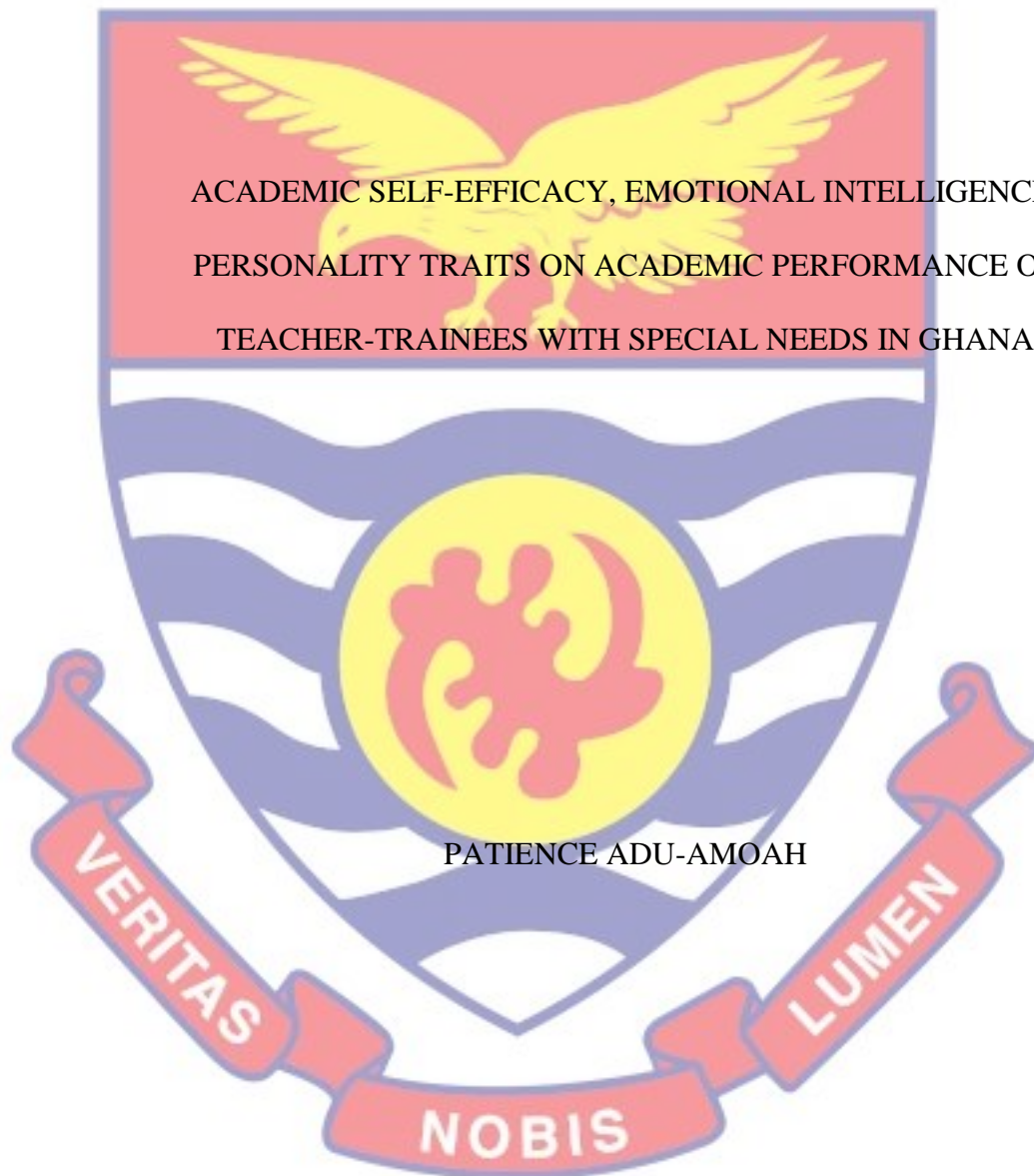


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ACADEMIC SELF-EFFICACY, EMOTIONAL INTELLIGENCE,
PERSONALITY TRAITS ON ACADEMIC PERFORMANCE OF
TEACHER-TRAINEES WITH SPECIAL NEEDS IN GHANA

BY

PATIENCE ADU-AMOAH

This thesis submitted to the Department of Guidance and Counselling of the
Faculty of Educational Foundations, College of Education Studies, University
of Cape Coast in partial fulfillment of the requirements for award of Master of
Philosophy degree in Guidance and Counselling

APRIL 2022

DECLARATION

Candidate's Declaration

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

Candidate's Signature: Date:

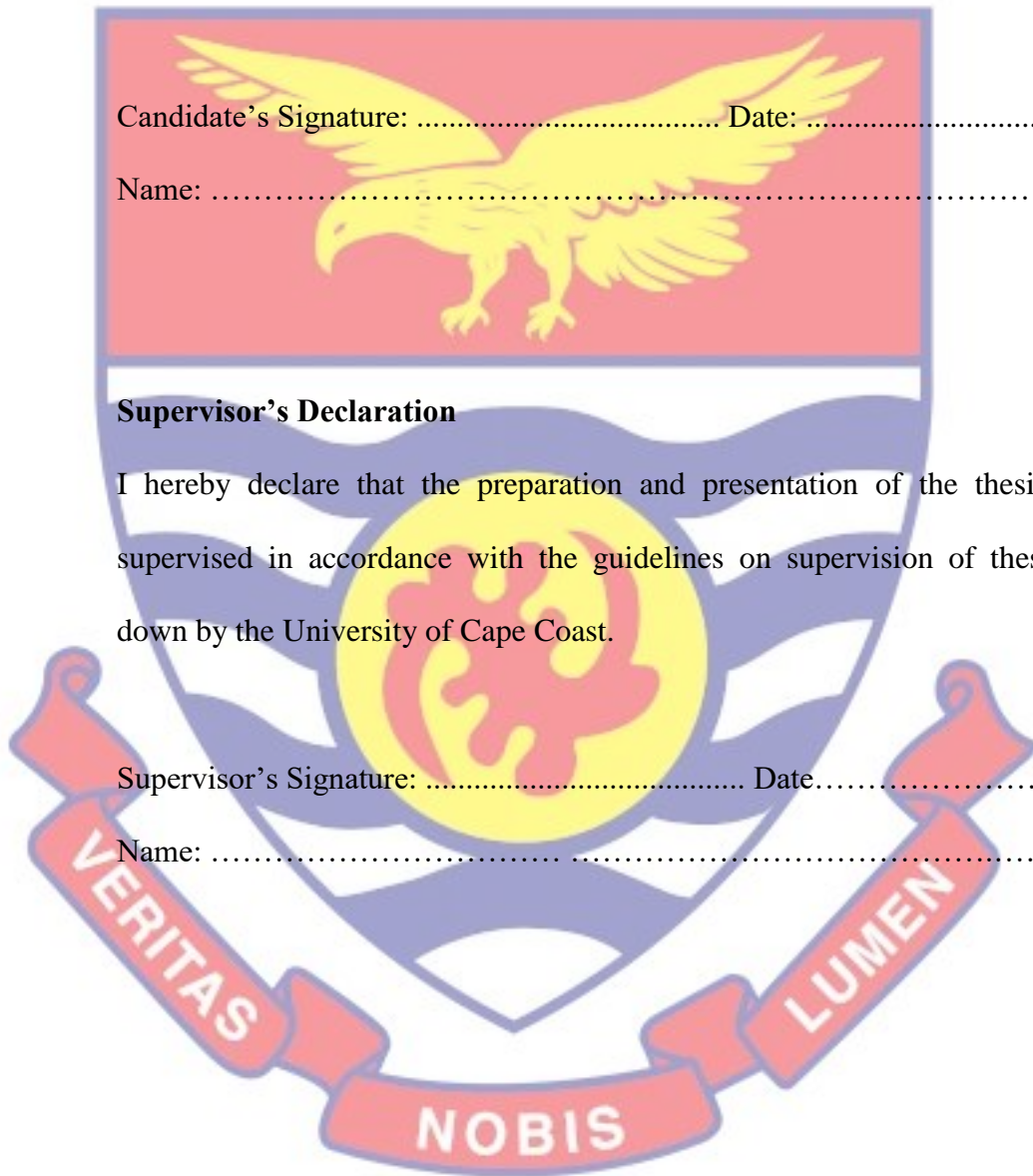
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Supervisor's Declaration

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

Supervisor's Signature: Date:

Name:



ABSTRACT

The research assessed the influence of self-efficacy, emotional intelligence and personality traits of teacher trainees with special needs on academic performance in colleges of education (CoEs) in Ghana. The study used descriptive survey design. The population was all teacher trainees with special needs in CoEs in Ghana. Census method was used to include all the 66 respondents. Questionnaire with a reliability co-efficient of .755 to .837 was used to collect data analysed using descriptive (frequency, percentages, means and standard deviation) and inferential (Multiple Linear Regression and Hayes' Conditional Process) statistics. The study found that teacher trainees with special needs had a high level of self-efficacy, emotional intelligence, and personality traits. There was statistically significant positive effect of self-efficacy, emotional intelligence and personality traits on academic performance. Further, the study found that gender moderate the relationship between academic performance, emotional intelligence (social competence) and personality traits (extraversion). However, gender does not moderate the relationship between self-efficacy and academic performance. Also, age does not moderate the relationship between academic performance, self-efficacy, emotional intelligence and personality traits of teacher-trainees with special needs. The study recommended that college tutors and administrators should continue to increase the self-efficacy, emotional intelligence and personality traits level among teacher trainees with special needs through developmental and intervention programmes. This can be done by proving effective communication, honest feedback, healthy learning environment and positive pedagogical strategies.

KEYWORDS

Academic Performance

Colleges of Education

Emotional Intelligence

Personality Traits

Self-Efficacy

Teacher-Trainees



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DEDICATION

To my family



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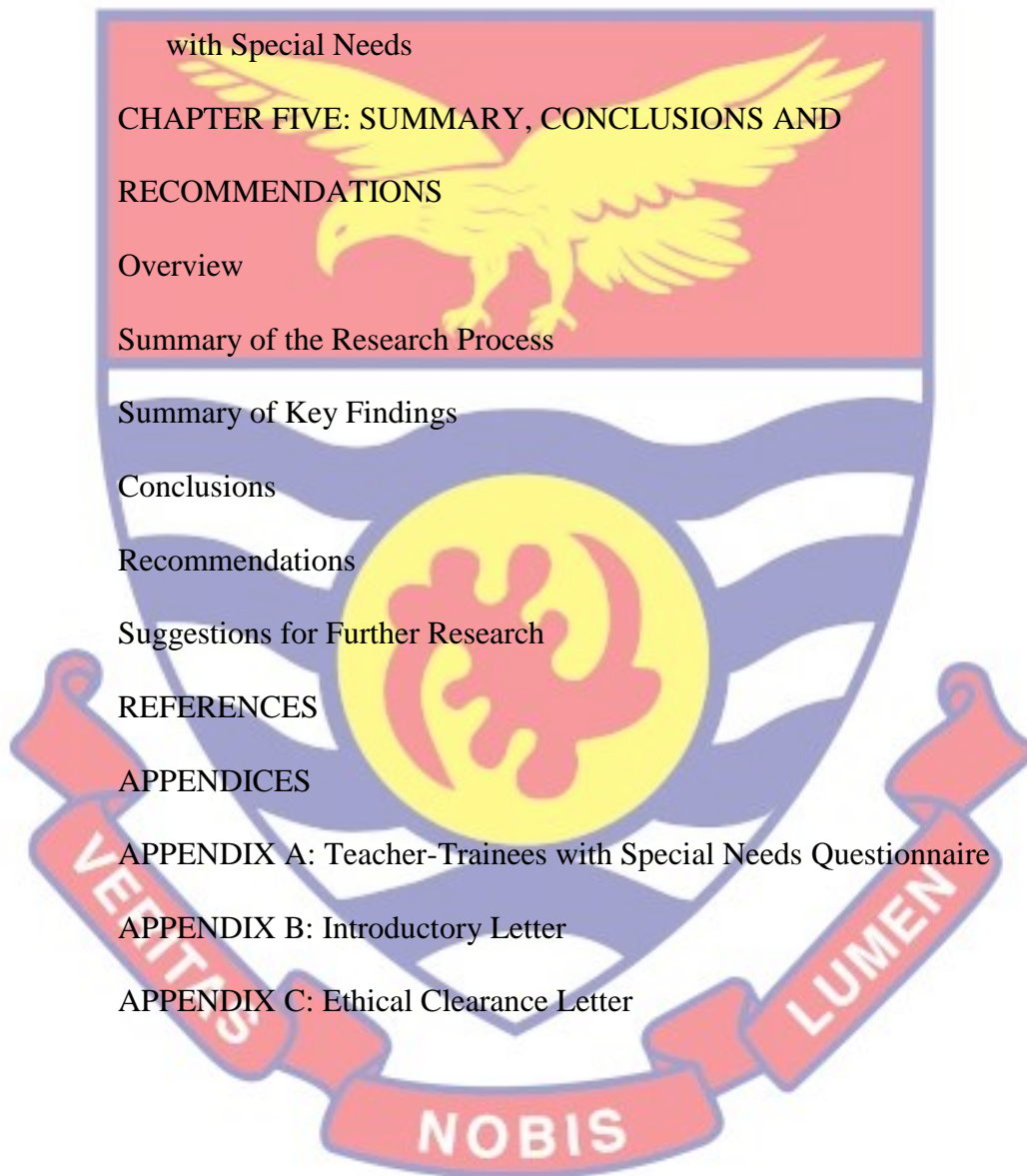
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CHAPTER ONE

INTRODUCTION

The role of teacher-trainees with special needs in our educational system cannot be underestimated. Accordingly, the level of their academic performance cannot be ignored. The academic performance of students is key driver of quality and effectiveness of any educational system (Darling-Hammond, 2000; Creemers, & Kyriakides, 2015; Chapman, et al., 2016). The level of academic performance among teacher-trainees with special needs could determine their level of confidence, motivation and enthusiasm for the teaching profession.

However, the educational achievement of teacher-trainees with special needs in the Colleges of Education (CoE) in Ghana is a major worry among stakeholders of education. The academic performance of teacher-trainees with special needs could be attributed to several factors like student, teacher, home and school-related factors (e.g., Alos, Caranto, & David, 2015; Asamoah, 2018; Asamoah et al., 2020). However, in terms of the student-related factors, the psychological factors like self-efficacy, emotional intelligence and personality traits of teacher-trainees with special needs and how they related to their academic performance has not been investigated. Little attention has been given to these factors and how they influence the academic performance of the teacher-trainees with special needs in the CoE in Ghana.

Globally, a great deal of studies has been carried out to examine how these components (self-efficacy, emotional intelligence and personality traits)

individually impact students' achievement in schools (Barrick, Mount, & Judge, 2001; Judge, Ilies, Bono, & Gerhardt, 2002; Judge, Jackson, Shaw, Scott, & Rich, 2007; Poropat, 2009; Richardson, Abraham, & Bond, 2012; Salgado, 1998). However, the combined effect of these variables has not been examined. Also, what remain unknown is how these variables affect the educational achievement of teacher-trainees with special needs in the CoE in Ghana.

Background to the Study

Education, primarily, aim to develop efficient and effective human resources. A country's younger generation, particularly students, is precious capital. A major obligation of the school is to promote pupils in terms of scientific, cultural, and proper planning as part of their education (Nayebzadeh, Dehnavi, Nejad & Sadrabadi, 2013). Education is process of honing, sustaining and conserving the society's collective values (Oyekan, 2000). For the future growth of the world and individual nations, the ability of the countries and individuals to adapt, acquire and process information and understanding are more important than ever (Lockheed & Vespoor, 1991). Since the country relies on excellent education for a modest labour power, an interconnected and unified society, it must be strengthened throughout one's life (Hettleman, 2007). This appears to have a good effect on human existence, and educational attainment aids in gaining respect and recognition.

Education is a necessary and requisite portion of human life (Aggarwal, 1997). Basically, education helps one in the attainment of basic numeracy and literacy skills which helps them in their basic economic, political and cultural life. Accordingly, a student's entitlement to a quality

education is an issue of self-interest, moral principle, and constitutional right. It is described by Taba (1962) as the way toward giving to the school children information, qualities, abilities and mentalities that will empower them to assume different dynamic positions in their communities. The country's education philosophy communicates the skills, values, knowledge and attitudes that are expected of the learners. These educational beliefs and principles are converted into viable operation via a mechanism known as educational programme or curriculum (Abosi & Brookman-Amisshah, 1992).

In Africa, education has been given all the necessary attention (Kuyini & Desai, 2007). Kuyini and Desai (2007) further posit that governments in the various African countries are investing a lot in their education system to help develop their human capital. As time has passed, the training of learners has evolved. Sometimes ago, people with disabilities were already looked down on by instructors and society as being unfit for enlightening and profitable work as broad training understudies without disabilities (Wright & Wright, 2007). Now, the viewpoint of public education has shifted concerning learners with disabilities who were not afforded the same instructional opportunities and rights as those in the regular educational setting (Turnbull, Turnbull, Shank, & Leal, 1999). There has been a concerted effort to address this problem. Students with special needs are given the same opportunities and prospects as other students in the instructional educational programme, which is then adapted into a specialized curriculum educational plan.

Smith (1993) characterised special education as “a set of instructions that is individually tailored to meet the unique needs of a child with exceptionality, taking into account the child’s individual learning strength and

weakness rather than following one set of curriculum as regular education does” (p.14). Also, special education, according to Heward and Orlansky (1992), is independently arranged, intentionally executed, and cautiously assessed instruction to support special students in achieving the best conceivable individual competence and accomplishment in their current and

future environment. Special needs education basically deals with the education of children who have characteristics that are significantly or considerably different from average school children. Special Education is a type of training for learners who are not or are probably not going to accomplish any task through the traditional systems of teaching. This type of education includes a study of the problems that special children might have such as special talents or challenges in sensory, physical, intellectual, emotional, communicative or behavioural capabilities. It also includes the modification and adaptation of classroom practices to suit specific needs of every individual (Heward & Orlansky, 1992).

In special needs education certain key concepts like exceptionality, disability, impairment and handicap are identified and addressed since learners who fall within the special needs category are likely to be affected by these categorisations. An exceptional child according to Kelly (1986), is the one who deviates markedly either above or below the norm of his group, in his mental, emotional, physical, social or sensory traits to a degree that he needs special services to help him profit from his educational experiences. Kirk and Gallagher (1986) also described the special learner as the person who varies considerably from the ordinary normal child with reference to mental, physical and social attributes so much that he requires alteration of school practices or

and curriculum to foster his/her potentials. Impairment in this context would refer to injury or impairment to a portion or all of a body organ or system. Damage to any part of the auditory system or the visual system is termed sensory impairment. Damage to the spine or loss of limbs through accident is termed physical impairment (Kelly, 1986; Kirk & Gallagher, 1986)

Impairment can thus be psychological, physical, sensory or intellectual and may arise from genetic or environmental factors. Disability as addressed by special needs education, because of harm or loss of a body part or organ, alludes to hardship or severely lessened capability to play out a competence or a few functions. It thus refers to the impact of impairment on the performance of some functions accepted as basic elements of normal life such as movement and communication. Handicap which falls within special needs bracket refers to the social, psychological and occupational disadvantages that result from impairment and disability (Kelly, 1986; Kirk & Gallagher, 1986).

In the process of educating learners with special needs, their level of self-confidence/assuredness (self-efficacy), enthusiastic knowledge (emotional intelligence) and character qualities (personality traits) cannot be overemphasized. When a learner can finish the scholarly activities and undertakings recommended by the school, it is called self-efficacy. Bandura (1997) characterized self-efficacy as "the confidence in person's abilities to put together and implement action plan or strategies needed to deliver or execute specified accomplishments. Self-efficacy assumes a significant part among teacher-trainees with special needs since it largely decides the learning inspiration and scholastic accomplishment of learners (Richardson et al., 2012; Chen & Yang, 2018). Self-efficacy influences numerous parts of individuals'

lives, as per social cognitive theory. These may include their objectives, choices, levels of exertion, intellectual designs, and the persistence and determination level they keep up despite challenges (Bandura, 1991).

Teacher-trainees with a great level of self-efficacy are sure about their capacity to meet educational provisions and necessities, design and organise their schooling, and keep away from interruptions (Bandura, 1997). Self-efficacy is related with educational achievement among students positively. Students who have a high feeling of learning efficacy are extra sure that they can work hard, conquer obstacles, and eventually advance in school achievement (Richardson et al., 2012; Komarraju & Nadler, 2013). Extant scholars revealed that self- efficacy beliefs are linked with the academic achievement of student's especially special need students (e.g., Chemers, Hu & Garcia, 2001).

Another significant psychological factor influencing teacher-trainees with special needs is emotional intelligence. Teacher-trainees with special needs are expected to teach learners with exceptional necessities demand a particular preparation to comprehend the individual necessities of exceptional students. One significant contributing factor for estimating teacher-trainees' with special needs academic achievement and life success is emotional intelligence (EI). Emotional intelligence (EI) includes the nature of a person's capacity to recognize and comprehend their own feelings and others, oversee struggle and adaptable in good communications and connections with the climate in verbal and non-verbal. Generally, according to authors (e.g., Perera & Digiakomo, 2013; Petridis, 2011; Petrides et al., 2007), EI alludes to different emotional character attributes, identified with normal standards of

conduct, sentiments and judgements, related with discretion, self-discipline (control) and inspiration (motivation) temperaments.

EI instructs individuals to perceive their moods, to sympathetically comprehend others power, motives, sentiments, and to encourage the affection focused capacity to decide to show the inclination which is best well-suited to a specific circumstance (Brackett, Rivers, & Salovey, 2011). EI assists learners with getting mindful of their sensations of dread, outrage and hostility and how to change over them into bravery, boldness and resilience. A previous examination by researchers found that there was a positive relationship between EI and with a person's psychological capacities and capability on competition of specific assignments (Noriah, Siti-Rahayah, Zuria, Saemah, Manisah & Rosadah, 2000). Student's emotional intelligence factors play a significant part in impacting school accomplishment. Learners with high EI or EIQ are found to obtain good educational achievements (Nwadinigwe & Azuka-Obieke, 2012; Noriah et al., 2008; Nelson, 2009; Downey et al., 2008; Holt, 2007).

Another psychological factor which is key in teacher-trainees with special needs is personality traits. The idea of character is characterized as generally persistent configurations of considerations, sentiments, and practices (McCrae & John 1992). Psychologists have steadily arrived at agreement on five comprehensive domains (extraversion; agreeableness; conscientiousness; neuroticism; and openness to experience) to portray personality traits (Costa & McCrae 1985; 1987; Goldberg 1990). The five dimensions' construction is discovered to be a profoundly dependable, substantial, and prescient instrument in different settings (Saucier & Goldberg 1998; Saulsman & Page,

2004). It was contended that character qualities are critical factor affecting educators, teacher-trainees, quality and effectiveness (Smits & Boeck, 2006; Timmering, Snoek, & Dietze, 2009). For example, proficient educators are found to be genuine, reliable, empathic, deferential, delicate, responsive, patient, energetic, submitted, connected with, and disciplined (Liu & Meng 2009; Mertens, 2010). The neuroticism of the personality elements has negative association with learners' school outcomes while the other four dimensions (openness to experience, agreeableness, conscientiousness and extraversion) had a positive influence on academic attainment of learners. The most significant predictor of school performance among schoolchildren was conscientiousness (Hurtz & Donovan 2000; Costa & McCrae 2008).

Teachers are crucial parts for guaranteeing that exceptional programmes are being executed effectively with the manifestation of equivalent opportunities and freedoms that will advance the accomplishment of all teacher-trainees with special needs (Anderson, 2007). Teaching practicum is intended to be a traineeship/an apprenticeship encounter (insight) during which the teacher-trainees are steadily given the opportunity to teach under the supervision of school cooperating (internal supervisors/mentors) and external supervisors for several months. It is the chance to execute methodological and instructive exercises/activities, under the supervisory roles and mastery of lead/experience mentors (teachers), who are certified in regular and/or special education.

It has been contended that teaching practicum is the main part of any teacher education programme like those in the CoE in Ghana. Most instructors guarantee that the main components in their expert training were the school

experience found in teaching practicum (Montgomery, 2000). Therefore, for teacher-trainees with special needs to excel in their teaching profession, they need a high level of self-efficacy, emotional intelligence and personality traits. However, it appears that these psychological factors have not been explored among teacher-trainees with special needs in Ghana.

Statement of the Problem

Academic achievement of teacher-trainees with special needs is a significant factor of school effectiveness and teacher quality. However, the academic performance of teacher-trainees with special needs in some of the College of Education in Ghana has been a major concern to many stakeholders. Most often, tutors are blamed for such poor performance of students. However, student performance could be attributed to several factors like school-related factors (e.g. school culture, climate, quality teacher, resources etc), teacher-related factors (e.g. knowledge, satisfaction, motivation, competence, attitude and instructional practices etc), and student-related factors (e.g. self-efficacy, attitude, personal values, personality, motivation, emotional intelligence, learning styles, study habits, etc). The study was conducted to examine how teacher-trainees with special needs related psychological variables like self-efficacy, emotional intelligence, and personality traits influence their educational achievement in the CoE in Ghana.

A few studies have recognised personality traits, emotional intelligence and self-efficacy beliefs as indicators of school work outcomes/attainments of special students in the basic school level to tertiary level (Barrick, et al., 2001; Judge, et al., 2002; Judge, et al., 2007; Poropat, 2009; Richardson, et al., 2012; Salgado, 1998). However, majority of these studies have only examined these

predictors (self-efficacy, emotional intelligence and personality traits) independently. Thus, these previous studies only considered these psychological variables separately as determinants of students' school accomplishments. Also, large part of these research has conflicting findings. For example, some of the studies found that self-efficacy, emotional intelligence and personality traits (i.e., examine separately) positively influence student academic performance (e. g. Judge et al., 2007; Poropat, 2009) while others also found negative results (e. g. Judge et al., 2007; Richardson et al., 2012).

The link between emotional intelligence and teacher-trainees' with special needs academic performance is contentious issues. A few scholars have established that emotional intelligence is related with students' school outcomes (Goleman, Boyatzis, & McKee, 2009; Daus & Ashkanasy, 2005). Similarly, there appears to be contradicting findings regarding the link between students' character qualities/attribute (personality traits) and their educational performance. Several studies have established that learner character traits significantly influence students' school attainments (Zhang, 2008; Goleman et al., 2009; Daus & Ashkanasy, 2005; Khurshid, 2017). However, other researches have indicated that personality traits do not significantly influence learners' educational accomplishment (Belanger, 2005; Qualter et al., 2012; Fernandez et al., 2012). Therefore, there seems to be no certainty concerning the connection among the influence of students' self-efficacy, emotional intelligence and personality traits on their school fulfilment, when examined separately.

