UNIVERSITY OF CAPE COAST

PRESERVICE MANAGEMENT TEACHERS' SELF-EFFICACY AND ANXIETY ABOUT TEACHING PRACTICUM

PRINCE YEBOAH ASARE

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BY

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

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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: Prince Yeboah Asare

Supervisors' Declaration

We 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.

Principal Supervisor's Signature……Date……

Name: Prof. Cosmas Cobbold

Co-supervisor's Signature…….....Date……

Name: Dr. Joseph Tufuor Kwarteng

ABSTRACT

The study examined preservice management teachers' (PMTs) self-efficacy and anxiety about the teaching practicum. The repeated measures sequential explanatory design, follow-up explanations model were employed for the study. The census-extreme case sampling technique was used to obtain the respondents and participants for the study. The census involved 119 respondents in the quantitative phase of the study and the extreme case sampling selected eight deviant participants based on the quantitative findings for the focus group discussion. The adapted TSES and STAS, validated through CFA, were used to gather self-efficacy and anxiety data respectively. Data gathered from the follow-up focus group discussion guide was validated for trustworthiness. Descriptive (mean and standard deviation) and inferential (chi-square, repeated-measures ANOVA, factorial MANOVA, paired-samples t-test, binomial logistic regression and structural equation modelling) statistics were used to analyse the quantitative data, and template analysis for the qualitative data. Findings indicated that the PMTs were highly efficacious, chiefly influenced by passion. They experienced transient anxiety with supervision anxiety as the key anxiety-provoking factor characterised by contradictory and constant negative feedbacks. Self-efficacy had a significant negative influence on anxiety. Admission to teacher education programmes should focus on teaching passion inaddition to grades as the bases for considering applicants. As part of their training, preservice teachers should be engaged in sensitisation programmes to dispel their fears about the teaching practicum. Teacher training institutions should consider discarding the competency-based assessment with the use of the rating scale and use global assessment technique.

KEYWORDS

Anxiety

Confidence

Management

Preservice teacher

Self-efficacy

Teaching practice

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DEDICATION

To my wife Deborah, and son Prince Daniel

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LIST OF ACRONYMS

PMT	Preservice Management Teacher
ONCTP	On-Campus Teaching Practice
OFCTP	Off-Campus Teaching Practice
SHS	Senior High School
STAS	Student-Teachers Anxiety Scale
TSES	Teacher Sense of Efficacy Scale
ELT	Experiential Learning Theory
SEQ	Self-Efficacy Questionnaire
SES	Self-Efficacy Scale
STEBI-B	Science Teaching Efficacy Belief Instrument-Preservice
PSTE	Personal Science Teaching Efficacy
STOE	Science Teaching Outcome Expectancy
ANOVA	Analysis of Variance
PPMCC	Pearson Product Moment Correlation Coefficient
MSE	Mathematics Self-efficacy
MTSE	Mathematics Teaching Self-efficacy
CRTSE	Culturally Responsive Teaching Self-Efficacy
Grit-S	Short Grit Scale
STSE	Scale for Teacher Efficacy
EPQ	Eysenck Personality Questionnaire
TCHAS	Teacher Anxiety Scale
STSAQ	Student Teachers Sources of Anxiety Questionnaire
FLSTAS	Foreign Language Student-Teacher Anxiety Scale
EFL	English as a Foreign Language

PTSES	Prospective Teacher Self-efficacy Scale
MANOVA	Multivariate Analysis of Variance
SEM	Structural Equation Modelling
TEBS-Self	Teachers' Efficacy Beliefs System-Self
STAI	State-Trait Anxiety Inventory
DASS	Depression Anxiety Stress Scales
MARS	Mathematics Anxiety Rating Scale
MTEBI	Mathematics Teaching Efficacy Beliefs Instrument
FFGD	Follow-up Focus Group Discussion
AMOS	Analysis of Moment Structures
CFA	Confirmatory Factor Analysis
ML	Maximum Likelihood
AVE	Average Variance Extracted
TLR	Teaching Learning Resources
PAC	Percentage Accuracy Classification

CHAPTER ONE

INTRODUCTION

Evidence in educational literature in some parts of the world have shown that preservice teachers are anxious about the teaching practicum component of their programme. Such anxiety has been recognised as an unhealthy teaching state, for it is likely to negatively influence preservice teachers' quality of teaching in schools. It has also been assumed and argued with inadequate empirical evidence that preservice teachers' level of self-efficacy has a negative influence on their level of anxiety. This study, therefore, pays attention to Preservice Management Teachers' (PMTs') self-efficacy and anxiety by examining the extent to which these are manifested in the teaching practicum. It also establishes the causal relationship between PMTs' self-efficacy and anxiety about the teaching practicum.

Background to 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). Emphasizing what teacher education in Ghana must typify, Benneh (as cited in Asare & Nti, 2014, p. 1) indicated that "the mission of Ghana's teacher education is to provide a comprehensive teacher education programme through pre- and in-service training that would produce competent, committed, and dedicated teachers to improve the quality of teaching and learning". It is concerned with who (teacher educator), whom (preservice teacher), what (content) and how (teaching strategy); and covers subject content, pedagogy,

education and professional studies and teaching practicum (Lewin & Stuart, 2003).

