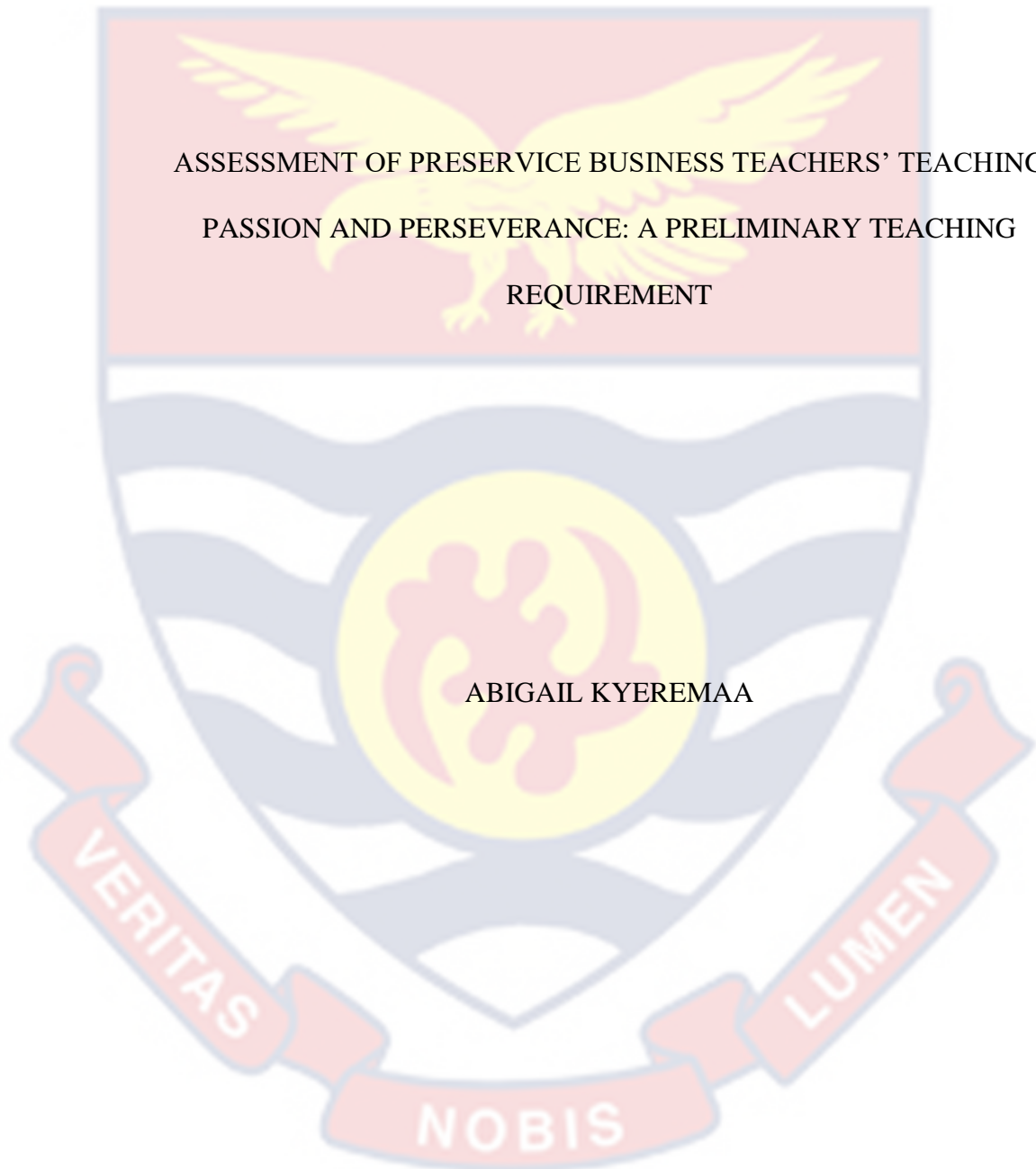


UNIVERSITY OF CAPE COAST



ASSESSMENT OF PRESERVICE BUSINESS TEACHERS' TEACHING
PASSION AND PERSEVERANCE: A PRELIMINARY TEACHING
REQUIREMENT

ABIGAIL KYEREMAA

2022



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University of Cape Coast

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REQUIREMENTS

BY

ABIGAIL KYEREMAA

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

OCTOBER 2022

DECLARATION

Candidate's Declaration

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

Candidate's Signature: Date.....

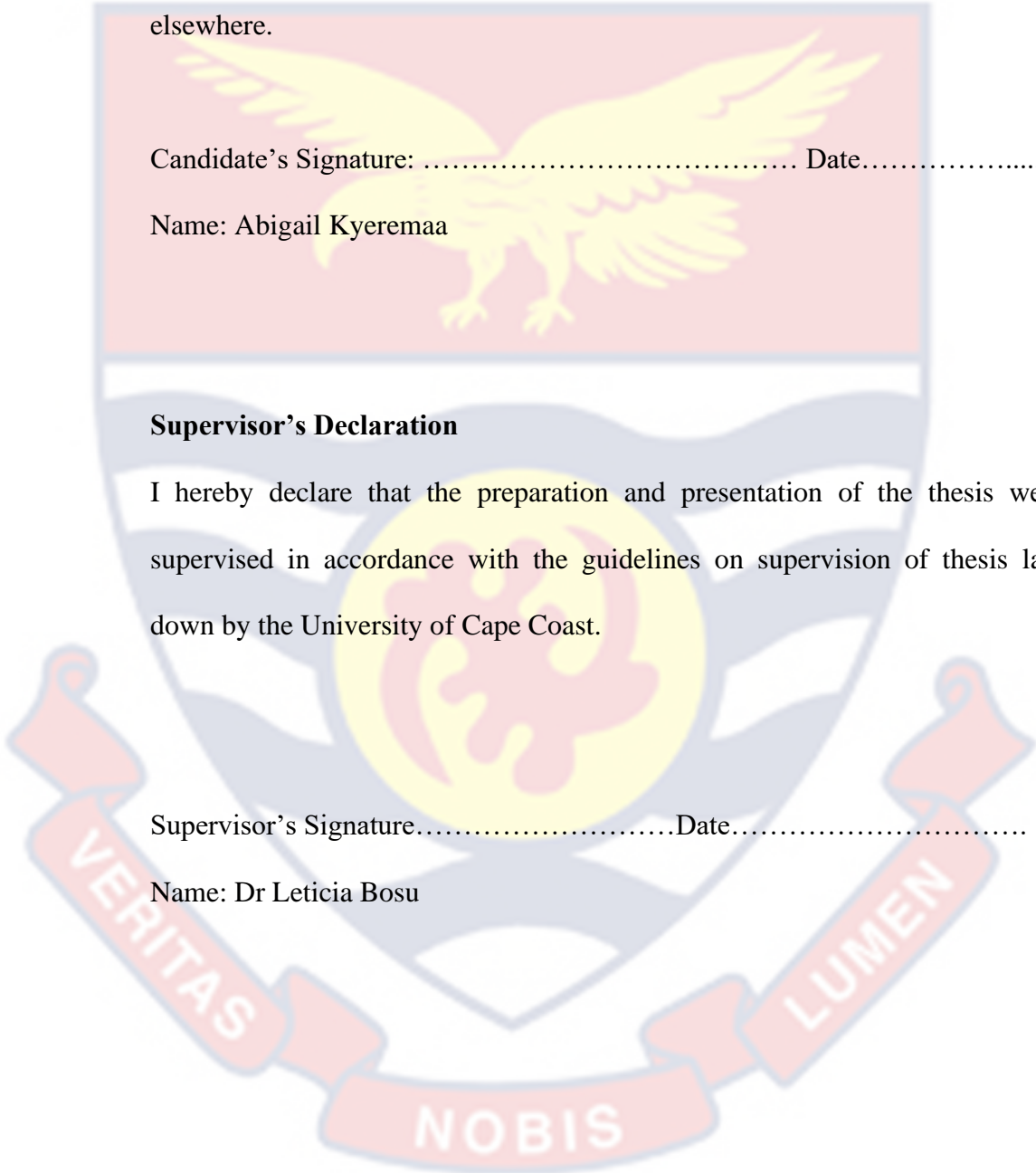
Name: Abigail Kyeremaa

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: Dr Leticia Bosu



ABSTRACT

The current study assessed preservice business teachers' passion and perseverance to teach through the descriptive cross-sectional survey design. Out of a population of 577 preservice business teachers (Management = 172, Accounting = 45), a valid sample of 217 participated in the study. The Preservice Teaching Passion and Perseverance Questionnaire was used to gather data on the study's variables. This instrument was validated through the exploratory factor analysis, and the reliability was ascertained through the McDonald's omega due to its multidimensional nature. Both descriptive (mean, standard deviation) and inferential (independent samples t-test, one-way ANOVA and Factorial MANOVA) statistics were used to analyse the data. The study found that the preservice business teachers exhibited high levels of passion and perseverance for teaching. Their passion to teach was sensitive to their level of study. However, their passion to teach declined at a higher level of study (Level 400); this is seen in the harmonious passion factor. Also, it was found that their demographic characteristics did not significantly influence their perseverance to teach. However, the interaction between their prior teaching experience and Level of study influenced their perseverance to teach. Therefore, to avert the possibility of admitting teacher candidates who are not passionate to teach, the Directorate of Academic Affairs of universities should include the submission of motivation letters as part of the admission requirements for education programmes.

KEYWORDS

Business

Grit

Management

Passion

Perseverance

Preservice teachers



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DEDICATION

To my husband, Mr Daniel Abina Dwaase, and my lovely kids, Lemuel and

Lois A-Amankona



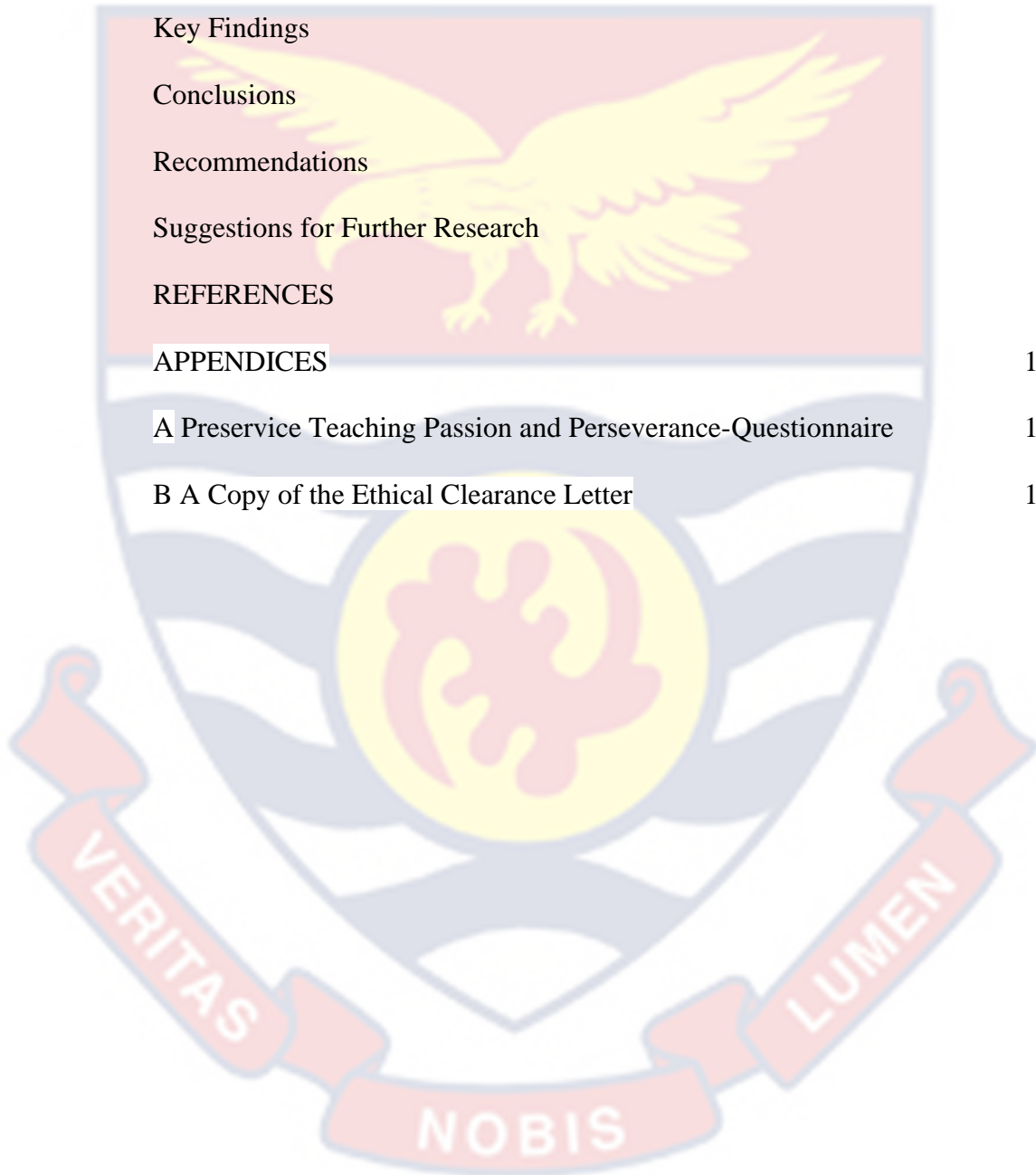
TABLE OF CONTENTS

	Page
DECLARATION	ii
ABSTRACT	iii
KEYWORDS	iv
ACKNOWLEDGEMENTS	v
DEDICATION	vi
LIST OF TABLES	x
LIST OF FIGURE	xii
CHAPTER ONE: INTRODUCTION	
Background to the Study	1
Statement of the Problem	4
Purpose of the Study	7
Research Objectives	7
Research Questions	8
Research Hypotheses	8
Significance of the Study	10
Delimitation	11
Limitations	12
Operational Definition of Key Terms	13
Organisation of the Study	13
CHAPTER TWO: LITERATURE REVIEW	
Overview	15
Theoretical Review	15
Grit Theory	15

Self-Determination Theory (SDT)	17
Dualistic Model of Passion (DMP)	20
Conceptual Framework	25
Empirical Review	27
Chapter Summary and Implications for Current Study	35
CHAPTER THREE: RESEARCH METHODS	
Overview	39
Research Design	39
Population	41
Respondents	42
Data Collection Instrument	43
Validity and Reliability	44
Data Collection Procedures	48
Ethical Considerations	49
Data Processing and Analysis	50
Chapter Summary	54
CHAPTER FOUR: RESULTS AND DISCUSSION	
Overview	55
Normality Test	55
Demographic Characteristics of the Respondents	56
Results	59
Hypotheses	64
Discussion	79
Chapter Summary	85

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND
RECOMMENDATIONS

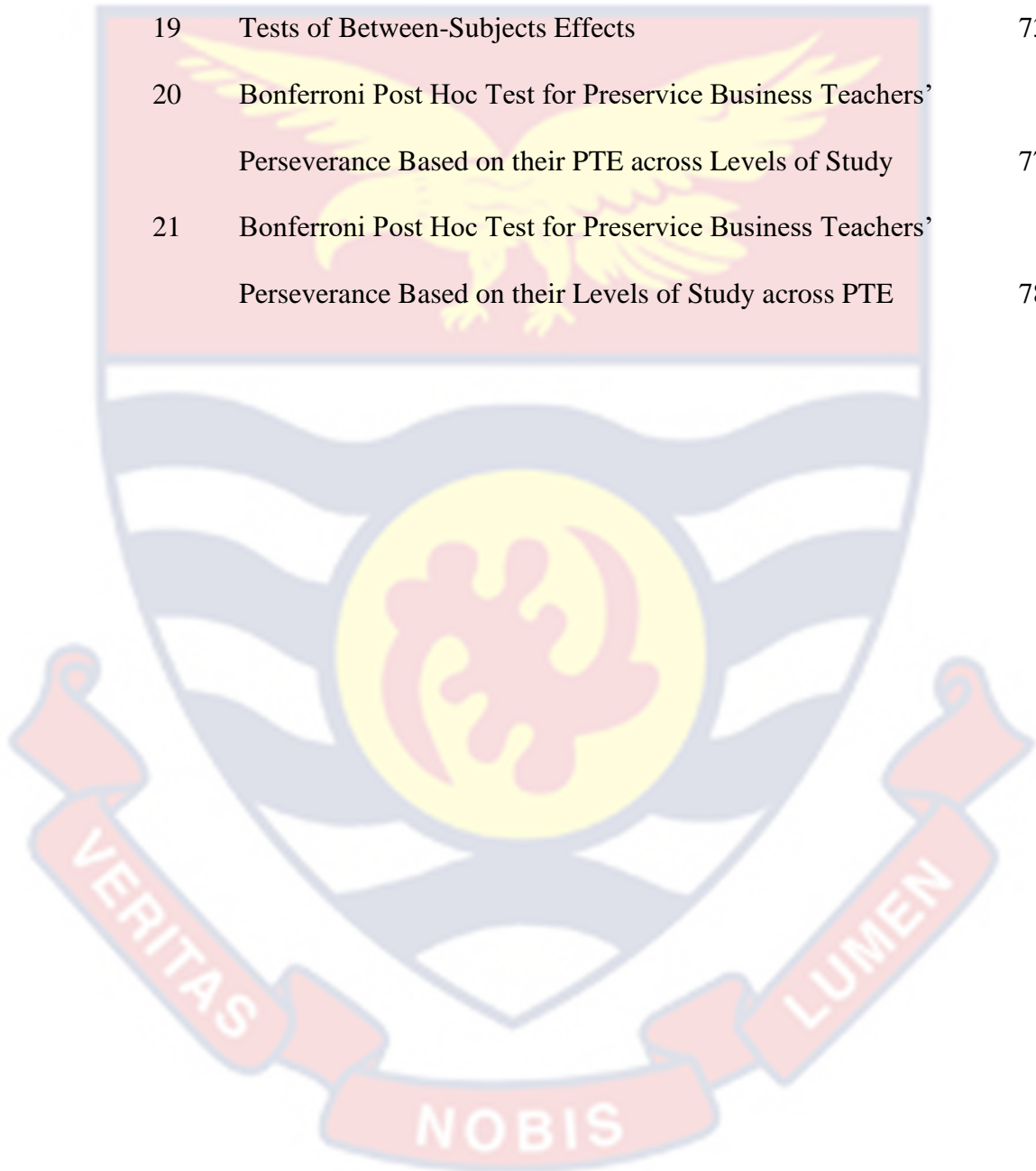
Overview	86
Summary of the Study	86
Key Findings	89
Conclusions	90
Recommendations	91
Suggestions for Further Research	93
REFERENCES	94
APPENDICES	106
A Preservice Teaching Passion and Perseverance-Questionnaire	106
B A Copy of the Ethical Clearance Letter	111



LIST OF TABLES

Table	Page
1 Population Distribution of Preservice Business Teachers	42
2 Factor Loadings of Teaching Passion	46
3 Factor Loadings of Teaching Perseverance	47
4 PTPP-Q Reliability	48
5 Summary of Data Analysis	53
6 Normality Results through Descriptive Statistics	56
7 Characteristics of Respondents	57
8 Preservice Business Teachers' Level of Passion to Teach	60
9 Preservice Business Teachers' Level of Teaching Perseverance	62
10 Difference between Preservice Business Teachers' Passion and Perseverance to Teach	63
11 Independent Samples T-test Results for Preservice Business Teachers' Passion to Teach and Sex	64
12 One-way ANOVA Results for Preservice Business Teachers' Passion to Teach and Age	65
13 Independent Samples T-test Results for Preservice Business Teachers' Passion to Teach and Prior Teaching Experience	66
14 Independent Samples T-test Results for Preservice Business Teachers' Passion to Teach and Programme of Study	67
15 One-way ANOVA Results for Preservice Business Teachers' Passion to Teach and Level of Study	68
16 Tukey HSD Post Hoc Test for Preservice Business Teachers' Passion by Level of Study	69

17	One-way ANOVA Results for Preservice Business Teachers' Perseverance by Sex, Age, Prior Teaching Experience, Programme of Study and Level of Study	70
18	MANOVA Results for Teaching Passion and Perseverance	71
19	Tests of Between-Subjects Effects	73
20	Bonferroni Post Hoc Test for Preservice Business Teachers' Perseverance Based on their PTE across Levels of Study	77
21	Bonferroni Post Hoc Test for Preservice Business Teachers' Perseverance Based on their Levels of Study across PTE	78



LIST OF FIGURE

Figure		Page
1	Passion-perseverance construct for quality teaching	26



CHAPTER ONE

INTRODUCTION

Teaching has come under immense scrutiny due to some teachers' ineffectiveness and students' poor academic performance. Therefore, Government efforts have been geared towards providing teaching and learning materials to schools, ensuring quality teaching and a conducive environment, motivating teachers and developing professional teachers. In all these, teacher education institutions have continuously played their roles in developing initial teacher education programmes and developing preservice teachers' capacity for schools, since it is at this point that teachers are made and fed into schools. Even though concentration is placed on improving the curricula of teacher education institutions as supervised by Ghana Tertiary Education Commission, preservice teachers' psychological affective characteristics (passion and perseverance to teach) are disregarded. These characteristics, for example, passion for teaching is already noted as a critical requirement for teaching by the National Teaching Council, Ghana. Therefore, the motivation for this study was to assess preservice teachers' teaching passion and perseverance to determine the type of professional teachers produced for Ghanaian schools.