With regard to the combine effects of emotional intelligence, personality traits and self-efficacy and students' academic performance, there appears to be disagreement among researchers. There are no unmistakably demarcated ways regarding whether these variables (linear combination) have a relationship with students' academic performance (Hopf & Hatzichristou, 1999; Chen, 2000). Also, most of these studies only focused on regular students or pre-service teachers leaving out teacher-trainees with special needs and this becomes equivocal when findings of such studies are generalised to all students with special needs or teacher-trainees with special needs. Again most of these studies were conducted in schools that do not practice inclusive education (Newsome, Day, & Catano, 2000; Goleman et al., 2009; Daus & Ashkanasy, 2005). A few of the investigations were executed in some advanced and developing nations but the findings of those studies cannot be generalised to teacher-trainees with special needs in the Ghanaian education system context due to differences in geographical boundaries, educational policy on teacher education, and diverse social-cultural perspectives. It is against this background that I explored the influence of self-efficacy, emotional intelligence and personality traits on academic performance of teacher trainees with special needs.

Purpose of the Study

The motivation behind this study was to ascertain the impact of teacher trainees with special needs self-efficacy, emotional intelligence and personality traits on academic performance in the Colleges of Education (CoEs) in Ghana.

Objectives of the Study

The objectives of the study were to assess the:

1. level of self-efficacy, emotional intelligence and personality traits among teacher trainees with special needs in the CoE in Ghana,
2. influence of self-efficacy on academic performance of teacher trainees with special needs in the CoE in Ghana,
3. influence of emotional intelligence on academic performance of teacher trainees with special needs in the CoE in Ghana,
4. influence of personality traits on academic performance of teacher trainees with special needs in the CoE in Ghana,
5. moderating role of gender in the connection between the;
 - a. self-efficacy and academic performance of teacher trainees with special needs in the CoE in Ghana,
 - b. emotional intelligence and academic performance of teacher trainees with special needs in CoE in Ghana, and
 - c. personality traits and academic performance of teacher trainees with special needs in the CoE in Ghana
6. moderating role of age in the link between the;
 - a. self-efficacy and academic performance of teacher trainees with special needs in the CoE in Ghana,
 - b. emotional intelligence and academic performance of teacher trainees with special needs in CoE in Ghana, and
 - c. personality traits and academic performance of teacher trainees with special needs in the CoE in Ghana.

Research Questions

The study was guided by the following research questions:

1. What is the level of self-efficacy, emotional intelligence and personality traits among teacher-trainees with special needs in the CoE in Ghana?
2. What is the influence of self-efficacy on academic performance of teacher trainees with special needs in the CoE in Ghana?
3. What is the influence of emotional intelligence on academic performance of teacher trainees with special needs in the CoE in Ghana?
4. What is the influence of personality traits on academic performance of teacher trainees with special needs in the CoE in Ghana?
5. What is the moderating role of gender in the connection between the:
 - a. self-efficacy and academic performance of teacher trainees with special needs in the CoE in Ghana?
 - b. emotional intelligence and academic performance of teacher trainees with special needs in CoE in Ghana?
 - c. personality traits and academic performance of teacher trainees with special needs in the CoE in Ghana?
6. What is the moderating role of age in the link between the:
 - a. self-efficacy and academic performance of teacher trainees with special needs in the CoE in Ghana?
 - b. emotional intelligence and academic performance of teacher trainees with special needs in CoE in Ghana?

- c. personality traits and academic performance of teacher trainees with special needs in the CoE in Ghana?

Significance of the Study

The outcomes of the examination offered recommendations that could be adopted by the Ministry of Education and the National Council of Tertiary Education (TCTE) to progress the excellence and superiority of instruction at the CoE with teacher trainees with special needs and any other institutions that practice inclusive education. The study would enable teachers at the CoE to have insight into how self-efficacy, emotional intelligence and personality traits affect teacher-trainees with special needs so that appropriate ways would be employed to involve them in the teaching and learning process. This would help improve their efficiency and self-esteem.

The findings would ascertain ways to reduce the challenges of the teacher trainees with special needs to the minimum. It would also enlighten the stakeholders on the specific support systems that the teacher trainees with special needs could access in order to function efficiently. Finally, the inquiry discoveries could serve as mention materials for researchers and other academicians who wish to conduct further studies on the academic performance of pre-service teachers with special needs.

Delimitation

The study focused on CoE with teacher trainees with special needs. The study focused on Presbyterian CoE, Wesley CoE and Nusrat Jahan Ahmadiyya CoE. These colleges were the colleges with teacher-trainees with special needs in Ghana. In terms of content, the study focused on role of self-efficacy, emotional intelligence and personality traits on academic

performance of teacher trainees with special needs in the CoE in Ghana.

Limitations

The survey-status of the examination uncovers data comparative with the overarching circumstances in a particular situation. As information was accumulated using surveys, the shortcomings which go with the utilization of the instrument would be available. These shortcomings included inclination, deficiency, fluctuation in responses, mechanical limitations, non-reaction blunders, absence of lucidity in definitions, ambiguities or unseemly phrasing and limited responses. However, the limitations encountered, did not affect the study since I took time to rectify those anomalies that could influence the results of the research. The items on the questionnaire were adapted to Ghanaian context and content and face validity were ensured by the supervisors. These were done to ensure that the findings are not affected.

Definition of Terms

Self-efficacy: In this research, self-efficacy means conviction and self-confidence/assuredness/assurance in a person ability that he/she can effectively accomplish educational tasks/activities or attain an explicit academic goal

Emotional intelligence: In this research, emotional intelligence is used interchangeable to mean knowledge, awareness and understanding. It is a person's capability to comprehend and monitor his/her own and other people's emotions, to discriminate between different emotions and label them appropriately, and to use emotional information to guide thinking and behaviour.

Personality traits: It refers to a person character attribute/qualities /characteristic sets of thoughts (cognitions), feelings (emotions) and behaviours that make him/her unique.

Academic performance: It is the competences gained by a person which is evaluated by marks or scores by a teacher and/or educational goals set by teacher trainees with special needs to be achieved over a specific period of time. In this study, it is made up of the total continuous assessment (CA) and the final examination (FE) marks, in averaged percentages with marks ranging from 0 to 100%.

Organisation of the Study

The investigation was separated into five parts. Chapter One, which is the introduction, involved background to the study, statement of the problem, purpose of the study, research questions, significance of the study, delimitation and limitation of the study. Chapter Two focused on appraisal of works related to the phenomenon under investigation. It involved with theoretical, conceptual and empirical review. Chapter Three outlined the research methods that was adopted for the examination. Chapter Four dealt with the results and discussion. The last chapter, which is the fifth chapter, focused on summary, conclusions, recommendations and areas for additional research.

CHAPTER TWO

LITERATURE REVIEW

Overview

The research drive was to examine the impact of teacher trainees with special needs self-efficacy, emotional intelligence and personality traits on their academic performance in the Colleges of Education (CoE) in Ghana. This section reviewed theories/concepts and empirical examinations identified with the research. The empirical appraisal was accomplished to contrast the discoveries of this examination and other related investigations to either affirm or refute inferences made by prior scholars. The chapter, also, survey of related writing with the view of identifying the gaps, looking at related research works and to help develop conceptual framework for the study.

Theoretical Review

Several educational researchers have recommended hypothetical frameworks to describe relationships occurring amid learning factors and learner's educational consequences. Examples of such theories are Walberg's Theory of Educational Productivity, Control-Value Theory of Achievement Emotions, Trait Theory of Personality, Ecological System Theory, and Expectancy-Value Theory of Achievement, Theory of Performance and Social Cognitive Theory. Each hypothetical model incorporates attributes of the student, the learning climate, and the excellence of teaching the student obtains (Haertel, Walberg, & Weinstein, 1983; Walberg, 1981; Bandura, 2001, 2006). This current study was rooted in Walberg's Theory of Educational

Productivity and Bandura's Social Cognitive Theory, Pekrun's Control-Value Theory of Achievement Emotions and McCrae and Costa's Trait Theory of Personality.

Walberg's Theory of Educational Productivity

The research was embedded in Walberg's Theory of Educational Productivity. Walberg's (1981) model was observationally established as one of the frameworks for measuring the factors influencing students' educational accomplishment. Walberg's theory conjectures that psychological qualities of individual learner and their close psychological conditions impact instructive results (intellectual, conduct, and attitudinal) (Reynolds & Walberg, 1992). Further, Walberg's exploration recognised nine (9) key factors that impact educational output as: learner ability, motivation, age/developmental level, volume and excellence of teaching, school and home climate, peers, and experience with the mass media outside the school (Walberg, Fraser, & Welch, 1986).

The initial three factors (motivation, learner ability, and age) indicate characteristics of the students in relation to learning. The fourth and fifth variables (volume and excellence of instruction) reflect instruction in relation to teacher training, qualification and experience. Finally, the last four indicators (school climate, experience with media, home atmosphere, and peer group) epitomise characteristics of the psychological atmosphere of students in relation to learning (DiPerna et al., 2002). Evidently, learner features are significant for effective learning, however they merely encompass a share of the learning equation (Walberg, 1981). In view of this theory, the present research concentrated on teacher trainees with special needs psychological

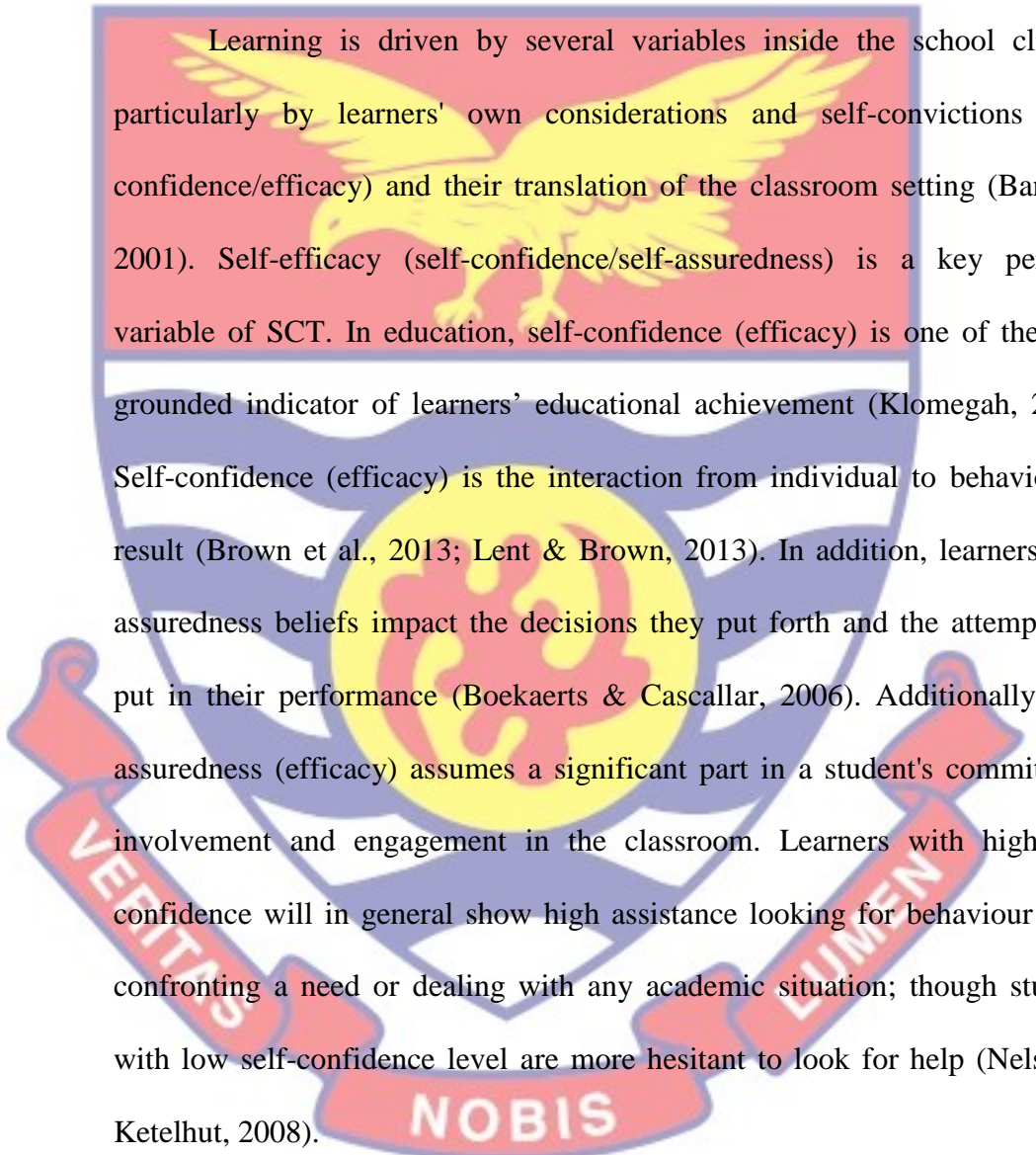
characteristics including self-efficacy, emotional intelligence and personality traits and their impact on academic attainment.

Bandura's Social Cognitive Theory (SCT)

The study was supported by Bandura's Social Cognitive Theory (SCT). SCT denotes a mental framework of conduct that arose basically from the research product of Bandura (1977). SCT emphasises that education (learning) happens in a community setting and that a lot of what is discovered is acquired via perception and observation (Bandura, 1977). In education, SCT is utilised to comprehend learning, learner inspiration, and scholarly accomplishment. SCT, likewise, has been used broadly by those keen on understanding school learning, motivation and performance (Zimmerman, 1994). In SCT, individuals' feeling of individual viability to practice some command over occasions that influence their life is viewed as the most persuasive part of self-knowledge, and a vital component in the activity of control and individual efficacy.

One presumption of SCT is about the triadic reciprocity that explains the opinion that individual, behavioural, and ecological components impact each other in a two directions, proportional design in every goal-achievement task. That is, an individual's on-going working is a result of an unremitting communication between psychological (cognitive), social (behavioural), and background (contextual) elements. As per Bandura's theory, the two fundamentals are connected to the fact that people make individual understandings of their former successful and failed encounters and therefore, put forward objectives upon these translations. As indicated by Bandura (1986), individuals will in general keep away from circumstances they accept

surpass their abilities, however, they will embrace and play out those undertakings or exercises they believe themselves to be fit for achieving its effectively. The second principal component alludes to the way that understudies put out singular objectives that become their own norms for surveying their achievement.



Learning is driven by several variables inside the school climate, particularly by learners' own considerations and self-convictions (self-confidence/efficacy) and their translation of the classroom setting (Bandura, 2001). Self-efficacy (self-confidence/self-assuredness) is a key personal variable of SCT. In education, self-confidence (efficacy) is one of the most grounded indicator of learners' educational achievement (Klomegah, 2007). Self-confidence (efficacy) is the interaction from individual to behaviour to result (Brown et al., 2013; Lent & Brown, 2013). In addition, learners' self-assuredness beliefs impact the decisions they put forth and the attempt they put in their performance (Boekaerts & Cascallar, 2006). Additionally, self-assuredness (efficacy) assumes a significant part in a student's commitment, involvement and engagement in the classroom. Learners with high self-confidence will in general show high assistance looking for behaviour when confronting a need or dealing with any academic situation; though students with low self-confidence level are more hesitant to look for help (Nelson & Ketelhut, 2008).

School children with affirmative and moderate level of self-confidence beliefs are probable to be extremely involved in intellectual, behaviour and enthusiasm and inspiration in the learning environment (Linnenbrink & Pintrich, 2003). Also, that learners' metacognitive mindfulness is stronger

when they have enhanced educational self-adequacy (Hermita & Thamrin, 2015). In furtherance, self-adequate learners have higher educational achievement for they manage and control their compulsions successfully in confronting scholarly difficulties (Komarraju & Nadler, 2013). Additionally, in foreseeing alluring instructive result, academic self-assuredness has superior impact on learners' capacity than self-concept (Jansen et al., 2015).

Pekrun's Control-Value Theory of Achievement Emotions (CVT-AE)

Emotions are multidimensional measures that incorporate explicit emotional, intellectual, physiological, inspirational, and communicative components (Pekrun, 2006; Pekrun & Linnenbrink-Garcia, 2014; Pekrun & Perry, 2014). Students' passionate insight encounters inside accomplishment and scholarly settings, according to scholars, can impact their learning cycles and accomplishment results and subsequently research on feelings has started to flourish (Pons, Hancock, Lafortune & Doudin, 2005; Pekrun, 2009; Pekrun & Linnenbrink-Garcia, 2012). Control-Value Theory of Achievement Emotions (CVT-AE) was utilized as a hypothetical system for clarifying teacher-trainees' with special needs emotional intelligence and what it means for their academic achievement.

The theory is a broad structure of the emotional encounters inside accomplishment and scholastic settings (Pekrun, 2006; Pekrun, 2009; Pekrun, Frenzel, Goetz & Perry, 2007). More explicitly, the framework expands on suspicions from expectancy-value models of emotions (Pekrun, 1984, 1988, 1992a; Turner & Schallert, 2001), transactional philosophies of stress evaluations and connected feelings (Folkman & Lazarus, 1985), models of perceived control (Patrick, Skinner & ConnelL 1993; Perry, 1991, 2003),

attributional principles of performance feelings and sentiments (Weiner, 1985), and theories addressing the impacts of feelings on learning and attainment (Fredrickson, 2001; Pekrun, 1992b; Pekrun et al. 2002a; Zeidner, 1998, 2007). The model gives an integrative structure for examining the predecessors and impacts of feelings encountered in accomplishment and school establishments. It depends on the reason that examinations of control and values are integral to the excitement of accomplishment feelings, comprising activity-related emotions like gratification, dissatisfaction, and fatigue encountered during learning, just as result emotions like delight, trust, pride, uneasiness, sadness, disgrace, and outrage identifying with progress or disappointment (Pekrun, 2006; Pekrun & Linnenbrink-Garcia, 2014; Pekrun & Perry, 2014).

Achievement (accomplishment) emotions (feelings) allude to the sentiments that learners experience in school and accomplishment environments and are identified with performance tasks/exercises and results (Pekrun, 2006; 2009; Pekrun & Perry, 2014). The CVT suggests that accomplishment feelings can be estimated as brief or transitory appearances inside a particular circumstance at a specific mark of time (state accomplishment feelings; e.g., mention dread of disappointment before a test) or they can be conjectured as routine dispositional feelings that an individual encountered as to performance-related tasks and results (trait accomplishment feelings; e.g., attribute of fear of regret). It is worth noting that time-based (temporal) speculation as opposed to situational speculation addresses the fundamental trademark that separates among trait and state accomplishment feelings since trait accomplishment feelings can be attached to a particular

circumstance also (e.g., characteristic science feelings are identified with delegate emotional sentiments in science related circumstances) (Pekrun & Linnenbrink-Garcia, 2014; Pekrun & Perry, 2014). Besides, the CVT-AE (accomplishment feelings) suggests that the psychological evaluation of power over and the individualised worth of accomplishment undertakings and results (indicators) can possibly invigorate accomplishment feelings (facilitator) which thus influence learning cycles and results (results) (Pekrun & Perry, 2014).

Consequently, the CVT-AE sets two kinds of appraisals that are especially relevant for accomplishment feelings: (1) individualised control (subjective) that denotes an apparent strength and impact over accomplishment-associated exercises and results (i.e., operating firm and perseverance could create achievement conceivable), and (2) individualised worth (subjective) that suggests an apparent worth of accomplishment undertakings and results (discernment that achievement is significant) (Pekrun, 2006). Inside an accomplishment setting, teacher-trainees with special needs can assess performance activities and results as per their abstract evaluations of control and value. For instance, if teacher-trainees with special needs take responsibility for their education activities and classroom assignment consequences, they are bound to perceive and identify satisfaction and happiness than their counterparts who failed to value their educational activities and take responsibility. They will turn up feeling uneasiness, weariness, and despondency (Pekrun, 2006; Pekrun & Stephens, 2010).

McCrae and Costa's Trait Theory of Personality (Five Factor model)

The personality (character) traits (qualities/attributes) theories were developed by several authors (Allport, 1979; Goldberg, 1981; McCrae, & Costa, 1996). However, McCrae and Costa's (1996) Five Factor Model of personality traits theory was utilised in the investigation. The trait model is a way to deal with the investigation of human character. Trait scholars are fundamentally intrigued by the estimation of attributes, which can be characterized as constant examples of conduct, thought, and feeling (Saul, 2003). As indicated by this point of view, traits (attribute) are parts of personality (character) that are generally steady after some time, contrast across people (e.g., a few group of people are outgoing though others are not), are generally predictable over circumstances, and impact conduct. This method accepts that behaviour is dictated by reasonably constant qualities which are the central units of one's character.

These models or notions underscore the distinctiveness of the individual and the inner cognitive and motivational procedures and methods that impact behaviour (McLeod, 2017). Attributes (traits) incline one to perform in a particular manner, irrespective of the condition. This implies that attributes should stay predictable across circumstances and after some time, yet could differ between people. It is assumed that people contrast in their attributes because of hereditary transformations and disparities. These frameworks are occasionally mentioned as psychometric theories, in view of their accentuation on estimating character by utilizing psychometric tests. Trait scores are quantitative variables measuring on interval scale (continuous variable). An individual is given a numeric score to show the amount of an

attribute they have (McLeod, 2017).

In psychological trait theory, the Big Five personality traits (the five-factor model [FFM]) is used in this study as theoretical basis for explaining teacher-trainees with special needs personality and how it affects their academic performance (Rothmann & Coetzer, 2003). This theory was spearheaded by McCrae and Costa's (1996). The Big Five personality traits model as an overall scientific classification in a wide scope of social sciences or psychological examinations has been as a perspective. This framework consists of five moderately autonomous measurements: extraversion, neuroticism, conscientiousness, agreeableness, and openness to experience. Extraversion is portrayed by broadness of exercises from exterior methods (Laney, 2002). Extraverts appreciate associating with individuals, and are frequently seen as ready to go. In general, they are energetic and action-oriented people. They have high gathering perceptibility, and discernibility, enjoy to interact, and advocate for themselves. Extraverted individuals may show up more prevailing in group environments, instead of introverted individuals in this context (Friedman & Schustack, 2016).

Neuroticism is the inclination to encounter negative feelings, like annoyance, uneasiness, or depression (Jeronimus, Riese, Sanderman & Ormel, 2014). At times, it is known emotional instability (insecurity), or is switched and called as emotional stability (steadiness). The individuals who score high in neuroticism are expressively receptive and susceptible to anxiety and tension. They are bound to decipher normal circumstances as undermining, and slight dissatisfactions as despairingly problematic. Their undesirable enthusiastic responses incline to endure for curiously extensive stretches of

time, which implies they are regularly feeling terrible (Fiske, Gilbert & Lindzey, 2009). Conscientiousness is an inclination to show self-restraint, act obediently, and make progress toward accomplishment against standards or external anticipations. It is connected to the manner by which individuals control, manage, and lead their compulsions and instincts. High conscientiousness individual is frequently seen as being difficult and centered. Low conscientiousness is related with adaptability and immediacy, yet can likewise show up as messiness and absence of dependability (Toegel & Barsoux, 2012).

The agreeableness trait indicates individual disparities in everyday worry for social agreement and friendliness. Agreeable person's respect coexisting with others. They are generally understanding, sympathetic, substantial, trusting and dependable, supportive, and eager to bargain their welfares with others (Rothmann & Coetzer, 2003). Additionally, agreeable individuals have an idealistic perspective on human instinct. Conversely, disagreeable people place personal benefits and concern above getting along with others. Commonly, they are more averse to expand themselves for others and are indifferent with others' interests and concerns (Bartneck, Van der Hoek, Mubin & Al-Mahmud, 2007). Lastly, openness to experience is an overall gratitude for sculpture, feeling, adventure, surprising thoughts/philosophies, innovation, imagination, inquisitiveness, and diversity of encounter/involvement. Individuals who are available to encounter (open to experience) are mentally inquisitive, open to feeling, sensitive to gorgeousness and magnificence and willing to attempt new things. They incline to be more imaginative and original and more mindful of their sentiments. They are

additionally bound to hold capricious convictions (Ambridge, 2014).

Conceptual Review

The following concepts were reviewed because of their practicality to the study. These include concept of self-efficacy, emotional intelligence, personality traits and academic performance.

Concept of Self-Efficacy

Self-efficacy (confidence/assuredness) is a significant part of Bandura's (1977, 1986) social-cognitive theory, which opposes that behaviour is firmly invigorated by one's own impact. The concept of self-confidence (efficacy) mirrors an idealistic self-conviction. It is the conviction that one has in his/her capability that s/he can accomplish original and innovative or demanding assignments, or adapt to difficulty, in different areas of human working (Bandura, 1997). Clearly, Bandura's perspective on self-efficacy links to the elucidation of self-capability in explicit areas, instead of a worldwide feeling of proficiency.

Bandura (1986) asserts that self-efficacy alludes to individual assurance and trust in one's capacities for an effective achievement of a specific assignment. Self-efficacy convictions are huge compelling variables of whether people will actually want to consume exertion on an activity and keep on adapting to a trouble. People with a significant degree of self-adequacy endeavour activities/assignments and continue attempting despite the fact that the undertaking may be troublesome, while people with a low degree of self-viability, wind up surrendering effortlessly most of the times. A person's convictions about his capacities comprehend self-adequacy (self-efficacy) as Bandura (1986) clarifies.

Social cognitive psychologists accentuated on the possibility of one's convictions and principles in executing an activity. It is functionally characterized as a person's confidence and certainty to complete a given assignment and can accomplish the objective (Bandura, 1982). An activity or undertaking can be planned and created satisfactorily and executed successfully by the people with high self-confidence (Bandura, 1982). These individuals consider and trust in their capabilities and they use them in order to accomplish set objectives. Interestingly, the people with low self-adequacy dodges complex and intricate activities, lack trust in their abilities to strategize, plan and attain the set intentions. The people who comprehend their abilities and effectively design their exercise are those with high self-adequacy (efficacy) while those with low self-confidence cannot execute their task (Bandura, 1982).