In the preparation of teachers at the University of Cape Coast, preservice teachers go through a four-year training programme of eight semesters. Each semester covers 14 weeks. In relation to the management teacher education, the Department of Business and Social Sciences Education of the College of Education Studies provides training to students so that they can work as management teachers in both public and private Senior High Schools (SHSs). Included in the subject content courses of the programme are introduction to business; principles of management; principles of accounting; organisational behaviour; human resource management; business law; business communication; management information systems; principles of economics; elements of economics; international business; introduction to entrepreneurship; principles of marketing; operation management; company and partnership law; and financial management. These and other subject content courses provide a complete content knowledge to the PMTs as far as the SHS management teaching syllabus is concerned.

Knowledge in these content courses should enable the PMTs to teach the ten thematic areas which form the content of the SHS teaching syllabus for business management (Ministry of Education, Ghana, 2010). These thematic areas are nature of management; functions of management; management information technology; legal environment of business; finance and financial institutions; the role of government in the economy; international trade and problems of developing economies; globalization and economic integration; entrepreneurship and small business management; and functional areas of

management. Complete coverage of the content areas is expected before the start of the practicum. By implication, PMTs should have acquired deep knowledge and be comfortable to teach all the content in the Business Management syllabus for SHSs.

In order to transmit content to the students, the programme provides PMTs with pedagogical knowledge through the pedagogical courses. Pedagogical knowledge refers to the general set of methodologies and strategies that the teacher needs in order to carry out the teaching activity. It requires an understanding of cognitive, social and developmental theories of learning and how they apply to students in the classroom (Shulman, 1986; 1987). It consists of knowledge of classroom management, knowledge of teaching methods, knowledge of classroom assessment, lesson structure and teachers' adaptive knowledge in the classroom (Voss, Kunter, & Baumert, 2011). Pedagogical courses such as principles and practice of curriculum and instruction, curriculum studies in management, methods of teaching management, and assessment in education make the pedagogical knowledge readily available to the PMTs. In providing preservice teachers with an understanding of how students learn, issues are explored in education and professional studies courses such as educational psychology; special education; social and philosophical foundation of education; guidance and counselling; and history and management of education.

Other liberal arts courses such as African studies, communication skills, information literacy and general social issues such as HIV/AIDS studies and gender and development are also taught to complete the total knowledge development of the preservice teacher. The subject content courses, pedagogical

courses, and education and professional studies courses should build the preservice teachers' level of teaching self-efficacy. It should be noted that the four components of the teacher education programme is connected to Shulman's (1986) seven knowledge base: content knowledge, curriculum knowledge, general pedagogical knowledge, content knowledge, knowledge of the learner, knowledge of educational contexts, knowledge of educational goals and their philosophical bases, and pedagogical content knowledge. Tschannen-Moran and Woolfolk Hoy (2001, p. 783) defined teacher self-efficacy as a "teacher's judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated".

The teaching practicum exercise forms the climax of the entire teacher education programme. To adequately prepare preservice teachers for teaching, the University of Cape Coast, through its Centre for Teacher Professional Development of the College of Education Studies divides the teaching practice into two where practice starts on the University campus and is commonly referred to as On-Campus Teaching Practice (ONCTP) and ends in schools. This school experience is commonly referred to as Off-Campus Teaching Practice (OFCTP).

The ONCTP is carried out in the 6th semester of the teacher education programme. According to Cobbold (2019a), preservice teachers are first given an orientation before the start of the ONCTP. The orientation covers issues such as the philosophy of teaching practice in the College, scope of microteaching and the various stages of the exercise. Finally, the preservice teachers are made to understand how they would be assessed and the period for the exercise.

Expected professional behaviours including regular attendance at school, are spelt out to them and an open forum is then provided for the preservice teachers to ask questions, bring out their concerns and offer suggestions.

During the ONCTP, each preservice teacher is given the opportunity to teach their peers (serving as simulated senior high students) in a smaller class setting. The class is normally made up of 20 to 30 students and the practice carried out in the presence of two supervisors. The supervisors observe and score the teaching performance of the preservice teachers and engage them in post-teaching discussions to point out their weaknesses and strengths. During the assessment, supervisors allow the peers of the preservice teachers to also critique their teaching performance. The assessment of the supervisors and peers of the preservice teachers allow for a complete objective appraisal of the preservice teachers. However, the scores awarded to the preservice teachers are usually not influenced by their peers' assessment. The simulated nature of the ONCTP calls for a real teaching context. It is in this real classroom context that preservice teachers are able to transfer their knowledge and skills acquired from the ONCTP; hence, the essence and need of the OFCTP.

The OFCTP follows the ONCTP in the 7th semester of the teacher education programme. Like the ONCTP, an orientation is provided to them which covers the university's philosophy of teaching, scope of teaching practice, a minimum number of supervisions each preservice teacher is expected to have, required professional behaviours, record keeping on the part of student teachers and nature of assessment (Cobbold, 2019b). The different stages of the lesson observation discussion namely, pre-observation discussion, actual observation and post-observation discussion are carefully explained. The

orientation ends with an open forum provided to address any concerns the preservice teachers might have. Similar orientation is provided for the supervisors and mentors.