Background to the Study

The nature of a profession and its complex responsibilities demand essential professional requirements for effective and efficient work execution. A profession requires a specialized body of knowledge acquired through extended training (Hargreaves, 2000). This specialized knowledge serves as a cardinal entry requirement for all occupations regarded as professions. It

defines the entry and negotiates the power and rewards due to expertise (Clarke & Newman, 1997).

The teaching occupation or profession provides some important requirements that every professional teacher must meet. About three and half decades ago, Shulman's (1986) classical work identified seven minimum requirements that should bind every professional teacher. As espoused in his pedagogical content knowledge theory, these requirements are content knowledge, curriculum knowledge, general pedagogical knowledge, knowledge of educational goals and their philosophical bases, knowledge of the learner, knowledge of educational contexts, and pedagogical content knowledge. By these knowledge bases, Shulman indicated that the pedagogical content knowledge component is the most important knowledge base in ensuring that the professional teacher achieves classroom results, which is meeting the learning and target needs of learners, which is the expectation of the teaching profession.

The pedagogical content knowledge theory did not categorically consider integrating teachers' technological knowledge. Hence, a deficiency was observed by Mishra and Koehler (2006) in that the theory did not envision the emerging complexity that technology brings to modern teaching. The argument was that knowledge of technology to the professional work of a teacher smoothens and facilitates the accomplishment of teaching outcomes. This gave birth to Mishra and Koehler's (2006) technological pedagogical content knowledge framework for teaching. By this framework, the minimum requirements for teaching are content knowledge, pedagogical knowledge, technological knowledge, pedagogical content knowledge, technological

content knowledge, technological pedagogical knowledge and technological pedagogical content knowledge.

Other teaching frameworks that have served the tone for the minimum requirements for teacher professionalism are the New South Wales quality teaching model and the Danielson framework for teaching. The quality teaching model identified intellectual quality, quality learning environment and significance dimensions, which corresponds to the components in the pedagogical content knowledge theory. The Danielson framework recognised a teacher's competency in planning and preparation, classroom environment, professional responsibilities and instruction. These theories and frameworks can separate professional teachers from unprofessional ones. These (theories and frameworks) and others influenced the development of the teaching standards for Ghana.

The teaching standards for Ghana by the National Teaching Council aim to prepare teachers instilled with professional attitudes, values, and skills. These professional qualities are captured under professional attitudes and values, professional knowledge and professional practice standards. As a well-developed teaching standard and a rigorous screening mechanism for the teaching profession, the standards further acknowledge the significance of teaching passion and categorically indicates it as a preliminary requirement. This implies that the competencies or minimum knowledge bases indicated by the standards are not enough to execute the teaching tasks successfully. Mart (2013) stated that teaching passion is essential to successful teaching. In Ghana, Asare (2020), through an empirical study, enforces and validates this

preliminary teaching requirement by stressing that pedagogical knowledge and content knowledge for teaching is ‘useless’ without teaching passion.

A few of the significance of teaching passion are recounted. Vallerand (2008) sees teaching passion as a teacher’s strong inclination towards the teaching of which time and energy is invested in its execution. It is characterised by intellectual emotion, enthusiasm, commitment and energy (De Cooman et al., 2007). Day (2007) indicated that these intellectual abilities and emotions combine to produce the best teaching practices. It creates excitement for students to achieve results (e.g., Hansen, 2001; Fink, 2003; Vallerand, 2007), ensures the success of all pedagogical approaches (e.g., Hargreaves, 1997), awakens learners to live (e.g., Roeger, 2012), and combines with perseverance ensures long term teaching success (Duckworth & Quinn, 2009).

Numerous empirical evidence (e.g., Day, 2007; Fink, 2003; Vallerand, 2007) support the need for teaching passion and perseverance in the teaching profession. This makes assessing preservice teachers’ passion and perseverance to teach essential. Hence, examining preservice teachers’ passion and perseverance is essential before they are certified and launched into the teaching profession. The study, therefore, assesses preservice teachers’ teaching passion and perseverance as prerequisites for the teaching profession.

Statement of the Problem

The application and admission of candidates into the teacher education programmes and curriculum do not pay attention to candidates’ passion and perseverance to teach. This is evident in both the admission processes of teacher candidates and the actual implementation of the teacher education

programmes. In terms of application and admission, prospective preservice teachers apply to read for various teacher education programmes by submitting two important documents (senior high certificates and statement of results) for their legibility assessment. Admissions are then offered to them to become preservice teachers by the teacher education institutions. It must be noted that no admission interview is run to assess prospective student teachers' interest or passion for teaching, and they submit no motivational letters during the application for the programme.

On the programme, the teacher education curriculum stresses content knowledge (knowledge in subject areas such as Management, Accounting, Mathematics, Social Studies, etc.) and pedagogical knowledge (knowledge in methods of teaching, classroom management, classroom assessment, etc.) for preservice teachers' professional development. Despite all these, schools are still deprived of passionate and dedicated teachers (Department for Education, 2018; Fogelgarn & Burns, 2020). Also, teacher attrition had gotten to a deplorable state in Ghana (Boateng, 2019). Over 10,000 teachers annually leave the teaching field (Ghana Education Service as cited in Sam, Effah & Osei-Owusu, 2014). Some teachers who teach in schools simply do so to earn a living and not with the passion for impacting their students to become agents of change (Watt & Richardson, 2007). Hence, teaching is treated as a fall-back rather than a professional career based on passion and perseverance (Watt & Richardson, 2007).

Therefore, Gibbs (as cited in Asare & Amo, 2023) recommended that teacher educators should focus less on knowledge and skills when developing preservice teachers, and that more emphasis should be placed on teaching self-

efficacy. Findings from previous studies (Low et al., 2011) show that harmonious teaching passion influences self-efficacy and that teacher education institutions should enhance preservice teachers' teaching passion. Empirical findings in South Africa support that teaching challenges are responsible for eroding teachers' teaching passion for the profession (Mahoko et al., 2019). The current study is important since the teaching passion and perseverance of preservice teachers in Ghana is not known to communicate the contribution of teacher education institutions in improving teachers' teaching passion and perseverance.

Several consequences are likely to be encountered for disregarding the assessment of teacher candidates' teaching passion and perseverance. An instance is filling in admission slots in teacher education institutions with candidates not interested in teaching, thereby wasting teacher training and education resources. Again, teacher educators might not focus on developing the requisite teaching passion and perseverance to influence preservice teachers' instructional effectiveness. Empirical studies (e.g., Vallerand, 2007; Duckworth, 2014) have shown that teaching passion and perseverance are critical attributes for effective instruction. As reported, pedagogical knowledge and content knowledge are useless without teaching passion (Asare, 2020), suggesting that all teachers and prospective teachers must possess the passion and perseverance to teach.

These two critical teacher attributes (passion and perseverance to teach) are required from all prospective teachers and teachers by the National Teaching Standards for Ghana. As stated by the national standards, particularly for teaching passion, "the teachers are required to have passion for

teaching and leadership, engage with members not only in the school community but also in the wider community and act as agents of change” (National Teaching Council, 2017, p. 11). However, literature search showed that from 2017 to 2021, the passion and perseverance of teachers to teach in Ghana have not been assessed and reported for policy formulation. If this must be addressed, then focus must be placed at the initial level where the teachers are trained for schools. At this level, prospective teachers can be moulded to develop, if absent, the passion and perseverance to teach, and their teaching successes are gauged through their levels of passion and perseverance to teach.

Purpose of the Study

The study, through the survey design, describes the University of Cape Coast's preservice business teachers' (management and accounting) level of teaching passion and perseverance to teach. Also, it examines differences in prospective teachers' passion and perseverance to teach based on their sex, prior teaching experience, age and programme of study.

Research Objectives

The specific objectives were to:

1. describe preservice business teachers' level of passion to teach.
2. determine preservice business teachers' level of perseverance to teach.
3. examine if there are differences in preservice business teachers' level of passion to teach based on:
 - a. sex
 - b. age,
 - c. prior teaching experience,
 - d. programme of study, and

- e. Level of study.
4. examine if there are differences in preservice business teachers' level of perseverance to teach based on:
 - a. sex
 - b. age,
 - c. prior teaching experience,
 - d. programme of study, and
 - e. Level of study.
 5. examine if there are interaction effects of preservice business teachers' demographic variables (sex, age, prior teaching experience and programme of study) on their levels of passion and perseverance to teach.

Research Questions

The study formulated two research questions and three hypotheses to examine University of Cape Coast business teachers' levels of passion and perseverance in teaching. The research questions are:

1. What is preservice business teachers' level of passion to teach?
2. What is preservice business teachers' level of perseverance to teach?

Research Hypotheses

The study tested the following hypotheses at a .05 level of significance:

1. H_0 : There is no statistically significant difference in preservice business teachers' level of passion to teach based on:
 - a. sex
 - b. age,
 - c. prior teaching experience,

- d. programme of study, and
- e. level of study.

H₁: There is a statistically significant difference in preservice business teachers' level of passion to teach based on:

- a. sex
- b. age,
- c. prior teaching experience,
- d. programme of study, and
- e. level of study.

2. H₀: There is no statistically significant difference in preservice business teachers' level of perseverance to teach based on:

- a. Sex
- b. age,
- c. prior teaching experience,
- d. programme of study, and
- e. level of study.

H₁: There is a statistically significant difference in preservice business teachers' level of perseverance to teach based on:

- a. sex
- b. Age,
- c. prior teaching experience,
- d. programme of study, and
- e. level of study.

3. H₀: There is no interaction effect of preservice business teachers' demographic variables (sex, age, prior teaching experience,

programme of study and level of study) on their levels of passion and perseverance to teach.

H₁: There is an interaction effect of preservice business teachers' demographic variables (sex, age, prior teaching experience, programme of study and level of study) on their levels of passion and perseverance to teach.

Significance of the Study

The study provides useful information to various stakeholders in teaching and teacher education. These stakeholders are the Directorate of Academic Affairs in the University of Cape Coast, teacher educators (lecturers) and teacher education researchers.

The study found that the preservice business teachers had a relatively low passion to teach compared to their perseverance. This informs the Directorate of Academic Affairs of the University of Cape Coast in addition to application forms, allow candidates seeking to read education programmes to submit motivational letters. This would help gauge preservice teachers' level of harmonious and obsessive passion and perseverance to teach before admission.

Also, the education academic department of the University should organise periodic seminars for final year SHS students on the nature of teaching and the teacher education programmes offered in the University. This should create much awareness before students apply for education programmes. This is because their knowledge about teaching resulted in a decline in their perseverance to teach.

The study found that the perseverance of the preservice business teachers reduced as they gained more knowledge and experience in teaching. Since teaching passion and perseverance is an emotional attribute contingent on interest and desire, teacher educators and lecturers should emotionally engage preservice teachers during classroom interactions. This can be done by projecting the rich attributes of the teaching profession to invoke the interest in preservice teachers for teaching. This requires teacher educators to first show teaching passion and perseverance during lectures (if not already in place or improve on it if in place).

The study enriches the literature on preservice teachers' passion and perseverance to teach and directs researchers on areas to focus on regarding teacher education. In particular, it directs researchers to examine the relationship between preservice teachers' passion and perseverance to teach and explore the underlying reasons for their relatively low teaching passion and declining perseverance in the face of their high knowledge and experience in teaching.

Delimitation

The study examined University of Cape Coast preservice business teachers' levels of passion and perseverance to teach. These preservice business teachers were being trained to teach management and accounting. The study focused on those coming from the regular stream of the business teacher education programme. Only preservice business teachers in Level 200 to Level 400 were considered in the study.

The teaching passion variable focused on harmonious and obsessive passion propounded by Vallerand et al. (2003). The teaching passion scale developed by the author mentioned above was used out of the many available scales. This is because various researchers relied on the scale developed by Vallerand et al. (2003) to assess preservice teachers' passion to teach due to its validity. The teaching perseverance variable explains preservice teachers' determination to teach amid difficulties and challenges.

Limitations

The study suffered from three major limitations. First, the study's findings cannot be generalised to cover preservice teachers in other disciplines. This is because the study focused only on preservice business teachers' passion and perseverance to teach. The pre-service business teachers were management and accounting preservice teachers.

Next, the descriptive cross-sectional survey design used to examine the passion and perseverance of the preservice business teachers prevented the study from gathering rich explanations about preservice business teachers' relatively low passion for teaching and decreasing perseverance concerning their increasing teaching knowledge and prior teaching experience. This was considered important to identify the specific attributes of the teaching profession that should be addressed to improve quality teaching in schools.

Finally, the current study failed to indicate the relationship between preservice teachers' passion and quality education. This would have explained how preservice teachers' passion and perseverance to teach influence quality education. However, the study provided enough evidence through the inferential analyses that preservice teachers had a relatively low passion to

teach, which the literature considers essential for effective teaching and quality education.

Operational Definition of Key Terms

The following terms are defined as used in the study:

Teacher education is the “type of education and training given to and acquired by an individual to make him or her academically and professionally proficient and competent as a teacher” (Government of Ghana, 2002, p. 161).

Preservice teachers are students enrolled on various teacher education programmes trained to become professional teachers. They are also known as student-teachers.

Preservice business teachers are students enrolled in the business teacher education programme. They are trained to teach business at senior high schools, specifically Business Management and Accounting.

Organisation of the Study

The entire study is organised into five chapters. Chapter One presents the introduction. This chapter covers the background of the study, the statement of the problem, the purpose of the study, research objectives, research questions, research hypotheses, the significance of the study, delimitation, limitations, operational definition of key terms and ends with the organisation of the study. Chapter Two presents a review of the literature. It focuses on the vested writings of various authorities or scholars in the area of passion and perseverance to teach. This chapter is organised under theoretical review, conceptual framework and empirical review, which ends with the summary and implications of the literature for the current study. Chapter Three describes the research methods employed in the execution of the study,

which covers the research design, population, sample and sampling procedures, data collection instrument, validity and reliability test, data collection procedures, ethical consideration, and data processing and analysis.

Chapter Four concentrates on the results and its discussion to address the research problem. Finally, Chapter Five summarises the study, draws conclusions, and proffers recommendations and suggestions for further research.



CHAPTER TWO

LITERATURE REVIEW

Overview

The first chapter laid the study's background, emphasising the current study's needs. The target is to determine preservice business passion and perseverance to teach for quality teaching. This passion and perseverance for teaching are described by three theories: Grit Theory, Self-Determination Theory (SDT) and the Dualistic Model of Passion (DMP). Based on these theories, a conceptual framework is developed to guide the execution of the study. Therefore, the chapter is structured into three parts. The first part presents a review of the theoretical literature. The second part focuses on the conceptual framework, and the last part focuses on the empirical literature to indicate the gaps which necessitated the current study. The chapter ends with a summary and implications for the current study.

Theoretical Review

The current study is influenced by three theories. These are Grit Theory, Self-Determination Theory (SDT) and the Dualistic Model of Passion (DMP). Next to this theoretical overview is the review of the theories.

Grit Theory

Duckworth, Peterson, Matthews, and Kelly (2007) formulated the grit theory. Grit is a personality attribute that explains the propensity to maintain passion and effort regardless of challenges while working vigorously towards a long-term goal (Duckworth et al., 2007; Duckworth & Quinn, 2009). It is a

multifaceted theory of mental forte that consists of two dimensions: perseverance of effort and consistency of interest.

Duckworth (2016) elaborates on these two dimensions of grit by relating passion to the consistency of interests to stay focused or have enduring devotion to a task and perseverance of effort to the tendency to maintain commitment and sustain effort over time, irrespective of challenges. The grit theory states that persons with higher perseverance of effort and consistency of interest are believed to be stronger learners and are less likely to be discouraged by obstacles, more motivated to engage in strategic behaviour, and sustain a focused effort to achieve success (Duckworth et al., 2007; Duckworth, 2016). Duckworth et al. (2007) believe that grit symbolises long-term persistence in pursuing consistent objectives and continued interest over time, despite failures or obstacles, rather than the short-term intensity of effort and interest.

Grit also explains possible relationships to various motivational and self-regulatory processes (Muenks, Wigfield, Yang & O'Neal, 2017; Von Culin, Tsukayama, & Duckworth, 2014). This is because the two dimensions of grit (perseverance of effort and consistency of interest) capture the notion of passion, entail working persistently through challenges towards specific goals and reduce the likelihood of abandoning a task at hand. For example, individuals with higher perseverance of effort (but not the consistency of interest) demonstrate higher levels of self-efficacy and value (Steinmayr, Weidinger & Wigfield, 2018; Wolters & Hussain, 2015). Additionally, grittier individuals (composite score) are more likely to seek meaning, purpose and

higher interest in a task and to attribute positive effects to learning (Von Culin et al., 2014), which might lead to intrinsic motivation.

Grit does not require constant feedback to maintain motivation and effort to accomplish a specific action. Hence, it differs from McClelland's (1961) need for achievement (the *n*-achievement theory) and Deci and Ryan's (2000) three intrinsic motivation needs of competence, autonomy, and relatedness. First, the need for achievement focuses on goal-related feedback and rewards, while grit does not require constant feedback to sustain motivation and effort. Second, the three intrinsic motivation needs of competence, autonomy, and relatedness pertain to a desire to execute specific actions to achieve a sense of personal fulfilment, whilst grit denotes commitment and perseverance to achieve long-term goals.

Self-Determination Theory (SDT)

The SDT originated from Deci and Ryan's work in the 1980s, where they argued that the type and quality of a person's motivation are more important than the amount of motivation when predicting an outcome (Deci & Ryan, 1985). SDT is a metatheory that concerns "the investigation of people's inherent growth tendencies and innate psychological needs that are the basis for their self-motivation and personality integration, as well as for the conditions that foster those positive processes" (Deci & Ryan, 2000, p. 68).

SDT is thought of as a metatheory in the sense that it is made up of six sub-theories (i.e., cognitive evaluation, organismic integration, causality orientations, basic psychological need, goal content, and relationship motivation) which integrate to offer a comprehensive understanding of human motivation and functioning across life domains. At the heart of each sub-

theory is the idea of basic psychological needs; all individuals strive for and need autonomy (the need to experience volition and to self-regulate one's actions), competence (the need to feel effective in interacting within one's social-contextual environment), and relatedness (the need to feel socially connected to and cared for by significant others) to flourish and grow (Deci & Ryan, 1985; 2000). These six sub-theories are briefly described.

The cognitive evaluation centres on the factors that shape intrinsic motivation by affecting perceived autonomy and competence. Also, the organismic integration theory concerns extrinsic motivation and how it may be internalized. Moreover, the causality orientations theory describes personality dispositions. That is, are individuals generally autonomous, controlled, or impersonal? Furthermore, the basic psychological need theory discusses the role of basic psychological needs in health and wellbeing and, importantly, outlines how social environments can neglect, thwart, or satisfy people's basic psychological needs. Penultimately, the goal content theory is concerned with how intrinsic and extrinsic goals influence health and wellness. Finally, the relationship motivation theory is focused on the need to develop and maintain close relationships. It describes how optimal relationships help people satisfy their basic psychological needs for autonomy, competence, and relatedness.

The major assumption of the SDT is that all human beings are organisms with a natural orientation toward vitality and growth. People strive to expand and understand themselves by integrating new experiences, cultivating their needs, desires, and interests, and connecting with others and the outside world. This growth tendency will be actualized as long as the three basic psychological needs (autonomy, competence and relatedness) are

available (Deci & Ryan, 2000). However, if organisms are deprived of these psychological needs, they may experience the “emergence of no optimal psychological outcomes” (p. 229), which include being controlled, fragmented, demotivated and alienated. Essentially, all three basic psychological needs must be satisfied for individuals to be integrated and psychologically well – satisfying “one or two is not enough” (p. 229).