Learners with high self-confidence/adequacy are assured and guaranteed to comprehend an exercise or class activity, answer instructive issues, and choose most demanding and challenging school disciplines/subjects (Zimmerman et.al, 1992). Bandura (1982) found that learners with high self-adequacy can finish an intricate undertaking. They accept that they can comprehend and tackle a mathematic issue when contrasted with learners with low self-adequacy (Schwarzer, 1992; Zajacova, Scott, Lynch, & Espenshade, 2005). One's self-confidence (efficacy) influences choice of subjects and co-curricular exercises (Bandura, 1982; Zimmerman et. al., 1992). Learners with high self-confidence learn most exceptional fields (Zajacova, Scott, Lynch, & Espenshade, 2005; Luszczynska, Gutierrez-Dona, & Schwarzer, 2005). It helps in determination

of uncommon (discretionary) courses.

Prior investigations show that endeavours and steadiness are one of the qualities of learners with high self-confidence/adequacy (Zajacova, Lynch, & Espenshade, 2005). Such learners ceaselessly work, if unfit to monitor the subject, they discover compelling approaches to control challenges in accomplishing their objectives. While learners with low self-adequacy (confidence/efficacy) will terminate, they are incapable to eliminate boundaries in accomplishing and learning (Ormrod, 2000). Previous researchers (e.g., Pintrich & Schunk, 1996) discovered significant job of memory. The psychological segment helps in learning and memory. Learners with high self-confidence/adequacy can give genuine consideration, arrange, and clarify study resources adequately via their intellectual viewpoint (Pintrich & Schunk, 1996; Zajacova, Scott, Lynch, & Espenshade, 2005; Heslin, & Klehe, 2006).

Sources of self-efficacy

Individuals' convictions in their confidence/adequacy are created by the four central foundations of impact. They are mastery experiences, vicarious experiences, social persuasion, and emotional states (Bandura, 1994, 1997). Out of the four foundations of self-confidence (efficacy), individual mastery experience has the significant effect (Lent, 2005). This basis prompts an improvement of self-confidence for a given conduct or area of conduct (Bandura, 1994, 1997, 2006). Mastery of experience or the consequences of one's own past accomplishment are acquired on simple victories as well as in overpowering complications through persistence exertion. Also, when an individual encounters troubles and misfortunes and figures out how to conquer

these obstacles, he becomes strong and later gains the fundamental experience expected to beat challenging activities (Bandura, 1994).

Vicarious encounters, then again, fill in as a wellspring of confidence via societal demonstrating. Discerning people like oneself triumph through supported exertion in educational setting raises eyewitnesses' beliefs that they also have the capacities to succeed (Bandura, 1994, 1997; Usher & Pajares, 2009). Social influence as a basis of confidence/adequacy among students underscores the conviction that when individuals are convinced verbally they will have the capacities to dominate given exercises and are probably going to assemble more prominent exertion and support it than if they harbour self-questions and harp on close to home insufficiencies when issues emerge. Fourth foundation depends incompletely on physical and emotional situations in passing judgment on capacities. The objective is to decrease individuals' pressure responses and modify negative passionate tendencies and misunderstandings of their actual conditions (Bandura, 1994). In any case, with regards to school context, a powerful method of estimating physiological excitement among learners is by estimating the stress and depression level on scholastic related subjects (Usher & Pajares, 2009).

Concept of Emotional Intelligence (EI)

Generally, emotional intelligence (EI) indicates the different emotional character qualities, identified with distinctive personal conduct standards, sentiments and reflections, connected to discretion and self-inspiration attitudes (Perera & Digiakomo, 2013; Petridis, 2011; Petrides, Furnham, & Mavroveli, 2007). EI is considered as the capacity to recognise, apprehend, regulate and react to human feelings which subsequently assist people with

adjusting socially and advance better execution in all parts of life (Parker, Taylor, & Bagby, 2001).

EI instructs individuals to perceive their sentiments, to sympathetically comprehend others sentiments, power and motives and to cultivate the adoration focused capacity to decide to show the inclination which is best adept to a specific circumstance (Brackett et al., 2011). EI assists learners to be mindful of their sensations of dread, outrage and animosity and how to change over them into bravery, fortitude and resistance. EI is a cross-part of interconnected enthusiastic and social capabilities and capacities that decide how productive people are at comprehension and articulating their thoughts, getting others and adapting to consistently life stress and pressing factors (Bar-On, 2006; Goleman, 2006a). EI comprises of five like spheres such as self-awareness, self-regulation, self-motivation, social awareness and social skills.

1. **Self-awareness** comprises perceiving one's feelings and their consequences (emotional awareness), knowing one's qualities and boundaries (precise self-appraisal) and sureness about one's self-esteem and capacities (self-assurance/confidence) (Bar-On, 2006; Goleman, 2006a).

2. **Self-regulation** contains overseeing disturbing responses and driving forces (self-control), keeping up norms of genuineness and respectability (dependability), assuming liability for individual execution (scrupulousness and meticulousness), adaptability in taking care of progress (versatility) and being alright with and open to original thoughts and new data (ingeniousness) (Bar-On, 2006; Goleman, 2006a).

3. **Self-motivation** consists of accomplishment energy (determining to advance or accomplish a standard of excellence), commitment (aligning with the goals of the group or organization), initiative (readiness to act on opportunities) and optimism (persistence in pursuing goals despite obstacles and setbacks) (Bar-On, 2006; Goleman, 2006a).

4. **Social awareness** consists of compassion (identifying others' moods and perspectives, and taking an active interest in their concerns) service orientation (anticipating, recognizing, and meeting customers' needs) developing others (sensing what others need in order to develop, and bolstering their abilities) leveraging diversity (cultivating opportunities through diverse people) and political awareness (reading a group's emotional currents and power relationships) (Bar-On, 2006; Goleman, 2006a).

5. **Social abilities** comprises of impact (using successful strategies for influence), interactions (transferring unambiguous and persuading information), leadership (stimulating and controlling assemblies or individuals), transformation promoter (starting or overseeing innovation), peace promotion (arranging and settling conflicts), building social capital/connections (sustaining instrumental connections), coordinated effort and participation (functioning with others concerning common objectives) and group capacities (making group cooperative energy in seeking after aggregate objectives) (Bar-On, 2006; Goleman, 2006a).

EI contributes importantly to educational accomplishment with army affirmative interdependence (Goleman, 2006b; Fayombo, 2012a). Learners with a positive EI are bound to agree generally and deal with their time advantageously when contrasted with the counterparts with negative EI (known to be more powerless to degenerate and unsafe conduct) (Pau, et al., 2004; Fayombo, 2012b). Actually, students having a high EI end up being more out of date, learn quicker, act all the more appropriately and manage their sentiments properly (Ghosh, 2003; Gill, 2003).

Capacity to complete is demonstrative of knowledge, abilities and capabilities, while eagerness to accomplish focuses on inspiration, drive and assurance. Learners who have positive EI characteristic are accomplishment situated, and that leads them to lay out scholastic objectives to achieve unrivaled educational results (Mount, Barrick, & Strauss, 1999). The willpower of these learners creates more noteworthy obligation to accomplishing their educational objectives. The individual learners having positive EI attributes are expected to perform more excellently compared to their colleagues with negative EI qualities.

Furthermore, concerning a learner's predisposition to low impetuosity (Petrides, 2009, 2011), learners with a high EI quality will in general postpone short-lived satisfaction in the assistance of natural requests and quest for set up objectives (Petrides, 2009). Low attribute EI people, contrariwise, firmly incline toward compulsion, respecting the allurements of prompt contentment (Petrides, 2009; Petrides et al., 2004). According to Perera and DiGiacomo, (2013, p. 9) “students with high EI traits set academic goals and their dispositional self-control tendencies may promote goal-

approach and academic outcomes”.

Concept of Personality Traits

Personality traits decides a bunch of significant attributes and how individuals communicate with others. Human character is the mix of various characteristics. Personality traits alludes to singular contrasts in the manner we feel, think, and act. As per Pervin, Cervone and John, 2005 (2005), personality traits contains remarkable arrangement of attributes that characterize an individual sentiments, perspective, and conduct. Character is an individual's arrangement of generally stable qualities that record for examples of conduct, in different circumstances. Every person here and there is extraordinary and somehow or another is exceptional. Cattell's and Eysenck's theory have been the subject of significant exploration which has driven a few scholars to accept that Cattell zeroed in on an excessive number of characteristics while Eysenck zeroed in on too couple of attributes, and another quality hypothesis regularly alluded to as the "Big Five" model arose. This five-factor model of personality traits addresses five center qualities; these are:

1. **Extroversion:** This part contrast friendly, individual situated and dynamic people with the individuals who are reserved and calm. There are two fundamental characteristics evaluated on this space, the relational contribution and the energy. According to Costa, McCrae ad Holland (1984), they are amiable, like persons and choose big crowds. Likewise, they are self-assured, vigorous, chatty, and they like stimulation and excitement (Costa et al., 1984). It is less difficulty to describe the qualities of people who are sociable than the people who are reserved or introvert. Introversion is the absence of extraversion

rather than what might be assumed to be its opposite. Thus introverts are reserved rather than not friendly, paced rather than sluggish and independent rather than followers. Introverts are generally not happy.

2. **Conscientiousness:** This judges the persons' extent of perseverance, organization and motivation in directed behaviours and those individuals are dependable, personal control and the ability to delay gratification of needs. Having this trait, the individual is purposeful, determined, strong willed and few become athletes or musicians. Individuals who are high in this trait are associated with high academic achievement, while those who are low in this trait become annoying, compulsive, and neat and they are more lackadaisical in working toward their goals.

3. **Agreeableness:** Assess the perspectives of a person towards others. These perspectives might be kind, trusting, pardoning nature, pessimistic, wrathful, and sympathetic and savage (Piedmont, 1998). Agreeableness is principally a component of relational propensities. Agreeable individual is thoughtful, anxious to help and generally philanthropic (McCare & Costa 1992). Low agreeable is related with antisocial, paranoid personality disorders and narcissistic, while high agreeableness is related with the dependent, personality disorder (McCare & Costa 1992).

4. **Neuroticism:** Evaluates emotional modification versus passionate uncertainty. Learners who have a high mark on this scale are inclined to encountering mental misery while people with little mark in this dimension are sincerely steady, normally quiet tempered and related

and better ready to confront upsetting circumstances without getting disturbed or shaken (McCrae & Costa, 1992; Zonderman, Costa, Herbst & McCare, 1993).

5. **Openness to experience:** The practical looking for and thankfulness for encounters for the good of its own. Those people are interested

about both internal and external universes and their lives are tentatively more extravagant and they will engage clever thoughts and flighty qualities. They encounter both optimistic and undesirable feelings more definitely when contrasted with close-mindedness people (McCrae & Costa, 1992). The individuals having small mark on

Openness to encounter will in general be ordinary in conduct and moderate in viewpoint, recognizable to the novel and their enthusiastic reactions are fairly quieted (Costa & McCrae, 1985). Close-mindedness individuals essentially have a smaller extension and power of interest, they will in general be socially and politically moderate. They should not be seen as dictators. Antagonistic, narrow mindedness or dictator hostility infers not closeness (McCrae & Costa, 1992).

Numerous learners vary in their own qualities and they measure data in an unexpected way, their character attributes are unique and furthermore their arrangement. Character characteristics are fundamental for individuals' life effectiveness. Personality trait has been perceived as a deciding component on how individuals learn (Lawrence, 1997; Myer et al, 1998). Human character and accomplishment are the main issues of character and instructive brain research. People are natural creatures living in a specific climate. It has for quite some time been accepted that the mental impact of climate on the

advancement of character is vital.

People go over different psychosocial issues, causing sensations of uneasiness and dissatisfaction. These sentiments might be because of their personality emergencies, professional determination, and peer pressing factor, connections and expected or un-anticipated obligations. They all act diversely in various circumstances and attempt to determine these issues all alone. At the point when they neglect to defeat their issues, they feel baffled, which further influences their general exhibition. In the current investigation, the point of convergence is to offer logical help to the idea that there are solid connections of certain character factors with educator students with uncommon requirements scholarly accomplishment. Woolfolk, (2000) announced that numerous individuals are scholastically gifted yet ineffective throughout everyday life. They have issues in school, seeing someone however they cannot advance the circumstances.

Concept of Academic Performance

The idea of academic performance has a few references. It ordinarily signifies tasks and mastery, having an effect on the climate and going up against some norm of greatness. Slavík (1999) comprehended scholastic accomplishment as a cycle of perceiving a student's degree of information, working and learning exercises. Academic achievement is the appraisal of the degree to which an individual – regularly an understudy – has accomplished an instructive objective. Darling (2005) stated that educational performance is information, getting, abilities, learning perspectives and which can all be evaluated through numerous tests during or in the wake of learning – instructing action.

Academic performance alludes to an effective achievement or accomplishment in a specific subject showed by evaluations, stamps and scores of unmistakable critiques (Dimbisso, 2009). Educational accomplishment additionally alludes to how understudies manage their investigations and how they adapt to or achieve various undertakings given to them by their educators in a fixed time or scholastic year (Dimbisso, 2009). Scholarly accomplishment is the measure of information got from learning. Academic accomplishment is a result of the presentation that shows what level of individual and instructive objectives an understudy has accomplished at school. Schools are fundamentally centered on psychological objectives (e.g., information, basic reasoning) or scholarly area (e.g., numeracy, proficiency, history and science), however, scholastic accomplishment is developed with more various spaces of learning (Alarcon, & Edwards, 2013). Learners' educational accomplishment is considered as a record of effectiveness and nature of schooling the executives, or the board of learning/instructing exercises. Regularly, scholastic execution is operationalized as evaluations (e.g., grade point normal (GPA), or, on the other hand, most elevated level of instructive fulfillment.

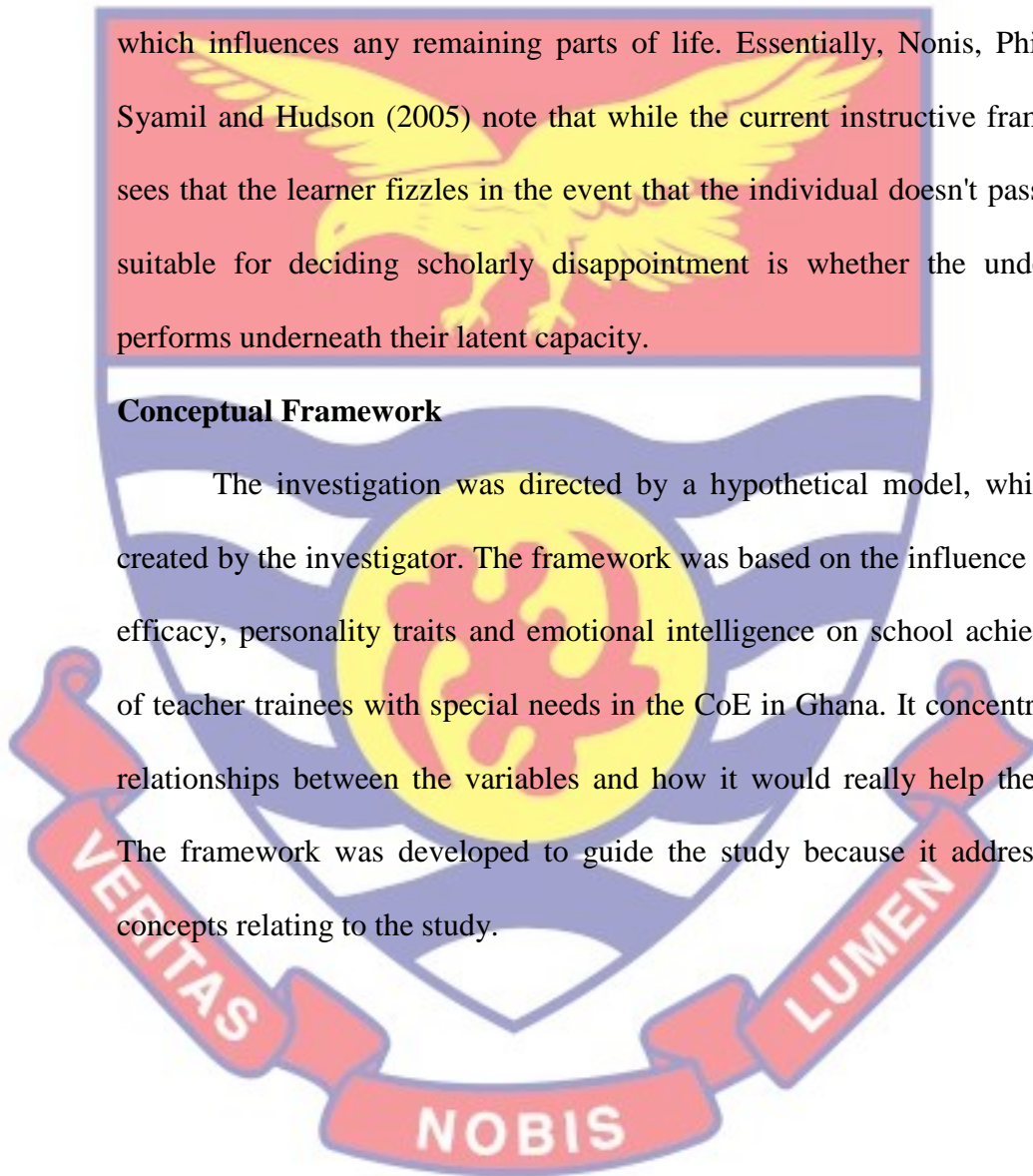
The under accomplishing student is one whose real fulfillment, as demonstrated by his academic accomplishment in school, doesn't compare his possible accomplishment as shown by his capacities (Ghanney, 2007). Kevin (2000) additionally characterized over achievers as learners whose school accomplishment is in overabundance of assumptions framed based on their exercises. The idea of over and under accomplishment proposes that there are factors notwithstanding capacity which positive impact on achievement and

that there is no ideal positive relationship between cleverness and fulfillment. The idea of low scholarly accomplishment changes in its definition. Diaz (2003) considers low scholarly accomplishment or scholastic disappointment as the circumstance in which the subject does not achieve the normal accomplishment as per their capacities, bringing about a modified character which influences any remaining parts of life. Essentially, Nonis, Philhours, Syamil and Hudson (2005) note that while the current instructive framework sees that the learner fizzles in the event that the individual doesn't pass, more suitable for deciding scholarly disappointment is whether the understudy performs underneath their latent capacity.

Conceptual Framework

The investigation was directed by a hypothetical model, which was created by the investigator. The framework was based on the influence of self-efficacy, personality traits and emotional intelligence on school achievement of teacher trainees with special needs in the CoE in Ghana. It concentrates on relationships between the variables and how it would really help the study.

The framework was developed to guide the study because it addresses the concepts relating to the study.



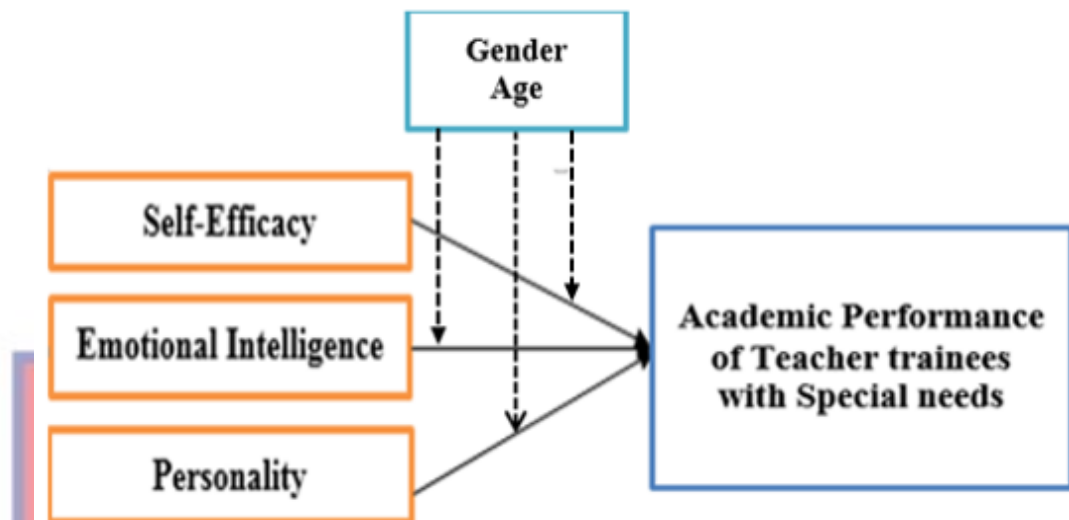


Figure 1: Impact of self-efficacy, emotional intelligence and personality traits on academic performance moderated by gender and age

Source: Author's own construct, 2019

Figure 1 shows the association between self-efficacy, emotional intelligence, and personality traits and school achievement of teacher trainees with special needs. It is believed that teacher trainees with special needs personal confidence in their capabilities for a positive achievement of a certain job (self-efficacy) could influence their academic achievement. Also, their capacity to recognise, comprehend, monitor and reply to people feelings which subsequently aid them to adjust superior communally and stimulate enhanced achievement in all parts of life (emotional intelligence) could also influence their academic achievement. Finally, how and the way they feel, think, and behave (personality traits) could influence their academic achievement. It is also believed that their gender and age distribution could also moderate the connection between self-efficacy, emotional intelligence, personality traits and educational achievement. It is likewise modelled that gender and age of the learners would moderate the links connection between self-efficacy, emotional intelligence, personality traits and school attainment.

Empirical Review

This part investigated works of other authors on the theme. A judgement of exploration discoveries is significant in deciding the relationship between the principle factors of the topic and how these connect with the concepts regarding the subject. Accounts on this investigation incorporates (a) the connection between self-efficacy and school achievement of teacher-trainees with special needs, (b) the relationship between EI and scholarly achievement of teacher-trainees with special needs and (c) the connection between character characteristics and scholarly performance of teacher-trainees with special needs.

Relationship between Academic Self-Efficacy and Academic Performance

Academic self-confidence (efficacy) alludes to people's feelings that they can effectively convey any scholarly assignments at assigned levels (Schunk, 1991). Academic self-confidence (efficacy) refers to learners' impression of their skill to do their classwork (Midgley et al., 2000). Students' confidence (efficacy) assumed an incredible part in deciding how a person's sentiments and thoughts roused themselves, which at that point eventually affected their conduct and the result (Bandura, 1986). Past examinations on academic self-confidence (efficacy) accepted and learners' educational performance has been a subject important to numerous scholars and especially friendly researchers. Since it was uncovered by numerous discoveries that scholastic self-confidence (adequacy) was unequivocally connected with learners' school achievement.

For instance, in Iran, Mohammadyari (2012) did an investigation of connection between broad perceived self-confidence (efficacy) and test

uneasiness in scholastic accomplishment of male and female learners. The investigation used descriptive correlational study and data were collected from 350 students who were chosen by random sampling process via self-efficacy questionnaire and test anxiety questionnaire. The outcomes displayed that there was a positive significant connection between broad perceived self-efficacy and learners' scholarly accomplishment (female: $r = 0.551$, $P < 0.000$, male: $r = 0.281$, $P < 0.004$) and a negative significant connection between test anxiety and learners' scholastic accomplishment (female: $r = -0.674$, $P < 0.000$, male: $r = -0.121$, $P < 0.043$). The outcomes of regression displayed that in scholarly accomplishment of female learners, test anxiety ($- 0.084$) and in scholastic accomplishment of male learners, self-confidence (efficacy) (0.057) had significant extrapolative force and in scholarly accomplishment of male learners. However, test anxiety and females overall perceived self-adequacy had no significant prescient force. Thus, anxiety as a female trademark and conviction to be able as a male feature can be envisioned motives of accomplishment in setting of a gender role.

Also, in China, Li (2012) assessed attitude, self-efficacy, effort and educational output among learners of City University of Hong Kong. The analyst detailed that scholarly self-adequacy ($\beta = 0.355$, $p < .01$) could significantly foresee educational productivity of students better than attitude and energy in the examination. In Ethiopia, an investigation directed by Tenaw (2013) on a connection between self-adequacy, scholastic accomplishment and sex in analytical Chemistry at Debre Markos College of Teacher Education revealed that, there was critical and positive connection between self-adequacy and school performance ($r = 0.385$, $p < 0.01$).

In Albania, Shkullaku (2013) investigated sex gaps in self-efficacy and educational achievement among Albanian learners from two major colleges in Tirana, Albania. The information was gathered from 180 learners (102 females and 78 males) chose from first, second and third year groups. The two colleges and respondents were chosen randomly. A survey was utilised to quantify self-efficacy and the CGPA of the first semester was collected to ascertain the school achievement of the respondents. The information was examined utilising descriptive and inferential measurements. The Pearson correlation coefficient was utilised to assess the connection between self-efficacy and school performance (CGPA). T-test was employed to parallel male and female respondents in self-adequacy and scholastic accomplishment. The outcomes of the examination showed that there was a critical difference among male and females in self-efficacy. There was no dissimilarity among males and females in academic performance. Likewise, a significant connection was found between the learners' self-efficacy and scholastic achievement. From the discoveries, it was suggested that lecturers and administrators at the colleges need to improve learners' self-efficacy and to help them to confront scholarly necessities with undeniable degree of confidence.

In a recent study in Nigeria, Koloa, Jaafar and Ahmad (2017) investigated the stages of learners' scholastic self-adequacy (efficacy) convictions (beliefs) and connection between scholarly self-efficacy (adequacy) with educational outputs among final year understudies in one of Nigerian colleges of training. A sample of 339 participants who were stratified and indiscriminately chosen from five faculty of the College partook in the examination and questionnaire was used for data collection. The discoveries

uncovered that, 80.82% of the students have a more level of self-efficacy in the College. Additionally, significant positive association between self-efficacy convictions and learners' school outcomes was established ($r=0.342$, $p<0.01$). In this manner, it is suggested that learners ought to be presented to the sort of self-adequacy intercession programme in order to acquire the kind of confidence, so they can truly accomplish excellent and manage all scholastic related undertaking positively, which thusly improve scholarly accomplishment of learners emphatically.

More recently, in Kenya, Oyuga, Raburu and Aloka (2019) carried out an investigation to examine the link between scholastic self-confidence (efficacy) and scholarly achievement among bereaved schoolchildren in Kenya. The investigation was tied to Social Cognitive model. The investigation employed concurrent triangulation research design within the mixed method approach. The populace involved 300 bereaved schoolchildren and 35 headteachers. A sum of 300 learners and 11 school directors were chosen using simple random sampling approaches respectively to constitute the symbolic sample. Questionnaires, document analysis and interview schedule were the principle information assortment instruments. Quantitative information was examined utilising descriptive and inferential measurements while qualitative information was analysed and presented utilizing topical investigation. Study discovered a significant small links between self-efficacy conviction and educational performance ($r = .276$). Results from the face-to-face schedule uncovered that self-efficacy is an imperative part of scholarly accomplishment among orphan students in Bondo Sub-County. The investigation commended that Ministry of Education and other educational

investors/partner sought to comprehend the situation of orphans and furnish them with improved services like prepared counsellors who might have the option to give stranded learners proper counselling services corresponding to self-guideline abilities.

