This suggests that technical competence has a moderate level of explanatory power when it comes to professional skills.

The moderate positive and significant relationship between students' technical competence and their professional skills development implies that developing technical competence is important for enhancing professional skills. As students improve their technical competencies, they are likely to see corresponding improvements in their professional skill set. This demonstrates the interconnection between technical competence and professional skills. Developing expertise in technical competence does not occur in isolation but is accompanied by the development of broader professional skills essential for the workplace.

This study finding supports the argument in the literature, as many scholars (Cecilione et al., 2021; Passow & Passow, 2017; Dunne & Rawlins, 2000) contended that as students are equipped with the needed technical competencies, there is also a corresponding improvement in the development of their professional skills. Passow and Passow (2017) revealed in their study that

students developed significant improvements in their professional skills (oral, written, visual, and aural communication skills) after they grasped the required technical competencies. According to Dunne and Rawlins (2000), students become better at communicating in writing, speaking publicly, and interacting with others after making significant developments in their technical knowledge.

However, the results of this study tend to contradict those of Okunuga and Ajeyalemi (2018). According to Okunuga and Ajeyalemi, students had no improvement in their professional skills development even though their technical competencies were met. This highlights the potential for variation across different contexts or disciplines.

The enormous evidence from literature, including this study, that students' technical competence development has a significant relationship with professional skills development cannot be underestimated in establishing that as students are equipped to develop their technical competencies, it results in an improvement in their professional skills.

Hypothesis 2: There is no statistically significant difference between the gender of accounting students' and the level of professional competence development.

A hypothesis was formulated to ascertain whether there is a difference in students' professional competence development based on gender. Male and female B.Ed. Accounting students represented the independent variable, and the dependent variable was the students' professional competence development. The data was analysed using an independent sample t-test at the 0.05 level of significance to address the hypothesis. Table 14 presents the results.

Table 14: Difference between Gender of Accounting Students' and Professional Competence Development.

Gender	N	M	SD	*t*	Df	*P*
Male	70	3.96	.53	-.593	103	.554
Female	35	4.02	.41			

p>.05

Source: Field work, 2023

An independent sample t-test was conducted to determine the difference between accounting students' professional competence development based on gender. The results indicate that there was no significant difference between the professional competence development of male (M = 3.96, SD =.53) and female students (M = 4.02, SD =.41); t (103) = -.593, p = 0554 (two-tailed).

This implies that the development of professional competence is not gender-dependent, as both male and female students have the same perspective about their level of professional competence development. It is also a strong indication that the university and its departments have fostered an environment that encourages and facilitates the growth of professional competence among students of both sexes. Hence, the null hypothesis was not rejected. However, this study's findings tend to contradict those of some authors (Ye et al., 2018; Zhang et al., 2020), who found significant differences between males and females when examining professional competence.

Chapter Summary

The results were presented and discussed in this chapter. The findings of this study revealed accounting students have significant development in professional competence, with significant development in both technical competence and professional skills. It revealed that no significant difference

exists between the gender of accounting students and their level of professional competence development. The relationship between accounting students' level of professional competence development and their CGPA was insignificant, with gender not moderating it. However, there was a significant positive relationship between accounting students' level of technical competence and professional skill development.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter represents the final section of the study. This chapter provides a concise overview of the study by emphasising the methods used to gather and analyse the data in order to address the research questions. The primary findings were used to establish conclusions, which were accompanied by relevant recommendations and suggestions for further study.

Summary of the Study

The descriptive cross-sectional design was used to assess the relationship between accounting students' level of professional competence development and academic performance and the moderating role of gender. The study explored the following research questions and hypotheses:

Research Questions

1. What is the level of Accounting students' technical competence development?
2. What is the level of Accounting students' professional skills development?
3. What is the relationship between Accounting students' level of professional competence development and their CGPA?
4. What is the moderating effect of gender on the relationship between Accounting students' level of professional competence development and their CGPA?

Research Hypotheses

1. ***H_o*:** There is no statistically significant relationship between accounting students' level of technical competence and professional skills development.

   ***H_1*:** There is a statistically significant relationship between accounting students' level of technical competence and professional skills development.

2. ***H_0*:** There is no statistically significant difference between the gender of accounting students and the level of professional competence development.

   ***H_1*:** There is a statistically significant difference between the gender of accounting students and the level of professional competence development.

The study targeted accounting students from the University of Cape Coast. Purposive sampling was used to sample level 400 Bachelor of Education in Accounting students, while simple random sampling was used to sample 122 students. The study utilised both primary and secondary sources of information. The instrument used for data collection was questionnaires, while the secondary data consisted of the student's cumulative grade point averages, which were obtained from the student's academic records. The questionnaires were validated through expert judgement and pilot-tested. The researcher's supervisors determined the face and content validity. The data was analysed using SPSS version 22 and Smart PLS 3. The data was analysed using both descriptive and inferential statistics. Specifically, the demographic background of the respondents was analysed using frequencies and percentages; research

questions one and two were analysed using the mean and standard deviation; the first hypothesis was examined using PLS-SEM; the second hypothesis was examined using an independent sample t-test; research questions three and four were analysed using PLS-SEM analysis.