Deci and Ryan (2000) describe a person’s sense of self-determination and motivation as being on a continuum, distinguishing between three different types of motivation on that continuum; intrinsic, extrinsic and motivation. Intrinsic motivation is where a person does something for the sheer pleasure and satisfaction of completing that activity. Accordingly, intrinsically motivated individuals identify as having the greatest sense of self-determination or autonomy and are at the top end of the motivation continuum (Deci & Ryan, 2000). Motivated people, or those who experience the slightest sense of self-determination and lack motivation, are placed at the opposite low end of the continuum. Between these two points of the continuum is extrinsic motivation, where a person’s motivation to engage in and complete an activity relies on external regulations. This type of motivation lacks a sense of volition, as extrinsically motivated people only engage in an activity to either achieve an outcome or avoid a negative consequence.

Research grounded in SDT has typically examined the universal benefits position by demonstrating the unique importance of each need. For example, Sheldon, Elliot, Kim, and Kasser (2001) compared psychological needs from several popular need theories (e.g., Maslow, 1968; Epstein, 1990) and consistently demonstrated that autonomy, competence and relatedness

were the most important psychological needs concerning life satisfaction. Additionally, motive disposition research (Sheldon & Schuler, 2011) shows that those who appear to not “want” a particular need (i.e., low motive disposition for that need) experience positive affect just as much from ‘having’ the corresponding basic need (i.e., satisfying that need) as those who report ‘wanting’ the need (i.e., high motive disposition for that need). Sheldon and Schuler suggest that these findings indirectly support SDT’s universality claim, namely that everyone benefits equally from need satisfaction.

In contrast to the earlier studies, other studies' findings contradict the universal benefits position. For example, Harackiewicz, Sansone and Manderlink (1985) found that the relationship between competence feedback and task interest depends on an individual’s orientation toward achievement incentives (i.e., achievement motivation). A series of studies in the motive disposition domain demonstrate the effects of need satisfaction on motivation (Schuler & Kuster, 2011; Schuler, Sheldon & Frolich, 2010; Schuler, Wegner & Knechtle, 2014) and domain-specific well-being (Hofer & Busch, 2011) are influenced by personality variables (i.e., implicit motives). These contradictory findings may be explained by inappropriate operationalisations of need strength (Chen et al., 2015) and statistical procedures (Hardy & Moriarty, 2006).

Dualistic Model of Passion (DMP)

The DMP is credited to Vallerand and his associates (Vallerand et al., 2003). These authors define passion as a strong inclination toward a meaningful and highly valued activity that an individual likes, attaches relevance and devotes substantial time and energy to. This definition implies

that passion consists of seven core elements that distinguish it from affective (e.g., personal interest), behavioural (e.g., workaholism), state (e.g., burnout), and trait (e.g., grit) constructs (Vallerand, 2015). The seven core elements are as follows:

1. Passion develops in the context of a specific activity, as opposed to a generalised passion for everything and anything.
2. Passion captures a thoughtful and enduring love of the activity.
3. Passion emerges only towards an activity that is personally valued or meaningful.
4. Passion is a motivational rather than affective construct.
5. Passion emerges when the activity becomes self-defining and resonates with one's identity.
6. Sixth, it incorporates high levels of psychological energy, effort and persistence.
7. Passion takes a dualistic form and can confer adaptive or maladaptive outcomes.

The DMP is anchored on Deci and Ryan's SDT (Deci & Ryan, 1985; 2000). Even though these two constructs are related, it is important to note that they are unique. SDT is a motivational theory that posits that all individuals strive for greater self-regulation, integration in action, and competence in any activity in which they are engaged. Deci and Ryan further propose that individuals' motivation for a given context is influenced by their perception of autonomy, competence, and relatedness. In essence, motivation is merely the first step to developing passion. However, just because a certain level of motivation is perceived in a given context does not necessarily mean that it

will develop into a passionate activity for the participant. According to the DMP, an individual's passion for a given activity could contain both positive and negative aspects, which ultimately may influence the consequences of participation in the activity; this is explained by the two main components of the DMP.

Focusing on the DMP, Vallerand et al. (2003) propose two main components of passion, namely, harmonious passion and obsessive passion, and distinguished them in terms of how the passionate activity is internalised into an individual's identity. Suppose a participant feels that the choice to participate originates internally and feels no pressure to continue participation from external sources. In that case, his or her internalisation is autonomous and will likely result in harmonious passion. Such an individual feels as if he or she is participating of his or her own will, and even though the activity may take up a large portion of his or her time, he or she fails to anticipate that the activity is negatively overtaking other aspects of his or her life. An example of a harmonious passion would be a teacher who loves and highly values teaching and can freely and unreservedly teach without creating conflicts with the other important aspects of his or her life (e.g., relationships with family and friends). Hence, this teacher can derive pleasure and self-actualization from teaching without endangering his or her personal life.

Conversely, suppose an individual feels that the choice to participate originates from an external source, by either intrapersonal demands (e.g., the excitement received from participation) or interpersonal factors (e.g., pressure from a head teacher, parents or friends). In that case, obsessive passion is likely to manifest. An individual who develops an obsessive passion will still

enjoy the activity but may feel compelled to engage in the activity even when the activity could jeopardise his or her life under optimal conditions. Likely, the activity will eventually overwhelm a significant portion of the individual's identity and cause conflict with other aspects of his or her life. An example of an obsessive passion would be a teacher who loves teaching but becomes so invested in their work that their entire self-esteem is derived from work. Obsessive passion consequently generates conflict between work and other spheres of life, where family and social life are neglected.

Based on the foregoing distinction between harmonious and obsessive passion, it can be inferred that a person who embodies a harmonious passion is more adaptive than a person who represents an obsessive passion. According to the DMP (Vallerand, 2010; Vallerand et al., 2003), a harmonious and not obsessive passion can help an individual attain crucial psychological needs, such as competence, autonomy, and relatedness. According to Deci and Ryan (2000), competence, autonomy, and relatedness are essential building blocks to positive adaptation and psychological health. According to this view, a healthy orientation towards a passion could be highly adaptable and positively influence one's life. Unlike harmonious passion, obsessive passion is not anticipated to produce such positive effects and may even expedite negative affect, conflict with other life activities, and psychological ill-being (Vallerand, 2012).

Broadly, psychological well-being is defined as life satisfaction, happiness, and self-growth, representing one of the most important aspects of efficient psychological functioning (Vallerand, 2012). According to Huppert (2009) and Lyubomirsky et al. (2005), happy people experience several

benefits ranging from physical health to better relationships to high-level performance. An essential correlate of the foregoing discussion is that the psychological well-being determinants should differ from those of ill-being (Gable & Haidt 2005; Keyes 2007). As stressed, psychological well-being is not an absence of ill-being (Diener 2000; Keyes 2007).

Empirical evidence has shown that the two types of passion differently predict various outcomes. Specifically, harmonious passion has been associated with better concentration, absorption, and flow during activity engagement (Forest, Mageau, Sarrazin, & Morin, 2011; Vallerand et al., 2003), as well as well-being (Rousseau & Vallerand, 2008; St-Louis, Carbonneau, & Vallerand, 2016) and satisfaction (Thorgren, Wincent, & Sirén, 2013). In addition, harmonious passion is associated with positive emotions during activity engagement, positive emotions and the absence of negative affect following task engagement, and negative emotions when prevented from engaging in the passionate activity (Vallerand et al., 2003). Harmonious passion has also been negatively related to conflict with other activities (Vallerand et al., 2003).

On the contrary, obsessive passion has led to maladaptive workplace outcomes, including negative emotion (Stenseng, Rise & Kraft, 2011), anxiety, depression, and burnout (Vallerand, Paquet, Philippe & Charest, 2010; Houliort, Philippe, Bourdeau & Leduc, 2018), emotional exhaustion (Fernet, Lavigne, Vallerand & Austin, 2014), work-family conflict (Vallerand et al., 2010; Houliort et al., 2018), and interpersonal distrust (Birkeland & Nerstad, 2015; Kong, 2016). Finally, obsessive passion has been associated with rumination and negative affect (Ratelle, Vallerand, Mageau, Rousseau, &

Provencher, 2004; Vallerand et al., 2003) when one is prevented from engaging in the passionate activity.

Conceptual Framework

The three theories, thus grit theory, SDT and DMP, reviewed in the study informed the conceptual framework for the study. Concerning the grit theory, the focal point is perseverance and passion. It enforces that perseverant and passionate individuals are less likely to be discouraged but can sustain the effort to achieve success. This grit is correlated with passion since passion incorporates psychological energy, effort and persistence (Vallerand, 2015). By implication, preservice business teachers that are perseverant and passionate about teaching are likely to achieve teaching goals, thereby ensuring quality teaching (Duckworth, 2014). However, the type of teaching passion the preservice business teachers are to display will determine the quality of teaching to be realised. This passion could be based on harmonious or obsessive teaching passion, as explained by the DMP.

If the preservice business teachers demonstrate high harmonious teaching passion, they will likely derive pleasure and self-actualisation from teaching through psychological well-being. The preservice business teachers' self-actualisation is to be competent and autonomous in teaching, a need exhibited by all preservice teachers as explained by the SDT. This competence and autonomy will help them to achieve teaching quality. It must be noted that preservice business teachers are motivated to grow in teaching. Their passion and perseverance to teach will expedite their growth to become self-determined for quality teaching. Figure 1 presents the passion-perseverance construct for quality teaching.

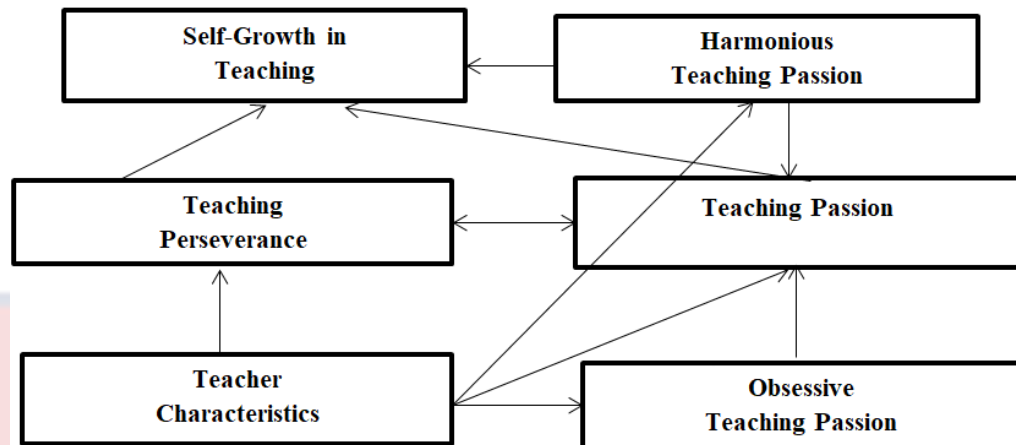


Figure 1: Passion-perseverance construct for quality teaching

Source: Author's construct (2021).

In Figure 1, preservice business teachers must demonstrate teaching perseverance and passion for achieving personal growth in teaching and ensuring quality teaching. The level at which such psychological tendencies are demonstrated shows the level of growth and, subsequently, quality teaching. The important aspect of their teaching passion is their level of harmonious passion to teach. This harmonious passion is associated with better teaching concentration, absorption and flow during teaching (Forest, Mageau, Sarrazin, & Morin, 2011; Vallerand et al., 2003).

Teaching passion and perseverance are likely to differ among the preservice business teachers based on their characteristics (sex, age, prior teaching experience, programme of study and level). This is because individuals are likely to show different passions and perseverance for activities. For example, in terms of teaching passion, it will depend on the individual preservice business teachers' level of internalisation (Vallerand et al., 2003). Suppose a preservice business teacher feels to teach based on internal teaching stimulus. In that case, harmonious passion will be demonstrated, but obsessive passion will be demonstrated if it is based on

external sources (Vallerand et al., 2003). Hence, these characteristics of the preservice teachers are examined concerning their passion and perseverance to teach.

Empirical Review

This part of the chapter reviews previous empirical studies on teaching passion and perseverance to identify appropriate gaps to direct the current study. The review process identified studies on preservice teachers' passion for teaching; preservice teachers' teaching passion, beliefs and efficacy; teachers' passion, well-being, and burnouts; preservice teachers' passion and demographic characteristics; teachers' perseverance and passion for teaching; and teachers' grit and demographic characteristics.

Preservice Teachers' Passion for Teaching

Fin and Ishak (2018) compared preservice teachers' passion for teaching in Malaysia and China. The descriptive cross-sectional design was employed for the study, and data were gathered from 409 preservice teachers (88 from China and 321 from Malaysia). The samples were obtained through multi-sampling, comprising the purposeful random and simple random sampling techniques. The Passion Scale developed by Vallerand et al. (2003) was used to gather data on their teaching passion. Independent samples t-test was used to test for differences in harmonious and obsessive passion for teaching based on the preservice teachers' country of origin. The preservice teachers exhibited high teaching passion. The study noted that the Malaysian and Chinese preservice teachers scored the highest mean in harmonious passion. Further evidence showed no significant difference in harmonious

passion between the preservice teachers. However, the Malaysian preservice teachers were more obsessive about teaching than the Chinese.

In Australia, Santoro, Pietsch and Borg (2012) investigated what preservice teachers learnt from the former generation of teachers about the context and nature of teaching and teacher education. A qualitative case study approach was employed for the study, and a semi-structured interview guide was used to gather data from six preservice teachers. A grounded theoretical approach was used to analyse the data. It was found that the preservice teachers drew inspiration from the older teachers' emotional connection to the profession, and their passion for teaching developed or intensified as they came to understand teaching as a rewarding lifelong career. The study recommended that teacher education incorporate opportunities for intergenerational learning involving retired teachers.

In Singapore, Low, Lim, Ch'ng and Goh (2011) examined preservice teachers' reasons for choosing teaching as a career. A qualitative study was conducted, and an open-ended questionnaire was used to gather data. The sample comprised 1,064 respondents. Frequencies and percentages were used to analyse the preservice teachers' reasons for joining the teaching profession. It was found that preservice teachers were mainly motivated by intrinsic factors (harmonious) to enter into teaching, followed by altruistic factors, and extrinsic factors (obsessive) ranked last. The study recommended that since cross-culturally altruistic motivations feature strongly, recruitment advertisements need to focus on larger and more meaningful areas of concern, such as making a difference in others' lives and the importance of teachers in helping to build the future of their nations and the world.

Phelps and Benson (2012) assessed the commonalities among teachers who have sustained passion for the teaching profession through a qualitative approach. The study used a structured interview guide to gather data from 13 respondents. Findings showed that teachers who maintained their passion for the profession had similar characteristics, such as embracing change and maintaining a positive attitude toward teaching. Again, the identified respondents as exemplars of keeping passion alive in their teaching emphasised the need to pursue professional development activities and build and maintain strong relationships with students and parents. The study recommended that teacher education programmes focus not only on candidates' academic ability but also on the appropriate psychological dispositions of their candidates.

Similarly, Rampa (2012) assessed teachers' passion for teaching at various schools in South Africa. A case study research design was employed in the study. This allowed for the use of a semi-structured interview guide to collect data from 48 respondents sampled through purposive and convenient sampling techniques. It was found that teachers' reasons for choosing teaching as a career vary and are attributed to altruistic, intrinsic and extrinsic motives. However, the extrinsic motives for the teaching profession were dominant determinants among the teachers. It was recommended that teachers' symbiotic relationships must be maintained, nourished, developed, and sustained for an enduring sense of efficacy as they relate to passion.

Mahoko, Omodan and Tsotetsi (2019) examined the challenges responsible for teachers' dispassionateness in South Africa's teaching profession. The study adopted the qualitative research approach. The purposive sampling technique was used to select six respondents, and data were collected through an unstructured interview guide. The data were analysed into themes. The study revealed that novice teachers love the teaching profession, but the problem comes when they face challenges such as lack of resources, underpayments, school stress, and conflict between co-workers and learners.

Celik (2017) examined teachers' passion for the teaching profession. The author reckoned three important characteristics that passionate teachers show. These are emotion, motivation and knowledge. This indirectly implies that when preservice teachers develop the requisite teaching knowledge, they are likely to be passionate about the teaching profession.

Preservice Teachers' Teaching Passion, Beliefs and Efficacy

In South Korea, Kim (2017) examined whether passion for teaching and teaching beliefs predicted preservice teachers' sense of teaching efficacy. A sample of 212 female preservice teachers participated in the study. The Passion Scale was used to gather data for the study. Pearson's correlation and multiple hierarchical linear regression analyses were used to predict how preservice teachers' beliefs and passion influence their teaching efficacies. The study found that preservice teachers' constructivist teaching belief was the most significant predictor of their teaching efficacies, followed by harmonious passion. Obsessive passion was a significant predictor of preservice teachers' sense of teaching efficacy, except for efficacy in instructional strategies. The

study recommended that teacher education programmes stress the benefits of constructivist teaching belief and practice for early childhood preservice teachers with a high level of harmonious passion for enhancing their sense of teaching efficacy.

Similarly, in the USA, Kim (2013) examined preservice teachers' passion for teaching children and its impact on their constructivist teaching beliefs and teaching efficacy. The Passion Scale was employed to gather data from 77 preservice teachers. Means and standard deviations were computed to analyse the preservice teachers' teaching passion for their preparation for the profession. Independent t-test, Pearson's correlation, and hierarchical multiple regression analyses were used to determine how preservice teachers' passion predicts their beliefs and self-efficacy. The findings showed that the preservice teachers were passionate about teaching, and they showed high harmonious passion. Also, preservice teachers' teaching passion (both harmonious and obsessive passion) was a significant predictor of their constructivist teaching beliefs and general teaching efficacy. The author recommended that early childhood preservice teachers provide a healthy environment with ample opportunities to share their experiences on social networks. This would enable the preservice teachers to utilize their initial passion for preparing to be a teacher and their love for their future job working with young children.

Again, Kim and Connelly (2019) assessed teaching efficacy and its association with preservice mathematics teachers' passion in the USA. The Passion Scale was employed to collect data from 193 early childhood preservice teachers. Pearson's correlation and hierarchical regression analyses were used to determine how preservice teachers' passion influences their

teaching efficacy. The findings showed that harmonious passion was the most significant predictor of preservice mathematics teachers' teaching efficacy. Therefore, the study recommended that teacher education programmes enhance preservice teachers' harmonious passion for positively influencing their teaching efficacy.

Teachers' Passion, Well-being, and Burnouts

Moe (2016) examined the relationships between passion for teaching and teachers' well-being in Italy. The study adopted a quantitative design, and the convenience sampling technique was used to sample 379 teachers to participate in the study. The Passion Scale was used to gather data for the study, and means, standard deviations and partial correlations were used to analyse the data for the study. Hierarchical regression analyses were used to explain the differences between teachers' passion and well-being factors. It was found that harmonious passion related to well-being factors (i.e., job satisfaction, positive affect, subjective happiness, and self-efficacy for teaching).

Carbonneau, Vallerand, Fernet and Guay (2008) assessed the role of passion in teachers' burnout symptoms, work satisfaction, and perceptions of positive student classroom behaviours in Canada. The quantitative survey design was used to sample 494 teachers for the study. The Passion Scale was used to collect data, and means, standard deviations, and correlations were used to analyse the data. It was revealed that increases in harmonious passion for teaching predicted increases in work satisfaction and decreases in burnout symptoms over time, while changes in obsessive passion were unrelated to such outcomes. In addition, increases in both harmonious and obsessive

passion predicted increases in teacher-perceived adaptive student behaviours over time.

Preservice Teachers' Passion and Demographic Characteristics

Balyer and Özcan (2014) examined the reasons student teachers choose the teaching profession as a career through the descriptive survey design. The sample size comprised 1,410 preservice teachers selected purposively, and the Choosing Teaching Profession as a Career Scale (CTPCS) was used to gather data from them. The t-test and one-way ANOVA were used to analyse the data for the study. It was found that students chose to teach mostly for altruistic-intrinsic reasons. However, the female student teachers chose teaching based on altruistic-intrinsic reasons, whilst their male counterparts chose teaching based on extrinsic reasons. Again, student teachers from poor and crowded families chose teaching based on extrinsic reasons.

Cenberci and Beyhan (2016) analysed the motivational persistence of students in an education department and those in the art and design department. The study focused on differences in their motivational persistence based on age and gender. The descriptive survey design was employed for the study. The mean findings showed that the student's overall level of persistence was high. However, the female preservice teachers within the age group of 23-24 years from the department of art and design showed a relatively higher motivational persistence.