The preservice teachers are then allowed to practice in various SHSs in the country. Normally, in these practising schools, head teachers allow the PMTs to teach the first and second-year students. This is because the third-year students are by then being prepared for their final external examination. It is expected that the confidence of the PMTs should be at its peak during the OFCTP, in that, they have had knowledge both in theory and practice (DeCleene Huber et al., 2015; Chernoff, 2018). DeCleene Huber et al. (2015) realised that subject content knowledge increases confidence in teaching. In Zimbabwe, Mudavanhu and Zezekwa (2012) found a positive relationship between confidence in teaching science and knowledge of the nature of science among preservice teachers. A similar positive relationship was identified between self-efficacy and subject content knowledge (Salbach, Jaglal, & Williams, 2013). Hence, the argument put forward by Russell-Bowie (2012) that increasing subject content knowledge and teaching competence can reduce fear and anxiety in teaching. According to Kyriacou (2001), teaching anxiety is the tension, anger and frustration emanating from aspects of a teacher's work.

It is anticipated that preservice teachers' confidence would further increase during the OFCTP in view of the fact that one supervisor is normally present in their classes as compared to two during the ONCTP. Also, as already indicated, every information they need about the OFCTP is provided during the orientation. Such a well-structured programme is equally observed in other teacher education programmes across the globe to provide preservice teachers

with the ability to confidently teach. However, literature provides evidence that preservice teachers are anxious when they take up the teaching practicum with an assumed corresponding tendency of low confidence.

Statement of the Problem

Ideally, it is expected that preservice teachers would exhibit high levels of confidence during teaching practicum. This confidence is expected to be developed and mastered gradually as preservice teachers go through the teacher education programme which prepares them for the teaching profession.

Maynard and Furlong (1995), however, noted that in the process of learning to become a teacher, preservice teachers demonstrate concerns throughout the stages of their development. These stages are early idealism, survival, recognising difficulties, and moving on. At the stage of early idealism, the preservice teachers have concerns (conceptualised as anxiety) about the kind of teacher they want to be. This ideal picture fades during the practicum when they enter the stage of survival where they encounter classroom realities. They usually face problems in classroom management and control, and show confusion about the actions they must take as teachers. Next, at the stage of recognising difficulties, they become sensitive to diverse demands expected from them. They are generally ready to give an impressive performance but their confidence, being the concept of self-efficacy, is usually shaken as they become so cautious about their teaching performance.

After few weeks, the preservice teachers find workable ways of teaching, the stage of hitting the plateau, but they are self-focused rather than student-focused. Finally, they get to the stage of moving on where they begin to show concerns for students' learning. They exhibit shallow level of reflection

in promoting professional development. According to Furlong (2000), the worries or anxieties that preservice teachers' exhibit are due to the fact that they are not able to develop practical theoretical knowledge and concepts of how to deal with classroom issues. Hence, the teacher education programmes have focused on developing preservice teachers' pedagogical content knowledge.

Campbell and Uusimaki (2006) noted that when teacher education programmes provide preservice teachers with increasing knowledge and skills, anxiety that would be experienced during teaching practice will decrease. Csizér and Piniel (2013) and Azimi (2018) documented that a low degree of such anxiety is normal and even necessary in the practicum. But Ekşi and Yakışık (2016) noted that high levels of teaching anxiety may cause high levels of stress, failure and disappointment in preservice teachers. However, the observation of Campbell and Uusimaki (2006) have been grossly challenged by the evidence put forth by Sanderson (2003) and Merc (2015a; 2015b) that preservice teachers are faced with increasing anxiety.

Ngidi and Sibaya (2003, p. 18), summarising evidence in previous studies which measured student teachers' anxiety about the teaching practicum, stated that "student teachers worldwide are anxious about evaluation". If this is true then it is only appropriate to examine the level of preservice teachers' anxiety about the teaching practicum, not only about evaluation but also the other components (class control, professional preparation, school staff and unsuccessful lesson) of the Student Teachers Anxiety Scale (STAS). These research findings suggest the need to examine preservice teachers' anxiety about the teaching practicum before they are launched into it.

Knowledge of such anxiety might afford teacher educators the opportunity to determine the extent to which preservice teachers are likely to be successful (or not) in their professional practice. Measures can then be appropriately employed to address their level of anxiety when known. This is particularly important if any remarkable efforts are expected from them in their bid to promote the learning of their students, after going through a stressful 3-4 year teacher education programme. Researchers have, therefore, paid keen attention to empirically discover the levels of anxiety among preservice teachers pursuing different programmes in different continents, through the use of different research approaches to comprehend the magnitude of the phenomenon.

For studies conducted within the past two decades, literature search found four studies in Asia (Agustiana, 2014; Mosaddaq, 2016; Soriano, 2017; Halet, & Sanchez, 2017). In North America, studies that were found are by Gelman (2004), Hong and Greene (2011), Ferguson, Frost and Hall (2012), and Gresham and Burleigh (2018). No study was found in South America. In Australia, only one study (Campbell & Uusimaki, 2006) was found. In Europe, nine studies were found: Peker (2009); Merc (2011; 2015b); Paker (2011); Bilali and Tarusha (2015); Szymańska-Tworek and Turzańska (2016); Ekşi and Yakışık (2016); Önder and Öz (2018); and Can (2018). In Africa, studies found were that of Ngidi and Sibaya (2003), Kiggundu and Nayimuli (2009), Boadu (2014), Otanga and Mwangi (2015) and Kwarteng (2018).