Key Findings

After a detailed analysis of the data obtained with the questionnaire and the student's CGPA, the following were the key findings obtained:

1. Accounting students had significant development in technical competence development.
2. Accounting students had significant development in professional skills development. This implied that the students had made significant development in professional competence development.
3. There was no significant relationship between accounting students' level of professional competence development and their CGPA.
4. Gender had no moderating effect on the relationship between accounting students' level of professional competence development and their CGPA.
5. There was a statistically significant relationship between accounting students' level of technical competence and professional skill development.
6. There was no statistically significant difference between the gender of accounting students and the level of professional competence development.

Conclusions

The significant development in technical competence among accounting students is a positive indication that the accounting education programme is effectively preparing students for the technical aspects of their future roles. This could potentially make the students more attractive to employers seeking candidates with strong technical accounting knowledge and skills.

In addition to technical competence, the programme also appears to be successful in developing essential professional skills among accounting students, such as communication, teamwork, and leadership skills, which are critical for their overall professional competence.

While the programme excels in developing technical and professional competencies, academic performance (as measured by CGPA) does not necessarily reflect these gains. Other factors beyond the scope of this study may influence a student's academic performance.

Gender not moderating the relationship between professional competence development and academic performance suggests that the programme is providing equal opportunities for all students, regardless of gender. This highlights the accounting education programme's commitment to diversity and inclusivity, which could attract a broader pool of applicants and enhance the overall learning experience.

The moderate relationship between technical competence and professional skills development highlights the interconnectedness of these two aspects. The programme should continue to emphasise the integration of technical competence and professional skills throughout the curriculum, as this

holistic approach better prepares students for the real-world challenges they will face in their careers.

The absence of a statistically significant difference in professional competence development based on gender is a positive indicator of the programme's inclusive learning environment. However, there should be continual assessment and addressing of any potential biases or barriers that may hinder equal opportunities for all students, regardless of gender or other demographic factors.

Overall, it can be concluded that the Bachelor of Education Accounting programme offered by the Department of Business and Social Sciences Education complies with the International Education Standard, which was developed by the International Accounting Education Standard Board to serve as a framework for accounting education. This conformance demonstrates that the curriculum is designed to assist the students in acquiring the professional competence required at the end of their initial professional development.

Recommendations

From the findings and the conclusions drawn, the following recommendations were made:

1. The accounting department within the University of Cape Coast should continue to prioritise and enhance the technical accounting curriculum, ensuring that it remains up-to-date with industry standards and best practices. This will help to continually equip students with the needed technical competencies.
2. The Department of Business and Social Sciences Education, in collaboration with the university's career services centre and the

Student Representative Council (SRC), should expand their offerings of professional development workshops and networking events. These initiatives will further strengthen students' communication, teamwork, leadership, and other essential professional skills, better preparing them for the workforce.

3. Lectures, in their capacity as instructional leaders, should make students understand that academic performance, while important, is not the sole indicator of their overall professional development. The students should be encouraged to strive for a holistic approach to their education, focusing not only on academic performance but also on developing a well-rounded set of professional competencies.
4. The Department of Business and Social Sciences Education should establish a suggestion and feedback mechanism for students to report any instances of gender bias or discrimination. This will help in the prompt resolution of such concerns.
5. Lecturers should incorporate more group projects, case studies, and class presentations into the instructional delivery that will require students to apply their technical knowledge while simultaneously developing their professional skills.
6. The Department of Business and Social Sciences Education should provide training to lecturers on creating an inclusive learning environment that values and supports students of all genders or other demographic factors.

Suggestions for Further Research

The quantitative research technique was used as the primary research method in assessing the relationship between accounting students' level of professional competence and academic performance, moderating the role of gender. The study concentrated on 400 level Bachelor of Education in Accounting students from the University of Cape Coast, measuring their academic performance through CGPA. Therefore, future research can focus on:

1. Assessing the relationship between accounting students' level of professional competence development and academic performance, a survey of selected universities.
2. The use of a mixed-methods approach to assess the relationship between accounting students' level of professional competence development and academic performance.
3. Examining the relationship between practical experience and professional competence development.

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APPENDICES

APPENDIX A

QUESTIONNAIRE FOR B. ED. ACCOUNTING STUDENTS

Dear Respondent

I am conducting research work on the topic ***assessing the relationship between accounting students' level of professional competence development and academic performance: the moderating role of gender.*** This questionnaire is designed to measure your perspective on how the accounting programme has helped you to develop professional competence. The study is being conducted in partial fulfilment of the requirement for a Master of Philosophy Degree in Accounting Education. I therefore seek your maximum cooperation and you are fully assured that all the responses that you provide will be handled with absolute confidence and will not reveal your identity. Thank you for your co-operation. **Instruction:** Please respond by ticking [√] where applicable.