Teachers' Perseverance and Passion for Teaching

Grohman, Ivcevic, Silvia, and Kaufman (2017) examined the influence of teachers' passion and perseverance on their creativity. Passion and

perseverance were measured from two different conceptualisations. The first was a self-reported measure based on the grit scale, and the second was based on the teachers' understanding of the concepts. The conceptualisation based on the grit scale did not influence creativity. However, teachers' understanding of passion and grit influenced creativity.

In Virginia, Riddle (2018) analysed the relationship between preservice teachers' grit and self-efficacy. The study was to determine the influence of grit on their teaching self-efficacy. Out of an accessible population of 534 preservice teachers, 73 of them were sampled. The Teacher Sense of Efficacy Scale and Short Grit Scale (Grit-S) were used to gather data on their self-efficacy and grit. The preservice teachers were found grittier to perform the teaching tasks. Also, the simple linear regression analysis found a moderate positive relationship between grit and self-efficacy. Their grit score explained 27.63% variations in their self-efficacy.

Fabelico and Afalla (2020), through the descriptive correlational design, studied teachers' perseverance and passion for teaching. The study focused on the inter-relationships among variables such as teacher characteristics (gender, age, educational attainment, marital status, number of dependents, length of service, teaching status, and academic rank), motivation, self-efficacy, burnout, and performance to create a model that explains teacher success. Other variables considered in the study were self-efficacy, burnout and performance. The study found that teachers' level of grit was comparable across their characteristics.

Teachers' Grit and Demographic Characteristics

Argon and Kaya (2018) investigated differences in teachers' grit levels based on age, sex, school type, graduation status and vocational seniority. The study employed the descriptive design and sampled 360 teachers from primary, senior high and tertiary schools. The mean findings showed that teachers' level of grit was moderate. However, their perseverance was high. Apart from sex which influenced their perseverance, where the female teachers were grittier than their male counterparts, age, school type, graduation status, and vocational seniority did not make a difference in the grit of the teachers.

Chapter Summary and Implications for Current Study

The literature review disclosed that preservice teachers assessed from Malaysia, China and USA had a high teaching passion (e.g., Kim, 2013; 2017; Fin & Ishak, 2018). Other studies in Singapore (e.g., Low et al., 2011) and the USA (Kim & Connelly, 2019) showed that a harmonious passion for teaching influenced preservice teachers. In particular, Fernet and Guay (2008), Moe (2016) and Kim and Connelly (2019) found that harmonious passion to teach was the most important predictor of teaching efficacy and enhanced job satisfaction, well-being and decreased burnout. However, in South Africa, studies found that teachers were highly influenced by an obsessive passion to teach (Rampa, 2012; Mahoko et al., 2019). Therefore, among other recommendations, teacher education should enhance preservice teachers' harmonious passion.

Some studies (Balyer & Özcan, 2014; Cenberci & Beyhan, 2016) concentrated on the sensitivity of preservice teaching passion and grit to their demographic characteristics such as gender and age. Altruistic-intrinsic reasons explained female preservice teachers' passion for teaching (an implication for harmonious passion for teaching), whilst male preservice teachers were explained by extrinsic factors (an implication for obsessive passion for teaching). Perseverance for teaching was found in favour of female teachers aged 23-24 years.

Important gaps were identified in context, substantive issues of focus and analytical methods employed to investigate teaching passion and perseverance among preservice and in-service teachers. In terms of context, the researcher did not find studies in Ghana. It is known that research must influence practice, and evidence gathered from practice communicates the utility of research findings and improvement in practice. Findings from previous studies show that harmonious teaching passion influences self-efficacy and that teacher education institutions should enhance preservice teachers' teaching passion. However, the teaching passion of preservice teachers in Ghana is not known to communicate the contribution of teacher education institutions in improving teacher quality, thereby creating another environment for enhancing students' academic performance. Hence, the current study targeted preservice business teachers' passion for teaching and assessed their perseverance to teach. This is because the grit theory enforces that passion and perseverance for teaching are important for achieving both short-term and long-term goals, irrespective of available challenges. Empirical findings in South Africa support that teaching challenges are responsible for

eroding teachers' teaching passion for the profession (Mahoko et al., 2019); however, the teaching perseverance of the teachers was not reported.

The few studies on preservice teachers' passion and perseverance only explored differences based on gender, age and department type. Considerations were not given to their level of study, programmes of study and prior teaching experience. The current study considered these variables left in the previous study. Literature (Celik, 2017) suggests that passion for teaching is influenced by emotion, motivation and knowledge. Hence, other factors kept constant, preservice teachers' advancement to higher academic levels will expose them to more content and pedagogical knowledge, likely influencing their teaching passion and perseverance. Therefore, the inclusion of their levels of study. Also, differences were determined based on department type, and no knowledge was offered on programme type. This makes it difficult to tell the particular teacher education programme that is highly likely to demonstrate teaching passion and perseverance. Finally, it was observed that some preservice business teachers in the study's context had experienced teaching before their enrolment into the business teacher education programme.

The analytical methods used in previous studies did not test the interaction effect of preservice teachers' demographic characteristics on their teaching passion and perseverance. Naturally, preservice teachers exhibit more than one character, and these characteristics are likely to influence their teaching passion and perseverance. Therefore, the current study employed multivariate analysis of variance (MANOVA) to determine the interaction of

preservice teachers' age, gender, prior teaching experience, programmes of study and level of study on their teaching passion and perseverance.

The identified and stated literature gaps informed the present study, the investigated issues and the study's design. Based on the grit theory, SDT and the DMP, the study formulated the passion-perseverance construct for quality teaching to guide the study through the cross-sectional survey design.



CHAPTER THREE

RESEARCH METHODS

Overview

This chapter describes the methods and techniques employed to describe preservice business teachers' levels of passion and perseverance to teach. This chapter covers the research design, population, sample and sampling procedures, data collection instrument, validity and reliability test, data collection procedures, ethical considerations and data processing and analysis.

Research Design

The descriptive cross-sectional survey design was employed to assess preservice business teachers' passion and perseverance for teaching. According to Avedian (2014), the survey design is a systematic method that gathers sample data to construct quantitative descriptors of the attributes of the larger population of which the samples are members. Therefore, the current study was evoked to quantitatively describe preservice business teachers' passion and perseverance to teach. The members of the business population were preservice management teachers and preservice accounting teachers. The survey allowed them to express their views about their desire and grit to teach. This was good to determine if the preservice teachers possessed the basic requirement for teaching aside from the content and pedagogical knowledge, which seems to have been the focus of most educational researchers and management of educational enterprises.

The survey design is practical and versatile, especially for educators, in that it identifies present conditions and points to present needs (Osuala, 2001). The current condition it pointed out was the level of preservice business teachers' passion and perseverance to teach. This was critical in directing and gauging how well the preservice teachers would be engaged in executing the teaching tasks. In effect, their teaching successes were gauged, and decisions about how they should be trained were identified to inform teacher educators about how they could help them to be committed to teaching.

A survey generally exhibits some specific characteristics. Usually, it is adopted when a wide field of issues, programmes, and populations are scanned to describe or measure generalised features (Cohen, Mannion & Morrison, 2018). This was appropriate for the current study since it scanned and assessed preservice teachers' management and accounting education programme issues. Issues such as their teaching passion and perseverance were the focus of the study. The population of the study was relatively large as it cuts across two different programmes at three levels of education (Level 200 to Level 400). The purpose was to generalise the findings just as afforded by design, according to Cohen et al. (2018).

Dilman, Smyth and Christian (2014) outlined that the survey design provided enormous utility to the study. It gathered one-shot data for the study and hence was economical and efficient. It represented a wide range of populations and generated numerical data for the study. This made it possible to obtain descriptive and inferential information about the preservice business teachers – their teaching passion and perseverance levels and how they vary based on their biological, academic, and experiential characteristics. It

generated an accurate online survey instrument through pilot testing and revision for the study. Also, it assisted the study in gathering standardised information on preservice teachers' passion and perseverance to teach from all the study respondents, irrespective of their programmes of study, using the same online survey instrument. Its ability to generalise findings, a unique purpose of the study, was achieved.

It must be noted that the use of survey design in the current study was not free from a few limiting factors. It prevented the researcher from obtaining an in-depth understanding of the preservice business teachers' level of passion and perseverance to teach. Also, the possibility that they might have exaggerated their passion and perseverance to teach. They were informed to remain as truthful as possible in their responses – an obvious strategy to reduce their exaggerations. Also, all ethical procedures were followed, so respondents developed the trust needed to provide valid responses.

Population

The population for the study was all (577) University of Cape Coast preservice business teachers for the 2020-2021 academic year. The decomposition of the population shows that the total number of preservice management and accounting teachers was 231 and 346, respectively. Table 1 presents the population distribution of the preservice business teachers.

Table 1: Population Distribution of Preservice Business Teachers

Programme/ Level	Management		Accounting		Total
	Male	Female	Male	Female	
200	55	42	92	44	233
300	32	32	78	37	179
400	39	31	73	22	165
Total	126	105	243	103	577

Source: Student Records and Management Information System, UCC (2021)

The preservice accounting teachers were more than their management counterparts by 115. The male population is higher than the female population for both programmes. The relatively large and disproportionate number of the population in terms of gender might create differences in their passion and perseverance to teach. These genders varied in terms of age, level of education, programmes of study, and prior teaching experiences. These observed characteristics could create differences in their levels of teaching passion and perseverance to teach.

Respondents

In all, 577 preservice business teachers were involved in the study. The census method was used to include all the preservice business teachers. This method is good as it prevents sampling errors from cropping into the study (Kothari, 2004), thereby increasing its validity. The online data collection procedure also made the census method appropriate for the study since it was easy to access all the respondents in the shortest possible time. According to Guest (2019), the census method provides a high degree of statistical

confidence in a study. The study required this to appropriately describe preservice business teachers' passion and perseverance to teach.

Data Collection Instrument

The Preservice Teaching Passion and Perseverance Questionnaire (PTPP-Q) was developed to gather data on preservice business teachers' passion and perseverance to teach. The PTPP-Q was developed on a five-point Likert-type scale with 42 items (including demographic items). The scale ranged from strongly disagree (1), disagree (2), Uncertain (3), agree (4), to strongly agree (5). The instrument was structured into three parts – demographic sections, preservice teachers' passion to teach, and preservice teachers' perseverance to teach.

The demographic section contained the sex, age, prior teaching experience, a programme of study and level of study of the preservice teachers. Only the age variable was an opened-ended question; the rest were all categorical variables. The teaching passion section focused on preservice business teachers' harmonious and obsessive passion for teaching adapted from Vallerand's Harmonious and Obsessive Passion scale. It had 31 items; harmonious passion to teach had 17 items, and obsessive passion to teach had 14 items.

The items which measured preservice teachers' perseverance to teach were adapted from the short Grit-scale developed by Duckworth and Quinn (2009). The original grit scale had two constructs, thus consistency of interest and perseverance of effort. The perseverance of effort has six items with scale descriptors as 'very much like me', 'mostly like me', 'somewhat like me', 'not much like me', and 'not like me at all'. The original items focused on responses

to general actions being carried out. However, the current study measured preservice teachers' perseverance in future teaching tasks. Hence, the import of the original items was changed to focus on future teaching actions activities, and the descriptors were changed to 'strongly disagree', 'disagree', 'uncertain', 'agree' and 'strongly agree'.

The use of the PTPP-Q provided several advantages with few limitations to the study. The instrument was appropriate for this survey study as it allowed the respondents to provide well-thought answers to the questions; this is a significant strength, as noted by Kothari (2004). The items were straightforward to understand. The major limitation was that it limited the respondents to explain the reasons behind their responses. Their reactions, feelings and emotions could not be captured by using PTPP-Q to explain their responses.

Validity and Reliability

The PTPP-Q was subjected to content, face and construct validity. The instrument was given to an expert in teacher education in the Department of Business and Social Sciences Education to ascertain its content validity. The expert suggested minor corrections in terms of item wording, and these corrections were effected. After, the instrument was given to the researcher's supervisor for final validation. It was judged by the supervisor to be appropriate in terms of content and face validity. The supervisor suggested no corrections.

The PTPP-Q was piloted and tested among 60 preservice business teachers at the University of Education, Winneba. This sample was good for the pilot test based on the criteria put forward by Baker (1994) for a pilot test.

The author recommended 10% to 20% of a study's actual sample as appropriate for a pilot test in a survey study. The sample of 60 is 10.39% of the study's actual sample (population), and a disproportionate random sample of 30 was selected from both universities. The online version of the PTPP-Q was used to gather the pilot data. The respondents were informed that the online survey was to test the instrument and make it fit for the actual study. A generated online address was sent to the respondents on a created WhatsApp platform for the exercise. It took four days for the 60 respondents to address the online pilot survey.

Next, the variables, thus teaching passion and perseverance, were examined for construct validity. This was done through the Exploratory Factor Analysis (EFA), which used the Promax with Kaiser Normalisation. The EFA test reduced the PTPP-Q items from 37 to 27. Items with loadings less than 0.5 and cross-loadings above 0.4 were deleted. For the teaching passion variable, the KMO value (.929) and Bartlett test result, Approximate χ^2 (435) = 3265.94, $p < .001$, show that the test was significant and valid. Extracted factors were harmonious and obsessive teaching passion, representing 58.55% of the extracted variance. Table 2 presents the factor structure.

Table 2: Factor Loadings of Teaching Passion

Components	1	2
I can see myself as a teacher as I move to higher levels of education.	.630	
My family wants to see me become a successful teacher someday.	.783	
My teachers look forward to my pursuit of a teaching career.	.737	
I love teaching as I simultaneously do other things.	.676	
My talents will be of good use when I eventually teach.	.738	
While studying at the university, I can balance fun and studies.	.754	
I think I will enjoy teaching.	.710	
I will gain a sense of fulfilment when I start teaching.	.760	
I believe teaching is like organizing a show.	.581	
My schooling at the university will be meaningless if I will not become a teacher.	.721	
I cannot imagine myself doing an administrative job.	.701	
I feel elated when I start imitating my favourite teacher.		.628
I have a strong urge to become a good teacher someday.		.638
I am engrossed with the idea of people listening to me when I talk.		.723
I will feel incomplete if I think I can never become a teacher.		.611
I like extending help to my classmates even when it is late.		.505
As I grow in the teaching profession, I will commit to my own teaching motto.		.653
I will attend enthusiastically to all my classes.		.845
I will work hard as a teacher to be a good example to my students.		.896
I will get upset when I miss a class when I become a teacher.		.746
I believe that teaching ends after class hours.		.724

Source: Fieldwork (2021)

Component 1 is harmonious passion, and component 2 is obsessive passion, and together, they form the teaching passion. It can be seen that each component had a factor loading above .50. The highest and the lowest loadings for harmonious passion are .783 and .581, respectively, and for obsessive passion, .896 and .505, respectively.

For the second variable, the KMO value (.833) and Bartlett test result, Approximate $\chi^2(15) = 462.57, p < .001$, also show that the test was significant and valid. The only extracted factor was teaching perseverance, representing 54.61% of the extracted variance. Table 3 presents the factor structure.

Table 3: Factor Loadings of Teaching Perseverance

Component	1
I will finish whatever I begin in teaching.	.669
Setbacks in teaching will not discourage me.	.669
I will be a diligent teacher.	.817
I am a hard worker.	.722
I will work harder no matter what to achieve a goal in teaching.	.813
I will overcome setbacks in teaching.	.740

Source: Fieldwork (2021)

Once again, all the loadings exceeded .50. The highest and the lowest loadings were .817 and .669, respectively. The reliabilities of the constructs are presented in Table 4.

Table 4: PTPP-Q Reliability

Variable	Cronbach's Alpha		McDonald Omega	
	Pilot	Actual	Pilot	Actual
Teaching Passion	.859	.905	.858	.902
Harmonious Passion	.825	.861	.826	.857
Obsessive Passion	.733	.801	.720	.801
Perseverance	.839	.828	.840	.827

Source: Fieldwork (2021)

The Cronbach's alpha for the pilot test data ranged from .733 to .859, and the actual data from .801 to .905. Concerning the McDonald omega, the reliability coefficient for the pilot test ranged from .720 to .858, and the actual data from .801 to .902. The teaching passion variable recorded the highest estimate on both reliability techniques. It can be seen that the estimates for the actual data were comparably higher than the pilot data. This suggests that the reliabilities were enhanced in the actual data gathered for the study. Also, slight differences can be observed in the reliability estimates of Cronbach's Alpha and the McDonald Omega. This relatively small difference confirms that the items on the instrument are reliable and the data gathered is good for the study. This is supported by Fraenkel and Wallen (2000) and Abington-Cooper (2005), who indicated that a reliable instrument produces a reliability coefficient of .7 or better; hence, the instrument used was credible.

Data Collection Procedures

Before the start of the data collection, the respondents were presented with an introductory letter that introduced the research and permitted the data collection. An online address for the survey was forwarded to the respondents

on their WhatsApp pages created for the exercise. Their consents were solicited; those who filled out the online survey by implication had given their consent to do it. This was made known so they could relax and complete them and enable those with internet connectivity to complete the survey at any time. The survey was open to them for one month and closed at the end of the month.

Reminders were sent to the respondents on their WhatsApp pages every two days. This was to achieve a higher return rate upon completing the survey. At the end of the third week, about 150 respondents had completed the only survey out of the 577 respondents targeted. This resulted in sending continuous reminders to the respondents. By the end of the fourth week, 217 respondents had completed the online survey. This represented a return rate of 37.6%. An additional one week was added to increase the return rate. However, no further response was obtained, and the process ended. After, a message of appreciation was sent to the respondents to appreciate their contributions to the study.

Ethical Considerations

Before the start of the data collection, an ethical application was filed with the Institutional Review Board, University of Cape Coast. This was to ensure that the ethics in research and the requirements of the University were duly followed. The clearance was issued on 26 January, 2022 with ID UCCIRB/CES/2021/166. Afterwards, an introductory letter was obtained from the Head Department of Business and Social Sciences Education, introducing the researcher to the study respondents. This letter was presented to the respondents on the WhatsApp pages. The purpose of the research was

explained to the respondents. They were informed that the study was to assess their teaching passion and perseverance for academic purposes. They were free to be part of the study, and none of them was coerced to participate. Also, they were free to withdraw at any study stage.

Confidentiality and anonymity are critical issues that must be followed (Ogah, 2013). Their violation can bring disgrace to the researcher and the respondents as well as harm them. Therefore, the respondents were informed that the data being elicited from them would be kept away from third parties. It would be kept in the google drive of the researcher with a secure password for 10 years. It is only the findings that would be reported. Their identities would not be disclosed to any third party.

After the data were gathered, the research adhered to ethical data processing and analysis principles. The data was cross-checked and edited without changing or altering the respondents' responses. Statistical assumptions were checked and reported to justify the use of a particular statistical tool. All statistical tools used were based on the knowledge of the researcher. No p-values or other statistical estimates were altered to project particular results and findings to wrongly direct policy development and guide practice.

Data Processing and Analysis

The online survey data was downloaded and converted into an excel file format. After, the researcher screened it for completeness. Errors were identified and corrected without altering the responses from the respondents. No missing data response was realised, making it easier to export it to SPSS

version 22 for the data analysis. Right after the SPSS captured it, codes were assigned to the variables, after which the data was analysed.

Both descriptive (frequency, percentage, mean and standard deviation) and inferential (factorial ANOVA) statistics were used to analyse the data. The frequency and percentage were used to describe the characteristics of the preservice teachers. The variables were their sex, age, prior teaching experience and level of study. The variables were categorical, and the best statistics to analyse them are the measures of frequencies, specifically frequency and percentage (Field, 2009; 2018).

Research Questions One and Two focused on the preservice business teachers' levels of passion and perseverance to teach, respectively. The study described their general levels of passion and perseverance to teach as a cohort and not as individuals. Hence, the mean was considered the best measure of central tendency to describe the aforementioned characteristics of the preservice teachers. It was appropriate because the two variables were measured at the interval level. At this scale, the preservice teachers were assumed to have at least some level of passion and perseverance to teach. When the mean is reported, the corresponding dispersion estimate must be reported to determine how the responses of the preservice business teachers were clustered around the mean. Hence, the standard deviation was run. It helped to determine the degree to which the preservice business teachers were homogeneous or heterogeneous in their responses. Usually, the closer the deviation estimate is to zero, the higher the level of homogeneity in their responses.

Research Hypotheses One and Two examined the differences in the preservice business teachers' levels of passion and perseverance to teach based on their sex, age, prior teaching experience, programmes of study, and level of study. Passion and perseverance to teach were the dependent variables for the analysis. The sex, age, prior teaching experience, programmes of study, and level of study were the independent variables. Each independent variable was run at a time against a dependent variable. The influence of an independent variable measured at two levels (for example, sex, prior teaching experience and programme of study) on a dependent variable was examined using the independent samples t-test. Also, the influence of an independent variable which was measured at three levels and above (for example, age and level of study) on a dependent variable, was examined using the one-way Analysis of Variance (ANOVA); these were influenced by Field (2018).