However, there are important gaps in previous research. First, of the five studies found in Africa, two (Ngidi & Sibaya, 2003; Kiggundu & Nayimuli, 2009) of them were in South Africa; two were in Ghana (Boadu, 2014; Kwarteng, 2018) and one in Kenya (Otanga & Mwangi, 2015). Boadu's (2014)

study was not an empirical study but a meta-analysis of extant studies on preservice teachers' anxiety about the teaching practicum. Kwarteng's (2018) study alone cannot give a better understanding of the situation in Ghana. Findings of studies outside Ghana cannot also describe the situation in Ghana because factors that affect teaching anxiety are culture-specific (Ekşi, & Yakışık, 2016). While most of the studies basically reported that preservice teachers are anxious about the teaching practicum, it was made explicit in Merc's (2015b) study that preservice teachers were moderately anxious about items in the STAS.

In terms of the programme of study, most of the researchers (e.g. Ngidi & Sibaya, 2003; Gelman, 2004; Campbell, & Uusimaki, 2006; Kiggundu & Nayimuli, 2009; Merc, 2015b) focused on the anxiety of preservice teachers' generally during the teaching practicum. The anxiety of preservice English teachers was also captured in some of the studies (e.g. Merc, 2011; Paker, 2011, Agustiana, 2014; Szymańska-Tworek, & Turzańska, 2016; Ekşi, & Yakışık, 2016; Mosaddaq, 2016, Can, 2018). Other studies covered preservice teachers in the subject areas of mathematics (Peker, 2009); Science (Hong & Greene, 2011; Önder & Öz, 2018) and accounting (Kwarteng, 2018). No evidence was found on preservice teachers who majored in teaching Business Management, the target group for the current study. Merc (2015b) indicated that subject taught might present some level of anxiety to preservice teachers. This could be the case if PMTs find the subject difficult as compared to other subjects. Anecdotal evidence the researcher gathered through informal observations of the behaviour of PMTs in their methods class projected their fears for the teaching practicum and seemed to back these fears to the difficulty level of the

management programme.

A review of the literature showed that different research approaches were employed by previous researchers to examine the anxiety of the preservice teachers. Most of the studies (e.g. Ngidi & Sibaya, 2003; Gelman, 2004, Peker, 2009; Ferguson et al., 2012; Otanga & Mwangi, 2015; Merc, 2015b; Mosaddaq, 2016; Soriano, 2017, Önder & Öz, 2018) employed the quantitative approach. Others (e.g. Campbell, & Uusimaki, 2006; Gunning & Mensah, 2011; Merc, 2011; Hong & Greene, 2011; Mosaddaq, 2016; Szymańska-Tworek, & Turzańska, 2016; Halet & Sanchez, 2017; Gresham & Burleigh, 2018; Can, 2018) also employed the qualitative approach. In order to seek elaboration of the quantitative findings, some of the researchers (e.g. Paker, 2011; Agustiana, 2014; Ekşi, & Yakışık, 2016) added on the qualitative approach. However, the use of the two approaches did not meet the criteria of mixed methods research as espoused by Teddlie and Tashakkori (2009) and Creswell and Plano Clark (2011). These scholars emphasised that the integration of quantitative and qualitative data is critical in any mixed methods study. Hence, if integration is not well executed, a study is assumed to have employed multiple methods. As a departure, the current study adequately combines quantitative and qualitative methods in a mixed methods approach within the pragmatist philosophy to examine PMTs' level of anxiety about the practicum.

Also, the findings of some of the studies (e.g. Ngidi & Sibaya, 2003; Agustiana, 2014) that employed the quantitative methods cannot completely be relied on due to errors found in the sampling. Either the sampling technique was not indicated or a non-probability sampling technique was used. The use of most inferential statistical tools requires random selection of participants (Pallant,

2005; Field, 2009). In addition, parametric statistical tools can only be used when the normality assumption is met, among other assumptions. Evidence of such an assumption is important but almost all the studies did not provide such evidence in their reports. This, therefore, makes it suspicious whether those assumptions were met before the application of the various parametric statistical tools.

In terms of content, it is assumed that preservice teachers' anxiety is likely to be influenced by their level of self-efficacy. If preservice teachers gain adequate knowledge during their coursework, then they are likely to build confidence and believe in themselves (self-efficacy) (Campbell & Uusimaki, 2006). Consequently, their anxiety is likely to decrease. It is, therefore, important to establish the relationship between preservice teachers' level of self-efficacy and anxiety, by indicating the extent to which self-efficacy influences the level of anxiety. Studies (e.g. El-Okda & AlHumaidi, 2003; Çubukçu, 2008; Gresham, 2008; Güngör & Yaylı, 2012; Tsai, 2013; Merc, 2015a; Tahsildar & Kabiri, 2019) which focused on these two variables only established correlation with contradictory findings (positive, negative and no relationship). However, three qualitative studies (Gunning & Mensah, 2011; Szymańska-Tworek, & Turzańska, 2016; Halet & Sanchez, 2017) inferred such a causal relationship from their qualitative evidence. This means that no causal relationship has yet been established where a regression analysis has been examined on these two constructs. Hence, this study considers the causal relationship between preservice teachers' levels of self-efficacy and anxiety.