Relationship between Emotional Intelligence (EI) and Academic

Performance

A few scholars attempted to review the association between EI attribute and scholastic accomplishment, nevertheless, research investigating the link between school performance and EI among students have delivered diverse outcomes (Fernández et al., 2012; Hogan et al., 2010; Keefer et al., 2012; MacCann et al., 2011; Perera & Digiacomio, 2013).

For example, In Iran, Fallahzadeh (2011) explored the association between educational accomplishment and EI in clinical science learners. To quantify EI, the instrument EQ-I-survey was chosen. A representative comprised 223 respondents (70 males and 153 females), taken an interest in this examination by stratified sampling. To investigate the information, Regression (relapse) analysis, Pearson's correlation and T-test were employed. Mean EI score was 245.94 (95% CI: 243.15-248.72). Pearson's correlation coefficient displayed that there is a significant ($r=0.14$, $p=0.039$) connection between EI and learners' educational achievement while discoveries demonstrated a significant link ($p<0.05$) between two subcomponents of EI and scholarly accomplishment. There were significant dissimilarities in the EI scores by understudies ($p<0.01$). Bearing in mind the low degree of EI among learners, the significant association among aggregate and a few segments of EI with scholastic execution, it appears to be vital to think about EI, how

learners' emotional wellness improve and assist them with finishing their undertakings all the more effectively.

Similarly, Maraichelvi and Rajan (2013) assessed the connection between EI and the educational achievement among undergraduates. In this study, EI was measured by E I Inventory (MEII) and scholastic accomplishment were analyzed under graduate understudies (n=300) CGPA. The self-management component and total composite score were discovered to be positively connected with educational output of the chosen participants. Likewise, the overall EI score exhibited a level of 7.5 percent of the respondents being emotionally intelligent. The significant ANOVA results has obviously indicated that EI could anticipate scholarly execution of learners. The discoveries give an additional need on the best way to refine the educational achievement of schoolchildren. Likewise, the investigation has presented that emotional well-being could be underscored on scholarly achievement. Narasgouda and Ganihar (2014) carried out an investigation of EI and scholastic accomplishment of learner-educators of CoE. This investigation was examining the link between EI and academic accomplishment among understudy educators. The questionnaire was distributed to student-teachers in 35 CoE conglomerated to Rani Channamma University, Belgium. The discoveries of the investigation uncovered that the female teacher-student of CoE are significantly higher on EI and its domains when contrasted with male student-educators of universities.

In Malaysia, Bunyaan, Tan and Loo (2015) completed an examination to evaluate the association between EI and academic performance. The outcome disclosed that one of the EI segments (utilisation of feeling) is

emphatically related to educational performance. The investigation likewise uncovered that the female participants scored lower than male counterparts in EI mean score. Conversely, the distinction in EI between sexes was not measurably significant. The distinction in EI between years of study was likewise considered and it was found measurement insignificant. The outcomes uncovered a fascinating discovery that the sample in this examination, paying little heed to the years of study, self-detailed that they are better in assessing their own feelings, however more vulnerable in controlling their feelings.

Similarly, in Greece, Sahinidis, Kallivokas, Markantonatou and Sdrolias (2016) analyzed the impacts of EI on school achievement among university students. Data were collected using 30-item Likert scale questionnaire and reported GPA. The outcomes show that there is a measurably significant association between composite EI score, and two of its dimensions and educational performance among the students. Besides, sex disparities were additionally found in self-control and emotionality. The ramifications of this investigation for instructors and educational strategy creators are significant, since the methodical cultivating of EI in learners could prompt more noteworthy instructive results and more successful organisations.

In a new report in Pakistan, Ahmed et al. (2017) determined the relationship between EI and undergraduate medical learners' school performance. The investigation utilised a cross sectional examination plan and information were gathered utilising EI surveys and CGPA via nonprobability consecutive technique from 120 students. The result revealed a solid association between CGPA and two individual components of EI (well-being

and sociability). The value of EI was essentially higher in the male than in the female understudies. The investigation concluded that proper measures must be taken to fortify enthusiastic prosperity in clinical learners for better scholastic exhibitions.

More recently in Pakistan, Suleman et al. (2019) conducted a study to explore the relationship between school excellence and EI among students at Kohat University of Science and Technology (KUST), Pakistan. The research employed descriptive correlational design. A well-test instrument ‘Emotional Intelligence Scale (EIS)’ was used to collect the data from 186 undergraduates. The academic excellence of the students was measured using CGPA. Pearson correlation and multiple linear regression (MLR) was employed to examine the information gathered from the respondents. The results discovered that there was a high positive link ($r = 0.880$) between EI and academic success among learners. The MLR enquiry disclosed that self-development (Beta = 0.296), emotional stability (Beta = 0.197), managing relations (Beta = 0.170), altruistic behaviour (Beta = 0.145), and commitment (Beta = 0.117) influence school performance of students positively. The conclusions propose that the EI of the learners could be enhanced more in order to positively heightened the academic excellence of the students in the college.

Relationship between Personality Traits and Academic Performance

Many investigations have carried out to look at the impact of student-teachers’ personality traits on academic success with different discoveries. For example, In Romania, Ciorbea and Pasarica (2013) identified the correlation between students’ character (personality traits) and educational achievement

utilising 80 members. The investigation utilised EPQ to gauge the personality traits of the respondents (Neuroticism, Extraversion, Psychoticism); MBTI for the degree of association during exercises and Rosenberg's Self-Esteem Scale. School achievement was assessed by the final project score and by the general CGPA. Precise recognizable proof of individual contrasts in scholastic execution has genuine ramifications for instruction.

Also, in Pakistan, Ghazi et al. (2013) examined the correlation between learner' character characteristics and their school accomplishment in Khyber Pakhtunkhwa. Hypothetical structure of this investigation was dependent on Big Five Personality Trait Theory (Cattell & Eysenck, 1973). Illustrative review strategy was utilised for this examination. Out of 12009 schoolchildren, 800 of them were chosen through random sampling strategy employing relative allotment procedure as a representative of the examination within two districts randomly selected. A self-created surveys were employed as an exploration instrument and data assembled were analysed using percentage, mean, standard deviation and Pearson product moment correlation. The outcomes of the research indicated that "conscientiousness" and "agreeableness" of character attribute were discovered high while "extroversion", "neuroticism" and "receptiveness to encounter character attributes were discovered low among learners. Generally, there was no critical connection found between the learners' character attributes and their scholastic accomplishment.

Nighute and Sadawarte (2014) examined the connection between Big Five Personality Traits and medical students' academic success. The study randomly used 150 students. The study found that all that all character

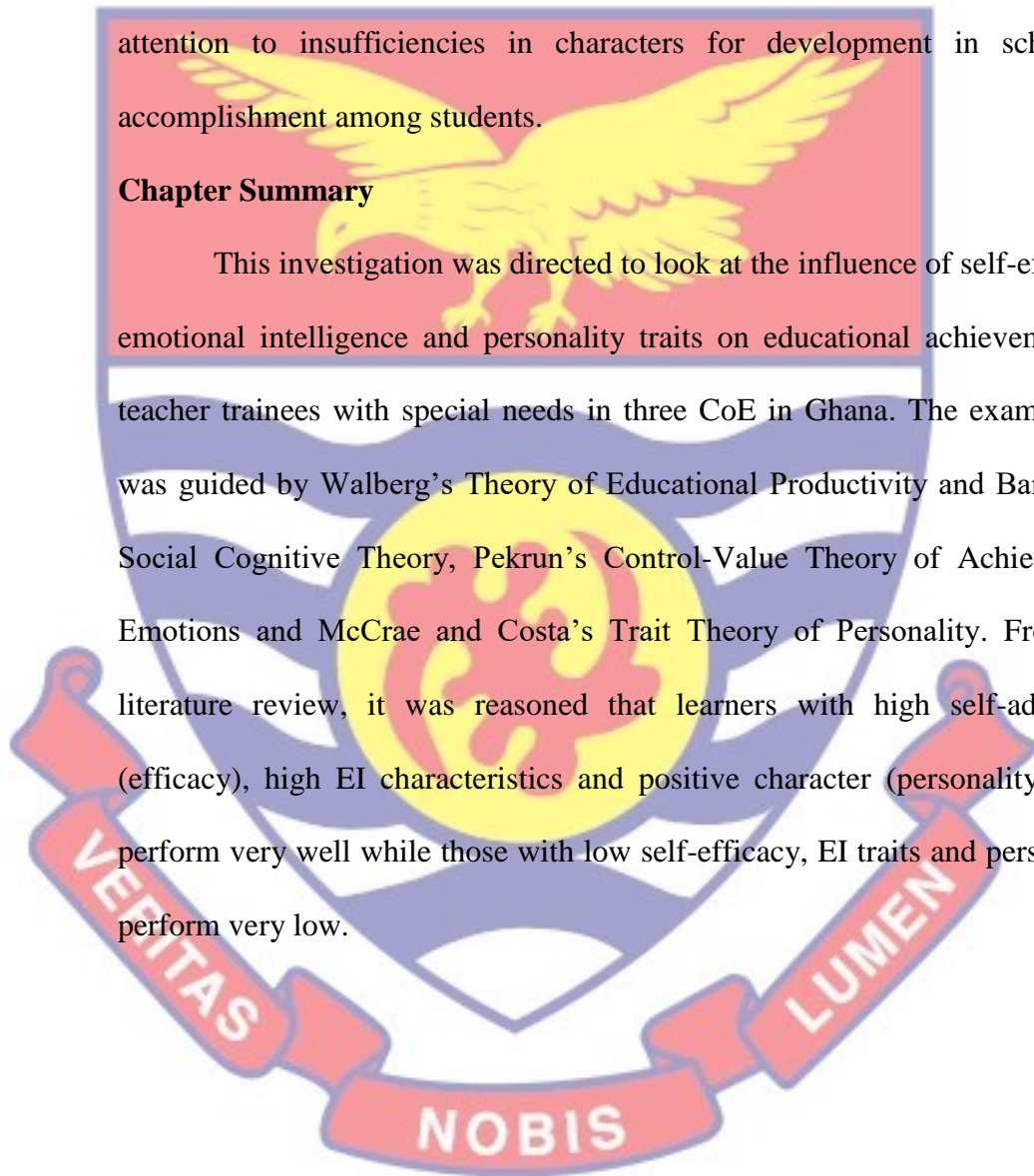
attributes are positive and significant predictors of medical schoolchildren with the exception of extraversion. Among the attribute, openness to experience and neuroticism were positively linked to learners' scholastic accomplishment than agreeableness and conscientiousness. In a recent study in Malaysia, Bakar and Heng (2018) conducted a study to examine the degree to which personality traits have significance to undergraduates' scholarly accomplishment. The character attributes are estimated dependent on the Big 5 Personality Trait Inventory. A sum of 320 public grade schoolchildren in Johor Bahru, Johor, Malaysia were engaged in his examination. The information collected were processed using SPSS and examined utilizing descriptive and inferential statistics. The discovering demonstrates that the attribute of Agreeableness, Conscientiousness, Extraversion and Neuroticism are associated with the scholastic accomplishment of schoolchildren. Further examination, likewise, displays that the learners with attribute of amiableness, sociability, and meticulous thoroughness and without ongoing passionate issues tend to acquire a superior educational accomplishment. Accordingly, it is said that explicit character attributes like extraversion, scruples and enthusiastic dependability of the learners should be taken into consideration so as to increase their academic excellence. A few ramifications for future exploration are additionally provided.

More recently, Lateef, Dahar and Yousuf (2019) assessed the influence of Type A and Type B personality on educational outcomes of tertiary learners. This investigation employed survey design. Besides, a random sampling method was utilised for the representative choice. Inferential measurements (T-test, Pearson correlation and Multiple Linear Regression)

was used for the information collected examination. Discoveries showed that character types A and B altogether affect school accomplishment of schoolchildren. Male and female learners of Type B character showed significant school attainment gap different Type A character. It is suggested that policy makers, educators and school administrators should pay critical attention to insufficiencies in characters for development in scholastic accomplishment among students.

Chapter Summary

This investigation was directed to look at the influence of self-efficacy, emotional intelligence and personality traits on educational achievement of teacher trainees with special needs in three CoE in Ghana. The examination was guided by Walberg's Theory of Educational Productivity and Bandura's Social Cognitive Theory, Pekrun's Control-Value Theory of Achievement Emotions and McCrae and Costa's Trait Theory of Personality. From the literature review, it was reasoned that learners with high self-adequacy (efficacy), high EI characteristics and positive character (personality) traits perform very well while those with low self-efficacy, EI traits and personality perform very low.



CHAPTER THREE

RESEARCH METHODS

Overview

The main objective this examination was to explore impact of self-efficacy, emotional intelligence and personality traits on academic performance of teacher trainees with special needs in Colleges of Education (CoE) in Ghana. This segment concentrated on the investigation methods utilised in the gathering of information for the research. It comprised a brief description of the research design, population, sample and sampling procedure, data collection instrument, data collection procedures, ethical considerations, and data processing and analysis.

Research Design

Descriptive survey strategy was used in this study. A descriptive survey research, as per Aborisade (1997), is the one the analyst is keen on contemplating certain attributes, mentalities, sentiments, convictions, inspirations, conduct, assessments of a populace, which might be enormous or little, without endeavouring to control any factors. The design is proper for this examination since it tries to investigate the impact of self-efficacy, emotional intelligence and personality traits on academic performance of teacher trainees with special needs in CoE in Ghana and the quantity of the respondents to be included is generally huge. Additionally, no factors were controlled in the examination.

Osuala (2001) asserted that descriptive survey designs are adaptable and reasonable, particularly, to instructors in that they recognize current conditions and highlight present necessities. As per Chalmers (2004) and Ponterotto (2005), descriptive research strategy is fitting for such an examination since it offers the investigators the chance to look for clarifications of specific parts of social occurrences like feelings, and perception of the answerers (participants). Descriptive research studies are intended to acquire data concerning the current status of situations. They are coordinated towards deciding the idea of a circumstance, as it exists at the hour of the investigation (Ary, Jacobs, & Razavieh, 2010).

The descriptive survey design was preferred on the grounds that it enjoys the benefit of creating a decent measure of reactions from a wide scope of individuals. Simultaneously, it gives a significant image of occasions and tries to clarify individuals' insights and conducts based on information accumulated at a point on schedule (Fraenkel & Wallen, 2010). Conversely, descriptive survey design may deliver inconsistent outcomes since they dig into private matters that individuals may not be totally honest about (Fraenkel et al., 2012).

Study Area

The study was conducted in three Colleges of Education, out of the Fourth Eighty (48) Colleges of Education in Ghana. These Colleges were selected because they are the only Colleges that handle special need students. The colleges are; the Presbyterian College of Education Akropong in the Eastern Region, Wesley College of Education in the Ashanti Region and Nusrat Jahan Ahmadiyya College of Education in the Northern Region.

Presbyterian College of education was selected because it has the hearing impairment, visually impairment and the physically challenged. The other two colleges were selected because they have students with visually impaired and the physically challenged students. This gave the study a full representation of the special needs students in the country.

Population

The populace for the examination involved all teacher trainees with special needs in Presbyterian CoE, Wesley CoE and Nusrat Jahan Ahmadiyya CoE. The population was considered appropriate due to the nature of the problem. The total population was 74. Table 1 shows the population distribution of teacher trainees with special needs from the three CoE in Ghana used in this study.

Sampling Procedure

The representative (respondents) file was the list of teacher-trainees with special needs from the three CoE. A sample of 74 teacher trainees with special needs was used for the study (see Table 1). Census was used because the number was small and it is realistic to include everyone in the study.

Table 1: *Population Distribution of Teacher Trainees with Special Needs*

College of Education (CoE)	Town//Region	Population
Presbyterian CoE	Akropong-Akuapem, Eastern Region	40
Wesley CoE	Kumasi, Ashanti Region	14
Nusrat Jahan Ahmadiyya CoE	Wa, Upper West Region	20
Total		74

Source: Field data, 2020

The objective of using this sampling technique is that, I focused on specific qualities of the unit study cohorts that are of attention (teacher-trainees with special needs) and this empowered the author to answer the enquiry questions. The technique produced a sample that was logically assumed to be representative of the population. It helped to make generalizations about the sample (Glen, 2015).

Data Collection Instruments

The opinion poll (questionnaire) was utilised to accumulate information from the research cohorts (respondents). The questionnaire was adapted from students' academic self-efficacy questionnaire (Dullas, 2018), students' emotional intelligence (Sterrett, 2004) and students' personality traits (John & Srivastava, 1999). The adapted survey was close-ended type of 4-position Likert nature inventory extending from Strongly Disagree (SD) to Strongly Agree (SA). The adapted questionnaire was grouped into quadruple segments (A, B, C and D).

Segment 'A' elicited data from the respondents on their basic/general characteristics (gender and age distribution). Section 'B' measured teacher-trainees with special needs self-efficacy. The academic self-efficacy questionnaire was adapted from Dullas (2018). The questionnaire has 62 items with four constructs: perceived control (PC), competence (C), persistence (P), and self-regulated learning domains (SLD). Out of 62 items, 12 items were adapted and each of the construct had three items. Examples of adapted items are as follows: I am positive that I can understand the ideas and subjects instructed in my group....I trust that I can have command over the ideas and discipline educated in my class; Notwithstanding the opposition from

friends/classmates, I actually keep learning very well....I continue to study very hard despite discouragement from peers.

Segment “C” elicited information from teacher-trainees with special needs on their emotional intelligence. The student emotional intelligence questionnaire was adapted from Sterrett (2004). The scale 30 items with the following dimensions: self-awareness, self-confidence, self-control, empathy, motivation and social competency. Out of 30 items, 18 items were adapted and each of the construct had three items. Examples of adapted items are as follows: I require some serious energy consistently for calm thinking.... I generally set aside time for my mediation; I readily admit mistakes and apologize.... I always accept my mistakes and apologise.

Finally, Segment “D” contained information on personality traits of teacher-trainees with special needs. This section of the questionnaire was adapted from John and Srivastava (1999). It has 44 items with the following constructs: extraversion, agreeableness, conscientiousness, neuroticism and openness. Out of 44 items, 15 items were adapted and each of the construct has three items. Examples of adapted items are as follows: I see myself as someone who is exclusive in all the subjects.....I see myself as someone who do well in all the subjects.

The surveys were utilised for the investigation since it is proper for this type of research and furthermore provides participants enough time to give accurate responses (Kothari, 2004). Furthermore, the questionnaire permits enormous representatives to be used in the study and the outcome can be made more trustworthy and dependable. Once more, the survey was utilised on the grounds that it is more affordable. Likewise, it offers more noteworthy secrecy

since there is no in-person-to-in-person communication between the researcher and the study cohorts. Also, the respondents can peruse and compose (Kothari, 2004). In spite of these qualities, there are shortcomings. For example, if study subjects do not comprehend some of the inquiry statements, there is no chance for them to have the importance explained (Kumar, 1999).

Academic Performance

To evaluate how the teacher trainees with special needs perform academically, their cumulative grade point average (CGPA) was collected. The data on CGPA was from the final year teacher-trainees enrolled in Diploma in Basic Education in the CoE in Ghana. This was gathered from the Assessment Officer from the various CoE used in this current research.

Reliability and Validity of Research Instrument

Face and content soundness and legitimacy was ensured. The questionnaire was given to supervisors for validation and approval. Gall, Borg and Gall (1996) focused on the requirement for pilot-testing of research instruments prior to distributing the instruments to the respondents. The reliability of the instruments was obtained through pilot-testing of the instruments. This was done with the objective of adjusting parts of the inquiries (Foddy, 1995). The respondents utilized in pilot-testing the instrument were approached to offer remarks on the clearness of the inquiries. These remarks were contemplated to make the inquiries as clear as could really be expected. The researcher pilot tested the instrument using 20 teacher-trainees with special needs from the UCC. UCC was chosen because it possesses the same characteristics of the selected CoE. They are tertiary education institution and also have teacher-trainees with special needs such as

students who are visually, hearing and physically impaired. Cronbach’s alpha was employed to determine the internal consistency of the instrument. The outcomes of the reliability co-efficient of the instrument are shown in Table 2.

Table 2: Reliability Co-efficient of Research Instrument

Variable	Cronbach's Alpha	N of Items
Academic self-efficacy scale	.837	12
Emotional intelligence scale	.780	18
Personality traits	.755	15

Source: Field data, 2020

As shown in Table 2, the reliability co-efficient of the instrument using Cronbach’s alpha shows high interior steadiness and uniformity of the questions. The reliability coefficient ranges from .755 to .837. The overall dependable guideline is that a Cronbach's alpha of .70 or more is acceptable (e.g., Fraenkle et al., 2012). This explains that the items are dependable and reliable for the sample, hence, the research instrument is good for actual data collection.

Aside the face and content validity of the adapted instruments construct validity; convergent and discriminate validity was also ensured. Convergent validity was assessed using the factor loadings, Cronbach alpha (α) and AVE coefficients. The discriminant validity was assessed using AVEs and square root of AVE (\sqrt{AVEs}) (Hair et al., 2010; Awang, 2014). Concerning the convergent validity, the factor loadings of self-efficacy scale ranges from .567 to .845, emotional intelligence scale ranges from .524 to .780 and personality traits scale also ranges from .526 to .771. All these factor loadings or regression weights were statistically significant ($p < .05$) (Hair et

al., 2010; Awang, 2014). The Cronbach alpha of self-efficacy scale ranges from .68 (persistence) to .82 (perceived control), emotional intelligence scale ranges from .51 (empathy) to .73 (self-control) and personality traits scale ranges from .53 (agreeableness) to .76 (Conscientiousness). These values indicated that inter-construct reliability were satisfactory (Hair et al., 2010; Awang, 2014). The alpha values suggest a consistent and reliable instrument because the reliability co-efficient were within than the recommended cut-off of .60 or .70.

Regarding the discriminant validity, the AVE coefficients for self-efficacy scale (AVE = .62 - .76), emotional intelligence scale (AVE = .52 - .66) and personality traits scale (AVE = .58 - .74) showed acceptable level of convergent validity (Fornell & Larcker, 1981; Hair et al., 2010). The square root of AVE (\sqrt{AVEs}) for self-efficacy scale (.79 - .87), emotional intelligence scale (.72 - .81) and personality traits scale (.76 - .86) were higher than the correlations involving the construct (Fornell & Larcker, 1981). Also, the values of AVE were less than .90 for the scale (Hair et al., 2010). These values suggest acceptable level of discriminant validity of self-efficacy, emotional intelligence and personality traits scale.

Data Collection Procedures

Ethical protocols were followed during the data collection. First, I sought for moral and behavioural authorisation and approval from Institutional Review Board (IRB), University of Cape Coast (UCC) and an introductory letter was taken from the Department of Guidance and Counseling, UCC to look for consent and acquiescence from the principals of selected CoE to undertake the study. The reason for the letter of presentation (introduction)

was to request for participation and furthermore to make an affinity between the investigator and the respondents who functioned as the critical members of the investigation. After seeking for permission from the principals of the various CoE, I also obtained informal verbal consent from the heads of department (HoDs) and assessment officers (AO) of the various CoE before administering the questionnaire to the respondents.

To get respondents to react to the survey on schedule, I connected, explained the objectives of the study to them and requested their participation. I explained to them the reasoning and motivation behind the examination for them to know that the research is for academic purpose. This was to help them provide objective response. I set aside some time to clarify the statements to the answerers to upgrade the legitimacy of the information, various subsequent meet-ups were made to discover whether the examinees had finished the questionnaire. The visits were important in light of the fact that they gave a chance to additional clarifications to respondents who have a few troubles with the things. With students who are visually impaired, the items on the questionnaire were read to them and their assistance helped them in responding (ticking) to the items. Also, some of the students who are visually impaired responded to the items on the questionnaire using the JAW software on their personal computers.

Ethical Considerations

Prior to the information assortment, I looked for moral leeway from Institutional Review Board (IRB), UCC. The investigation was done solely after the communicated assent of respondents had been looked for. I gave a composed statement to guarantee those worried of their privacy and that the

data given would be utilised with the goal of the examination and that it would be treated thusly. The official introductory letter from the Department of Guidance and Counseling, UCC assisted with imparting trust in the foundations of information and, consequently, the letter was most extreme significance to the investigation. To keep away from copyright infringement, all wellsprings of data were properly recognized. In order to avoid plagiarism, all sources of information were duly acknowledged.

Data Processing and Analysis

The raw information gathered from the participants were coded and processed using Statistical Product and Service Solution (SPSS 25.0). The information was examined utilizing descriptive statistics (frequency, percentages, means and standard deviation) and inferential statistics (Multiple Linear Regression and Moderation analysis). Data on research question one (RQ 1) was analysed using mean and standard deviation. The mean analysis provided the average response of the respondents regarding the levels of self-efficacy, emotional intelligence and personality traits. Data on research question two to four (RQ 2-4) was analysed using multiple linear regression. Multiple linear regression was used to predict the value of academic achievement (dependent variable-continuous data) on the value of independent variables (self-efficacy, emotional intelligence and personality traits) (independent variables). The data on research question five and six (RQ 5-6) was analysed using moderation analysis by Hayes' (2018) Macro Process. The analysis made use of 5,000 bootstrap samples with 95% confidence interval. Gender and age was the moderator for research question five and six respectively; the predictor variables were academic self-efficacy, emotional

intelligence and personality traits and the criterion variable was the academic performance of teacher-trainees in the CoE in Ghana. Table 3 shows the summary of the data analysis plan that is adopted under the current study.