Research Hypothesis Three focused on the interaction effect of the characteristics of the preservice business teachers on their levels of passion and perseverance to teach. The factorial MANOVA was considered useful for the test. Separate ANOVAs and t-tests would have provided the main and no interaction effects (Field, 2009; Field, 2018). Table 5 presents the summary of the data analysis.

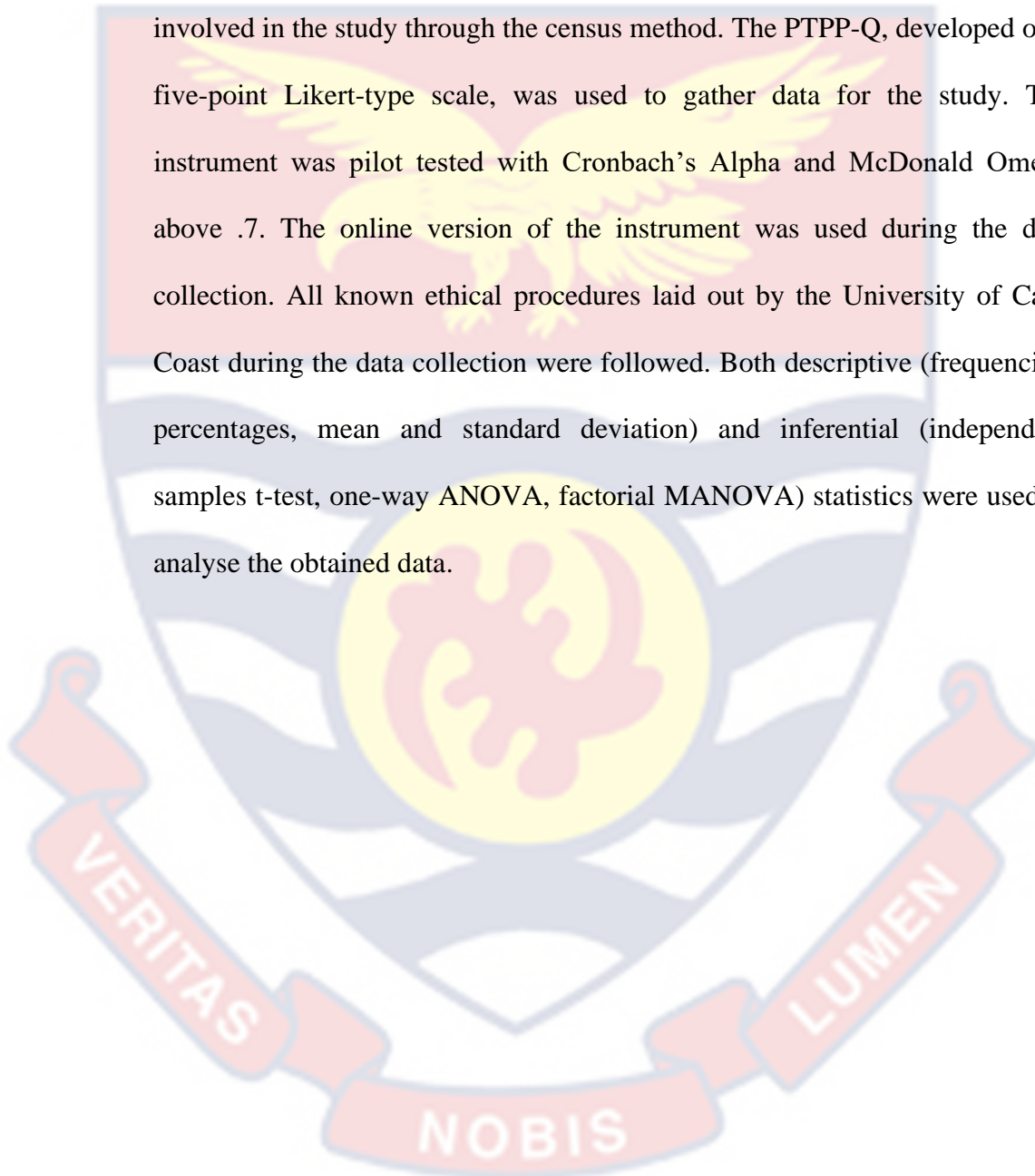
Table 5: Summary of Data Analysis

Research Questions/Hypotheses	Instrument	Statistical Tool
What is preservice business teachers' level of passion to teach?	Online survey	Mean and Standard Deviation
What is preservice business teachers' level of perseverance to teach?	Online survey	Mean and Standard Deviation
There is no statistically significant difference in preservice business teachers' level of passion to teach based on: a. Sex b. age, c. prior teaching experience, d. programme of study, and e. level of study.	Data from online survey	Independent samples t-test One-way ANOVA
H ₀ : There is no statistically significant difference in preservice business teachers' level of perseverance to teach based on: a. sex b. age, c. prior teaching experience, d. programme of study, and e. level of study.	Data from an online survey	Independent samples t-test One-way ANOVA
There is no interaction effect of preservice business teachers' demographic variables (sex, age, prior teaching experience, programme of study and level of study) on their levels of passion and perseverance to teach.	Data from online survey	Factorial MANOVA

Source: Fieldwork (2021)

Chapter Summary

The study assessed preservice business teachers' passion and perseverance to teach through the descriptive cross-sectional survey design. Out of a total population of 577 preservice business teachers, 217 were involved in the study through the census method. The PTPP-Q, developed on a five-point Likert-type scale, was used to gather data for the study. The instrument was pilot tested with Cronbach's Alpha and McDonald Omega above .7. The online version of the instrument was used during the data collection. All known ethical procedures laid out by the University of Cape Coast during the data collection were followed. Both descriptive (frequencies, percentages, mean and standard deviation) and inferential (independent samples t-test, one-way ANOVA, factorial MANOVA) statistics were used to analyse the obtained data.



CHAPTER FOUR

RESULTS AND DISCUSSION

Overview

This chapter presents the results of the fieldwork and the discussion to determine the implication of preservice business teachers' passion and perseverance for teaching. The study employed the descriptive cross-sectional survey design with a valid sample of 217 preservice business teachers. The online version of the PTPP-Q was used to draw out the survey responses. It must be noted that there were no missing responses.

The chapter is structured into four parts. The first part presents the normality test for the dependent variables (teaching passion and perseverance). The second part presents the respondents' demographic results to put the findings into perspective. The third part presents the results gathered on the research questions and hypotheses. The results are presented in themes couched out of the research questions and hypotheses. The last part discusses the results in line with extant literature on preservice teachers' passion and perseverance to teach. The results are presented in tables to expedite readers' understanding.

Normality Test

Using parametric or non-parametric statistics in data analysis depends on whether the normality assumption is met. Authors such as Ghasemi and Zahediasl (2012) and Field (2018) indicated that parametric statistics tests should be used only when the normality of data is established. According to the authors, when descriptive statistics are used, normality should only be assumed when the mean and the median are equal or approximately equal.

Also, when the skewness coefficient is less than 1.96 (where $p > 0.05$), normality can be assumed (Ghasemi & Zahediasl). Hence, both descriptive statistics were used to test for normality for the passion and perseverance variables. Table 6 presents the results.

Table 6: Normality Results through Descriptive Statistics

Variable	Mean	Median	Skewness
Passion	3.59	3.62	-.34
Harmonious Passion	3.55	3.55	-.21
Obsessive Passion	3.64	3.60	-.43
Perseverance	4.21	4.17	-.40

Source: Fieldwork (2022)

The evidence in Table 6 shows that the mean and the median for passion, harmonious passion, obsessive passion and perseverance are approximately equal. Also, the respective skewness coefficients for the variables are less than 1.96. Hence, the data for the variables were considered approximately normal. Therefore, parametric statistics such as independent t-test, one-way ANOVA and MANOVA were used to analyse and test the null hypotheses formulated for the study.

Demographic Characteristics of the Respondents

Data was gathered on preservice business teachers' sex, age, prior teaching experience, programme and level of study. These variables provided insight into the obtained findings for their passion and perseverance to teach. Thus, it enabled the determination of the influence of background characteristics on the passion and perseverance to teach. It also assisted in finding out if any of these demographic variables interacted to influence

preservice teachers' passion and perseverance to teach. This is because the passion and the perseverance to teach are not stable for all preservice teachers.

Table 7 presents the descriptive results for the respondents' demographic characteristics.

Table 7: Characteristics of Respondents

Variable	Subscale	Frequency	Percentage	<i>M</i>	<i>SD</i>
Sex	Male	129	59.4		
	Female	88	40.6		
Age (in years)	19-22	69	31.8	24.14	3.01
	23-26	111	51.2		
	27+	37	17.1		
PTE	Yes	142	65.4		
	No	75	34.6		
PoS	Management	172	79.3		
	Accounting	45	20.7		
LoS	Level 200	58	26.7		
	Level 300	66	30.4		
	Level 400	93	42.9		

Note: PTE = Prior Teaching Experience; PoS = Programme of Study; LoS = Level of Study; Minimum Age = 19; Maximum Age = 36

Source: Fieldwork (2022)

The preservice business teachers' sex and age appear first in Table 7. It can be observed that the male preservice business teachers (n = 129, 59.4%) dominated the study by a difference of 41 over their female counterparts. This difference is relatively large; male preservice business teachers might

influence the findings highly. Therefore, preservice business teachers' passion and perseverance to teach were subjected to their sex for differential analysis; the results can be seen under the hypotheses. Concerning their ages, the majority of them (n = 111, 51.2%) were found within the age group of 23-26 years. The average age of the preservice business teachers was 24.14 years. By their minimum age (19 years) and maximum age (36 years), it can be concluded that they are mature with recourse to Ghana's constitutional adult age of 18 years and above. It is believed that they could describe their passion and perseverance to teach.

Most preservice business teachers (n = 142, 65.3%) had experienced teaching before enrolling on the business teacher education programme. The majority of the preservice business teachers for the study were recorded on the management teacher education programme (n = 172, 79.3%). The preservice management teachers exhibited high motivation to participate in the study as their counterparts in Accounting. This explains their dominance in the study. Therefore, the study findings are likely to be influenced by the preservice management teachers.

The preservice business teachers were drawn from three levels of study at the University of Cape Coast. The majority of them were in Level 400 (n = 93, 42.9%) whilst relatively few of them were in Level 200 (n = 58, 26.7%). The different levels from which the preservice business teachers were drawn provided insight into the study as to how their passion and perseverance to teach developed as they progressed from one level to another level concerning their biographic characteristics.

Results

This part of the chapter presents the results that address the research questions and hypotheses formulated for the study. The PTPP-Q used to gather the data was structured on a five-point Likert-type scale. Hence, the interpretation of the results followed the descriptors: 1.00-1.49 (*Very low*); 1.50-2.49 (*low*); 2.50-3.49 (*Moderately*); 3.50-4.49 (*High*); 4.50-5.00 (*Very High*). The results are presented under the themes preservice business teachers' level of passion to teach, preservice business teachers' level of perseverance to teach and hypotheses.

Preservice Business Teachers' Level of Passion to Teach

Research Question One: What is preservice business teachers' level of passion to teach?

The research question seeks to assess the harmonious and obsessive passion, the preservice business teachers have for teaching. Items 1-11 assessed their harmonious passion to teach, and items 12-21 assessed their obsessive passion to teach. The items were developed on a five-point Likert-type scale. Data gathered on this item format was analysed through the mean and standard deviation. Table 8 presents the descriptive results.

Table 8: Preservice Business Teachers' Level of Passion to Teach

Statements	<i>M</i>	<i>SD</i>
I can see myself as a teacher as I move to higher levels of education.	3.78	.96
My family wants to see me become a successful teacher someday.	3.55	1.01
My teachers look forward to my pursuit of a teaching career.	3.65	.92
I love teaching as I simultaneously do other things.	3.87	.95
My talents will be of good use when I eventually teach.	3.84	.88
While studying at the university, I can balance fun and studies.	3.83	.96
I think I will enjoy teaching.	3.94	.83
I will gain a sense of fulfilment when I start teaching.	3.87	.87
I believe teaching is like organizing a show.	3.54	1.07
My schooling at the university will be meaningless if I will not become a teacher.	2.58	1.29
I cannot imagine myself doing an administrative job.	2.61	1.31
I feel elated when I start imitating my favourite teacher.	3.86	.82
I have a strong urge to become a good teacher someday.	3.90	.88
I am engrossed with the idea of people listening to me when I talk.	4.02	.77
I will feel incomplete if I think I can never become a teacher.	2.85	1.13
I like extending help to my classmates even when it is late.	3.94	.79
As I grow in the teaching profession, I will commit to my teaching motto.	3.83	.78
I will attend enthusiastically to all my classes.	4.03	.74
I will work hard as a teacher to be a good example to my students.	4.29	.79
I will get upset when I miss a class when I become a teacher.	3.52	.97
I believe that teaching ends after class hours.	2.20	1.23
Grand Mean/Grand SD	3.60	.95

Scale: 1.00-1.49 (*Very low*); 1.50-2.49 (*low*); 2.50-3.49 (*Moderately*); 3.50-4.49 (*High*); 4.50-5.00 (*Very High*).

Source: Fieldwork (2022)

The results show that the preservice business teachers had a high level of harmonious ($M = 3.55$, $SD = 1.00$) and obsessive passion to teach ($M = 3.64$, $SD = .89$). However, the dispersion estimates of both constructs suggest that their responses were homogenous on the obsessive passion than the harmonious passion to teach. This suggests relatively high variability in their responses to harmonious passion. Hence, the preservice business teachers are likely to be influenced by internal teaching contingencies (external stimulus) rather than autonomous internalization, which occur when they have accepted the teaching activity freely from external stimulus attachments.

Preservice business teachers' harmonious passion to teach indicated several things that depicted their love for teaching and not because they were pressured to teach. The dominant passion item is observed in their remark, "I will enjoy teaching" ($M = 3.94$, $SD = .83$). The actualisation of this desired reality will certainly create a sense of fulfilment for them ($M = 3.87$, $SD = .87$). Even though they are likely to be engaged in other things, they professed their love for teaching ($M = 3.87$, $SD = .95$). They believed that they had the talents which will be useful when they eventually teach ($M = 3.84$, $SD = .88$). The harmonious passion professed by the preservice business teachers is likely to remain as they move to higher levels of education ($M = 3.78$, $SD = .96$). Even though there was some level of controlled internalisation from family members ($M = 3.55$, $SD = 1.01$) and teachers ($M = 3.65$, $SD = .92$), this appears incongruent for all the preservice business teachers.

Preservice Business Teachers' Level of Perseverance to Teach

Research Question Two: What is preservice business teachers' level of perseverance to teach?

The research question focused on the extent to which preservice business teachers can exhibit high determination in teaching to achieve goals. This was necessary to gauge their grit for teaching and classroom effectiveness. Hence, data was gathered from the preservice business teachers through a five-point Likert-type questionnaire, and the mean and standard deviation were used to analyse the data. The descriptive results are presented in Table 9.

Table 9: Preservice Business Teachers' Level of Teaching Perseverance

Statements	<i>M</i>	<i>SD</i>
I will finish whatever I begin in teaching.	3.94	.75
Setbacks in teaching will not discourage me.	3.94	.82
I will be a diligent teacher.	4.30	.64
I am a hard worker.	4.51	.58
I will work harder no matter what to achieve a goal in teaching.	4.29	.72
I will overcome setbacks in teaching.	4.28	.75
Grand Mean/Grand SD	4.21	.71

Scale: 1.00-1.49 (*Very low*); 1.50-2.49 (*low*); 2.50-3.49 (*Moderately*); 3.50-4.49 (*High*); 4.50-5.00 (*Very High*).

Source: Fieldwork (2022)

The preservice business teachers indicated a high level of determination as far as teaching is concerned. They believed that they can be

diligent teachers ($M = 4.30$, $SD = .64$) to finish whatever they begin in teaching ($M = 3.94$, $SD = .75$). Such a display of hard work of which they affirmed ($M = 4.51$, $SD = .58$), shows that they can achieve teaching goals no matter what ($M = 4.29$, $SD = .72$). They affirmed that setbacks in teaching will not discourage them ($M = 3.94$, $SD = .82$) and that they can overcome setbacks as they show up in teaching ($M = 4.28$, $SD = .75$).

In conclusion, the preservice business teachers were highly perseverant to teach. With this attitude, they can achieve instructional goals and ensure classroom effectiveness. This is likely to influence their prospective students' academic achievement positively.

The preservice business teachers' perseverance to teach ($M = 4.21$) appears higher than their passion to teach ($M = 3.59$). This observation was confirmed through the paired samples t-test to determine whether passion or perseverance to teach will contribute more to their teaching. Table 10 presents the results.

Table 10: Difference between Preservice Business Teachers' Passion and Perseverance to Teach

Variables	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	Sig	η^2
Passion	3.59	.57	-17.493	216	<.001	.59
Perseverance	4.21	.52				

Source: Fieldwork (2022)

The paired samples t-test results show that there is a statistically significant difference between preservice business teachers' passion ($M = 3.59$, $SD = .57$) and perseverance to teach ($M = 4.21$, $SD = .52$); $t(216) = -17.493$ (2-tailed), $\eta^2 = .59$. By this, their perseverance to teach is higher than

their passion to teach. This observed difference is very large regarding Cohen's D effect size (Cohen, 1988). By implication, the preservice business teachers' teaching is likely to be influenced more by their perseverance to teach.

Hypotheses

H₀: There is no statistically significant difference in preservice business teachers' level of passion to teach based on a. sex, b. age, c. prior teaching experience, d. programme of study, and e. level of study.

The first hypothesis examined if the sex of the preservice business teachers influenced their passion to teach. This was to gauge the differences in the teaching effectiveness of both genders. The data were analysed through the independent samples t-test, and the results are presented in Table 11.

Table 11: Independent Samples T-test Results for Preservice Business Teachers' Passion to Teach and Sex

Variable	Group	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	Sig	Eta
Passion	Male	3.62	.60	.713	215	.476	.002
	Female	3.56	.52				
Harmonious Passion	Male	3.58	.68	.686	215	.493	.002
	Female	3.51	.62				
Obsessive Passion	Male	3.66	.58	.650	215	.516	.002
	Female	3.61	.49				

Source: Fieldwork (2022)

The results show that there is no statistically significant difference between the male ($M = 3.62$, $SD = .60$) and the female ($M = 3.56$, $SD = .52$) preservice business teachers' level of passion to teach, $t(215) = .713$, $p = .476$ (2 tailed), eta squared = .002. The study, therefore, failed to reject the null hypothesis that *there is no statistically significant difference in preservice business teachers' level of passion to teach based on sex*. This means that both the male and the female preservice business teachers displayed the same level of passion to teach.

A further analysis of the specific passion components, thus harmonious passion, $t(215) = .686$, $p = .493$ (2 tailed), eta squared = .002, and obsessive passion, $t(215) = .650$, $p = .516$ (2 tailed), eta squared = .002 show that gender is not a significant factor. Hence, this evidence validates the non-significant difference in preservice business teachers' level of passion based on gender.

The focus shifted to preservice business teachers' age and passion to teach. For this analysis, one-way ANOVA was used because the age variable was measured at three levels (19-22 years, 23-26 years and 27 years +). Table 12 presents the obtained results.

Table 12: One-way ANOVA Results for Preservice Business Teachers' Passion to Teach and Age

Variable	Group	F	df	Sig	Eta
Passion	Age	.031	2, 214	.970	.000
Harmonious Passion	Age	.157	2, 214	.855	.001
Obsessive Passion	Age	.023	2, 214	.978	.001

Source: Fieldwork (2022)

The one-way ANOVA results show no statistically significant difference in preservice business teachers' level of passion to teach based on age, $F(2, 214) = .031, p = .970, \eta^2 = .000$. Therefore, the null hypothesis was not rejected. This means that the ages of the preservice business teachers did not influence their passion to teach.

Concerning the specific passion components, harmonious passion, $F(2, 214) = .157, p = .855, \eta^2 = .001$, and obsessive passion, $F(2, 214) = .023, p = .978, \eta^2 = .001$, of the preservice business teachers were not sensitive to their ages. Therefore, the preservice business teachers show the same teaching passion level irrespective of age.

The next independent factor that was considered was the preservice business teachers' prior teaching experience. The argument was that those who had taught before might show higher teaching passion than those who are yet to teach. This argument was validated through the independent samples t-test, and the results are presented in Table 13.