Purpose of the Study

The study adopted the repeated measures sequential explanatory mixed methods design to examine the levels of self-efficacy and anxiety of PMTs about teaching practicum in the University of Cape Coast. Both quantitative and qualitative data were gathered for the study following the stated design. The essence was to provide elaboration and clarification of PMTs' levels of self-efficacy and anxiety about the teaching practicum and establish the causal relationship between self-efficacy and anxiety. Based on this purpose, specific research objectives were formulated.

Research Objectives

The specific research objectives were to:

1. assess preservice management teachers' level of self-efficacy (i.e. instructional strategies efficacy, class management efficacy and student engagement efficacy) about the on-campus teaching practicum.
2. assess preservice management teachers' level of anxiety about the on-campus teaching practicum.
3. ascertain whether significant differences exist in the self-efficacy level of preservice management teachers before and after their on-campus teaching practicum.
4. ascertain whether significant differences exist in the anxiety level of preservice management teachers before and after the on-campus teaching practicum.
5. examine whether there are significant differences in preservice management teachers' levels of self-efficacy and anxiety about the on-campus teaching practicum based on their sex, age, prior teaching

experience and intention to teach.

6. establish whether preservice management teachers' self-efficacy significantly influence their anxiety about the on-campus teaching practicum.

Research Questions

In order to address the problem at hand, the following research questions were stated to guide the study:

1. What is preservice management teachers' level of self-efficacy (i.e. instructional strategies efficacy, class management efficacy and student engagement efficacy) about the on-campus teaching practicum?
2. What is preservice management teachers' level of anxiety about the on-campus teaching practicum?

Research Hypotheses

In order to establish the extent to which demographic characteristics of the preservice management teachers were likely to influence their levels of self-efficacy and anxiety about the teaching practicum, the following hypotheses were formulated and tested:

1. H_0: There is no statistically significant difference in the self-efficacy level of preservice management teachers before and after their on-campus teaching practicum.

   H_1: There is a statistically significant difference in the self-efficacy level of preservice management teachers before and after the on-campus teaching practicum.

   Alternatively,

   $H_0: \mu_1 - \mu_2 = 0$

$H_1: \mu_1 - \mu_2 \neq 0$

where μ_1 and μ_2 are the population means of self-efficacy in Time 1 and Time 2 respectively.

2. H_0: There is no statistically significant difference in the anxiety level of preservice management teachers before and after the on-campus teaching practicum.

   H_1: There is a statistically significant difference in the anxiety level of preservice management teachers before and after the on-campus teaching practicum.

   Alternatively,

   $H_0: \mu_1 - \mu_2 = 0$

   $H_0: \mu_1 - \mu_2 \neq 0$

   where μ_1 and μ_2 are the population means of practicum anxiety in Time 1 and Time 2 respectively.

3. H_0: There is no statistically significant difference in preservice management teachers' levels of self-efficacy and anxiety about the on-campus teaching practicum based on their sex, age, teaching experience and intention to teach.

   H_1: There is a statistically significant difference in preservice management teachers' levels of self-efficacy and anxiety about the on-campus teaching practicum based on their sex, age, prior teaching experience and intention to teach.

   Alternatively,

   $H_0: \mu_1 = \mu_2 = \mu_3 = \mu_4$ (population mean vectors are equal)

   $H_1: \mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4$ (population mean vectors are not equal).

4. H_0: There is no statistically significant influence of preservice management teachers' self-efficacy (instructional strategies efficacy, class management efficacy and student engagement efficacy) on their anxiety about the on-campus teaching practicum.

   H_1: There is a statistically significant influence of preservice management teachers' self-efficacy (instructional strategies efficacy, class management efficacy and student engagement efficacy) on their anxiety about the on-campus teaching practicum.

Significance of the Study

The findings from the study demand the attention and actions of key stakeholders such as preservice teachers, teacher educators, Quality Assurance Unit of the University and Centre for Teacher Professional Development.

The study discovered that self-efficacy has a negative influence on teaching anxiety. This finding, alerts preservice teachers, especially PMTs, about the need to build and strengthen their knowledge as far as teaching is concerned. They would, therefore, be much interested in learning the basic teaching tasks and its associated techniques to build high levels of teaching self-efficacy. This would mean developing self rather than focusing on contextual factors that they might basically have no control on.

Teacher educators are informed that preservice teachers encounter much anxiety in the area of supervision and professional preparation. Focused training of the preservice teachers is therefore required in these two areas to promote a quality climate for professional development. This is intended to improve the quality of the training provided to them.

The high anxiety experienced by the PMTs as found in this study alerts the Quality Assurance Unit to the need to monitor the training of PMTs and other preservice teachers of the University to ensure that training practices are well executed to boost the confidence of preservice teachers and reduce their teaching anxiety. This would help to keep teaching practicum activities under control.