Table 3: *Summary of Data Analysis Plan*

SN	Research Questions	Tool for Analysis
RQ 1	What is the level of self-efficacy, emotional intelligence and personality traits among teacher-trainees with special needs in the CoE in Ghana?	Mean, Standard deviation
RQ 2	What is the influence of self-efficacy on academic performance of teacher trainees with special needs in the CoE in Ghana?	Multiple Linear Regression
RQ 3	What is the influence of emotional intelligence on academic performance of teacher trainees with special needs in the CoE in Ghana?	Multiple Linear Regression
RQ 4	What is the influence of personality traits on academic performance of teacher trainees with special needs in the CoE in Ghana?	Multiple Linear Regression
Table 3: Continued		
RQ 5	What is the moderating role of gender in the connection between the: <ol style="list-style-type: none"> a. self-efficacy and academic performance of teacher trainees with special needs in the CoE in Ghana? b. emotional intelligence and academic performance of teacher trainees with special needs in CoE in Ghana? c. personality traits and academic performance of teacher trainees with special needs in the CoE in Ghana? 	Moderation Analysis Hayes' Macro Process
RQ 6	What is the moderating role of age in the link between the: <ol style="list-style-type: none"> a. self-efficacy and academic performance of teacher trainees with special needs in the CoE in Ghana? b. emotional intelligence and academic performance of teacher trainees with special needs in CoE in Ghana? c. personality traits and academic performance of teacher trainees with special needs in the CoE in Ghana? 	Moderation Analysis Hayes' Macro Process

Chapter Summary

The motivation behind this examination was to investigate the influence of self-efficacy, emotional intelligence and personality traits on academic performance of teacher trainees with special needs in CoE in Ghana.

This section focuses on the research methods used in the collection of data for the examination. The current research engaged descriptive survey design. The research respondents were all teacher trainees with special needs in CoE in Ghana. Census was conducted among all the respondents. The information was gathered from the participants via adapted questionnaire. The questionnaire was validated by the supervisors and pilot test was conducted to estimate the reliability of the instrument. Ethical protocols were followed during the data collection process and data was analysed using both descriptive (frequency, percentages, means and standard deviation) and inferential (Multiple Linear Regression and Moderation analysis by Hayes) statistics.



CHAPTER FOUR

RESULTS AND DISCUSSION

Overview

The reason for this examination was to explore influence of self-efficacy, emotional intelligence and personality traits on academic performance of teacher trainees with special needs in Colleges of Education (CoE) in Ghana. This part is committed to the presentation and discussion of the outcomes that arose out of the examination. The chapter is divided into two parts. The first part displays the demographic profile outcomes of the research subjects. The subsequent segment focuses on the chief outcomes of the study in order to answer the research questions that guided the study respectively

Background Characteristics of Respondents

This segment offers evidence on the socio-economies of the sample. It shelters gender and age group distribution of respondents. The background data of the respondents form a significant part of the study and provide relevant information of the respondents to enhance results discussion. The data gathered was analysed using frequency. The detail results of the background information of the respondents are shown in Table 4.

Table 4 presents the results of the respondents concerning their demographic profile which includes gender and age group distribution. To the gender distribution of respondents, it was found that out of 66 respondents, 34 of them representing 51.5% were female teacher-trainees with special needs

while 32(48.5%) of them were male teacher-trainees with special needs. This result implies that the female teacher-trainees with special needs who partook in the research surpassed the male respondents which could skew the data distribution.

Table 4: *Background Information of Respondents (n = 66)*

Variable	Sub-scale	Freq.	%
Gender	Male	32	48.50
	Female	34	51.50
Age group	Below 20years	3	4.50
	20-24years	38	57.60
	25yrs +	25	37.90

Source: Field data, 2020

Also, the group of respondents could provide diverse perspective on how their self-efficacy, emotional intelligence and personality traits affect their academic performance. Regarding age distribution of the respondents which ranges from below 20 years to 25 years and above, it was found that the majority of respondents (n = 38; 57.6%) within the age bracket of 20-24 years while 25(37.9%) and 3(4.5%) of them were found to be within the age bracket of above 25 years and below 20 years respectively. This would inform us how age distribution of respondents moderates the relationship among their self-efficacy, emotional intelligence and personality traits affect academic performance.

Research Question One: What is the level of self-efficacy, emotional intelligence and personality traits among teacher-trainees with special needs in the CoE in Ghana??

This research question one sought to determine the level of self-efficacy, emotional intelligence and personality traits of teacher trainees with special needs. The data was collected using 4-location Likert scale (Strongly Disagree to Strongly Agree). To identify the level of self-efficacy, emotional intelligence and personality traits among teacher trainees with special needs, the data was analysed using mean and standard deviation. The test point of 2.50 was set up for the inventory by adding the four points jointly and partitioned by the number in the inventory ($4 + 3 + 2 + 1 = 10/4 = 2.50$). To comprehend the average score interpretations, a mean of 2.50 and above indicates a high level of self-efficacy, emotional intelligence and personality traits while a mean below 2.50 indicates a low level of self-efficacy, emotional intelligence and personality traits. A standard deviation below 1.00 denotes homogeneity (similarity) in responses (cluster to the mean score), whereas a standard deviation of 1 and above denotes heterogeneity (diversity) in responses of respondents (disperse from the mean score). Table 5 shows the results.

Table 5 displays the results of the participants concerning their level of self-efficacy, emotional intelligence and personality traits. It is obvious from the results that most of the teacher trainees with special needs had high level of self-efficacy, emotional intelligence and personality traits. For example, concerning the self-efficacy of teacher trainees with special needs, the mean of means score revealed that they had high level of self-efficacy (MM = 3.18; SD

= 0.42) with a range of 1-4.

Table 5: *Special Needs Teacher-Trainees' Level of Academic Self-Efficacy, Emotional Intelligence and Personality Traits (n = 66)*

Variable	Range	Mean	SD
<i>Academic Self-efficacy</i>	1-4	3.18	0.42
Perceived control	1-4	3.41	0.56
Competence	1-4	3.21	0.55
Persistence	1-4	3.09	0.58
Self-regulated learning domains	1-4	3.00	0.54
<i>Emotional intelligence</i>	1-4	3.72	0.32
Self-awareness	1-4	3.25	0.39
Self-confidence	1-4	3.21	0.51
Self-control	1-4	3.03	0.56
Empathy	1-4	2.97	0.48
Motivation	1-4	3.25	0.44
Social competency	1-4	2.94	0.46
<i>Personality traits</i>	1-4	2.94	0.34
Extraversion	1-4	2.71	0.46
Agreeableness	1-4	3.11	0.60
Conscientiousness	1-4	2.95	0.43
Neuroticism	1-4	2.87	0.69
Openness	1-4	3.04	0.57

Source: Field data, 2020

This result implies that teacher trainees with special needs believe in their capabilities or have confidence in their capacity to establish, consolidate and implement the procedures or strategies needed to manage their academic and social works. This result was also evidenced in the academic self-efficacy construct. The teacher trainees with special needs had high level of perceived control (M = 3.41; SD = 0.56) with a range of 1-4). This result means that they can learn more because they develop good study habits and improve their

study habit. They can also pass all their subjects because they have the ability to do so. This could positively influence their academic and social performance. They also had high level of competence ($M = 3.21$; $SD = 0.55$) with a range of 1-4. This result implies that teacher trainees with special needs can understand and have command over the main ideas in the subjects imparted in school. They can get good grades in all the subjects because they can perform all their class tasks. This could positively influence their academic and social performance. The teacher trainees with special needs also indicated a high level of persistence ($M = 3.09$; $SD = 0.58$) and self-regulated learning ($M = 3.00$; $SD = 0.54$) with a range of 1-4. This result means that the teacher trainees with special needs can continue to study very hard despite discouragement from peers, continue to maintain good grades in all their subjects in spite of pressures in college and can continue and persist when they are having difficult time understanding the lesson. They can as well study on their own, submit their assignments before the deadlines and can plan and organise their school activities/works very well. This could positively influence their academic and social performance.

In Table 5, regarding the level of emotional intelligence among teacher trainees with special needs, it was discovered that they had a high level of emotional intelligence ($MM = 3.72$; $SD = 0.32$) with a range of 1-4. This result means that teacher trainees with special needs perceived that they can apprehend, use, and deal with their own feelings in good manners to diminish academic and social pressure, interact adequately, and understand others, defeat difficulties and stop struggle that might arise. This high level of emotional intelligence among that teacher trainees with special needs was also

evidenced in the sub-scales. The respondents perceived that they had a high level of self-awareness ($M = 3.25$; $SD = 0.39$). This result means that the respondents have the ability to always take time for quite reflection, identify their emotion at any given time, and they are clear about their own goals and values. This could positively influence their academic and social performance.

Concerning self-confidence among teacher trainees with special needs, it was realised that they had high level of self-confidence ($M = 3.21$; $SD = 0.51$). This result suggests that they have the ability to always accept their mistakes and apologise, take plans on tasks that need to be done, and express their views in the class thoughtfully and honestly. This could positively influence their academic and social performance. The respondents further indicated to have a high level of self-control ($M = 3.03$; $SD = 0.56$). This result means that the teacher trainees with special needs have the ability to often relinquish issues and pains and sufferings from the earlier experience, open-up to people in a good way, and manage my moods and emotions in the midst of people. This could positively influence their academic and social performance. The teacher trainees with special needs also believed that they possessed a high level of empathy ($M = 2.97$; $SD = 0.48$). This result means that they have the ability to always show an understanding to their friends when they are communicating and focus their attention on another person when they are listening to them. Similarly, they can request for assistance when in need and can rely on several people. This could positively influence their academic and social performance. They also perceived a high level of motivation ($M = 3.25$; $SD = 0.44$). This result suggests that they have the ability to always inspire and encourage others when they are communicating, find the positive in any

given situation, and believe the work they do on daily basis. The teacher trainees with special needs indicated that they had a high level of social competency ($M = 2.94$; $SD = 0.46$). This result means that they have the ability to easily initiate conversation with new people in their class, always deal politely with their friends who have emotional issues, and adequately convince others to embrace their perspective without forcing topic. This could positively influence their academic and social performance.

From Table 5, relating to personality traits among teacher trainees with special needs, it was found that they had a high level of personality traits as pointed by the mean of mean score ($MM = 2.94$; $SD = 0.34$) with a range of 1-4. This result could describe the stable pattern of behaviours among teacher trainees with special needs that persist for a long period of time. This could have direct effect on the respondents' on how they behave and interact among peers. This level of personality traits among teacher trainees with special needs is also evidenced in the sub-scales. For example, concerning extraversion among the respondents, it was found that teacher trainees with special needs had a score of extraversions ($M = 2.75$; $SD = 0.46$). This result means that the respondents are outgoing and energetic. They are assertive, talkative and might seek the company of others. They are perceived as attention seekers and domineers. They could seek excitement, make new friends easily, and enjoy being active with others. This could positively influence their academic and social performance. Regarding agreeableness among teacher trainees with special needs, it was observed that they had a high level of agreeableness score ($M = 3.11$; $SD = 0.60$). This result suggests that teacher trainees with special needs have a tendency to be friendly,

compassionate, and cooperative. They could be ready to help, cared, honest, interested and believed the best about peers in schools. This could positively influence their academic and social performance. To conscientiousness among teacher trainees with special needs, it was noted that they had a high conscientiousness score ($M = 2.95$; $SD = 0.43$). This result infers that they are efficient and organised. They have a tendency to be self-disciplined and dependable. They could keep academic and social tasks in order, come to school highly prepared, and persist in academic activities and goal driven. This could positively influence their academic and social performance. Similarly, the teacher trainees with special needs had a high score on openness to experience ($M = 3.04$; $SD = 0.57$). This result means that they are inventious, and have intellectual curiosity. They also have preference for variety over routine and seek fulfilment in intense as well as euphoric experiences. They could be creative, enjoy trying new things, have a good imagination and be willing to consider new ideas. This could positively influence their academic and social performance. However, teacher trainees with special needs indicated a high level of neuroticism ($M = 2.87$; $SD = 0.69$). This result means that they have a high emotional reaction and they are vulnerable to stress. They could also struggle with difficult situations and have a mood swings which could negatively affect their social and academic performance.

Research Question Two: What is the influence of self-efficacy on academic performance of teacher trainees with special needs in the CoE in Ghana?

The intention of this research question two was to assess the influence of academic self-efficacy on academic performance of teacher trainees with special needs. The sub-scales of academic self-efficacy served as predictors while the academic performance was used as a criterion variable. The data gathered was analysed using multiple linear regression. Prior to the regression analysis, the presuppositions and expectations of multivariate normality, outliers, linearity, autocorrelation, multicollinearity and singularity, homoscedasticity and independence of residuals were tested. Table 6 displays the results.

Table 6: *Influence of Academic Self-Efficacy on Academic Performance*

Variable	B	SE	Beta	t-value	Sig.	T	VIF
(Constant)	4.796	1.802		2.661*	0.010		
Perceived control	1.353	0.537	0.375	2.520*	0.014	0.597	1.676
Self-regulated learning	1.060	0.515	0.281	2.058*	0.044	0.710	1.409
Competence	-0.004	0.541	-0.001	-0.007	0.995	0.616	1.623
Persistence	-1.205	0.509	-0.345	-2.369*	0.021	0.622	1.609
R	: 0.440			DW	=	1.677	
R ²	: 0.193			F-value (4, 61)	=	3.651	
adj R ²	: 0.140			Sig.	=	0.010	

a. Dependent Variable: Academic performance

Source: Field data, 2020

*Significant at $p < 0.05$

The discoveries of the multiple relapse examination (regression analysis) between students' efficacy and the dependent variable (academic performance of teacher trainees with special needs) are shown in Table 6. The outcomes of the multiple relapse examination showed that the multiple relationship coefficient was 0.440 which estimates the level of connection

between the independent variables and the predicted values of the academic performance of teacher trainees with special needs. The direction and magnitude of the effect of self-confidence (efficacy) on academic performance of teacher trainees with special needs was positive moderate (medium), according to Cohen's (1988) guidelines. From Table 6, the multiple coefficient of determination value ($R^2 = 0.193$) assesses the goodness-of-fit (i.e. how closely observed data mirrors expected data) of the projected relapse model (regression) as far as the extent of the change in the outcome variable (academic performance of teacher trainees with special needs) explained by the predictors (efficacy). The R^2 value (0.193) implies that nearly 19% of the difference in educational performance of teacher trainees with special needs was clarified and represented by the indicators (self-efficacy dimensions) and R^2 value was significant at 5% level.

From Table 6, the Durbin-Watson (WD) statistics was 1.677. This value is within the critical values $1.5 < d < 2.5$. This value tests for autocorrelation in the remainder (residuals) of the relapse investigation. Hence, it advises whether the supposition of free mistakes is viable or something else. In this information, it is seen that the value is near 2; henceforth, the suspicion has in all likelihood been met. Subsequently, I can accept that there was no first request straight auto-connection in the regression model. Accordingly, there was no auto-relationship in the representation (sample). From the relapse model, the results of ANOVA (F-test), revealed that the independent variables, academic self-efficacy statistically significantly predicted dependent variable (academic performance of teacher trainees with special needs), $F(4, 61) = 3.651$, $p = 0.010$, $R^2 = 0.193$. This means there was

statistically significant direct connection between the independent factors and dependent variable (all in all, $R^2 > 0$). This load of discoveries is revealing that the model is good. Thus, they provide trustworthiness that the model utilised was acceptable.

In Table 6, the constant of the relapse model was ($B = 4.796$, $SE = 1.802$, $t = 2.661$, $p = 0.010$). This value means that even when the independent variables, academic self-efficacy are detained consistent or held at nothing, school performance of teacher trainees with special needs will still be 4.796 and this value is positive and statistically significant. From the regression model, the *perceived control* ($B = 1.353$, $SE = 0.537$; $t = -2.520$, $p = 0.014$) and *self-regulated learning* ($B = 1.060$, $SE = 0.515$; $t = -2.058$, $p = 0.044$) as a sub-scale of academic self-efficacy of teacher trainees with special needs had negative coefficient respectively. These values represent the partial effect of perceived control and self-regulated learning on academic performance of teacher trainees with special needs, retaining other predictors as steady (constant). The assessed positive sign infers that such impact of *perceived control* and *self-regulated learning* on academic performance was positive and that academic performance score of teacher trainees with special needs would increase by 1.353 and 1.060 for every unit increase in their *perceived control* and *self-regulated learning* as dimensions efficacy respectively. This result infers that if teacher trainees with special needs have the convictions or the certainty that they can handle or have authority over their inside state, practices and the spot or individuals or things or sentiments or exercises encompassing an individual, it would positively affect their academic performance. Also, if they have or do have the trust in their capacity to plans

for an undertaking, monitor their performance, and then reflects on the outcome, it would also positively affect their academic performance.

Again in Table 6, the coefficient of *competence* ($B = - 0.004$; $SE = 0.541$; $t = 0.007$; $p = 0.995$) and *persistence* ($B = - 1.205$; $SE = 0.509$; $t = 2.369$; $p = 0.021$) as a sub-scale of academic self-efficacy was negative respectively. These values represent the partial effect of competence and persistence on academic performance score of teacher trainees with special needs, retaining other independent factors steady. The assessed negative sign infers that such impact of competence and persistence on educational performance was negative and that scholarly achievement mark of teacher trainees with special needs would decrease by 0.004 and 1.205 for every unit decrease in their competence and persistence respectively. The implication of this result is that teacher trainees with special needs who lack the knowledge and skills cannot successfully exceed in their learning. They would not be able to draw and build upon what they know, how they think and what they can do. Likewise, if they do not have the confidence in their ability to continue learning and persist when they are having difficult time in schools, it would affect them in the academic activities.

From these outcomes in Table 6, it was concluded that the predictors, academic self-efficacy dimensions statistically significantly predicted dependent variable (academic performance of teacher trainees with special needs). Three of the sub-scales of academic self-efficacy (perceived control, self-regulated learning and persistence) added statistically significantly to the prediction while competence did not add to the prediction model. The highest predictor of academic performance of teacher trainees with special needs was

perceived control and least predictors was persistence.

Research Question Three: What is the influence of emotional intelligence on academic performance of teacher trainees with special needs in the CoE in Ghana?

The objective of this research question three was to examine the influence of emotional intelligence on academic performance of teacher trainees with special needs. The sub-scales of emotional intelligence served as predictors while the academic performance was used as a criterion variable. The data gathered was analysed using multiple linear regression. The conventions and expectations of multivariate normality, outliers, linearity, autocorrelation, multicollinearity and singularity, homoscedasticity and independence of residuals were tested the analysis was done. Table 7 presents the results.

Table 7 displays the relapse (regression) analysis results between independent factors (EI dimensions) and the dependent variable (academic performance of teacher trainees with special needs). The aftereffects of the relapse examination (regression analysis) showed that the multiple relationship coefficient is 0.435 which estimates the level of association between the autonomous factors (EI dimensions) and the predicted values of the academic performance of teacher trainees with special needs. The direction and degree of the effect of EI dimensions on school performance of teacher trainees with special needs was positive moderate (medium), according to Cohen's (1988) guidelines.

Table 7: *Influence of Emotional Intelligence on Academic Performance*

Variable	B	SE	Beta	t-value	Sig.	T	VIF
(Constant)	9.374	2.763		3.393*	0.001		
Self-awareness	0.811	0.653	0.156	1.243	0.219	0.871	1.148
Self-confidence	0.458	0.738	0.115	0.621	0.537	0.399	2.503
Self-control	0.159	0.659	0.044	0.241	0.810	0.419	2.389
Motivation	0.459	0.705	0.100	0.651	0.518	0.586	1.705
Empathy	-0.611	0.685	-0.144	-0.892	0.376	0.525	1.905
Social competency	-1.624	0.667	-0.370	-2.437*	0.018	0.598	1.673
R	=	0.435		DW	=		1.955
R ²	=	0.189		F-value (6, 59)	=		2.296
adj R ²	=	0.107		Sig.	=		0.047

a. Dependent Variable: Academic performance
 Source: Field data, 2020 *Significant at p < 0.05

From Table 7, the multiple co-efficient of determination value ($R^2 = 0.189$) quantifies the goodness-of-fit (i.e. whether the sample data fits a distribution from a certain population) of the expected relapse model in respect of the percentage of discrepancy in the reliant variable (academic performance of teacher-trainees with special needs) explained by the predictors. The R^2 value (0.189) implies that roughly 19% of the variability in scholarly performance of teacher-trainees with special needs was clarified and justified by the independent factors (EI dimensions) and R^2 value was significant at 5% level.

From Table 7, the Durbin-Watson (WD) statistics was 1.955. This value stands within the rule of thumb of $1.5 < d < 2.5$. This value tests for autocorrelation in the fitting deviation (residuals) of relapse investigation. Consequently, it advises whether the supposition of autonomous mistakes (error of independence) are reasonable. In this information, it is seen that the

value is near 2; subsequently, the presumption has in all likelihood been met. Consequently, I can expect that there was no first request straight auto-connection in the regression data (relapse model), and in the sample, there was no auto-relationship. From the relapse model, the results of ANOVA (F-test), revealed that the independent variables, EI dimensions statistically significantly predicted dependent variable (academic performance of teacher trainees with special needs), $F(6, 59) = 2.296$, $p = 0.047$, $R^2 = 0.189$. This means there was statistically significant straight association between the independent factors and dependent variable (i.e., $R^2 > 0$). This load of discoveries are uncovering that the model is agreeable. This load of discoveries give belief that the model utilised was good.

In Table 7, the constant of the relapse model was ($B = 9.374$, $SE = 2.763$, $t = 3.393$, $p = 0.001$). This value means that even when the independent variables, EI dimensions are detained consistent or held at nothing, academic performance of teacher trainees with special needs will still be 9.374 and this value is positive and statistically significant. From the regression model, the *self-awareness* ($B = 0.811$, $SE = 0.653$; $t = 1.243$, $p = 0.219$), *self-confidence* ($B = 0.458$, $SE = 0.738$; $t = 0.621$, $p = 0.537$), *self-control* ($B = 0.159$, $SE = 0.659$; $t = 0.241$, $p = 0.810$) and *motivation* ($B = 0.459$, $SE = 0.705$; $t = 0.651$, $p = 0.518$) as a sub-scale of emotional intelligence of teacher trainees with special needs had positive coefficient respectively, however, these co-efficient were not statistically significance ($p > 0.05$). These values represent the partial effect of self-awareness, self-confidence, self-control and motivation on academic performance of teacher trainees with special needs, maintaining other predictors as steady. The assessed positive sign suggests that such

impact of self-awareness, self-confidence, self-control and motivation on academic performance was positive and that academic performance score of teacher trainees with special needs would increase by 0.811, 0.458, 0.159 and 0.459 for every unit increase in their self-awareness, self-confidence, self-control and motivation as domains of emotional intelligence respectively.

These results imply that if teacher trainees with special needs have the ability to precisely pass judgment on their own educational attainment, behaviour and to respond appropriately to various social circumstances; accept and trust themselves and have a sense of control in their life; choose their actions and reactions and push themselves to meet the goals set, it would positively affect their academic performance in the school.

Again in Table 7, the coefficient of *empathy* ($B = - 0.611$; $SE = 0.685$; $t = - 0.892$; $p = 0.376$) and *social competency* ($B = - 1.624$; $SE = 0.667$; $t = - 2.437$; $p = 0.018$) as a sub-scale of emotional intelligence was negative respectively. These values represent the partial effect of empathy and social competency on academic performance score of teacher trainees with special needs, retaining other autonomous factors consistent. The considered negative sign suggests that such impact of empathy and social competency on academic performance was negative and that academic performance score of teacher trainees with special needs would decrease by 0.611 and 1.624 for every unit decrease in their empathy and social competency respectively. The implication of this result is that teacher trainees with special needs who cannot comprehend and share the reactions and sentiments of others just as the skills to handle and influence other people's emotions and sentiments effectively, they may not increase their academic performance positively.

From these outcomes in Table 7, it is concluded that the independent variables, EI dimensions statistically significantly predicted dependent variable (academic performance of teacher trainees with special needs). Five dimensions of EI did not statistically significantly add to the prediction while only social competency significantly added to the prediction model. The highest predictor of academic performance of teacher trainees with special needs was self-awareness and least predictors was social competency.

Research Question Four: What is the influence of personality traits on academic performance of teacher trainees with special needs in the CoE in Ghana?

This research question four aimed to investigate the impact of personality traits on academic achievement of teacher trainees with special needs. The dimensions of personality traits served as predictors while the academic performance was used as a criterion variable. The data gathered was analysed using multiple linear regression. Prior to the regression analysis, the conjectures and presumptions of multivariate normality, outliers, linearity, autocorrelation, multicollinearity and singularity, homoscedasticity and independence of residuals were tested. The results are presented in Table 8.