Table 13: Independent Samples T-test Results for Preservice Business Teachers' Passion to Teach and Prior Teaching Experience

Variable	Group	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	Sig	Eta
Passion	PTE-Yes	3.63	.56	1.396	215	.164	.009
	PTE-NO	3.52	.58				
Harmonious Passion	PTE-Yes	3.60	.66	1.650	215	.100	.013
	PTE-NO	3.45	.64				
Obsessive Passion	PTE-Yes	3.67	.52	.864	215	.389	.003

Source: Fieldwork (2022)

The interpretative results of sex and passion, age and passion are not different from their prior teaching experience and passion. From the results, there is no statistically significant difference between the teaching passion of

preservice business teachers who had prior teaching experience ($M = 3.63$, $SD = .56$) and those without prior teaching experience ($M = 3.52$, $SD = .58$), $t(215) = 1.396$, $p = .164$, eta squared = .009. Therefore, the null hypothesis was not rejected.

The results did not differ for the specific teaching passion components. Harmonious passion, $t(215) = 1.650$, $p = .100$, eta squared = .013, and obsessive passion, $t(215) = .864$, $p = .389$, eta squared = .003, of the preservice business teachers were not sensitive to their prior teaching experience. Once again, prior teaching experience of the preservice business teachers was not considered a significant factor in their teaching passion.

There could also be the possibility that a programme of study could ignite some higher levels of interest and passion in the preservice teachers. Hence, differences in preservice business teachers' passion to teach were examined based on their programme of study. This test was possible through the independent samples t-test, and the results are presented in Table 14.

Table 14: Independent Samples T-test Results for Preservice Business Teachers' Passion to Teach and Programme of Study

Variable	Group	<i>M</i>	<i>SD</i>	<i>t</i>	df	Sig	Eta
Passion	Mgt.	3.58	.56	-.715	215	.475	.002
	Acct.	3.65	.60				
Harmonious Passion	Mgt.	3.53	.66	-.707	215	.480	.002
	Acct.	3.61	.66				
Obsessive Passion	Mgt.	3.63	.53	-.626	215	.532	.002
	Acct.	3.69	.61				

Note: Mgt. = Management Programme; Acct. = Accounting Programme

Source: Fieldwork (2022)

The results show that there is no statistically significant difference between management ($M = 3.58$, $SD = .56$) and accounting ($M = 3.65$, $SD = .60$) preservice business teachers' level of teaching passion, $t(215) = -.715$, $p = .475$ (2-tailed), eta squared = .002. Once again, the null hypothesis was not rejected. The non-significant results for the overall teaching passion did not differ for harmonious passion, $t(215) = -.707$, $p = .480$ (2-tailed), partial eta squared = .002, and obsessive passion, $t(215) = -.626$, $p = .532$ (2-tailed), partial eta squared = .002. Also, it is concluded that the programme of study read by the preservice business teachers did not influence their teaching passion.

Again, the preservice business teachers teaching passion was examined based on their levels of study (Level 200, Level 300 and Level 400). This was executed through the one-way ANOVA. The results are presented in Table 15.

Table 15: One-way ANOVA Results for Preservice Business Teachers' Passion to Teach and Level of Study

Variable	Group	<i>F</i>	<i>df</i>	Sig	Eta
Passion	LoS	3.928	2, 214	.021	.035
Harmonious Passion	LoS	5.582	2, 214	.004	.050
Obsessive Passion	LoS	2.295	2, 214	.103	.021

Note: Levene: Passion, $F = 1.313$, $p = .271$; Harmonious Passion, $F = 1.149$, $p = .319$.

Source: Fieldwork (2022)

The results show that there is a significant difference in preservice business teachers' passion based on level of study, $F(2, 214) = 3.928$, $p = .021$, eta squared = .035. Therefore, the null hypothesis was rejected. Specifically, a significant difference is found in preservice business teachers'

harmonious passion based on their level of study, $F(2, 214) = 5.582, p = .004$, eta squared = .050. A Tukey HSD post hoc test was conducted to highlight where the difference lies, and the results are presented in Table 16.

Table 16: Tukey HSD Post Hoc Test for Preservice Business Teachers'

Passion by Level of Study					
Dependent Variable	(I) Level of Study	(J) Level of Study	Mean		
			Difference (I-J)	Std. Error	Sig.
Passion	Level 200	Level 300	.18480	.10051	.160
		Level 400	.26042*	.09344	.016
	Level 300	Level 200	-.18480	.10051	.160
		Level 400	.07562	.08988	.678
	Level 400	Level 200	-.26042*	.09344	.016
		Level 300	-.07562	.08988	.678
Harmonious	Level 200	Level 300	.31771*	.11570	.018
		Level 400	.33699*	.10756	.006
Passion	Level 300	Level 200	-.31771*	.11570	.018
		Level 400	.01928	.10347	.981
	Level 400	Level 200	-.33699*	.10756	.006
		Level 300	-.01928	.10347	.981

Source: Fieldwork (2022)

For the overall teaching passion, the teaching passion of the Level 200 preservice business teachers is higher than that of the Level 400 business teachers. No significant difference in teaching passion is found between Level 200 and 300 and Level 300 and Level 400 preservice business teachers.

Concerning harmonious teaching passion, the Level 200 preservice business teachers' passion is higher than the Level 300 and Level 400 preservice business teachers. The Level 300 and Level 400 preservice business teachers exhibited the same level of harmonious teaching passion.

H₀: There is no statistically significant difference in preservice business teachers' level of perseverance to teach based on a. sex, b. age, c. prior teaching experience, d. programme of study, and e. level of study.

The second hypothesis examined if the preservice business teachers' perseverance to teach was influenced by sex, age, prior teaching experience, the programme of study, and level of study. For data gathered on preservice business teachers' sex, prior teaching experience, and programme of study, the independent samples t-test was used to determine the differences in their perseverance. For preservice business teachers' perseverance by age and level of study, one-way ANOVA was used. Table 17 presents the results.

Table 17: One-way ANOVA Results for Preservice Business Teachers' Perseverance by Sex, Age, Prior Teaching Experience, Programme of Study and Level of Study

Variable	Group	<i>M</i>	<i>SD</i>	<i>F/t</i>	<i>df</i>	<i>Sig</i>	<i>Eta</i>
Perseverance	Male	4.19	.53	-.752	215	.453	.003
	Female	4.24	.52				
Perseverance	Age			.572	2, 214	.565	.005
Perseverance	PTE-Yes	4.21	.55	-.255	215	.799	.000
	PTE-NO	4.22	.46				
Perseverance	Mgt	4.21	.54	-.307	215	.759	.000
	Acct	4.23	.47				
Perseverance	LoS			2.514	2, 214	.083	.023

Note: PTE = Prior Teaching Experience; Mgt. = Management; Acct. = Accounting; LoS = Level of Study; *F* = *F* Statistic; *t* = *t* statistic.

Source: Fieldwork (2022)

The results show that preservice business teachers' perseverance for teaching is not influenced by their sex, $t(215) = -.752, p = .453$ (2-tailed), eta squared = .003; age, $F(2, 214) = .572, p = .565$, eta squared = .005; prior teaching experience, $t(215) = -.255, p = .799$ (2-tailed), eta squared = .000; programme of study, $t(215) = -.307, p = .759$ (2-tailed), eta squared = .000; and level of study, $F(2, 214) = 2.514, p = .083$, eta squared = .023. Therefore, the null hypothesis is that *there is no statistically significant difference in preservice business teachers' level of perseverance to teach based on a. sex, b. age, c. prior teaching experience, d. programme of study and e. level of study* was not rejected.

H₀: There is no interaction effect of preservice business teachers' demographic variables (sex, age, prior teaching experience, programmes of study and level of study on their levels of passion and perseverance to teach.

The last hypothesis was to determine if the interaction of preservice business teachers' demographic characteristics significantly created a difference in their passion and perseverance to teach. The data were analysed with MANOVA, and the results are presented in Table 18.

Table 18: MANOVA Results for Teaching Passion and Perseverance

Effect	Value	F	Hypothesi				
			s df	Error df	Sig.	η_p^2	
Intercept	Λ_w	.036	2145.917	2.000	161.000	.000	.964
Sex	Λ_w	1.000	.018	2.000	161.000	.982	.000
Age	Λ_w	.992	.335	4.000	322.000	.854	.004
PTE	Λ_w	.983	1.392	2.000	161.000	.251	.017
PoS	Λ_w	.994	.475	2.000	161.000	.623	.006
LoS	Λ_w	.989	.453	4.000	322.000	.771	.006

Table 18:Cont.

Sex * Age	Λ_w	.990	.404	4.000	322.000	.806	.005
Sex * PTE	Λ_w	.998	.145	2.000	161.000	.865	.002
Sex * PoS	Λ_w	.985	1.232	2.000	161.000	.294	.015
Sex * LoS	Λ_w	.953	1.958	4.000	322.000	.101	.024
Age * PTE	Λ_w	.992	.321	4.000	322.000	.864	.004
Age * PoS	Λ_w	.996	.159	4.000	322.000	.959	.002
Age * LoS	Λ_w	.975	.506	8.000	322.000	.852	.012
PTE * PoS	Λ_w	.979	1.693	2.000	161.000	.187	.021
Table 18: Continued		2	2.460	4.000	322.000	.045	.030
PoS * LoS	Λ_w	.979	.871	4.000	322.000	.482	.011
Sex * Age * PTE	Λ_w	.996	.149	4.000	322.000	.963	.002
Sex * Age * PoS	Λ_w	.993	.546	2.000	161.000	.581	.007
Sex * Age * LoS	Λ_w	.980	.541	6.000	322.000	.777	.010
Sex * PTE * PoS	Λ_w	.995	.399	2.000	161.000	.672	.005
Sex * PTE * LoS	Λ_w	.996	.165	4.000	322.000	.956	.002
Sex * PoS * LoS	Λ_w	.975	1.037	4.000	322.000	.388	.013
Age * PTE * PoS	Λ_w	.973	1.120	4.000	322.000	.347	.014
Age * PTE * LoS	Λ_w	.966	.699	8.000	322.000	.693	.017
Age * PoS * LoS	Λ_w	.978	.456	8.000	322.000	.886	.011
PTE * PoS * LoS	Λ_w	.992	.340	4.000	322.000	.851	.004
Sex * Age * PTE * PoS	Λ_w	1.000	.	.000	161.500	.	.
Sex * Age * PTE * LoS	Λ_w	.986	1.162	2.000	161.000	.315	.014
Sex * Age * PoS * LoS	Λ_w	1.000	.	.000	161.500	.	.
Sex * PTE * PoS * LoS	Λ_w	1.000	.	.000	161.500	.	.
Age * PTE * PoS * LoS	Λ_w	1.000	.	.000	161.500	.	.
Sex * Age * PTE * PoS * LoS	Λ_w	1.000	.	.000	161.500	.	.

Note: Box's $M = 100.449$, $F(81, 2830.917) = .935$, $p = .644$; Λ_w = Wilks' Λ
Source: Fieldwork (2022)

The Box's M test of equality of homogeneity of variance-covariance matrices indicated that the assumption of the equality of homogeneity of variance-covariance matrices had been met, $M = 100.449$, $F(81, 2830.917) = .935$, $p = .644$. The MANOVA result shows that there is a statistically significant difference in the interaction of preservice business teachers' prior teaching experience and level of study based on the linear combination of their passion and perseverance to teach, $F(4, 322) = 2.460$, $p = .045$, $\Lambda_w = .942$, partial $\eta^2 = .030$. Apart from this, no significant difference was found in the two-way, three-way, four-way and five-way interactions of preservice business teachers' characteristics based on the linear combination of their passion and perseverance to teach. Except for the interaction between preservice business teachers' prior teaching experience and perseverance to teach, which explained 3% of the variance in the linear combination of passion and perseverance to teach, no other interactions could explain up to 2.5% of the effect in the linear combination of passion and perseverance to teach. The univariate level results were also examined for statistical significance, and the results are presented in Table 19.

Table 19: Tests of Between-Subjects Effects

Source	Dependent Variable	Type III		Mean Square	F	Sig.	η_p^2
		Sum of Squares	df				
Corrected Model	Passion	20.387 ^a	54	.378	1.253	.143	.295
	Perseverance	16.580 ^b	54	.307	1.173	.222	.281
Intercept	Passion	747.045	1	747.045	2479.612	.000	.939
	Perseverance	1010.241	1	1010.241	3860.676	.000	.960
Sex * Age	Passion	.374	2	.187	.621	.539	.008
	Perseverance	.241	2	.121	.461	.631	.006

Table 19: Cont.

Sex * PTE	Passion	.061	1	.061	.202	.654	.001
	Perseverance	.061	1	.061	.235	.628	.001
Sex * PoS	Passion	.373	1	.373	1.237	.268	.008
	Perseverance	.042	1	.042	.162	.688	.001
Sex * LoS	Passion	.193	2	.097	.320	.726	.004
	Perseverance	1.735	2	.867	3.314	.039	.039
Age * PTE	Passion	.023	2	.012	.038	.963	.000
	Perseverance	.174	2	.087	.332	.718	.004
Age * PoS	Passion	.123	2	.061	.204	.816	.003
	Perseverance	.089	2	.044	.170	.844	.002
Age * LoS	Passion	1.048	4	.262	.870	.484	.021
	Perseverance	.632	4	.158	.603	.661	.015
PTE * PoS	Passion	.995	1	.995	3.302	.071	.020
	Perseverance	.374	1	.374	1.430	.234	.009
PTE * LoS	Passion	1.756	2	.878	2.915	.057	.035
	Perseverance	2.221	2	1.111	4.245	.016	.050
PoS * LoS	Passion	.386	2	.193	.641	.528	.008
	Perseverance	.740	2	.370	1.414	.246	.017
Sex * Age * PTE	Passion	.150	2	.075	.249	.780	.003
	Perseverance	.021	2	.011	.041	.960	.001
Sex * Age * PoS	Passion	.054	1	.054	.180	.672	.001
	Perseverance	.098	1	.098	.376	.540	.002
Sex * Age * LoS	Passion	.679	3	.226	.751	.523	.014
	Perseverance	.691	3	.230	.880	.453	.016
Sex * PTE * PoS	Passion	.137	1	.137	.456	.501	.003
	Perseverance	.007	1	.007	.028	.866	.000
Sex * PTE * LoS	Passion	.182	2	.091	.301	.740	.004
	Perseverance	.016	2	.008	.030	.970	.000
Sex * PoS * Level	Passion	.127	2	.064	.212	.810	.003
	Perseverance	.952	2	.476	1.819	.166	.022
Age * PTE * PoS	Passion	1.038	2	.519	1.724	.182	.021
	Perseverance	.624	2	.312	1.193	.306	.015
Age * PTE * LoS	Passion	.749	4	.187	.622	.648	.015
	Perseverance	1.291	4	.323	1.233	.299	.030
Age * PoS * LoS	Passion	.921	4	.230	.764	.550	.019
	Perseverance	.496	4	.124	.474	.755	.012
PTE * PoS * LoS	Passion	.239	2	.120	.397	.673	.005
	Perseverance	.160	2	.080	.306	.737	.004
Sex * Age * PTE * PoS	Passion	.000	0	.	.	.	.000
	Perseverance	.000	0	.	.	.	.000
Sex * Age * PTE * LoS	Passion	.492	1	.492	1.632	.203	.010
	Perseverance	.491	1	.491	1.877	.173	.011
Sex * Age * PTE * PoS	Passion	.000	0	.	.	.	.000

Table 19: Cont.

PoS * LoS	Perseverance	.000	0	.	.	.	.000
Sex * PTE *	Passion	.000	0	.	.	.	.000
PoS * LoS	Perseverance	.000	0	.	.	.	.000
Age * PTE *	Passion	.000	0	.	.	.	.000
PoS * LoS	Perseverance	.000	0	.	.	.	.000
Sex * Age *	Passion	.000	0	.	.	.	.000
PTE * PoS *	Perseverance	.000	0	.	.	.	.000
LoS							
Error	Passion	48.807	162	.301			
	Perseverance	42.391	162	.262			
Total	Passion	2873.56	217				
		5					
	Perseverance	3908.72	217				
		2					
Corrected	Passion	69.193	216				
Total	Perseverance	58.971	216				

*Bonferroni adjustment $p < .025$.

Source: Fieldwork (2022)

The univariate results show that the corrected model for teaching passion was not statistically significant, $F(54, 162) = 1.253$, $p = .143$, partial $\eta^2 = .295$. Therefore, no significant differences were found in the interaction effects (Sex * Age, Sex * PTE, Sex * PoS, Sex * LoS, Age * PTE, Age * PoS, Age * LoS, PTE * PoS, PTE * LoS, PoS * LoS, Sex * Age * PTE, Sex * Age * PoS, Sex * Age * LoS, Sex * PTE * PoS, Sex * PTE * LoS, Sex * PoS * LoS, Age * PTE * PoS, Age * PTE * LoS, Age * PoS * LoS, PTE * PoS * LoS, Sex * Age * PTE * PoS, Sex * Age * PTE * LoS, Sex * Age * PoS * LoS, Sex * PTE * PoS * LoS, Age * PTE * PoS * LoS, and Sex * Age * PTE * PoS * LoS).

Again, the univariate results show that the corrected model for teaching perseverance was not statistically significant, $F(54, 162) = 1.173$, $p = .222$, partial $\eta^2 = .281$. The large effect size (.281) suggested practical significance in any interactions. A significant difference was, therefore, found

between the interaction of PTE * LoS on teaching perseverance, $F(2, .262) = 4.245, p = .016, \text{partial } \eta^2 = .050$.

No significant difference was found on other two way interactions (Sex * Age, Sex * PTE, Sex * PoS, Sex * LoS, Age * PTE, Age * PoS, Age * LoS, PTE * PoS, PoS * LoS), all three-way interactions (Sex * Age * PTE, Sex * Age * PoS, Sex * Age * LoS, Sex * PTE * PoS, Sex * PTE * LoS, Sex * PoS * LoS, Age * PTE * PoS, Age * PTE * LoS, Age * PoS * LoS, PTE * PoS * LoS), all four-way interactions (Sex * Age * PTE * PoS, Sex * Age * PTE * LoS, Sex * Age * PoS * LoS, Sex * PTE * PoS * LoS, Age * PTE * PoS * LoS) and five-way interaction (Sex * Age * PTE * PoS * LoS).

First, differences were identified in preservice business teachers' prior teaching experience across their levels of study. Second, differences were identified in preservice business teachers' teaching perseverance based on their levels of study across their prior teaching experience. Hence, the significant interaction between PTE * LoS on teaching perseverance was followed through the Bonferroni post hoc comparison. Table 20 presents the post hoc test on preservice business teachers' teaching perseverance based on their prior teaching experience across their levels of study.

**Table 20: Bonferroni Post Hoc Test for Preservice Business Teachers’
Perseverance Based on their PTE across Levels of Study**

Dependent Variable	PTE	(I) LoS	(J) LoS	Mean	Std. Error	Sig.
				Difference (I-J)		
Perseverance	Yes	Level 200	Level 300	.112	.171	.514
			Level 400	.430*	.160	.008
		Level 300	Level 200	-.112	.171	.514
			Level 400	.318*	.157	.044
		Level 400	Level 200	-.430*	.160	.008
			Level 300	-.318*	.157	.044
			Level 200	.112	.171	.514
	No	Level 200	Level 300	.081	.171	.637
			Level 400	-.228	.190	.230
		Level 300	Level 200	-.081	.171	.637
			Level 400	-.309	.186	.098
		Level 400	Level 200	.228	.190	.230
			Level 300	.309	.186	.098
			Level 200	-.081	.171	.637

*Bonferroni adjustment $p < .025$.

Source: Fieldwork (2022)

The results show significant differences in the perseverance of preservice business teachers' who have prior teaching experience across their levels of study. It can be seen that preservice business teachers who had prior teaching experience and were at Level 200 ($M = 4.43$) had higher teaching perseverance than those who had prior teaching experience in Level 400 ($M = 4.00$). Also, preservice business teachers who have prior teaching experience and are at Level 300 ($M = 4.31$) had higher teaching perseverance than those who have prior teaching experience in Level 400 ($M = 4.00$). No significant difference was found between preservice business teachers who had prior teaching experience and were at Levels 200 ($M = 4.43$) and 300 ($M = 4.31$).

The results suggest that preservice business teachers' level of perseverance to teach decreased from Levels 300 to 400. Table 21 presents the post hoc test on preservice business teachers' levels of study across their prior teaching experience on their teaching perseverance.