SECTION A

Background information of students

1. Sex a) Male [ ] b) Female [ ]

2. Age a) Below 20 yrs. [ ]

b) 20-22 yrs. [ ]

c) 23-25 yrs. [ ]

d) 26-28 yrs. [ ]

e) Above 28 yrs. [ ]

SECTION B

The Development of Technical Competence

This section relates to how the accounting programme has shaped you to the development of the necessary technical competencies. Please indicate the level to which you agree to each of the following statements by ticking [√] the appropriate box.

1 (no development); 2 (insignificant development); 3 (partial development); 4 (significant development); and 5 (full development)

	Statements **I have been able to develop technical competence in**	**1**	**2**	**3**	**4**	**5**
3.	Financial Accounting and reporting					
4.	Management Accounting					
5.	Finance and financial management					
6.	Taxation					
7.	Audit and assurance					
8.	Governance, risk management, and internal control					
9.	Business laws and regulations					
10.	Information technology					
11.	Business and organisational environment					
12.	Economics					
13.	Business strategy and management					

SECTION C

The Development of Professional Skills

This section relates to how the accounting programme has equipped you to develop the required professional skills. Please indicate the level to which you agree to each of the following statements by ticking [√] the appropriate box.

1 (no development); 2 (insignificant development); 3 (partial development); 4 (significant development); and 5 (full development)

	Statements **The accounting programme has helped me develop the ability to;**	**1**	**2**	**3**	**4**	**5**
14.	Evaluate information from a variety of sources and perspectives through research, analysis, and integration.					
15.	Apply reasoning, critical analysis, and innovative thinking to solve problems.					
16.	Be able to work with others					
17.	Communicate clearly and concisely both vocally and in writing.					
19.	Use negotiation skills to reach solutions and agreements.					
20.	Interact with experts to lessen or resolve disputes					
21.	Demonstrate a commitment to lifelong learning					
22.	Manage time and resources to achieve professional commitments					

23.	Anticipate challenges and plan potential solutions					
24.	Execute tasks by following desired procedures					
25.	Apply delegation skills to deliver assignments					
26.	Apply leadership skills to influence others to work towards organisational goals.					

Thank You

APPENDIX B

INTRODUCTORY LETTER

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
FACULTY OF HUMANITIES & SOCIAL SCIENCES EDUCATION
DEPARTMENT OF BUSINESS & SOCIAL SCIENCES EDUCATION

Telephone: +233209408788
Ext.: (268), Direct: 35411
Telegrams & Cables: University, Cape Coast
E-mail: dbsse@ucc.edu.gh

UNIVERSITY OF CAPE COAST
PRIVATE MAIL BAG

Our Ref:
Your Ref:

21st February, 2023

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

INTRODUCTORY LETTER

Mr. Emmanuel Darko Effah is an MPhil (Accounting Education) student of the Department of Business and Social Sciences Education, and as a requirement for the programme, he is working on the research topic: **"Assessing the Development of Professional Competence of Accounting Students."**

The study seeks find out whether the Accounting Students have been able to Develop their Professional Competence after going through the Accounting Education Programme.

We would be glad if you could give him the needed assistance to undertake data collection.

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

You may also get in touch with the Department on 0209408788 or through dbsse@ucc.edu.gh.

Thank you.

Yours faithfully,

DR. ERIC MENSAH
HEAD OF DEPARTMENT

APPENDIX C

ETHICAL CLEARANCE LETTER

UNIVERSITY OF CAPE COAST
INSTITUTIONAL REVIEW BOARD SECRETARIAT
TEL: 0558093143 / 0508878309
E-MAIL: irb@ucc.edu.gh
OUR REF: IRB/C3/Vol.I/0051
YOUR REF:
OMB NO: 0990-0279
IORG #: IORG0011497

20TH FEBRUARY 2023

Mr Emmanuel Darko Effah
Department of Business and Social Science Education
University of Cape Coast

Dear Mr Effah,

ETHICAL CLEARANCE – ID (UCCIRB/CES/2022/123)

The University of Cape Coast Institutional Review Board (UCCIRB) has granted Provisional Approval for the implementation of your research on ***Assessing the Development of Professional Competence of Accounting Students.*** This approval is valid from 20th February 2023 to 19th February 2024. You may apply for a renewal subject to the 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 a 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,

Kofi F. Amuquandoh

Ag. UCCIRB Administrator

ADMINISTRATOR
INSTITUTIONAL REVIEW BOARD
UNIVERSITY OF CAPE COAST