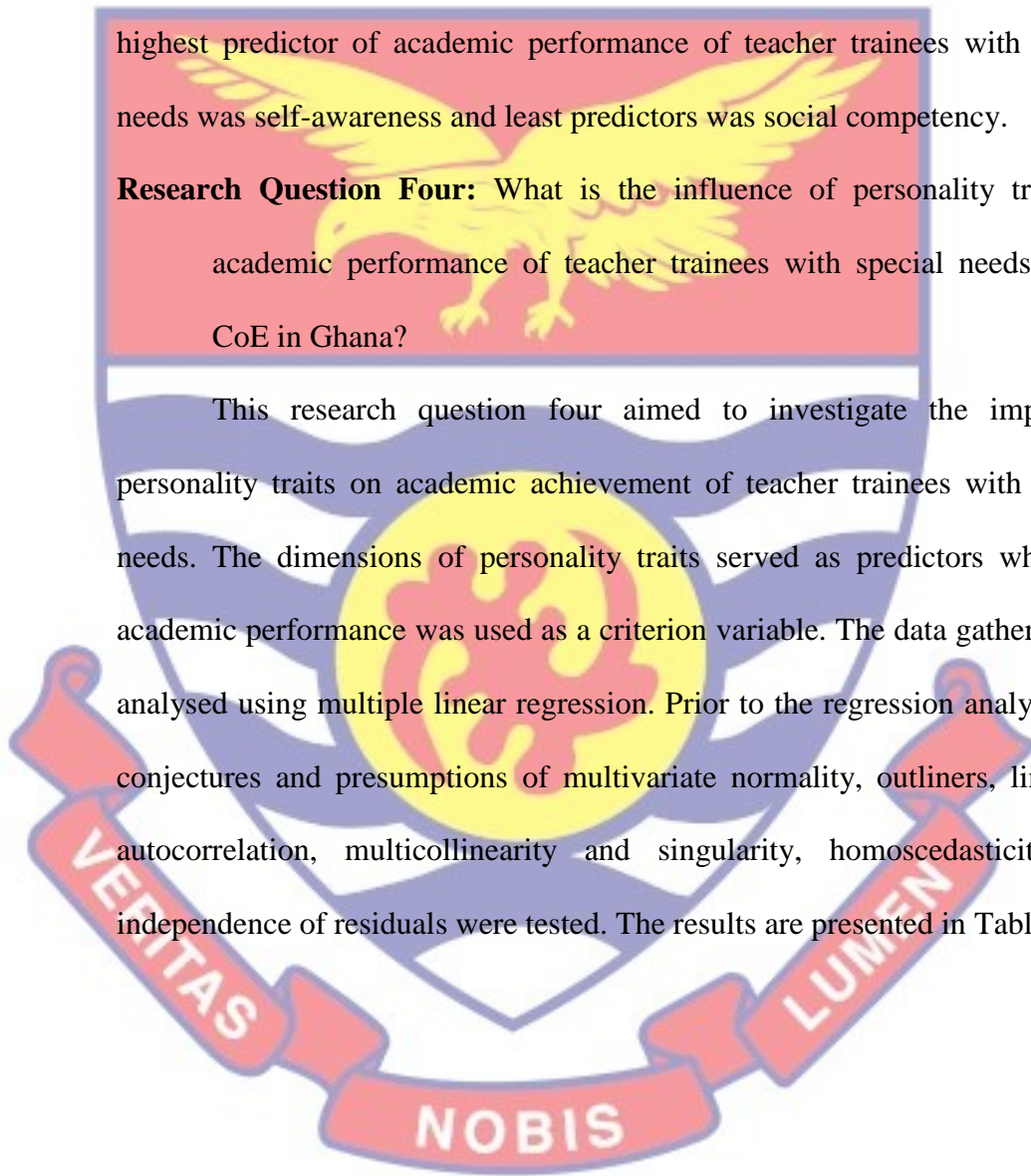


Table 8: *Influence of Personality Traits on Academic Performance*

Variable	B	SE	Beta	t-value	Sig.	T	VIF
(Constant)	0.877	2.560		0.343	0.733		
Extraversion	0.840	0.598	0.191	1.404	0.165	0.744	1.345
Agreeableness	0.378	0.501	0.112	0.753	0.454	0.627	1.594
Conscientiousness	1.625	0.589	0.346	2.758*	0.008	0.874	1.144
Openness to experience	0.162	0.424	0.046	0.382	0.704	0.960	1.041
Neuroticism	-0.261	0.501	-0.089	-0.521	0.604	0.473	2.115
R	=	0.418		DW	=		1.695
R ²	=	0.174		F-value (5, 60)	=		2.535
adj R ²	=	0.106		Sig.	=		0.038

a. Dependent Variable: Academic performance

Source: Field data, 2020

*Significant at $p < 0.05$

Table 8 illustrates the outcomes of the relapse examination between predictors, personality traits and the response characteristic (academic performance of teacher trainees with special needs). The results of the relapse analysis (regression) showed that the compound relationship coefficient is 0.418 which estimates the level of connection between the autonomous factors and the predicted values of the academic performance of teacher trainees with special needs. The extent and direction of the effect of personality traits on school performance of teacher trainees with special needs was positive moderate (medium), according to Cohen's (1988) guidelines.

From Table 8, the multiple co-efficient of determination value ($R^2 = 0.174$) judges how well the observed data correspond to the fitted (assumed) model (goodness of fit) of the predictable relapse model (regression) in relation to the fraction of the variability in the outcome factor (academic performance of teacher trainees with special needs clarified by the indicators). The R^2 value (0.174) infers that almost 17% of the deviation in performance of

teacher trainees with special needs was considered by the explanatory factors (personality dimensions).

From Table 8, the WD statistics was 1.695. This value falls within the range of $1.5 < d < 2.5$. This value tests for autocorrelation in the residuals from a measurable relapse investigation. Subsequently, it directs whether the supposition of predictor mistakes (error of independence) are rational. It is observed from this information that the value is approximately 2; successively, the conjecture the supposition has very likely been met. Accordingly, I can conclude that there was no first request direct auto-connection in the multiple relapse information, and that there was no auto-relationship in the example. The results of ANOVA (F-test) from the regression analysis, revealed that the autonomous factors, personality domains (extraversion, appropriateness, good faith, neuroticism and transparency) statistically significantly predicted dependent variable (academic performance of teacher trainees with special needs), $F(5, 60) = 2.535, p = 0.038, R^2 = 0.174$. This means there was statistically significant direct associations between the independent factors and dependent variable (i.e, $R^2 > 0$). The discoveries are indicating that the regression model is suitable and acceptable. Thus, the outcomes provide assurance that the relapse model (regression) employed was good.

The constant of the relapse model was ($B = 0.877, SE = 2.560, t = 0.343, p = 0.733$) as shown in Table 8. This value means that even when the predictors (personality traits) are maintained at zero (constant), teacher trainees with special needs academic performance will still be 0.877. This value is positive yet not statistically significant. From the regression model, the *extraversion* ($B = 0.840, SE = 0.598; t = 1.404, p = 0.165$), *agreeableness*

($B = 0.378$, $SE = 0.501$; $t = 0.753$, $p = 0.454$), *conscientiousness* ($B = 1.625$, $SE = 0.589$; $t = 2.758$, $p = 0.008$) and *openness* ($B = 0.162$, $SE = 0.424$; $t = 0.382$, $p = 0.704$) as a sub-scale of personality traits of teacher trainees with special needs had positive coefficient respectively, however, these co-efficient were not statistically significance ($p > 0.05$) except for conscientiousness

which significantly influence the academic performance of teacher trainees with special needs. These values represent the partial effect of the personality traits dimensions on educational performance of teacher trainees with special needs, retaining other explanatory factors (predictors) at zero. The impact of the personality domains was positive because of the positive expected sign.

Thus, the academic performance score of teacher trainees with special needs would increase by 0.840, 0.378, 1.625 and 0.162 for every unit decrease in their extraversion, agreeableness, conscientiousness and openness of personality traits respectively. These results infer that if teacher trainees with special needs are sociable, assertive, cooperative, trustworthy, good natured, competent, self-discipline, thoughtful, goal-driven and have good feelings, ideas, imagination and independence, they would have the option to expand their scholarly presentation decidedly.

Again in Table 8, the *neuroticism* as a sub-scale of the personality trait had a coefficient of ($B = - 0.261$; $SE = 0.501$; $t = - 0.521$; $p = 0.604$). This means that neuroticism has a negative partial power on educational achievement score of teacher trainees with special needs, keeping other autonomous factors steady. The negative sign revealed that neuroticism as a dimension of teacher trainees with special needs' character attribute has negative impact on their school achievement score and a unit proliferation in

this trait, will cause a significant decline in academic performance score of teacher trainees with special needs by 0.261. The implication of this result is that when teacher trainees with special needs are highly anxious, unhappy and easily prone to negative emotions, it would negatively affect their academic performance in the school.

From these results in Table 8, it is concluded that the personality traits (predictors) statistically significantly predicted academic performance of teacher trainees with special needs (response variable). Four domains of personality traits (extraversion, agreeableness, neuroticism and openness) did not statistically significantly add to the prediction. It is conscientiousness which only significantly added to the prediction model. The highest predictor of academic performance of teacher trainees with special needs was conscientiousness and least predictors was neuroticism.

Research Question Five: What is the moderating role of gender in the connection between the:

- a. self-efficacy and academic performance of teacher trainees with special needs in the CoE in Ghana?
- b. emotional intelligence and academic performance of teacher trainees with special needs in CoE in Ghana?
- c. personality traits and academic performance of teacher trainees with special needs in the CoE in Ghana?

This research question five ascertained whether gender would moderate the influence of academic self-efficacy, emotional intelligence and personality traits on educational achievement of teacher trainees with special needs. Thus, the research question explored whether the impact of academic

self-efficacy, emotional intelligence and personality traits on academic performance would differ for male and female teacher-trainees with special needs. The data gathered was analysed using moderation analysis of Conditional PROCESS by Hayes (2018). The analysis made use of 5,000 bootstrap samples with 95% confidence interval. The predictor variables were academic self-efficacy, emotional intelligence and personality traits while the criterion variable was academic performance, which was the CGPA of teacher-trainees with special needs who were enrolled in the Diploma of Basic Education in the CoEs. The moderator variable was gender, which was categorical. This was dummy-coded where male (0) was used as the comparison group (reference point). Table 9, 10, and 11 display the detailed of outcomes.

Table 9 presents the directing function of sex in the connection between academic self-efficacy and school achievement of teacher-trainees with special needs. It was revealed that the overall model for perceived control as a sub-scale of academic self-efficacy was significant, $F(3, 62) = 3.9985, p = .0114$ with $R = .4026, R^2 = .1621$. However, the overall model for competence ($p = .2460$), persistence ($p = .3664$), and self-regulated learning ($p = .1276$) as dimensions of academic self-efficacy were not significant.

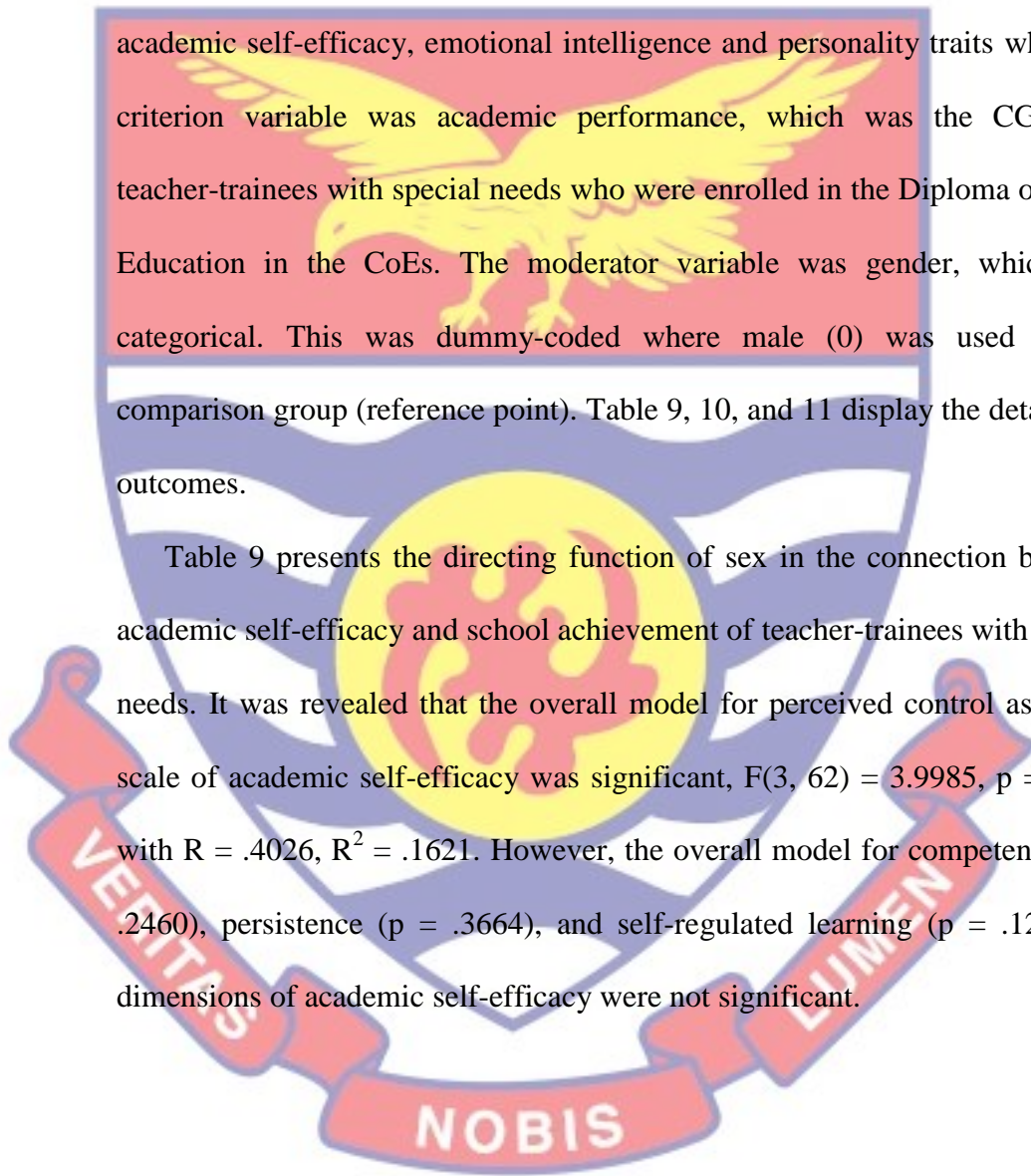


Table 9: Moderating Role of Gender in the Relationship between Academic Self-Efficacy and Academic Performance

Model	Variable	B	BootSE	t-value	p-value	BootLLCI	BootULCI	Model Summary			
								R	R ²	F	p-value
1	Constant	9.3686	.3360	27.8849*	.0000	8.6970	10.0402	.4026	.1621	3.9985	.0114
	Perceived control	1.1320	.5091	2.2236*	.0298	.1144	2.1497				
	Gender (female)	-.9932	.4688	-2.1187*	.0381	-1.9302	-.0561				
	Perceived*Gender	.2775	.9035	.3071	.7598	-1.5285	2.0835				
2	Constant	9.2865	.3555	26.1212*	.0000	8.5758	9.9971	.2534	.0642	1.4180	.2460
	Competence	.4882	.6025	.8104	.4208	-.7161	1.6925				
	Gender (female)	-.8211	.4956	-1.6569	.1026	-1.8118	.1695				
	Competence*Gender	-.0072	.9207	-.0078	.9938	-1.8477	1.8334				
3	Constant	9.3125	.3568	26.0966*	.0000	8.5991	10.0258	.2223	.0494	1.0747	.3664
	Persistence	-.0160	.6246	-.0255	.9797	-1.2645	1.2326				
	Gender (female)	-.8707	.4972	-1.7513	.0848	-1.8646	.1231				
	Persistence*Gender	-.2171	.8646	-.2511	.8026	-1.9454	1.5112				
4	Constant	9.2813	.3576	25.9579*	.0000	8.5666	9.9960	.2951	.0871	1.9710	.1276
	Self-regulated learning	.2995	.7151	.4188	.6768	-1.1300	1.7289				
	Gender (female)	-.7440	.4966	-1.4983	.1391	-1.7366	.2486				
	Self-regulated*Gender	.6809	.9433	.7219	.4731	-1.2047	2.5666				

Source: Field data, 2020

df (3, 62)

*Significant at $p < 0.05$

As demonstrated in Table 9, the aftereffects of the moderation examination uncovered that there was no statistically significant interaction effect of all the dimensions of academic self-efficacy and gender in the association between academic self-confidence (efficacy) and school achievement of teacher-trainees with special needs. For example, concerning “*perceived control*”, there was no critical joint impact of “*perceived control*”, and sex in the association between saw “*perceived control*”, and scholarly attainment, while controlling the effect of other academic self-efficacy dimensions [B = .2775; SE = .9035; Boot 95% CI (- 1.5285, 2.0835)].

Likewise, while the other academic self-efficacy dimensions were controlled, there was no significant join-influence of “*competence*” and sex in the relationship between “*competence*” and academic performance [B = -.0072; SE = .9207; Boot 95% CI (-1.8477, 1.8334)]. The implication for these results is that differences do not exist in the connection between self-confidence/assuredness (efficacy) and academic performance for male and female teacher trainees with special needs. Thus, teacher trainees with needs who have a high or low level of efficacy (self-confidence/assuredness) would have the same level of academic performance irrespective of gender.

The results of the cushioning role of sex in the association between emotional intelligence and educational achievement of teacher-trainees with special needs are presented in Table 10.

Table 10: Moderating Role of Gender in the Relationship between Emotional Intelligence and Academic Performance

Model	Variable	B	BootSE	t-value	p-value	BootLLCI	BootULCI	Model Summary			
								R	R ²	F	p-value
1	Constant	9.3534	.3505	26.6852*	.0000	8.6528	10.0541	.2957	.0875	1.9807	.1261
	Self-awareness	1.4255	.8635	1.6509	.0298	-.3005	3.1516				
	Gender (female)	-.9155	.4884	-1.8745	.0656	-1.8918	.0608				
	Self-awarene*Gender	-1.3049	1.2671	-1.0298	.3071	-3.8377	1.2280				
2	Constant	9.3106	.3564	26.1257*	.0000	8.5982	10.0230	.2282	.0521	1.1357	.3417
	Self-confidence	.2873	.7376	.3895	.6982	-1.1871	1.7618				
	Gender (female)	-.8677	.4965	-1.7476	.0855	-1.8602	.1248				
	Self-confidenc*Gender	-.0111	.9896	-.0113	.9911	-1.9893	1.9670				
3	Constant	9.3052	.3542	26.2679*	.0000	8.5971	10.0133	.2532	.0641	1.4153	.2468
	Self-control	-.4921	.7236	-.6801	.4990	-1.9384	.9543				
	Gender (female)	-.8705	.4935	-1.7639	.0827	-1.8570	.1160				
	Self-control*Gender	.9557	.9205	1.0382	.3032	-.8843	2.7957				
4	Constant	9.2429	.3543	26.0891*	.0000	8.5347	9.9511	.2970	.0882	1.9996	.1233
	Empathy	-.9429	.7864	-1.1989	.2351	-2.5149	.6292				
	Gender (female)	-.7456	.4927	-1.5132	.1353	-1.7306	.2393				
	Empathy*Gender	.1365	1.0473	.1303	.8968	-1.9571	2.2300				
5	Constant	9.3460	.3626	25.7725*	.0000	8.6211	10.0709	.2275	.0518	1.1281	.3447
	Motivation	.3669	.7336	.5001	.6188	-1.0996	1.8334				
	Gender (female)	-.8855	.5077	-1.7440	.0861	-1.9004	.1295				
	Motivation*Gender	-.5919	1.2053	-.4911	.6251	-3.0013	1.8175				
6	Constant	9.2922	.3279	28.3357*	.0000	8.6367	9.9478	.4652	.2164	5.7082	.0016
	Social competency	-.2710	.6782	-.3996	.6908	-1.6268	1.0847				
	Gender (female)	-.6611	.4572	-1.4458	.1533	-1.5751	.2529				
	Social compet.*Gender	-2.4272	1.0050	-2.4152*	.0187	-4.4361	-.4183				

Source: Field data, 2020

df (3, 62)

*Significant at p < 0.05

It was found that the overall model for “self-awareness” ($p = .1261$), “self-confidence” ($p = .3417$), “self-control” ($p = .2468$), “empathy” ($p = .1233$) and “motivation” ($p = .3447$) as a sub-scale of emotional intelligence were not significant. However, the overall model for “social competence” as a dimension of emotional intelligence was statistically significant, $F(3, 62) = 5.7082$, $p = .0016$, with $R = .4652$, $R^2 = .2164$.

As demonstrated in Table 10, the outcomes of the moderation examination discovered that with the exception of “social competency”, there was no measurement critical combined impact of the remaining dimensions of EI and gender in the association between EI and scholastic achievement of teacher-trainees with special needs. For example, regarding “self-awareness”, there was no critical joint influence of “self-awareness” and sex in the connection between “self-awareness” and school attainment, while controlling the power of other emotional intelligence (EI) dimensions [$B = -1.3049$; $SE = 1.2671$; Boot 95% CI (-3.8377, 1.2280)]. Likewise, while the other emotional intelligence dimensions were controlled, there was no measurement critical combined influence of “self-confidence” and sex in the association between “self-confidence” and educational accomplishment [$B = -.0111$; $SE = .9896$; Boot 95% CI (-1.9893, 1.9670)].

Also, to “motivation” as an emotional intelligence dimension, it was discovered that there was no critical combined impact of “motivation” and sex in the relationship between “motivation” and educational performance [$B = -.5919$; $SE = 1.2053$; Boot 95%CI (-3.0013, 1.8175)] while controlling the other dimensions of emotional intelligence. The results, however, disclosed a numerically critical interaction bearing of “social competency” as a dimension

of emotional intelligence and gender in the link between “social competency” and school accomplishment [B = -2.4272; SE = -2.4272; Boot 95% CI (-4.4361, -.4183)]. The partial power of “social competency*gender on the association between “social competency” and academic accomplishment was negative. This infers that a rise in “social competency” as EI dimension of teacher-trainees with special needs, the academic performance of female teacher trainees with special needs would decrease by 2.43 compared to male teacher trainees with special needs. The implication of this result is that differences exist in the link between “social competency” and school achievement for male and female teacher trainees with special needs. Thus, for teacher trainees with special needs who have more or less “social competency” as a dimension of EI, the power of their EI on school accomplishment would differ on the basis of gender.

Table 11 depicts the directing part of sex in the link between personality dimensions (character attributes) and scholastic accomplishment of teacher-trainees with special needs. It was found that the overall model for agreeableness ($p = .1556$), neuroticism ($p = .1728$) and Openness ($p = .0958$) as personality trait dimensions were not significant. However, the overall model for extraversion, $F(3, 62) = 3.8252$, $p = .0140$, with $R = .3952$, $R^2 = .1562$ and conscientiousness, $F(3, 62) = 4.6010$, $p = .0057$, with $R = .4267$, $R^2 = .1821$) as dimensions of personality traits were statistically significant.

Table 11: *Moderating Role of Gender in the Relationship between Personality Traits and Academic Performance*

Model	Variable	B	BootSE	t-value	p-value	BootLLCI	BootULCI	Model Summary			
								R	R ²	F	p-value
1	Constant	9.3409	.3380	27.6333*	.0000	8.6652	10.0166	.3952	.1562	3.8252	.0140
	Extraversion	-.7500	.9256	-.8103	.4209	-2.6002	1.1002				
	Gender (female)	-.8399	.4703	-1.7860	.0790	-1.7799	.1002				
	Extraversion*Gender	2.4291	1.1135	2.1816*	.0329	.2033	4.6549				
2	Constant	9.3114	.3511	26.5201*	.0000	8.6096	10.0133	.2834	.0803	1.8048	.1556
	Agreeableness	.0771	.6368	.1211	.9040	-1.1958	1.3501				
	Gender (female)	-.8597	.4892	-1.7575	.0838	-1.8375	.1181				
	Agreeableness*Gender	.7304	.8358	.8739	.3855	-.9403	2.4012				
3	Constant	9.2954	.3311	28.0760*	.0000	8.6336	9.9572	.4267	.1821	4.6010	.0057
	Conscientiousness	1.9369	.7828	2.4744	.0161	.3722	3.5016				
	Gender (female)	-.8416	.4613	-1.8246	.0729	-1.7637	.0804				
	Conscientious*Gender	-.4276	1.0802	-.3958	.6936	-2.5869	1.7317				
4	Constant	9.2898	.3534	26.2834*	.0000	8.5833	9.9963	.2769	.0767	1.7164	.1728
	Neuroticism	.3561	.5521	.6451	.5212	-.7474	1.4597				
	Gender (female)	-.8129	.4921	-1.6520	.1036	-1.7966	.1707				
	Neuroticism*Gender	.2383	.7278	.3274	.7445	-1.2166	1.6931				
5	Constant	9.3923	.3507	26.7804*	.0000	8.6913	10.0934	.3108	.0966	2.2099	.0958
	Openness	1.3036	.7274	1.7922	.0780	-.1504	2.7576				
	Gender (female)	-.9379	.4877	-1.9232	.0590	-1.9128	.0370				
	Openness*Gender	-1.5331	.9013	-1.7010	.0940	-3.3347	.2686				

Source: Field data, 2020

df (3, 62)

*Significant at $p < 0.05$

From Table 11, the results of the moderation analysis discovered that with the exception of “extraversion dimension” of personality traits, there was no statistically significant interaction consequence of the remaining dimensions of character traits and gender in the connection between “personality traits” and academic performance of teacher-trainees with special needs. For example, in relation to “agreeableness”, there was no critical joint impact of “agreeableness” and gender in the relationship between “agreeableness” and school attainment, while guiding the effect of other character trait sub-scale [B = .7304; SE = .8358; Boot 95% CI (-.9403, 2.4012)]. Likewise, while controlling the other personality trait dimensions, “conscientiousness” and sex does not have any critical combined effect in the relationship between “conscientiousness” and academic performance [B = -.4276; SE = 1.0802; Boot 95% CI (-2.5869, 1.7317)].

Also, to “openness to experience” as personality trait dimension, it was discovered that there was no substantial combined impact of “openness to experience” and gender in the relationship between openness and academic performance [B = -1.5331; SE = .9013; Boot 95%CI (-3.3347, .2686)] while controlling the other dimensions of personality traits. The findings, however, showed that there was a numerically substantial joint impact of “extraversion” and sex in the connection between “extraversion” and educational accomplishment [B = 2.4291; SE = 1.1135; Boot 95%CI (.2033, 4.6549)]. The positive co-efficient of extraversion*gender represents the partial positive power of extraversion*gender in the link between “extraversion” and school achievement. This implies that for a unit increase in extraversion as personality traits, the educational success of female teacher trainees with

special needs would increase by 2.43 compared to male teacher trainees with special needs. This result suggests that differences exist in the bond between “extraversion” and educational success for male and female teacher trainees with special needs. Thus, the academic performance of teacher trainees with special needs who are dominated with extraversion personality type would differ based on gender.

Research Question Six: What is the moderating role of age in the link between the:

- a. self-efficacy and academic performance of teacher trainees with special needs in the CoE in Ghana?
- b. emotional intelligence and academic performance of teacher trainees with special needs in CoE in Ghana?
- c. personality traits and academic performance of teacher trainees with special needs in the CoE in Ghana?

This research question six assessed whether age would moderate the influence of academic self-efficacy, emotional intelligence and personality traits on academic performance of teacher trainees with special needs. Thus, the research question aimed at examining whether the role of efficacy, emotional intelligence and personality traits in school accomplishment would differ based on age group for teacher-trainees with special needs. The data gathered was analysed using moderation analysis of Conditional PROCESS by Hayes (2018). The analysis made use of 5,000 bootstrap samples with 95% confidence interval. The predictor variable was emotional intelligence, personality traits and efficacy while the criterion item was school achievement, which was the CGPA of teacher-trainees with special needs who

were enrolled in the Diploma of Basic Education in the CoEs. The moderator variable was age group, which was categorical. This was dummy-coded where below 24yrs (0) and 25yrs+ (0) were used as the comparison group (reference point) in the first interaction and below 24yrs (0) and 20-24yrs (0) were also used comparison group (reference point) in the second interaction. The results are presented in Table 12, 13 and 14.