Table 21: Bonferroni Post Hoc Test for Preservice Business Teachers' Perseverance Based on their Levels of Study across PTE

Dependent Variable	LoS			Mean		Sig.
		(I) PTE	(J) PTE	(I-J)	Std. Error	
Perseverance	Level 200	Yes	No	.217	.175	.217
		No	Yes	-.217	.175	.217
	Level 300	Yes	No	.186	.167	.268
		No	Yes	-.186	.167	.268
	Level 400	Yes	No	-.442*	.176	.013
		No	Yes	.442*	.176	.013

*Bonferroni adjustment $p < .025$.

Source: Fieldwork (2022)

The results show a significant difference in preservice business teachers' perseverance in Level 400 based on prior teaching experience. It can be seen that the Level 400 preservice business teachers who had no prior teaching experience ($M = 4.43$) had higher perseverance to teach than those who had prior teaching experience ($M = 4.00$). No significant difference was found in the teaching perseverance of preservice business teachers in Levels 200 and 300 across their prior teaching experience.

The study concludes that as preservice business teachers' increased knowledge about teaching and prior teaching experience, they were demotivated to persevere to teach. Those in Level 400 who did not have prior teaching experience exhibited relatively higher teaching perseverance than those with teaching experience.

Discussion

The study was conducted to assess preservice business teachers' passion and perseverance to teach due to stakeholders' limited knowledge about these psychological attributes of the preservice teachers. The descriptive survey design was employed to provide a preliminary report of their passion and perseverance to teach to bridge this knowledge gap and inform teacher educators and stakeholders about the necessary actions.

The study found that preservice business teachers were generally highly passionate about teaching. This finding is novel as far as the assessment of business preservice teachers' teaching passion is concerned. The current study reports that the preservice business teachers are interested in teaching business programmes (Accounting and Management) at senior high schools. This is a good signal being transmitted to educational stakeholders. With this

professed teaching passion, they are highly likely to exhibit a strong inclination toward teaching the content of business programmes (Vallerand et al., 2003). By further implication, they can derive pleasure and self-actualisation from teaching without endangering their personal lives. Hence, teaching is likely to be a hobby rather than a work obligation. This is the expectation of the teaching profession as indicated by the National Teaching Council, Ghana (2017) and stated in the National Teaching Standards. A recap of this expectation is that “the teachers are required to have a passion for teaching and leadership, engage with members not only in the school community but also in the wider community and act as agents of change” (National Teaching Council, Ghana, 2017, p. 10).

To the study's conceptual framework, preservice business teachers' teaching passion is likely to be influenced by harmonious and obsessive teaching passion; this was evident in the study. They professed a high harmonious and obsessive passion for teaching. This means that they are influenced not only by the intrinsic nature of teaching, in terms of the value and the pleasure they can obtain from teaching, but also by the extrinsic aspects as well, that is, external pressures pushing them to teach. Both high harmonious and obsessive passion for teaching seems to weaken the stability of their autonomy to remain highly focused on teaching without paying attention to external demands. The DMP makes it clear that if a teacher feels that the choice to teach originates internally and feels no pressure to continue participation from external sources, the teacher's internalisation is autonomous and will likely result in harmonious passion. Preservice business teachers' high obsessive passion for teaching, therefore, seems to weaken their

harmonious passion. This might be explained by other factors such as poor salary, conditions of service, poor image of the profession, high cost of living and pressures from family, among others (Watt & Richardson, 2007). By implication, if the external factors overwhelm them, they are likely to have a conflict with other life activities, including work conflict (Vallerand et al., 2010; Houliort et al., 2018) and develop psychological ill-being (Deci & Ryan, 2000; Vallerand, 2012). Obsessive passion to teach is noted for maladaptive workplace outcomes such as anxiety, depression, burnout and emotional exhaustion (Vallerand et al., 2010; Houliort et al., 2018; Fernet et al., 2014; Kong, 2016).

The finding that preservice business teachers are highly passionate about teaching is rooted in literature (Ch'ng & Goh, 2011; Kim, 2017; Kim, 2013; Fin & Ishak, 2018). However, the current finding highlights differences in teaching passion of the preservice teachers assessed in Ghana and those assessed outside Ghana. For instance, previous findings suggested that preservice teachers had higher harmonious passion than obsessive passion (Low et al., 2011; Santoro, 2012; Kim, 2013; Kim, 2017; Fin & Ishak, 2018). The current study observed a reverse phenomenon among preservice business teachers in Ghana. The observed preservice business teachers, even though they had a general high teaching passion, appeared to have a slightly higher obsessive teaching passion than harmonious teaching passion. These differences can be attributed to contextual differences. The extant studies assessed preservice teachers teaching passion in Singapore, Australia, Malaysia, South Korea and China. Comparably, the economic conditions of these countries (Singapore, Australia, Malaysia, South Korea and China) are

relatively better than Ghana. Hence, working conditions given to teachers are likely to be better than that in Ghana. Hence, preservice teachers are likely to appreciate better teaching in the countries mentioned above without many external pressures, especially salary, than their Ghanaian counterparts.

Further, the current study found that the preservice business teachers professed high perseverance to teach. A similar finding was obtained from teachers (Argon & Kaya, 2018). By the grit theory, immediate and long-term school goals will be achieved when this high teaching perseverance is combined with teaching passion. The preservice business teachers have shown grittier in performing the numerous classroom tasks to achieve instructional objectives. Previous studies (e.g., Grohman et al., 2017; Riddle, 2018; Fabelico & Afalla, 2020) also found that preservice teachers are grittier. Grohman et al. showed that preservice teachers' grit influenced their creativity. Riddle found that preservice teachers' grit influenced their teaching self-efficacy. Duckworth (2014) noted that passion and perseverance to teach are critical factors for effective teaching. Synthesizing and drawing an implication from these previous findings point to the fact that the preservice business teachers assessed in the current study are likely to achieve instructional success in their prospective teachings. If the preservice business teachers' perseverance and passion to teach are maintained or enhanced, there is a high possibility that they will achieve self-growth in teaching and actualize a quality teaching career (Vallerand et al., 2003; Duckworth et al., 2007) as depicted by the conceptual framework.

Aside from assessing preservice teachers' passion and perseverance to teach, attention was paid to the influence of their demographic characteristics (sex, age, prior teaching experience, programme of study and level of study) on their teaching passion and perseverance. To their teaching passion, only their level of study was found to be significant. Preservice business teachers at lower levels of academic study (Level 200) exhibited higher levels of harmonious passion to teach than those at higher levels (Levels 300 and 400). This seems to explain the earlier observation about their unstable harmonious teaching passion due to their relatively high obsessive teaching passion. As they get closer to the reality of teaching and developed knowledge in the entire teaching profession, their harmonious teaching passion diminishes. This finding is novel in the educational literature. It must be noted that the Level 400 preservice business teachers had experienced the real school context. They had interacted with experienced teachers on the field who might have painted the awkward reality of the teaching profession in Ghana. In other countries like South Africa, novice teachers love the teaching profession (Mahoko et al., 2019); this appears to be different from Ghana. The preservice business teachers increased knowledge in the teaching profession did not increase their teaching passion; this seems to be a result of their negative emotions, probably caused by their high obsessive teaching passion (Celik, 2017). The current study did not find preservice business teachers' sex, age, prior teaching experience, and programme of study to influence their teaching passion. Hence, the current study disconfirms previous findings that preservice teachers' teaching passion is influenced by their sex (e.g., Balyer & Özcan, 2014).

Previous literature (Cenberci & Beyhan, 2016; Argon & Kaya, 2018) that found that female preservice teachers are grittier than their male counterparts is not confirmed. However, the current finding confirms the extant literature (Fabelico & Afalla, 2020) that teachers' sex did not make any difference in their grit. Also, teachers' grit was not sensitive to their age (e.g., Argon & Kaya, 2018; Fabelico & Afalla, 2020). Again, the preservice business teachers' perseverance to teach was not influenced by their sex, age, prior teaching experience, programmes of study and level of study.

The current study makes another novel revelation about the interaction of preservice teachers' prior teaching experience and level of study on their perseverance to teach. The study found that the preservice business teachers at lower levels of study (i.e., Level 200) who had prior teaching experience exhibited higher perseverance to teach than those at a higher level of academic study (i.e. Level 400) with prior teaching experience. Again, when the comparison was made within the higher level of academic study, the preservice business teachers with no prior teaching experience exhibited higher perseverance to teach than their counterparts. Their prior teaching experience and enhanced understanding of the teaching profession did not trigger them to persevere. This finding again provides the platform to argue that there are some unfavourable conditions in the teaching profession in Ghana. These unfavourable conditions might be teachers' poor salaries and working conditions. Admission to the business teacher education programme does not necessarily mean they want to be professional teachers. But it could be that they tried to use teaching as a fallback career since the teaching

profession relatively promises job vacancies more than other professions (Watt & Richardson, 2007).

Chapter Summary

This chapter presented the results and discussed the findings about preservice business teachers' passion and perseverance to teach. It provided novel findings concerning the teaching passion of the preservice business teachers. The chapter indicated that the preservice business teachers were highly passionate to teach. Even though they showed high harmonious passion and obsessive passion to teach, their obsessive teaching passion seems to weaken their harmonious teaching passion. With their perseverance to teach, the preservice business teachers once again professed that they had high teaching perseverance. However, their demographic characteristics appear to provide more illumination into the understanding of their teaching passion and perseverance. For example, the level of academic study brought to light that as they acquired more knowledge in their academic progression, their harmonious passion declined. Again, the interaction of their prior teaching experience and their level of the study indicated that those in their final year with teaching experience were not eager to display high teaching perseverance as their counterparts at the same level. Hence, the study blamed some unfavourable conditions on the teaching profession.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Overview

This chapter summarises the study focusing on the research process in assessing preservice business teachers' passion and perseverance to teach. It highlights the key findings obtained and draws conclusions that inform the recommendations preferred for policy development and practice guidance for teaching and teacher education. The chapter also provides suggestions that future researchers should take for further research.

Summary of the Study

The current study assessed preservice business teachers' passion and perseverance for teaching at the University of Cape Coast. The thrust of the study was to describe University of Cape Coast preservice business teachers' (management and accounting) level of teaching passion and perseverance to teach and examines differences in their passion and perseverance for teaching based on their sex, prior teaching experience, age and programme of study. Hence, the specific research objectives were to:

1. describe preservice business teachers' level of passion to teach.
2. determine preservice business teachers' level of perseverance to teach.
3. examine if there are differences in preservice business teachers' level of passion to teach based on:
 - a. sex
 - b. age,
 - c. prior teaching experience,
 - d. programme of study, and

- e. level of study.
4. examine if there are differences in preservice business teachers' level of perseverance to teach based on:
 - a. sex
 - b. age,
 - c. prior teaching experience,
 - d. programme of study, and
 - e. level of study.
 5. examine if there are interaction effects of preservice business teachers' demographic variables (sex, age, prior teaching experience and programme of study) on their levels of passion and perseverance to teach.

Based on the specific research objectives, two research questions and three hypotheses were formulated to guide the study. The research questions were:

1. What is preservice business teachers' level of passion to teach?
2. What is preservice business teachers' level of perseverance to teach?

The research hypotheses were:

1. H₀: There is no statistically significant difference in preservice business teachers' level of passion to teach based on:
 - a. sex
 - b. age,
 - c. prior teaching experience,
 - d. programme of study, and
 - e. level of study.

2. H₀: There is no statistically significant difference in preservice business teachers' level of perseverance to teach based on:
 - a. sex
 - b. age,
 - c. prior teaching experience,
 - d. programme of study, and
 - e. level of study.
3. H₀: There is no interaction effect of preservice business teachers' demographic variables (sex, age, prior teaching experience, programme of study and level of study) on their passion and perseverance to teach.

The descriptive cross-sectional survey design was employed for the study. Of a total population of 577 preservice business teachers, 217 participated in the study through the census method. The PTPP-Q was used to gather the relevant data for the study after it had been tested for validity and reliability. For validity, content, face and construct validities were ascertained. Except for content and face validities which were ascertained through experts in teacher education, the construct validity was ascertained through EFA after the instrument was pilot-tested. Two reliability techniques, Cronbach's Alpha and McDonald Omega were used to test the reliability of the items (internal consistency) that measured the constructs (passion and perseverance). Both techniques yielded reliability coefficients above the .7 threshold suggested by many scholars.

The online version of the instrument was used to gather the data. The electronic copy of the data was downloaded and fed into the SPSS software. After, it was analysed through descriptive (frequencies, percentages, mean and standard deviation) and inferential (independent samples t-test, one-way ANOVA, factorial MANOVA) statistics.

Key Findings

The following key findings were discovered:

1. The preservice business teachers exhibited a high level of passion to teach. Specifically, they showed high harmonious and obsessive passion to teach.
2. Also, the preservice business teachers showed high perseverance to teach; this perseverance was relatively higher than their passion to teach.
3. Their passion to teach was sensitive to their level of study. Generally, the Level 200 preservice business teachers exhibited higher levels of passion to teach than the Level 400 preservice business teachers. For the specific teaching passion findings, the Level 200 preservice teachers exhibited higher levels of harmonious teaching passion than the Levels 300 and 400 preservice business teachers. However, their gender, age, prior teaching experience, and programme of study did not influence their teaching passion in general and for harmonious and obsessive teaching passion.
4. Again, the preservice business teachers' perseverance to teach was not sensitive to their gender, age, prior teaching experience, programmes of study and level of study.

5. The interaction of preservice business teachers' prior teaching experience and level of study influenced their level of perseverance to teach. The preservice business teachers at Level 200 with prior teaching experience exhibited higher perseverance to teach than those in Level 400 who had prior teaching experience. Within the Level 400 academic level, the preservice business teachers with no prior teaching experience exhibited higher teaching perseverance than their counterparts.

Conclusions

Preservice business teachers admitted onto the teacher education programme appear to be perseverant rather than passionate about teaching. Even though this teaching perseverance is relatively higher than their teaching passion, further evidence showed that their teaching perseverance was not resolute. They might have been compelled by external actors in their environment to follow the teaching path. It was not surprising that their perseverance to teach declined as they moved higher on the academic levels. If their passion and perseverance to teach are not firmed up, they are likely to take the teaching profession as a fall-back career as indicated in literature. A further Implication is that teacher admission processes should find a way of assessing the passion and perseverance of preservice teachers before they are admitted on to the teacher education programme.

The foregoing observations and deductions are not out of place because the preservice business teachers in Level 200 exhibited higher harmonious passion than those in Level 400. As the preservice business teachers got closer to the completion of the business teacher education, all

expectations were that they would have gathered all the teaching competencies and psychological attributes associated with executing teaching tasks. However, it was observed that they had rather lost the ability to freely accept the teaching profession and its tasks as important and devoid of attachments or external stimuli. By extension, the teaching activities did not occupy a significant part, and it was not in harmony with the life of the about-to-be-graduated preservice teachers. This calls for concerns for teacher education institutions and relevant stakeholders in education. Their relatively low teaching passion is probably about the features of teaching and the teaching profession. It is not about their characteristics such as gender, age, prior teaching experience, and programme of study.

Even though the descriptive findings indicated that all the preservice business teachers demonstrated high perseverance to teach, the inferential findings highlighted and projected that the higher their exposure to teaching and acquired knowledge in teaching, the lower their perseverance to teach. This could explain their relatively low passion for teaching. Again, this indicates that the nature of the teaching profession might not be attractive and satisfying to them. Hence, the possibility for pre-tertiary educational institutions to recruit graduate teachers who are not grittier despite their accumulated rich knowledge in various curriculum fields. This does not guarantee quality in schools.

Recommendations

Based on the obtained findings and the conclusions drawn, the study recommends some important actions to key stakeholders to enhance teaching

passion and perseverance in preservice teachers for quality teaching in schools.

1. The Directorate of Academic Affairs of the University should in addition to application forms, allow candidates seeking to read education programmes to submit motivational letters. This would help gauge preservice teachers' level of harmonious and obsessive passion and perseverance to teach before admission.
2. Since teaching passion is an emotional attribute contingent on interest and desire, teacher educators and lecturers should emotionally engage preservice teachers during classroom interactions. This can be done by projecting the rich attributes of the teaching profession to invoke the interest in preservice teachers for teaching. This requires teacher educators to first show teaching passion and perseverance during lectures (if not already in place or improve on it if in place).
3. The education academic department of the University should organise periodic seminars for final year SHS students on the nature of teaching and the teacher education programmes offered in the University. This should create much awareness before students apply for education programmes. This is because their knowledge about teaching resulted in a decline in their perseverance to teach.

Suggestions for Further Research

The current study examined preservice business teachers' passion and perseverance to teach. This was carried out through the descriptive cross-sectional survey design with the questionnaire as the sole data collection instrument. Hence, future efforts should be geared towards:

1. the investigation of preservice teachers' passion and perseverance across other subject areas such as Economics, Social Studies, Mathematics, and English, among others.
2. the comparison of preservice teachers' harmonious and obsessive teaching passion.
3. the use of a sequential explanatory mixed methods designs to obtain a rich explanation of the passion and perseverance of preservice teachers for teaching. This would also help to specifically determine the attributes of the teaching profession that must be addressed to ensure quality in schools.
4. the establishment of the correlation among teachers' passion, perseverance to teach and quality education.

REFERENCES

- Abington-Cooper, M. (2005). *An evaluation of the LSU Agricultural Center's agricultural leadership development program, 1988-2004* (Doctoral dissertation, Northeast Louisiana University).
- Argon, T., & Kaya, A. (2018). Examination of grit levels of teachers according to personal variables. *Journal of Education and Training Studies*, 6(n3a), 45-53.
- Asare, P. Y. (2020). *Preservice management teachers' self-efficacy and anxiety about teaching practicum*. (Doctoral dissertation, University of Cape Coast).
- Asare, P. Y., & Amo, S. K. (2023). Developing preservice teachers' teaching engagement efficacy: A classroom managerial implication. *Cogent Education*, 10(1), 1-17.
- Avedian, A. (2014). Survey design. *Harvard Law School*. Retrieved from <http://hnmcp.law.harvard.edu/wp-content/uploads/2012/02/Arevik-Avedian-Survey-Design-PowerPoint.pdf>.
- Baker, T. L. (1994). *Doing social research* (2nd ed.). New York: McGraw-Hill Inc.
- Balyer, A., & Özcan, K. (2014). Choosing teaching profession as a career: Students' reasons. *International Education Studies*, 7(5), 104-115.
- Birkeland, I., & Nerstad, C. (2015). Incivility is (not) the very essence of love: Passion for work and incivility instigation. *Journal of Occupation, Health Psychol.* 21(1), 77-90.

- Boateng, S. S. (2019). Teachers' attrition at pre-tertiary level in Ghana: A qualitative investigation into its causes and suggestions. *Journal of Education and Practice, 10*(14), 139-149.
- Carbonneau, N., Vallerand, R. J., Fernet, C., & Guay, F. (2008). The role of passion for teaching in intrapersonal and interpersonal outcomes. *Journal of educational psychology, 100*(4), 977.
- Celik, B. (2017). Teaching profession and passion. *International Journal of Social Sciences & Educational Studies, 4*(2), 85-92.
- Cenberci, S., & Beyhan, A. (2016). Research for motivational persistence levels of prospective teachers in terms of age, gender and teaching branch variables. *Journal of Education and Training Studies, 4*(12), 21-26.
- Chen, B., Vansteenkiste, M., Beyers, W., Boone, L., Deci, E. L., Van der Kaap-Deeder, J., Verstuyf, J. (2015). Basic psychological need satisfaction, need frustration and need strength across four cultures. *Motivation and Emotion, 39*(2), 216-236.
- Clarke, J., & J. Newman (1997). *The managerial state: Power, politics and ideology in the remaking of social welfare*. London: Sage.
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th Ed.). New York: Routledge.
- Day, C. (2009). A passion for quality: Teachers who make a difference. *Tijdschrift Voor Lerarenopleiders, 30*(3), 4-13.

De Cooman, R., Gieter, S., Pepermans, R., Du Bois, C., Caers, R., & Jegers, M. (2007). Graduate teacher motivation for choosing a job in education. *International Journal for Education Vocation and Guidance*, 7(1): 123-136.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behaviour*. New York: Plenum.

Deci, E. L., & Ryan, R. M. (2000). The 'what' and 'why' of goal pursuits: Human needs and the self-determination of behaviour. *Psychological Inquiry*, 11(4), 227–268.

Department for Education. (2018). *Factors affecting teacher retention: Qualitative investigation*. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/686947/Factors_affecting_teacher_retention_qualitative_investigation.

Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, 55(1), 34-43.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail and mixed-mode surveys: The tailored design method* (4th Ed.). Hoboken, NJ: John Wiley & Sons.