The implementation, management and evaluation of the practicum for preservice teachers in the University of Cape Coast lie in the hands of the Centre for Teacher Professional Development of the University. The study brings to their attention some inefficiencies in the training of the PMTs. These inefficiencies came from practices adopted by some teacher educators and mainly the teaching practice supervisors. These inefficiencies were found in the preparation of lesson plans, use of teaching and learning resources, and professional behaviours of supervisors. Hence, attention is drawn to the employment of some harmonising measures in order to address these inefficiencies to reduce PMTs' teaching anxiety.

Delimitation

The study focused on PMTs' level of self-efficacy and anxiety about the teaching practicum in the University of Cape Coast. The study considered only University of Cape Coast due to the controlled environment it provided in examining the PMTs' self-efficacy and anxiety. All the preservice teachers had gone through the same management teacher education and were taught by the same teacher educator on the methods of teaching management. They were also exposed to similar physical practicum environment with relatively same temperature. Hence, these naturally controlled conditions provided the

opportunity to examine them and compare differences in their self-efficacy and anxiety about the teaching practicum. The PMTs were those trained on the regular stream of the management teacher education programme. Only Level 300 PMTs for the 2018-2019 academic year were involved in the study. This year group of the preservice teachers were the cohort who were yet to begin their teaching practicum at the time of the study.

Data were gathered from them on their ONCTP which prepared them for the OFCTP. In measuring their anxiety, the focus was placed on five areas as espoused by the STAS. These areas are evaluation, class control, professional preparation, school staff and unsuccessful lesson anxiety. This standardised scale has been employed by previous researchers to examine preservice teachers' level of anxiety in different subject areas. Any other external variables that are likely to influence PMTs' levels of self-efficacy and anxiety were not considered.

In determining the demographic characteristics of the PMTs that had the potential of influencing their anxiety, the study focused on age, sex, prior teaching experience and desire to take teaching up as a career. It did not focus on other characteristics such as the type of learners, department relationship, and other psychological traits of the respondents apart from their level of self-efficacy. In relation to their levels of self-efficacy, the Teacher Sense of Efficacy Scale (TSES) was used. It had only three factors: instructional strategies efficacy, classroom management efficacy and student engagement efficacy.

Limitations

The study suffered from few limitations considered worthy to mention. First, the measure of self-efficacy was not based on the National Teaching Standards (NTS) for Ghana (standards based on professional values and attitudes, professional knowledge and professional practice). The NTS were developed by the National Teaching Council (NTC), Ghana with support from UK aid through Transforming Teacher Education and Learning (T-TEL) and the Japan International Cooperation Agency (JICA) in 2017 and implemented in 2018. The reason for not using the NTS is that the PMTs used in the study did not go through a curriculum which was developed based on the said standards. Hence, the study incorporated the standards in the University of Cape Coast as found on their teaching practice assessment tool. It must be noted that efficacy cannot be measured in a vacuum; it must be based on a particular training offered and received.

Next, self-efficacy cannot be considered as the only variable that influences teaching anxiety and this might have resulted in the relatively low predictive power of self-efficacy on teaching anxiety found in the study. More independent variables in a model enhance the R squared and hence the predictive power of the model. Also, the relatively small population size might have limited the validity of the results. Hence, the use of the bootstrap samples to enhance the statistical estimates.

Again, the inability of the researcher to use Winsteps (Rasch analysis) tool to analyse the Likert scale data was also considered as a limitation since Winsteps maximises the homogeneity of the measured trait than the mean and standard deviation on a Likert scale. The researcher lacked the expertise to use

it. However, the measured trait was appropriately validated through confirmatory factor analysis and internal consistency checks. Finally, the use of one focus group of eight members might have limited further rich information that would have been obtained to explain and elaborate on the levels of PMTs' self-efficacy and anxiety about the teaching practicum. However, the extensive focus group discussion provided the required explanations.

Definition of Terms

The following terms are defined as used in the study to facilitate readers' comprehension. These are:

Management: This term is used in this study to mean Business Management course and not educational management or otherwise.

Preservice teachers: These are students who are being trained on an educational programme to be professional teachers. Preservice teachers are also referred to as student-teachers.

Preservice management teachers: These are preservice teachers who are being trained to teach business management at senior high school level.

Practising schools: These are schools where these preservice teachers are placed during the seventh semester of the programme to practice the art and science of teaching.

Practice supervisors: These are personnel (normally lecturers and senior research assistants) assigned to observe and train preservice teachers to practice teaching

Teaching practice: An experiential and social learning environment provided for preservice teachers to learn how to professionally teach.

Practicum: The term is used interchangeably with teaching practice.

Prior teaching experience: defined to mean whether preservice teachers had taught in a formal school before being admitted into the teacher education programme and not the number of years they had taught in a formal school.

Teacher educators: These are the lecturers who also serve as supervisors of the preservice teachers during the teaching practice exercise.

Professional teacher: A teacher who has gone through an accredited teacher education programme and licensed to teach. Hence, possesses both content and pedagogical skills.

Respondents: Used to describe the preservice management teachers who provided the quantitative data.