Table 12 presents the dampening function of age group in the bond between academic self-efficacy and school achievement of teacher-trainees with special needs. It was found that the overall model for perceived control ($p = .0523$), competence ($p = .5987$), persistence ($p = .8887$) and self-regulated learning ($p = .0747$) as dimensions of academic self-efficacy were not significant. The results of the moderation exploration discovered that there was no statistically significant nexus influence of all the dimensions of academic self-efficacy and age groups in the link between all the efficacy dimensions and educational performance of teacher-trainees with special needs.

For example, regarding “perceived control”, there was no critical nexus impact of “perceived control” and age group of 20-24years [$B = 2.7122$; $SE = 1.5803$; Boot 95% CI $(-.4489, 5.8734)$] and “perceived control” and age group of 25+years [$B = 2.1477$; $SE = 1.5429$; Boot 95% CI $(-.9386, 5.2340)$] in the association between “perceived control” and academic performance while controlling for the effect of other academic self-efficacy dimensions.

Table 12: *Moderating Role of Age Group in the Relationship between Academic Self-Efficacy and Academic Performance*

Model	Variable	B	BootSE	t-value	p-value	BootLLCI	BootULCI	Model Summary			
								R	R ²	F	p-value
1	Constant	8.4273	1.4304	5.8916*	.0000	5.5660	11.2885	.4040	.1632	2.3409	.0523
	Perceived control (PC)	-.9000	1.4147	-.6362	.5271	-3.7299	1.9299				
	Age (20-24yrs)	.1753	1.4647	.1197	.9051	-2.7545	3.1052				
	Age (25yrs +)	.6704	1.4813	.4525	.6525	-2.2928	3.6335				
	PC* Age (20-24yrs)	2.7122	1.5803	1.7162	.0913	-.4489	5.8734				
	PC*Age (25yrs +)	2.1477	1.5429	1.3920	.1691	-.9386	5.2340				
2	Constant	8.2670	1.6987	4.8666*	.0000	4.8690	11.6651	.2405	.0579	.7369	.5987
	Competence (COP)	-1.1250	1.8765	-.5995	.5511	-4.8785	2.6285				
	Age (20-24yrs)	.4399	1.7308	.2542	.8002	-3.0222	3.9020				
	Age (25yrs +)	.8034	1.7483	.4596	.6475	-2.6936	4.3005				
	COP* Age (20-24yrs)	2.1554	1.9751	1.0912	.2795	-1.7955	6.1062				
	COP*Age (25yrs +)	1.2554	2.0555	.6108	.5437	-2.8562	5.3671				
3	Constant	8.1753	1.5136	5.4014*	.0000	5.1477	11.2029	.1652	.0273	.3367	.8887
	Persistence (PER)	-1.2857	1.4413	-.8920	.3759	-4.1688	1.5974				
	Age (20-24yrs)	.4993	1.5519	.3218	.7488	-2.6049	3.6036				
	Age (25yrs +)	.8993	1.5696	.5730	.5688	-2.2403	4.0390				
	PER* Age (20-24yrs)	1.7836	1.6915	1.0544	.2959	-1.5999	5.1671				
	PER*Age (25yrs +)	1.1214	1.5536	.7218	.4732	-1.9862	4.2289				
4	Constant	9.0000	2.9633	3.0371*	.0035	3.0724	14.9276	.3878	.1504	2.1241	.0747
	Self-regulated le(SGL)	.0000	4.1153	.0000	1.0000	-8.2318	8.2318				
	Age (20-24yrs)	-.2224	2.9801	-.0746	.9408	-6.1834	5.7387				
	Age (25yrs +)	.1561	2.9902	.0522	.9585	-5.8253	6.1375				
	SGL* Age (20-24yrs)	1.9129	4.1620	.4596	.9585	-6.4124	10.2381				
	SGL*Age (25yrs +)	-.5710	4.1811	-.1366	.8918	-8.9345	7.7925				

Source: Field data, 2020

df (5, 60)

*Significant at p < 0.05

Likewise, while controlling the other academic self-efficacy dimensions, no critical combined impact of “competence” and age group of 20-24years [$B = 2.1554$; $SE = 1.9751$; Boot 95% CI (-1.7955, 6.1062)] and “competence” and age group of 25+years [$B = 1.2554$; $SE = 2.0555$; Boot 95% CI (-2.8562, 5.3671)] was found in the nexus concerning “competence” and school success.

Regarding “self-regulated learning” as a domain of efficacy, no critical joint influence of “self-regulated learning” and age group of 20-24years [$B = 1.9129$; $SE = 4.1620$; Boot 95% CI (-6.412, 10.2381)] and “self-regulated learning” and age group of 25+years [$B = -.5710$; $SE = 4.1811$; Boot 95% CI (-8.9345, 7.7925)] was found in the bond concerning “self-regulated learning” and educational success while controlling the other dimensions of efficacy among teacher-trainees with special needs. These results submit that differences do not exist in the nexus with reference to all the dimensions of efficacy and academic performance for teacher trainees with special needs based on age group. Thus, age group of respondents does not moderate the bond regarding efficacy and educational accomplishment of teacher trainees with special needs. Thus, teacher-trainees with special needs who have the belief or conviction or assurance in their capability to finish education responsibilities or achieve educational objectives, would perform excellently in their academic activities despite their age.

Table 13 shows the moderating role of age group in the relationship between emotional intelligence and academic performance of teacher-trainees with special needs.

Table 13: *Moderating Role of Age Group in the Relationship between Emotional Intelligence and Academic Performance*

Model	Variable	B	BootSE	t-value	p-value	BootLLCI	BootULCI	Model Summary			
								R	R ²	F	p-value
1	Constant	8.8712	1.2172	7.2885*	.0000	6.4365	11.3059	.1699	.0289	.3566	.8760
	Self-awareness (SAW)	1.5000	2.5402	.5905	.5571	-3.5812	6.5812				
	Age (20-24yrs)	-.1355	1.2640	-.1072	.9150	2.6638	2.3928				
	Age (25yrs +)	.1196	1.2902	.0927	.9264	-2.4611	2.7003				
	SAW* Age (20-24yrs)	-1.1023	2.6791	-.4114	.6822	-6.4613	4.2568				
	SAW*Age (25yrs +)	-.4615	2.8181	-.1638	.8705	-6.0986	5.1755				
	2	Constant	8.8712	1.2172	7.2885*	.0000	6.4365				
Self-Confiden (SCF)	1.5000	2.5402	.5905	.5571	-3.5812	6.5812					
Age (20-24yrs)	-.1355	1.2640	-.1072	.9150	-2.6638	2.3928					
Age (25yrs +)	.1196	1.2902	.0927	.9264	-2.4611	2.7003					
SCF* Age (20-24yrs)	-1.1023	2.6791	-.4114	.6822	-6.4613	4.2568					
SCF*Age (25yrs +)	-.4615	2.8181	-.1638	.8705	-6.0986	5.1755					
3	Constant	8.7739	1.2133	7.2315*	.0000	6.3470	11.2009	.2025	.0410	.5134	.7651
	Self-control (SCL)	-1.6579	1.7373	-.9543	.3438	-5.1330	1.8172				
	Age (20-24yrs)	.0061	1.2604	.0049	.9961	-2.5151	2.5274				
	Age (25yrs +)	.3417	1.2847	.2660	.7912	-2.2280	2.9114				
	SCL* Age (20-24yrs)	2.4605	1.9127	1.2864	.2033	-1.3656	6.2865				
	SCL*Age (25yrs +)	1.4173	1.8438	.7687	.4451	-2.2709	5.1054				

Table 13: Continued

4	Constant	8.5682	1.3298	6.4430*	.0000	5.9081	11.2283				
	Empathy (EMP)	-2.2500	3.6114	-.6230	.5356	-9.4739	4.9739				
	Age (20-24yrs)	-.0059	1.3686	-.0043	.9966	-2.7435	2.7316	.3572	.1276	1.7553	.1359
	Age (25yrs +)	.5356	1.3894	.3855	.7012	-2.2437	3.3149				
	EMP* Age (20-24yrs)	.0099	3.6998	.0027	.9979	-7.3908	7.4106				
	EMP*Age (25yrs +)	2.0574	3.6785	.5593	.5780	-5.3008	9.4156				
5	Constant	9.1773	1.2324	7.4466*	.0000	6.7121	11.6425				
	Motivation (MOT)	-.9000	1.5215	-.5915	.5564	-3.9435	2.1435				
	Age (20-24yrs)	-.4742	1.2775	-.3712	.7118	-3.0295	2.0811	.1793	.0322	.3987	.8478
	Age (25yrs +)	-.1037	1.3001	-.0798	.9367	-2.7044	2.4970				
	MOT* Age (20-24yrs)	.5161	1.7023	.3032	.7628	-2.8890	3.9212				
	MOT*Age (25yrs +)	2.0008	1.9147	1.0450	.3002	-1.8291	5.8308				
6	Constant	9.0909	1.1149	8.1538*	.0000	6.8607	11.3211				
	Social Comp. (SCP)	-1.5000	2.3458	-.6394	.5250	-6.1923	3.1923				
	Age (20-24yrs)	-.3407	1.1575	-.2943	.7695	-2.6560	1.9746	.4145	.1718	2.4892	.0409
	Age (25yrs +)	-.0214	1.1792	-.0181	.9856	-2.3801	2.3374				
	SCP* Age (20-24yrs)	-.8717	2.4496	-.3558	.7232	-5.7716	4.0283				
	SCP*Age (25yrs +)	1.1803	2.4799	.4759	.6358	-3.7802	6.1407				

Source: Field data, 2020

df (5,60)

*Significant at $p < 0.05$

It was found that the overall model for “self-awareness” ($p = .8760$), “self-confidence” ($p = .8760$), “self-control” ($p = .7651$), “empathy” ($p = .1359$) and “motivation” ($p = .8478$) as emotional intelligence dimensions were not statistically significant. However, the overall model for social competency, $F(5, 60) = 2.4892$, $p = .0409$, with $R = .4145$, $R^2 = .1718$) as a dimension of personality traits is statistically significant. The outcomes of the moderation analysis discovered that there was no measurement critical joint influence of all the dimensions of EI and age groups in the relationship between all the EI dimensions and school success of teacher-trainees with special needs. For example, with regard to self-awareness, no critical combined influence of “self-awareness” and age group of 20-24years [$B = -1.1023$; $SE = 2.6791$; Boot 95% CI (-6.4613, 4.2568)] and “self-awareness” and age group of 25+years [$B = -.4615$; $SE = 2.8181$; Boot 95% CI (-6.0986, 5.1755)] was realised in the bond regarding “self-awareness” and educational achievement, while controlling for the power of other emotional intelligence dimensions.

Also, while controlling the other emotional intelligence dimensions, no significant interaction effect of self-confidence and age group of 20-24years [$B = -1.1023$; $SE = 2.6791$; Boot 95% CI (-6.4613, 4.2568)] and self-confidence and age group of 25+years [$B = -.4615$; $SE = 2.8181$; Boot 95% CI (-6.0986, 5.1755)] in the relationship between self-confidence and academic performance. Similarly, on the subject of motivation as emotional intelligence dimension, it was observed that there was no significant interaction effect of motivation and age group of 20-24years [$B = .5161$; $SE = 1.7023$; Boot 95% CI (-2.8890, 3.9212)] and motivation and age group of 25+years [$B = 2.0008$;

SE = 1.9147; Boot 95% CI (-1.8291, 5.8308)] in the relationship between motivation and academic performance while controlling the other dimensions of emotional intelligence.

From Table 13, it was also found that there was no significant interaction effect of social competency and age group of 20-24years [B = -.8717; SE = 2.4496; Boot 95% CI (-5.7716, 4.0283)] and social competency and age group of 25+years [B = 1.1803; SE = 2.4799; Boot 95% CI (-3.7802, 6.1407)] in the relationship between social competency and academic performance while controlling the other dimensions of emotional intelligence. The implication of these results is that variances do not exist in the association between all the dimensions of emotional intelligence and academic performance for teacher trainees with special needs based on age group. Thus, age group of respondents does not moderate the relationship between their emotional intelligence and academic performance. Thus, teacher-trainees with special needs who have the ability to understand, interpret their own emotions and as well as others' and responding appropriately to them, would perform in academically regardless of their age group.

Table 14 shows the moderating role of age group in the relationship between personality traits and academic performance of teacher-trainees with special needs. It was found that the overall model for “extraversion” (p = .1629), “agreeableness” (p = .5348), “conscientiousness” (p = .0132), “neuroticism” (p = .4199) and “openness to experience” (p = .6769) as emotional intelligence dimensions were not statistically significant.

Table 14: Moderating Role of Age Group in the Relationship between Personality Traits and Academic Performance

Model	Variable	B	BootSE	t-value	p-value	BootLLCI	BootULCI	Model Summary			
								R	R ²	F	p-value
1	Constant	10.7045	1.9531	5.4807*	.0000	6.7977	14.6114	.3469	.1203	1.6414	.1629
	Extraversion (EXT)	4.5000	4.1874	1.0746	.2868	-3.8761	12.8761				
	Age (20-24yrs)	-1.8781	1.9797	-.9487	.3466	-5.8382	2.0820				
	Age (25yrs +)	-1.5776	1.9964	-.7902	.4325	-5.5710	2.4159				
	EXT* Age (20-24yrs)	-2.6597	4.2505	-.6258	.5339	-11.1620	5.8425				
	EXT* Age (25yrs +)	-4.8328	4.2772	-1.1299	.2630	13.3884	3.7229				
2	Constant	10.7857	1.9615	5.4986*	.0000	6.8620	14.7094	.2541	.0646	.8281	.5348
	Agreeableness (AGR)	3.2143	2.8269	1.1370	.2600	-2.4403	8.8689				
	Age (20-24yrs)	-2.1134	1.9893	-1.0624	.2923	-6.0926	1.8659				
	Age (25yrs +)	-1.7063	2.0033	-.8517	.3978	-5.7136	2.3011				
	AGR* Age (20-24yrs)	-2.3984	2.8774	-.8335	.4078	-8.1541	3.3572				
	AGR* Age (25yrs +)	-3.3353	2.9259	-1.1399	.2589	-9.1881	2.5175				

Table 14 continued

3	Constant	8.5568	1.2754	6.7091*	.0000	6.0056	11.1080				
	Conscientious (CON)	-1.1250	1.7194	-.6543	.5154	-4.5643	2.3143				
	Age (20-24yrs)	.0927	1.3112	.0707	.9439	-2.5300	2.7154				
	Age (25yrs +)	.5099	1.3293	.3836	.7026	-2.1491	3.1688	.4572	.2090	3.1711	.0132
	CON* Age (20-24yrs)	3.6473	1.8516	1.9698	.0535	-.0566	7.3511				
	CON*Age (25yrs +)	2.3908	2.0347	1.1750	.2446	-1.6792	6.4607				
4	Constant	10.8660	2.0439	5.3163*	.0000	6.7776	14.9545				
	Neuroticism (NEU)	1.8947	1.7038	1.1121	.2706	-1.5134	5.3029				
	Age (20-24yrs)	-2.2150	2.0703	-1.0699	.2889	-6.3563	1.9262				
	Age (25yrs +)	-1.7864	2.0836	-.8574	.3946	-5.9542	2.3813	.2786	.0776	1.0098	.4199
	NEU* Age (20-24yrs)	-.9768	1.7773	-.5496	.5847	-4.5320	2.5784				
	NEU*Age (25yrs +)	-1.8742	1.8156	1.0322	.3061	-5.5060	1.7576				
5	Constant	8.9221	1.1862	7.5213*	.0000	6.5492	11.2949				
	Openness (OPE)	-1.9286	1.6448	-1.1725	.2456	-5.2187	1.3615				
	Age (20-24yrs)	-.2329	1.2330	-.1889	.8508	-2.6994	2.2336				
	Age (25yrs +)	.2528	1.2585	.2009	.8415	-2.2646	2.7701	.2235	.0499	.6309	.6769
	OPE* Age (20-24yrs)	2.1876	1.7512	1.2492	.2164	-1.3153	5.6905				
	OPE*Age (25yrs +)	2.7164	1.8095	1.5012	.1386	-.9032	6.3360				

Source: Field data, 2020

df (5, 60)

*Significant at $p < 0.05$

In Table 14, the results of the moderation analysis shown that there was no statistically significant interaction effect of all the domains of personality and age groups in the relationship between all the personality traits dimensions and academic performance of teacher-trainees with special needs. For example, to extraversion, there was no significant interaction effect of extraversion and age group of 20-24years [B = -2.6597; SE = 4.2505; Boot 95% CI (-11.1620, 5.8425)] and extraversion and age group of 25+years [B = -4.8328; SE = 4.2772; Boot 95% CI (13.3884, 3.7229)] in the relationship between extraversion and academic performance, while controlling for the effect of other personality traits dimensions. Furthermore, while controlling the other personality traits dimensions, there was no significant interaction effect of agreeableness and age group of 20-24years [B = -2.3984; SE = 2.8774; Boot 95% CI (-8.1541, 3.3572)] and agreeableness and age group of 25+years [B = -3.3353; SE = 2.9259; Boot 95% CI (-9.1881, 2.5175)] in the relationship between agreeableness and academic performance. In the same way, in relation to conscientiousness as personality traits dimension, it was found that there was no significant interaction effect of conscientiousness and age group of 20-24years [B = 3.6473; SE = 1.8516; Boot 95% CI (-.0566, 7.3511)] and conscientiousness and age group of 25+years [B = 2.3908; SE = 2.0347; Boot 95% CI (-1.6792, 6.4607)] in the relationship between conscientiousness and academic performance while controlling the other dimensions of personality traits.

From Table 14, it was also found that there was no significant interaction effect of openness and age group of 20-24years [B = 2.1876; SE = 1.7512; Boot 95% CI (-1.3153, 5.6905)] and openness and age group of

25+years [$B = 2.7164$; $SE = 1.8095$; Boot 95% CI (-.9032, 6.3360)] in the relationship between openness and academic performance while controlling the other dimensions of personality traits. The implication of these results is that there was no variances in the association between all the dimensions of personality traits and academic performance for teacher trainees with special needs based on age group. Thus, age group of respondents does not moderate the relationship between their personality traits and academic performance. Thus, teacher-trainees with special needs who have the characteristic patterns of thoughts, feelings, and behaviours in terms of extraversion, agreeableness, conscientiousness, openness and neuroticism would perform in their academic activities irrespective of their age group.

Discussion of Results

This part of the study interprets and discusses the results of the study. The discussion was organised under the following topical issues:

- a. level of self-efficacy, emotional intelligence and personality traits among teacher-trainees with special needs
- b. influence of self-efficacy on academic performance of teacher trainees with special needs
- c. influence of emotional intelligence on academic performance of teacher trainees with special needs
- d. influence of personality traits on academic performance of teacher trainees with special needs
- e. moderating role of gender and age in the relationship between self-efficacy and academic performance of teacher trainees with special needs

f. moderating role of gender and age in the relationship between emotional intelligence and academic performance of teacher trainees with special needs

g. moderating role of gender and age in the relationship between personality traits and academic performance of teacher trainees with

special needs

Level of Self-Efficacy, Emotional Intelligence and Personality Traits among Teacher-Trainees with Special Needs

The study discovered that teacher-trainees with special needs had high level of academic self-efficacy, emotional intelligence and personality traits.

Concerning the respondents' high level of academic self-efficacy. It implies that they have significant degree of convictions, certainty and inspirational perspectives toward their capacities to make scholarly progress by satisfying their scholastic assignments and be effective in studying the resources. This implies that the respondents can plan and organise their school activities, study very well, study on their own, have command over the ideas and subject matter delivered in class, submit assignments before the deadlines, pass all their subject and maintain good grades in all the subjects. This could lead to excellent academic performance through increasing commitment, endeavour, and perseverance (Pintrich, 2003). This could positively influence their academic and social performance. The outcomes of the current investigation confirmed the discoveries of aforementioned research. Mohammadyari (2012) found that students with special needs had moderate level of self-efficacy. Majority of the learners obtained high degree of self-confidence and adequacy (efficacy) in the college (Koloa et al., 2017). Oyuga et al. (2019) found that

tertiary learners had a moderate degree of confidence (efficacy).

Concerning the high level of emotional intelligence among teacher-trainees with special needs, the results imply that the respondents have the capability to perceive their own feelings and those of others, recognize between various sentiments and mark them suitably, utilize enthusiastic data to manage thinking and conduct, and change feelings to adjust to conditions. This level of emotional intelligence could influence social behaviors, better academic performance and improved empathy towards each other. The results of the investigation are in line with the outcomes of earlier researchers. Fallahzadeh (2011) found that students had moderate level of emotional intelligence. Maraichelvi and Rajan (2013) disclosed that greater part of the samples were having EI. Sahinidis, et al. (2016) found that students had high level of emotional intelligence. Suleman et al. (2019) reported that the learners had a much degree of EI.

Finally, in relation to personality traits among teacher-trainees with special needs, the results infer that the respondents have high patterns of thoughts, feelings, and behaviors. This could have direct effect on the respondents' on how they behave and interact among peers. The outcomes agreed with the study of Ghazi et al. (2013) that “conscientiousness” and “agreeableness” personality traits were high while “extroversion”, “neuroticism” and “openness to experience” personality traits were low among schoolchildren. Nighute and Sadawarte (2014) found that all personality traits scores was moderate among the students. Bakar and Herng (2018) found personality traits scores were high except with neuroticism among students. Lateef et al. (2019) found that students had a moderate level of personality

traits scores.

Influence of Self-Efficacy on Academic Performance of Teacher Trainees with Special Needs

The study found that teacher-trainees with special needs' academic self-efficacy statistically significantly affect their educational achievement.

The study found that perceived control and self-related learning positively influence academic performance while competence and persistence contribute negatively to respondents' academic performance. The highest predictor of academic performance of teacher trainees with special needs was perceived control and least predictors was persistence. This result implies that if teacher-trainees with special needs have high belief about their own ability of applying impact on inner states and practices, just as one's outside climate, it would positively influence their academic performance. Also, if they have high confidence in their ability to learn more, improve their study habit and pass all the subject, they can perform excellently in the academic performance. However, if they decrease their ability to continue in their academic activity such as study very hard and maintain good grades in all their subjects, it would negatively affect their academic performance.

The aftereffects of the current examination affirmed the discoveries of past investigations. Mohammadyari (2012) discovered that self-confidence (efficacy) (0.057) had huge prescient force in scholarly accomplishment of understudies. Also, Li (2012) detailed that scholarly self-confidence (efficacy) ($\beta=0.355$, $p < .01$) could essentially anticipate scholastic accomplishment among learners. Tenaw (2013) indicated that there was critical and positive connection between leaners' efficacy and their scholastic accomplishment.

Shkullaku (2013) found critical connection between the learners' self-confidence (efficacy) and school achievement. Koloa et al. (2017) uncovered positive and significant association between learners' efficacy convictions and their school accomplishment. Alyami et al. (2017) uncovered that efficacy of students has a positive and huge impact on their scholastic success. Oyuga et al. (2019) found a critical feeble (little) positive connection between self-efficacy conviction and educational attainment ($r = .276$).

Influence of Emotional Intelligence on Academic Performance of Teacher Trainees with Special Needs

The study indicated that the emotional intelligence of teacher-trainees with special needs influences their academic performance. The dimension of self-awareness, self-confidence, self-control and motivation of emotional intelligence positively contributed to the academic performance of teacher-trainees with special needs. However, empathy and social competency negatively contributed to the academic performance. The highest predictors were self-awareness and motivation while the least predictor was social competency. These results infer that if the respondents have the ability to take time for quite reflection, identify their emotion at any given time, clear mind about their own goals and values, inspire and encourage others when they are communicating, find the positive direction in any given situation, and believe the academic work they do on daily basis, it would positively affect their academic performance. However, if they decrease their ability to initiate conversation with new people in their class, deal politely with their friends who have emotional issues, and viably convince others to accept their perspective without constraining them, it would negatively affect their school

achievement. The results of the current research are in disagreement with the discoveries of previous investigators. Fallahzadeh (2011) found that there was a critical ($r=0.14$, $p=0.039$) connection between EI and school achievement while discoveries demonstrated a significant connection ($p<0.05$) between its two domains of EI, and scholarly achievement. Bunyaan et al. (2015) revealed that one of the EI parts (for example, utilization of feeling) is decidedly corresponded to EI. Sahinidis et al. (2016) indicated that there was a genuinely critical connection between overall EI and two of its features with school achievement. Ahmed et al. (2017) revealed a solid bond between school achievement and two individual variables of EI that were (i.e., “sociability” and “well-being”). Suleman et al. (2019) uncovered that there was a solid positive nexus concerning EI and scholastic accomplishment among college understudies ($r = 0.880$). The investigation indicated that “self-development” (Beta = 0.296), “emotional stability” (Beta = 0.197), “managing relations” (Beta = 0.170), “altruistic conduct” (Beta = 0.145), and “commitment” (Beta = 0.117) influence scholarly accomplishment of students decidedly.

Influence of Personality Traits on Academic Performance of Teacher Trainees with Special Needs

The study revealed that the personality traits of teacher-trainees with special needs influence their academic performance. The dimension of extraversion, agreeableness, conscientiousness and openness of personality traits positively contributed to the academic performance of teacher-trainees with special needs, however, neuroticism negatively contributed to the academic performance. The highest predictors of academic performance among teacher-trainees with special needs were conscientiousness and

agreeableness while the least predictor was neuroticism. The implication of these results is that if the respondents have the ability to organise and plan academic information, persist in their learning and develop good interpersonal relationships as well as reach out to other colleagues in the school, it would positively increase their academic performance. However, if they have unstable emotions (negative emotions) such as anger, anxiety, and sadness, it would negatively affect their academic performance in the schools.

These outcomes are reliable with the previous literature. “Conscientiousness” is one of the steady indicators that is discovered in most of studies. It is the most grounded indicator of the Big Five: Higher marks on “conscientiousness” identify with tertiary students’ learning accomplishment (Conard, 2006; Proporat, 2009; Richardson et al., 2012), and last grades and test scores (Chamorro-Premuzic & Furnham, 2003; O’Connor & Paunonen, 2007; Komarraju et al. 2009). Another domain of Big Five model of character attribute (personality) that adversely affect student scholarly accomplishments was “neuroticism” (uneasiness, impetuous, and impulsivity) (O’Connor & Paunonen, 2007). However, Komarraju et al. (2009) curiously revealed a positive connection regarding neuroticism and scholarly accomplishment of learners. They established that learners are eager to have excellent achievement, may feel some degree of accomplishment tension, which will persuade them to contemplate.