Duckworth, A. (2016). *Grit: The power of passion and perseverance* (Vol. 234). New York: Scribner.

Duckworth, A. L., & Quinn, P. D. (2009). Development and validation of the Short Grit-Scale (GRIT-S). *Journal of Personality Assessment*, 91(2), 166-174.

- Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, 92(6), 1087-1101.
- Epstein, S. (1990). Cognitive-experiential self-theory. In L. A. Pervin (Ed.), *Handbook of personality: Theory and research* (pp. 165-192). New York: Guilford Press.
- Exploring issues of teacher retention and attrition in Ghana: A case study of public senior high schools in Kwabre East district of Ashanti region-Ghana. *Journal of Education and Practice*, 5(1), 83-89.
- Fabelico, F., & Afalla, B. (2020). Perseverance and passion in the teaching profession: Teachers' grit, self-efficacy, burnout, and performance. *Journal of Critical Reviews*, 7(11), 108–119.
- Fernet, C., Lavigne, G., Vallerand, R., & Austin, S. (2014). Fired up with passion: Investigating how job autonomy and passion predict burnout at career start in teachers. *Work & Stress*, 28(3), 270-288.
- Field, A. (2009). *Discovering statistics using SPSS (3rd Edition)*. London: Sage Publications Ltd.
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics (5th Ed.)*. London: Sage Publications.
- Fin, L. S., & Ishak, Z. (2018). Educational beliefs and passion among preservice teachers: A comparative statistical analysis. *The Educational Review*, 2(5), 281-288.
- Fink, L. D. (2003). *Creating significant learning experiences*. San Francisco, CA: Jossey-Bass.

- Fogelgarn, R., & Burns, E. A. (2020). What constraints passionate teaching? A heuristic exploration. *Issues in Educational Research*, 30(2), 493-511.
- Forest, J., Mageau, G. A., Sarrazin, C., & Morin, E. M. (2011). "Work is my passion": The different affective, behavioural, and cognitive consequences of harmonious and obsessive passion toward work. *Canadian Journal of Administrative Sciences*, 28(1), 27-40.
- Fraenkel, J. R., & Wallen, N. E. (2000). *How to design and evaluate research in education (4th ed.)*. New York: McGraw-Hill.
- Gable, S. L., & Haidt, J. (2005). What (and why) is positive psychology? *Review of General Psychology*, 9(2), 103–110.
- Ghasemi, A., & Zahediasl, S. (2012). Normality tests for statistical analysis: a guide for non-statisticians. *International Journal of endocrinology and metabolism*, 10(2), 486.
- Government of Ghana (2002). *Meeting the challenges of education in the twenty-first century: Report of the President's Committee on review of education reforms in Ghana*. Accra: Government of Ghana.
- Grohman, M. G., Ivcevic, Z., Silvia, P., & Kaufman, S. B. (2017). The role of passion and persistence in creativity. *Psychology of Aesthetics, Creativity, and the Arts*, 11(4), 376–385.
- Guest, C. (2019). *Advantages and disadvantages of census surveys*. Retrieved from <https://www.cvent.com/en/blog/events/advantages-disadvantages-census-surveys>.
- Hansen, D. T. (2001). *Exploring the moral heart of teaching: Toward a teacher's creed*. New York: Teachers College Press.

- Harackiewicz, J. M., Sansone, C., & Manderlink, G. (1985). Competence, achievement orientation, and intrinsic motivation: A process analysis. *Journal of Personality and Social Psychology*, *48*(2), 493-508.
- Hardy, L., & Moriarty, T. (2006). Shaping self-concept: The elusive importance effect. *Journal of Personality*, *74*(2), 377- 401.
- Hargreaves, A. (1997). The four ages of professionalism and professional learning [Paper presented to the Australian College of Education Conference on the Status of Teaching.]. *Unicorn (Carlton, Vic)*, *23*(2), 86-114.
- Hargreaves, A. (2000). Four ages of professionalism and professional learning. *Teachers and Teaching*, *6*(2), 151-182.
- Hofer, J., & Busch, H. (2011). Satisfying one's needs for competence and relatedness consequent domain-specific well-being depends on strength of implicit motives. *Personality and Social Psychology Bulletin*, *37*(9), 1147-1158.
- Houffort, N., Philippe, F. L., Bourdeau, S., & Leduc, C. (2018). A comprehensive understanding of the relationships between passion for work and work-family conflict and the consequences for psychological distress. *International Journal of Stress Management*, *25*(4), 313–329.
- Huppert, F. A. (2009). Psychological well-being: Evidence regarding its causes and consequences. *Applied Psychology: Health and Well-Being*, *1*(2), 137-164.
- Keyes, C., 2007. Promoting and protecting mental helplessness in sport. *The Sport Psychologist*, health as flourishing: A complementary strategy

for improving national mental health. *American Psychologist*, 62(2), 95-108.

Kim, H. (2013). Passion on teaching beliefs and efficacy. *Academic Exchange Quarterly*, 17(4), 20-27.

Kim, H. (2017). Early childhood preservice teachers' passion, beliefs, and their sense of teacher efficacy. *Journal of Education and Human Development*, 6(1), 44-55.

Kim, H., & Connelly, J. (2019). Early childhood preservice teachers' mathematics teaching efficacy: Effects of passion and teacher efficacy. *Asia-pacific Journal of Research in Early Childhood Education*, 13(1), 1-21.

Kong, D. T. (2016). The pathway to unethical pro-organisational behaviour: Organisational identification as a joint function of work passion and trait mindfulness. *Personal Individual Difference*, 93, 86–91.

Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Delhi: New Age International (P) Ltd., Publishers.

Low, E. L., Lim, S. K., Ch'ng, A., & Goh, K. C. (2011). Pre-service teachers' reasons for choosing teaching as a career in Singapore. *Asia Pacific Journal of Education*, 31(2), 195-210.

Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, 131(6), 803–855.

Mahoko, N., Omodan, B. I., & Tsotetsi, C. T. (2019). Managing teachers' passion in rural secondary school: An asset-based approach. In *Proceedings of 247th the IIER International Conference* (pp. 16-23).

- Mart, C. T. (2013). A passionate teacher: Teacher commitment and dedication to student learning. *International Journal of Academic Research in Progressive Education and Development*, 2(1), 437-442.
- Maslow, A. (1968). Some educational implications of the humanistic psychologies. *Harvard Educational Review*, 38(4), 685-696.
- Mishra, P. & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, 108(6), 1017-1054.
- Moe, A. (2016). Harmonious passion and its relationship with teacher well-being. *Teaching and Teacher Education*, 59, 431-437.
- Muenks, K., Wigfield, A., Yang, J. S., & O'Neal, C. R. (2017). How true is grit? Assessing its relations to high school and college students' personality characteristics, self-regulation, engagement, and achievement. *Journal of Educational Psychology*, 109(5), 599.
- National Teaching Council (2017). *National teachers' standards for Ghana: Guidelines*. Accra: Ministry of Education, Ghana.
- Ogah, J. K. (2013). *Decision-making in the research process*. Companion to students and beginning researchers. Accra: Adwinsa Publications (Gh) Ltd.
- Osuala, E. C. (2001). *Introduction to research methods*. Onitsha: African FEP publishers.
- Phelps, P. H., & Benson, T. R. (2012). Teachers with a passion for the profession. *Action in Teacher Education*, 34(1), 65-76.
- Rampa, S. H. (2012). Passion for teaching: A qualitative study. *Procedia-Social and Behavioral Sciences*, 47, 1281-1285.

- Ratelle, C. F., Vallerand, R. J., Mageau, G. A., Rousseau, F. L., & Provencher, P. (2004). When passion leads to problematic outcomes: A look at gambling. *Journal of Gambling Studies*, 20(2), 105–119.
- Riddle, R. A. (2018). *Teacher quality: Understanding the effectiveness of teachers' attributes*. Washington, DC: Economic Policy Institute.
- Roeger, E. B. (2012). *A qualitative inquiry into community college students' perceptions of teacher passion*. University of Illinois at Urbana-Champaign.
- Rousseau, F. L., & Vallerand, R. J. (2008). An examination of the relationship between passion and subjective well-being in older adults. *International Journal of Aging and Human Development*, 66(3), 195–211.
- Santoro, N., Pietsch, M., & Borg, T. (2012). The passion of teaching: Learning from an older generation of teachers. *Journal of Education for Teaching*, 38(5), 585-595.
- Schuler, J., & Kuster, M. (2011). Binge eating as a consequence of unfulfilled basic needs: The moderating role of implicit achievement motivation. *Motivation and Emotion*, 35(1), 89-97.
- Schuler, J., Sheldon, K. M., & Fröhlich, S. (2010). Implicit need for achievement moderates the relationship between competence need satisfaction and subsequent motivation. *Journal of Research in Personality*, 44(1), 1-12.
- Schuler, J., Wegner, M., & Knechtle, B. (2014). Implicit motives and basic need satisfaction in extreme endurance sports. *Journal of Sport Exercise Psychology*, 36(3), 293-302.

- Sheldon, K. M., & Schüler, J. (2011). Wanting, having, and needing: Integrating motive disposition theory and self-determination theory. *Journal of Personality and Social Psychology, 101*(5), 1106-1123.
- Sheldon, K. M., Elliot, A. J., Kim, Y., & Kasser, T. (2001). What is satisfying about satisfying events? Testing 10 candidates psychological needs. *Journal of Personality and Social Psychology, 80*(2), 325-339.
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher, 15*(2), 4-14.
- Steinmayr, R., Weidinger, A. F., & Wigfield, A. (2018). Does students' grit predict their school achievement above and beyond their personality, motivation, and engagement? *Contemporary Educational Psychology, 53*, 106-122.
- Stenseng, F., Rise, J., and Kraft, P. (2011). The dark side of leisure: Obsessive passion and its covariates and outcomes. *Leisure Studies, 30*, 49-62.
- St-Louis, A. C., Carbonneau, N., & Vallerand, R. J. (2016). Passion for a cause: How it affects health and subjective well-being. *Journal of Personality, 84*(3), 263-276.
- Thorgren, S., Wincent, J., and Sirén, C. (2013). The influence of passion and work-life thoughts on work satisfaction. *Human Resource Development Quart. 24*(4), 469-492.
- Vallerand R. J., Paquet, Y., Philippe, F. L., & Charest, J. (2010). On the role of passion in burnout: A process model. *Journal of Personality, 78*(1), 289-312.

Vallerand, R. J. (2007). On the psychology of passion: In search of what makes life most worth living. Presidential Address at the 68th Canadian Annual Psychological Association Convention in Ottawa, Ontario.

Vallerand, R. J. (2008). On the psychology of passion: In search of what makes people's lives most worth living. *Canadian Psychology/Psychologie Canadienne*, 49(1), 1.

Vallerand, R. J. (2010). On passion for life activities: The dualistic model of passion. In M. P. Zanna (Ed.), *Advances in experimental social psychology*, Vol 42 (pp. 97–193). New York: Academic Press.

Vallerand, R. J. (2012). The role of passion in sustainable psychological well-being. *Psychology of Well-Being: Theory, Research and Practice*, 2(1), 1-21.

Vallerand, R. J. (2015). *The psychology of passion: A dualistic model*. New York: Oxford.

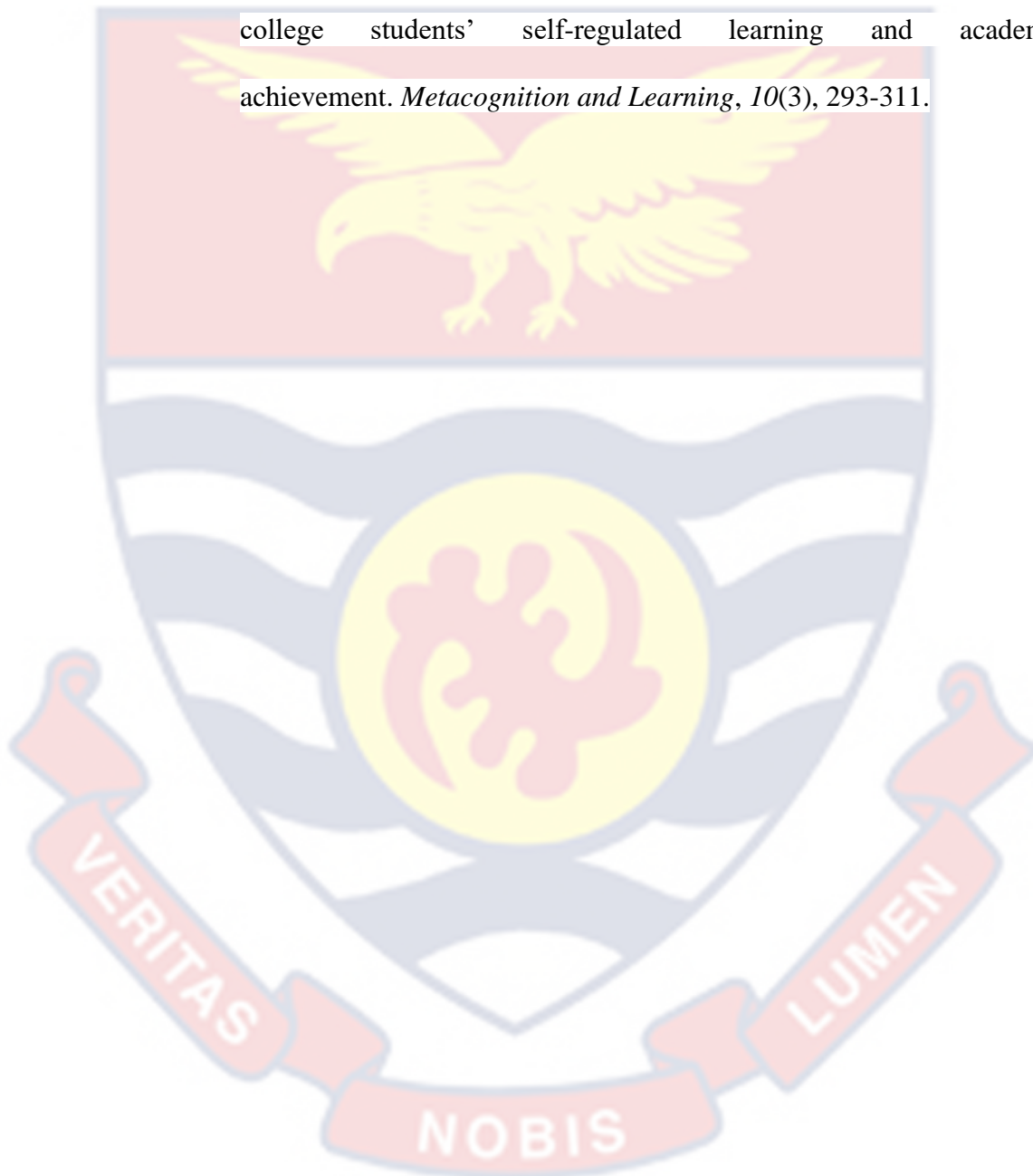
Vallerand, R. J., Blanchard, C., Mageau, G. A., Koestner, R., Ratelle, C., Léonard, M., Gagne, M., & Marsolais, J. (2003). Les passions de l'ame: On obsessive and harmonious passion. *Journal of Personality and Social Psychology*, 85(4), 756-767.

Vallerand, R. J., Paquet, Y., Philippe, F. L., & Charest, J. (2010). On the role of passion for work in burnout: A process model. *Journal of Personality*, 78(1), 289-312.

Von Culin, K. R., Tsukayama, E., & Duckworth, A. L. (2014). Unpacking grit: Motivational correlates of perseverance and passion for long-term goals. *The Journal of Positive Psychology*, 9(4), 306-312.

Watt, H. M., & Richardson, P. W. (2007). Motivational factors influencing teaching as a career choice: Development and validation of the FIT-Choice scale. *The Journal of experimental education*, 75(3), 167-202.

Wolters, C. A., & Hussain, M. (2015). Investigating grit and its relations with college students' self-regulated learning and academic achievement. *Metacognition and Learning*, 10(3), 293-311.



APPENDICES**APPENDIX A****Preservice Teaching Passion and Perseverance-Questionnaire****Dear Respondent,**

This online survey is to help the researcher to collect data on preservice teachers' passion to teach. The study is solely for academic purposes. Please, kindly provide sincere and objective responses to the questions. I assure you that any information provided will be treated as strictly confidential.

SECTION A: Demography of Preservice Teachers

Please, type or click to put a checkmark (√) where appropriate in the box corresponding to your choice concerning each statement.

1. Sex:

a. Male []

b. Female []

2. Age:

.....

.....

3. Prior Teaching Experience (in formal school) Yes []

No []

4. Programme of Study:

a. Management []

b. Accounting []

SECTION A: Preservice Teachers' Passion to Teach

Indicate the extent to which you agree or disagree with the following statements by ticking **1=Strongly Disagree (SD)**, **2=Disagree (D)**, **3=Neutral (N)**, **4= Agree (A)**, and **5=Strongly Agree (SA)**.

SN	Items	SD	D	N	A	SA
		1	2	3	4	5
	Harmonious Passion Scale					
1	Becoming a teacher drives me to do equally interesting activities.					
2	I can see myself as a teacher as I move to higher levels of education.					
3	I gain memorable experiences as I go through my teacher education subjects.					
4	My family wants to see me become a successful teacher someday.					
5	My teachers look forward to my pursuit of a teaching career					
6	I love teaching as I can do other things simultaneously.					
7	My talents will be of good use when I eventually teach.					
8	While studying in college, I can balance fun and studies.					
9	I think I will enjoy teaching.					

10	I will gain a sense of fulfilment when I start teaching.					
11	I believe that passionate teachers are good teachers.					
12	I believe I can be a source of inspiration to others.					
13	I believe teaching is like organising a show.					
14	I believe that teachers must put their students as the focus of learning.					
15	I make sure that whatever happens, I come to class on time.					
16	My schooling in college will be meaningless if I will not become a teacher.					
17	I CAN NOT imagine myself doing an administrative job.					
	Obsessive Passion Scale					
18	I believe that teachers exist to serve their students.					
19	I feel elated when I start imitating my favourite teacher.					
	I have a strong urge to become a good teacher someday.					

21	I am engrossed with the idea of people listening to me when I talk.					
22	I will feel incomplete if I think I can never become a teacher.					
23	I like extending help to my classmates even when it is late.					
24	I am too exacting in my schoolwork.					
25	As I grow in the teaching profession, I will commit to my teaching motto.					
26	I am NOT very excited about becoming a teacher.					
27	I enthusiastically attend all my classes.					
28	A teacher works hard to be a good example to the students.					
29	I will not leave the teaching profession if I have a choice.					
+	I get upset when I miss a class.					
31	I believe that teaching ends after class hours.					

SECTION B: Preservice Business Teachers' Perseverance to Teach

Indicate the extent to which you agree or disagree with the following statements by ticking **1=Strongly Disagree (SD)**, **2=Disagree (D)**, **3=Neutral (N)**, **4= Agree (A)**, and **5=Strongly Agree (SA)**.

SN	Items	SD	D	N	A	SA
1	I will finish whatever I begin in teaching.					
2	Setbacks in teaching will not discourage me.					
3	I will be a diligent teacher.					
4	I am a hard worker.					
5	I will work harder no matter what to achieve a goal in teaching.					
6	I will overcome setbacks in teaching.					

APPENDIX B

A Copy of the Ethical Clearance Letter

UNIVERSITY OF CAPE COAST

INSTITUTIONAL REVIEW BOARD SECRETARIAT

TEL: 0558093143 / 0508878309
 E-MAIL: irb@ucc.edu.gh
 OUR REF: UCC/IRB/A/2016/1227
 YOUR REF:
 OMB NO: 0990-0279
 IORG #: IORG0009096

26TH JANUARY, 2022

Ms. Abigail Kyeremaa
 Department of Business and Social Sciences Education
 University of Cape Coast

Dear Ms. Kyeremaa,

ETHICAL CLEARANCE – ID (UCCIRB/CES/2021/166)

The University of Cape Coast Institutional Review Board (UCCIRB) has granted Provisional Approval for the implementation of your research titled **Assessment of Preservice Business Teachers' Passion and Perseverance for Teaching: A preliminary Requirement**. This approval is valid from 26th January, 2022 to 25th January, 2023. You may apply for a renewal subject to submission of all the required documents that will be prescribed by the UCCIRB.

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

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

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

Yours faithfully,

Samuel Asiedu Owusu, PhD

UCCIRB Administrator

ADMINISTRATOR
 INSTITUTIONAL REVIEW BOARD
 UNIVERSITY OF CAPE COAST