Participants: Used to describe the preservice management teachers who were involved in the focus group discussion.

Intention to teach: used to describe preservice management teachers' desire to take up teaching as a career.

Sex: used interchangeably with gender to mean male and female only.

Organisation of the Study

The study is organised into five chapters. Chapter One covers the introduction of the study. It presents the background to the study, statement of the problem, purpose of the study, research questions, research hypotheses, significance of the study, delimitation, limitations and ends with the organisation of the study. Chapter Two discusses the relevant literature relating to the study. It is organised under the theoretical framework and empirical review. Chapter Three also covers the methodological approach of the study. It describes the research methods employed to address the research problem. It comprises research design, the study context, population, respondents and

participants, data collection instruments, test for validity and reliability, data collection procedures, ethical consideration and data processing and analysis. Chapter Four focuses on the results of the data collected and their discussions. It first presents the quantitative results, followed by the qualitative results. It then presents the discussion where both quantitative and qualitative data are integrated to holistically understand and address the problem. Chapter Five deals with the summary, conclusions, recommendations contribution to knowledge and ends with suggestions for further research.

CHAPTER TWO

LITERATURE REVIEW

Overview

The previous chapter raised issues of preservice teachers' anxiety experienced in different parts of the world. It argued for the need for examining preservice teachers' self-efficacy that is likely to influence their level of anxiety. The study explains and elaborates on PMTs' self-efficacy and anxiety about the teaching practicum. This chapter, therefore, provides an in-depth understanding of the variables (self-efficacy and anxiety). It reviews literature on studies conducted by other researchers that were considered significant to the study. The review of the literature allowed comparison of the findings of this study with other similar studies to provide a basis for confirming or refuting earlier findings and conclusions and also for situating the current study.

The chapter is divided into theoretical framework and empirical review. Under the theoretical framework, the following were considered: self-efficacy theory; sources of self-efficacy; teacher self-efficacy; measuring preservice teachers' self-efficacy; processing efficiency theory; teaching anxiety; and measuring preservice teachers' anxiety. The conceptual framework, efficacy-anxiety construct, which guides the study follows. In the empirical review, related studies are reviewed.

Theoretical Framework

The study is located within Bandura's (1997) self-efficacy theory and Eysenck's (1979) processing efficiency theory. These theories, thus, provide the direction and focus of this study.

Self-Efficacy Theory

Self-efficacy theory is one of the social cognitive theories developed by Bandura (1977). To Bandura, self-efficacy serves as the foundational motivational force behind one's actions and the level to which an action is undertaken depends on one's level of self-efficacy. Bandura stated that people develop specific beliefs concerning their coping ability to execute a task, what he called "self-efficacy" and defined self-efficacy as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3).

Self-efficacy, therefore, is a type of cognitive evaluation which every individual conducts over his/her own competence (Sebastian, 2013). It is neither an ability, a trait nor self-esteem (Maddux & Kleiman, 2019). Maddux and Kleiman explained that self-efficacy is not ability; rather it is the belief in one's ability that a task can be successfully performed. It is not a trait, in that certain people have not been categorized as having high self-efficacy and others low self-efficacy (Stajkovic & Luthans, 1998; Maddux & Kleiman, 2019). However, people have beliefs about specific goals and life domains. The beliefs held are motivational forces that drive people to achieve success, hence self-efficacy seen as the foundational motivational force. Also, self-efficacy differs from self-esteem in that the latter is the extent to which one believes to be good and worthwhile, but the former is the self-confidence to achieve and perform well in a specific aspect of life. The relationship between self-efficacy and self-esteem is that self-efficacy influences self-esteem such that how well one feels about self is determined by the confidence in one's ability to perform specific aspects of life activities to achieve desired goals.

As an illustration of self-efficacy, if a person believes in performing well in school, then the person is perceived to have high academic self-efficacy. If a teacher believes he/she can teach very well then high teacher self-efficacy is being demonstrated. Highly self-efficacious individuals may prompt achieving tasks that surpass their capacities, while lowly self-efficacious individuals may bring about the underestimation of capacities, in this manner, prompting underachievement (Bandura, 1982). Accordingly, the probability that a specific task will be completed successfully is intensified by an individual's perception of the capabilities to effectively perform the task (Sure, 2009). Schwarzer and Hallum (2008) identified three key features differentiating self-efficacy from other constructs (e.g. self-concept, locus of control, self-esteem).

1. Self-efficacy implies an internal attribution (I am the cause of the action)
2. It is prospective, referring to future behaviour, and
3. It is an operative construct, which means that this cognition is quite proximal to the critical behaviour, thus being a good predictor of actual behaviour (p. 154).