The outcomes of the present examination buttressed the discoveries of earlier researchers. Nighute and Sadawarte (2014) found that all character attributes (personality domains) of learners significantly influence their educational productivity (CGPA) with the exception of “extraversion”. The

characteristics “openness to experience” and “neuroticism” were emphatically identified with learners’ scholastic accomplishment than “agreeableness” and “conscientiousness” were identified as the most drivers of academic achievement of the understudies. Olowookere et al. (2017) in Nigeria found that “extraversion”, “agreeableness”, “conscientiousness”, “neuroticism” and “openness to experience” statistically significantly affect understudies' school achievement positively and the highest predictor was “conscientiousness”.

“Extraversion” was emphatically related yet not statistically critical ($r = .150$). Bakar and Herng (2018) showed that the trait of “agreeableness”, “conscientiousness”, “extraversion” and “neuroticism” are identified with the scholastic accomplishment of understudies. Lateef et al. (2019) showed that character types “A” and “B” altogether affect scholastic accomplishment of understudies. Nonetheless, Ghazi et al. (2013) revealed that there was no critical bond found between the understudies' character qualities and their scholarly accomplishment.

Moderating Role of Gender and Age in the Relationship between Self-Efficacy and Academic Performance of Teacher Trainees with Special Needs

The study found that both gender and age of teacher trainees with special needs does not moderate connection between efficacy (self-confidence/assuredness) and school achievement. As a result, the impact of efficacy (self-confidence) on the educational achievement of teacher trainees with special needs is not sensitive to their sex and age distribution of the respondents. This finding is new since previous studies only focused on general students and pre-service teachers. In general, the insensitivity of the

connection between self-adequacy (efficacy/confidence/assuredness) and educational attainment to gender was identified by Nejad and Khani (2014). Nejad and Khani discovered that there was no significant combined influence of among sex and self-adequacy in math and science lessons. Therefore, the current evidence does not share in the idea that sex moderate the link concerning learners' efficacy and their scholarly accomplishment as indicated in other previous investigations (e.g., Shkullaku, 2013; Ye, Pasada & Liu, 2018). Ye et al. found that sexual orientation directed the impacts of scholastic stress on students' efficacy in that it was more grounded for female understudies than for male counterparts. It is worth noting that academic self-efficacy of teacher-trainees with special needs cannot be developed in a vacuum; it must be based on training or experiences provided to them. This could mean that if gender moderates the association in relation to self-confidence (efficacy/adequacy) and educational achievement, then a particular sex (either male or female) of the teacher-trainees might have been highly exposed to other classroom or school activities that were considered in this present investigation.

The moderating role of age in the nexus concerning self-adequacy (efficacy/confidence) and scholarly attainment of teacher-trainees with special needs was also deemphasized by the current examination. The aftereffect of the present investigation supported the findings of Witt-Rose (2003) who found that age does not moderate the link between learners' efficacy and their school performance. No significant findings linked age to self-efficacy. Therefore, the study does not hold that age can moderate the connection between "self-efficacy" and "academic achievement" as found by previous

examinations (e.g., Huang, 2013). Huang reported that academic self-efficacy differs age in relations to their academic performance. The difference between the current research and the study of Huang (2013) could be attributed to geographical boundaries and social perspectives and type of respondents.

Moderating Role of Gender and Age in the Relationship between Emotional Intelligence and Academic Performance of Teacher Trainees with Special Needs

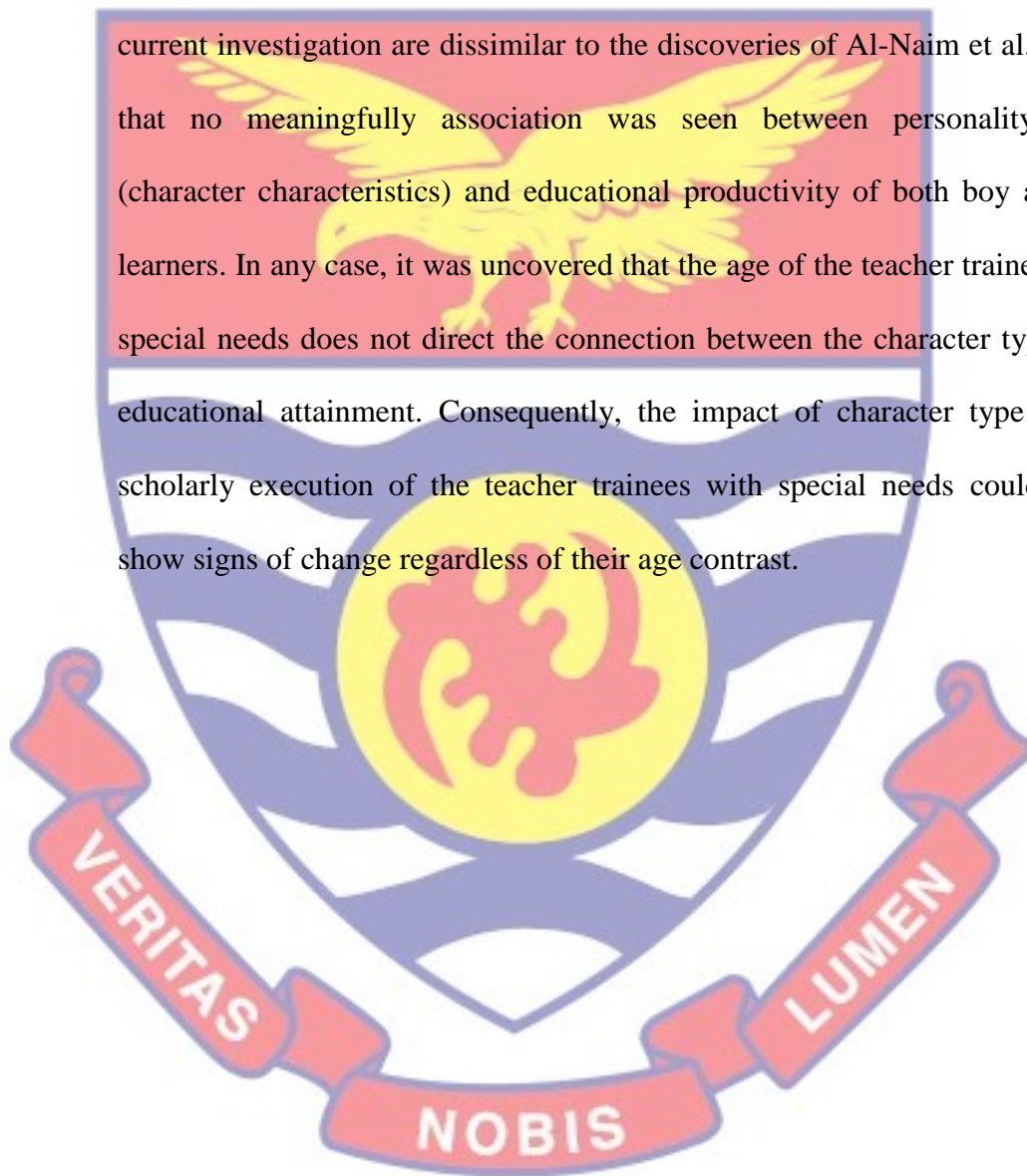
The study found that sex moderates the connection between EI and educational achievement of teacher trainees with special needs. Thus, connection between EI and school accomplishment is sensitive to the gender of teacher trainees with special needs. With male teacher trainees with special needs having a positive increase in their academic performance while female counterparts have a negative effect in their academic performance. I assume that female teacher-trainees with special needs would be more emotionally intelligent, perhaps because female understudies have propensity for expressing emotions more than male learners. Nonetheless, the outcomes demonstrated that there was negative moderate impact of sex in the link between “social competency” and scholastic execution of teacher-trainees with special needs. The findings of the present examination concurred with the discoveries of past scholars on the moderating function of sex in the association between EI and scholastic execution (e.g., Fida et al., 2018), nonetheless, repudiated the discoveries of Meshkat and Nejati (2017) that there was no significant impact of sexes in the bond between EI and educational achievement of understudies.

However, it was found that age of the respondents does not direct the co-variance regarding the “emotional intelligence” (EI) and “academic performance” of teacher-trainees with special needs. Accordingly, the age of the teacher-trainees with special needs is not sensitive to nexus concerning their EI and school achievement. The present research’s results confirmed the findings of Kashani et al. (2012) that that age of schoolchildren does not meaningfully direct the connection between EI and scholastic execution. Further, there was no significant link concerning EI and the understudies' school accomplishment. However, the results disagreed with the study of Chamundeswari (2013) that age moderates the correlation between EI and educational achievement of understudies. The difference between the current research and the study of Chamundeswari (2013) could be attributed to geographical boundaries and social perspectives and type of respondents.

Moderating Role of Gender and Age in the Relationship between Personality Traits and Academic Performance of Teacher Trainees with Special Needs

The study revealed that gender of teacher trainees with special needs assumes a significant part in the connection with respect to their character attribute (personality dimensions) and educational attainment. Thus, the influence of teacher trainees with special needs extraversion on the academic performance is highly sensitive to their sex. This was in favourable of the female teacher trainees with special needs. Thus, female teacher trainees with special needs with the characteristics of enjoying interpersonal interactions, enthusiastic, assertive, gregarious and energized would have positive influence in their academic performance than the male teacher trainees with special

needs. The aftereffects of the current investigation were corroborated by the findings of former studies on the directing part of sex in the connection between character attributes and scholarly execution of learners (e.g., Hazrati-Viari et al, 2012; Khan, 2020). Khan found that different personality traits impact the school achievement of learners. However, the outcomes of the current investigation are dissimilar to the discoveries of Al-Naim et al. (2016) that no meaningful association was seen between personality types (character characteristics) and educational productivity of both boy and girl learners. In any case, it was uncovered that the age of the teacher trainees with special needs does not direct the connection between the character types and educational attainment. Consequently, the impact of character type on the scholarly execution of the teacher trainees with special needs could never show signs of change regardless of their age contrast.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Overview

This chapter presents the outline of the investigation. The summary of the research is in two parts. The first part deals with the synopsis of the examination process and the outline of the key outcomes. Based on the key findings, deductions and inferences were drawn and suggestions and commendations were provided. Propositions for additional investigations are also given.

Summary of the Research Process

The study was directed to assess the impact of teacher trainees' with special needs self-efficacy, emotional intelligence and personality traits on academic performance in the CoE in Ghana. The study was directed by the accompanying inquiry questions:

1. What is the level of self-efficacy, emotional intelligence and personality traits among teacher-trainees with special needs in the CoE in Ghana?
2. What is the influence of self-efficacy on academic performance of teacher trainees with special needs in the CoE in Ghana?
3. What is the influence of emotional intelligence on academic performance of teacher trainees with special needs in the CoE in Ghana?

4. What is the influence of personality traits on academic performance of teacher trainees with special needs in the CoE in Ghana?
5. What is the moderating role of gender in the connection between the:
 - a. self-efficacy and academic performance of teacher trainees with special needs in the CoE in Ghana?
 - b. emotional intelligence and academic performance of teacher trainees with special needs in CoE in Ghana?
 - c. personality traits and academic performance of teacher trainees with special needs in the CoE in Ghana?
6. What is the moderating role of age in the link between the:
 - a. self-efficacy and academic performance of teacher trainees with special needs in the CoE in Ghana?
 - b. emotional intelligence and academic performance of teacher trainees with special needs in CoE in Ghana?
 - c. personality traits and academic performance of teacher trainees with special needs in the CoE in Ghana?

Descriptive survey design was used in this study. The design was appropriate for this study because it seeks to investigate influence of self-efficacy, emotional intelligence and personality on academic performance of teacher trainees with special needs in the CoE in Ghana. The population for the study was all teacher trainees with special needs in Presbyterian CoE, Wesley CoE and Nusrat Jahan Ahmadiyya CoE. Census was conducted on teacher trainees with special needs in the colleges. Adapted structured questionnaire was used to gather data from the respondents on academic self-efficacy, emotional intelligence and personality and academic performance

data was grade point average (CGPA). The questionnaire was pre-tested using 20 pre-service teachers with special needs from the University of Cape Coast (UCC). Ethical protocols was followed prior, during and after data collection. The data gathered was analysed using descriptive (frequency, percentages, means and standard deviation) and inferential (multiple linear Regression and

Moderation analysis by Hayes) statistics

Summary of Key Findings

The following were the findings of the study:

1. The study discovered that teacher-trainees with special needs had high level of academic self-efficacy, emotional intelligence and personality traits
2. There was statistically significant influence of self-efficacy on academic performance among teacher-trainees with special needs. The highest predictor was perceived control and least predictors was persistence
3. There was statistically significant influence of emotional intelligence on academic performance among teacher-trainees with special needs. The highest predictors were self-awareness and motivation while the least predictor was social competency.
4. There was statistically significant influence of personality traits on academic performance among teacher-trainees with special needs. The highest predictors were conscientiousness and agreeableness while the least predictor was neuroticism.
5. The study found that gender:
 - a. gender does not moderate the relationship between self-efficacy and academic performance of teacher-trainees with special needs.

b. moderate the relationship between emotional intelligence and academic performance of teacher-trainees with special needs.

c. moderate the relationship between personality traits and academic performance of teacher-trainees with special needs.

6. The study found that age does not moderate the relationship between academic performance and self-efficacy, emotional intelligence and personality traits of teacher-trainees with special needs.

Conclusions

The study concluded that the level of self-efficacy, emotional intelligence and personality traits among teacher trainees with special needs was high. The self-efficacy could help teacher trainees with special needs develop deeper interest in their academic activities and recover quickly from setbacks and poor academic performance in any academic semester. It could also influence their academic aspirations, and motivation to achieve academic goals. The emotional intelligence could help teacher trainees with special needs to increase school and team performance, decrease academic and social stress, improve academic decision making, increase their leadership ability and personal well-being, reduce school dropout, and truancy. This could also help them increase collaboration among peers, communicate effectively, empathise with others, overcome challenges and defuse conflict that might arise. This could influence their academic and social performance as well as their motivation. The personality traits could describe the stable pattern of behaviours among teacher trainees with special needs that persist for a long period of time. They could seek excitement, make new friends easily, and enjoy being active with others. They are perceived as attention seekers and

domineers. They could be ready to help, cared, honest, interested and believed the best about peers in schools. They could keep academic and social tasks in order, come to school highly prepared, and persist in academic activities and goal driven. They could be creative, enjoy trying new things, have a good imagination and be willing to consider new ideas. They could also struggle with difficult situations and have a mood swing. This could influence their academic and social performance as well as motivation.

The gender of teacher trainees with special needs is sensitive to their level of emotional intelligence and personality traits which affect their academic. Consequently, critical attention should be taken on social competency of emotional intelligence and extraversion of personality traits and these should be instilled in students with special attention on the female students regarding social competency and male students regarding extraversion trait. However, age of teacher trainees with special needs does not play any significant role in the self-efficacy, emotional intelligence and personality traits of teacher trainees with special needs.

Recommendations

The following were recommended based on the findings:

1. The study recommended that college tutors and administrators should continue to boost and increase the self-efficacy, emotional intelligence and personality level among teacher trainees with special needs. This can be done by proving effective communication, honest feedback, healthy learning environment, positive pedagogical strategies and modelling.

2. The study recommended that college tutors, administrators and counsellors have to continue to improve teacher trainees with special needs' self-efficacy, emotional intelligence and personality by supporting them to face academic requirements with high level of self-esteem.

3. The study recommended that college tutors and administrators should continually exposed teacher trainees with special needs to self-efficacy, emotional intelligence and personality traits development intervention programme. This will help them build up their confidence and develop appropriate character towards their academic activities and social life.

4. The study recommended that college tutors and administrators should consider the gender of teacher trainees with special needs when designing development and intervention programme to increase their self-efficacy, emotional intelligence and personality.

5. The study recommended that teacher-trainees with special needs should not relent on the level of their self-efficacy, emotional intelligence and personality traits. The female students are alerted to work on their social competency of their emotional intelligence and the male are informed to work on the extraversion trait.

Suggestions for Further Research

Since this study only looked teacher trainees with special needs, another study could be conducted to compare the self-efficacy, emotional intelligence and personality level among teacher trainees without special needs.

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APPENDIX A

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
FACULTY OF EDUCATIONAL FOUNDATIONS
DEPARTMENT OF GUIDANCE AND COUNSELLING
M.Phil. in Guidance and Counselling

Teacher Trainees with Special Needs Questionnaire

Dear Respondent

I am conducting a research on the topic *“Impact of Academic Self-efficacy, Emotional Intelligence and Personality on Academic Performance of Teacher Trainees with Special Needs”*. I kindly request your assistance to help fill this questionnaire frankly and objectively. I assure you that any information provided will be treated and held in strict confidence and use solely for academic purpose. Thank you for your time.

Instructions: Please, tick (✓) the box where applicable

SECTION A
Background Information

- | | | |
|---------------|-----------------------|---------------------|
| 1. Gender | a) Male [] | b) Female [] |
| 2. Age group | a) Below 20yrs [] | b) 20-24yrs [] |
| | c) 25-29yrs [] | d) 30-34yrs [] |
| 3. Year/Level | a) Level 100 [] | b) Level 200 [] |
| | c) Level 300 [] | |

SECTION B

Students' Self-Efficacy

This section relates generally to your beliefs about what you can do in your academic work. Indicate the extent to which you agree or disagree with the following statement by ticking (✓) 1=Strongly Disagree (SD), 2=Disagree (D), 3=Agree (A) and 4=Strongly Agree (SA)

SN	Statement	SD 1	D 2	A 3	SA 4
PC1	I will succeed because I can improve my study habit				
PC2	I believe that I can pass all my subject because I have the ability to do so.				
PC3	I can learn more because I develop good study habits				
CO1	I can perform all my class works/tasks				
CO2	I can get good grades in all my subjects				
CO3	I believe that I can master the concepts and topics taught in my class.				
PE1	I continue to study very hard despite discouragement from peers				
PE2	I continue to maintain good grades in all my subjects in spite of pressures in school				
PE3	I continue and persist when I am having a difficult time understanding the lesson				

SR1	I can study on my own				
SR2	I can submit my assignments before the deadlines				
SR3	I plan and organise my school activities/works very well				
PER	My confidence level in class affect my academic performance negatively				

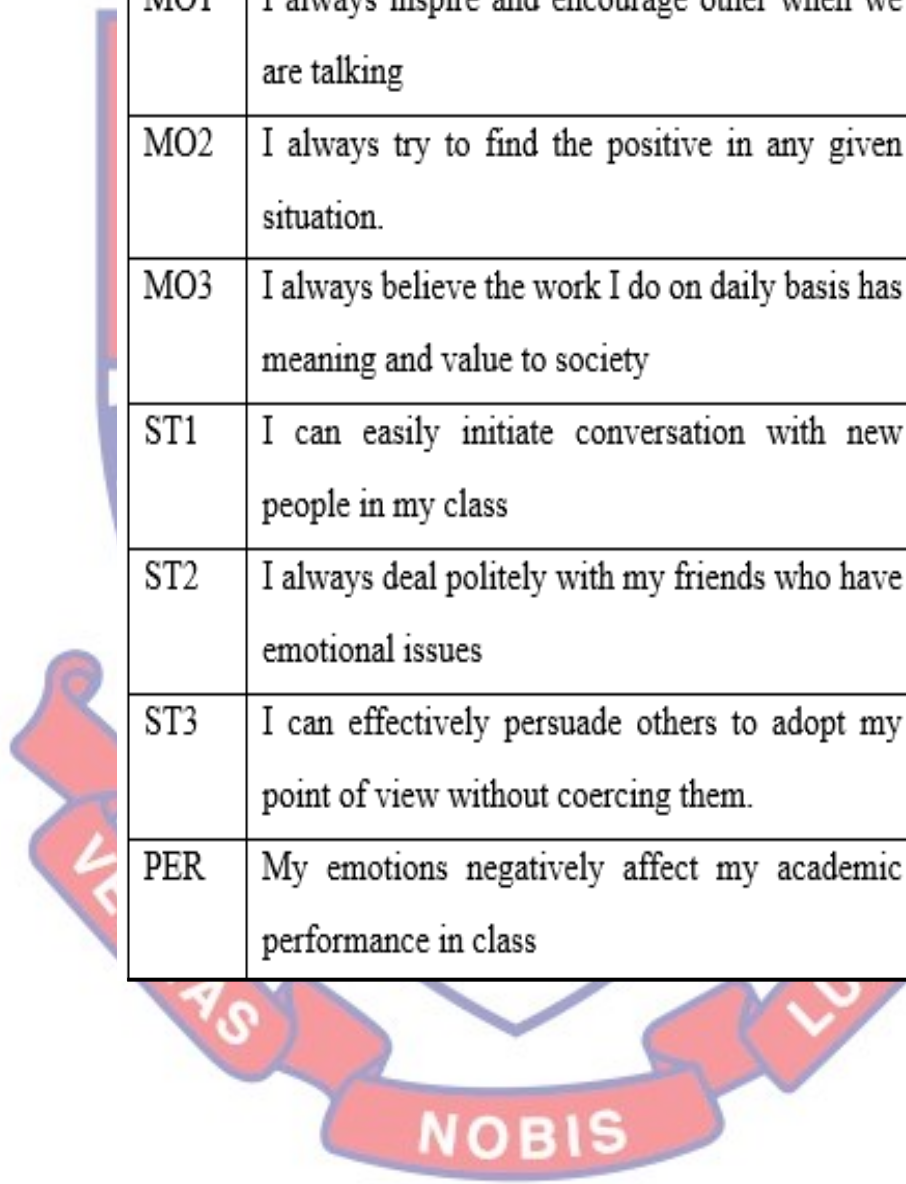
SECTION C

Students' Emotional Intelligence

This section relates generally to your ability to recognise your emotion and emotion of other and how you manage it. Indicate the extent to which you agree or disagree with the following statement by ticking (✓) 1=Strongly Disagree (SD), 2=Disagree (D), 3=Agree (A) and 4=Strongly Agree (SA)

SN	Statement	SD 1	D 2	A 3	SA 4
SA1	I always take time for quite reflection				
SA2	I always identify my emotion at any given time				
SA3	I am clear about my own goals and values				
SC1	I always accept my mistakes and apologise				
SC2	I always take plans on tasks that need to be done				
SC3	I always express my views in the class thoughtfully and honestly				
SL1	I often let go of problems and hurts from the past experience				
SL2	I always open-up to people in a good way				
SL3	I always manage my moods and emotions in the midst of people				
EM1	I have a number of people I can turn to, and I ask for their help when I need it.				

EM2	I always show empathy to my friends when we are communicating				
EM3	I often focus my attention on another person when I am listening to them				
MO1	I always inspire and encourage other when we are talking				
MO2	I always try to find the positive in any given situation.				
MO3	I always believe the work I do on daily basis has meaning and value to society				
ST1	I can easily initiate conversation with new people in my class				
ST2	I always deal politely with my friends who have emotional issues				
ST3	I can effectively persuade others to adopt my point of view without coercing them.				
PER	My emotions negatively affect my academic performance in class				



SECTION D

Students' Personality Traits

This section relates generally to your patterns of thoughts, feelings, and behaviours. Indicate the extent to which you agree or disagree with the following statement by ticking (✓) 1=Strongly Disagree (SD), 2=Disagree (D), 3=Agree (A) and 4=Strongly Agree (SA)

SN	Statement	SD 1	D 2	A 3	SA 4
	I see myself as someone who.....				
EX1	is a talkative in class				
EX2	is reserved in class				
EX3	is full of energy in class				
AG1	tends to find fault with others in class				
AG2	is helpful and unselfish with others in class				
AG3	starts quarrels with others in class				
CO1	does a thorough job in class				
CO2	can be somewhat careless in class				
CO3	is a reliable worker in class				
NE1	is depressed in class				

NE2	is relaxed in class				
NE3	worries a lot in class				
OP1	comes up with new ideas in class				
OP2	is a deep thinker in class				
OP3	do well in all the subjects				
PER	My personality influences my academic performance negatively				

Thank you for your time



APPENDIX B

INTRODUCTORY LETTER

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
FACULTY OF EDUCATIONAL FOUNDATIONS
DEPARTMENT OF GUIDANCE AND COUNSELLING

UNIVERSITY POST OFFICE
CAPE COAST, GHANA

30th July, 2020

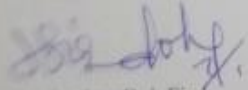
TO WHOM IT MAY CONCERN

LETTER OF INTRODUCTION

We introduce to you, Patience Adu-Amoah a student pursuing an M.Phil Programme in Guidance and Counselling at the Department of Guidance and Counselling of the University of Cape Coast. As a requirement, she is to submit a Thesis on the topic: *"Impact of Self Efficacy, Emotional Intelligence of Teacher Trainees with Special Needs"*. We are by this letter affirming that, the information she will obtain from your Institution will be solely used for academic purposes.

We would be most grateful if you could provide her the necessary assistance.

Thank you.


Dr. Stephen Doh Fia
HEAD OF DEPARTMENT

NOBIS

APPENDIX C

ETHICAL CLEARANCE LETTER

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
ETHICAL REVIEW BOARD

UNIVERSITY POST OFFICE
CAPE COAST, GHANA



Our Ref: CES-ERB/ucc.edu/15/21-86
Your Ref:

Date: 1st October, 2021

Dear Sir/Madam,

ETHICAL REQUIREMENTS CLEARANCE FOR RESEARCH STUDY

Chairman, CES-ERB
Prof. J. A. Omotosho
jomotosho@ucc.edu.gh
0243784739

Vice-Chairman, CES-ERB
Prof. K. Edjah
kedjah@ucc.edu.gh
0244742357

Secretary, CES-ERB
Prof. Linda Dzama Forde
lforde@ucc.edu.gh
0244786680

The bearer, Patience Adu-Amoah, Reg. No. is an
M.Phil. / Ph.D. student in the Department of Guidance and
Counselling in the College of Education Studies,
University of Cape Coast, Cape Coast, Ghana. ~~He~~ / She wishes to
undertake a research study on the topic:

Influence of self-efficacy, emotional intelligence and
personality traits on academic performance of
teacher-trainees with special needs in the Colleges
of Education in Ghana.

The Ethical Review Board (ERB) of the College of Education Studies
(CES) has assessed ~~his~~/her proposal and confirm that the proposal
satisfies the College's ethical requirements for the conduct of the
study.

In view of the above, the researcher has been cleared and given approval
to commence ~~his~~/her study. The ERB would be grateful if you would
give ~~him~~/her the necessary assistance to facilitate the conduct of the said
research.

Thank you.
Yours faithfully,

Prof. Linda Dzama Forde
(Secretary, CES-ERB)