Bandura' self-efficacy theory has been utilized as a predictive power in determining human behaviour even in the midst of difficulties. Graham, Harris, Fink and MacArthur (2001) confirmed that self-efficacy is a good predictor of teacher behaviour. Henson (2001) was of the view that self-efficacy has been noted to be a strong predictor of both current behaviour and the effect of treatments on behaviour change. Extant studies (Tschannen-Moran &Woolfolk Hoy, 2001; Knoblauch & Hoy, 2008) have found that people with a high sense of self-efficacy set high goals and demonstrate high commitment towards the achievement of the goals. Pajares (2002) noted that human behaviours are often

directed by perceptions of self-efficacy rather than true capabilities. According to Bandura (1986), self-referent thought intervenes among knowledge and action and through self-reflection people assess their own experiences and thought processes. Knowledge, skill, and earlier achievements are often poor indicators of ensuring accomplishments on the grounds that beliefs that people hold about their capacities and about the result of their efforts strongly impact the ways by which they will behave (Pajares, 1996). Therefore, belief is a stronger predictor than knowledge in determining one's approach to a problem or task. The strong effect of a person's confidence to perform a specific task or behaviour has made self-efficacy of particular interest to educational researchers (Albion, 1999). In the social-cognitive theory, self-efficacy is appreciated as a resource with regard to personality study and stress vulnerability (Sebastian, 2013). The theory is focused on the relevance of the cognitive process on the emotional level as well as on the behavioural level. Bandura (1997), therefore, stated that a resilient sense of self-efficacy can help to reduce anxieties associated with performing tasks.

Sources of Self-Efficacy

Bandura (1997) states that there are four key sources that influence self-efficacy. These are enactive mastery experiences, vicarious experiences, verbal persuasion and physiological and affective states. These sources provide the most authentic evidence of one's potential to succeed deemed to have the most influence on self-efficacy.

Self-efficacy is enhanced through enactive mastery experiences where an individual performs a task. Blanch (2016) noted that mastery experiences through service learning, practice teaching, or embedded in the school-based

course give singular proof of their capacity to organize and execute the course of action required to attain an objective. It is essential that preservice teachers are made to experience first the art of teaching during the course work. This is because enactive mastery experiences are regarded as the most powerful influence as they give real evidence of one's performance in a teaching condition (Bandura, 1997; Mulholland & Wallace, 2001). Even though the content of teacher education programmes are important, the real teaching experience is the most powerful activity that shapes an individual's confidence in their abilities (Tschannen-Moran et al., 1998). Pendergast et al. (2011) and Ghaderi and Salehi (2011) argued that a teacher's success in performance leads to a high level of self-efficacy while a failure produces a decrease in self-efficacy. However, occasional failure after several mastery experiences should not affect a person's self-efficacy beliefs (Schunk & Usher, 2011).

Vicarious experiences also provide a wonderful avenue through which self-efficacy is developed. They are experiences in which an individual observes the performance of others who are believed to have comparable capabilities (Cone, 2009). In vicarious experiences, the target activity is modelled by a different person as the learner observes to develop efficacy (Tschannen-Moran & Woolfolk Hoy, 2007). The extent to which the observer or learner identifies with the model determines the impact of the modelled performance on the observer's efficacy beliefs (Tschannen-Moran & Woolfolk Hoy, 2007). Bandura (1986) detailed that "people persuade themselves that if others can do, they should be able to achieve at least some improvement in performance" (p. 399). If others can perform new or challenging tasks successfully, people are inclined to believe they too are more likely to succeed

in the task (Schunk & Usher, 2011). Vicarious experiences are well enforced in social cognitive theories as espoused in Vygotsky's theory of cognitive development (Vygotsky, 1978). In Vygotsky's scaffolding, learning occurs when the behaviour is first modelled for the observer to learn after which independent action can be performed by the observer (Lantolf, 2005). If teacher educators model good teaching behaviours to preservice teachers, then high self-efficacy would be developed. What we learn and how we make sense of knowledge depends on where and when, such as in what social context we are learning (Yang & Wilson, 2006). Opportunities to learn vicariously through models have been found to have a positive impact on the development of preservice teachers' efficacy (Bandura, 1997; Lee, 2002). Additionally, vicarious experiences provide preservice teachers with an opportunity to learn effective strategies for managing the task demands (Tschannen-Moran & McMaster, 2009).

Verbal persuasion also serves as the third self-efficacy influencing factor. It is mostly experienced by an individual from words of encouragement or discouragement from others. Blanch (2016) noted that in teacher education, verbal persuasions are the verbal feedback that preservice teachers receive from their teachers and other people in their social environment which promotes their success or contributes to their lack of self-efficacy. Encouragement from teacher educators and other peers along with evaluative, positive feedback about performance may raise preservice teachers' self-confidence in accomplishing a task in a related domain (Usher & Pajares, 2008). Supportive messages can serve to reinforce a preservice teacher's effort and self-confidence, chiefly when accompanied by conditions and enabling environment that help bring about

success (Hattie & Timperley, 2007). Especially, in order to be effective, social persuasions should be genuine (Britner & Pajares, 2006). Bandura (1997), however, cautions that it is often easier to erode a preservice teacher's self-efficacy with negative comments than to enhance it with positive messages. An observation that should be well-thought-out when offering feedback (Britner & Pajares, 2006).

Finally, physiological and affective states determine one's level of self-efficacy. Physiological and affective states refer to those physical and emotional responses experienced due to stress, fear, and/or anxiety. To Bandura (2004), the human body informs the owner of such behavioural tendencies which may not be evident on the surface. Bandura (1986) specified that most people judge or consider their capacity to perform an action based on cognitive evaluation. For example, when an individual perceives fear, stress, fatigue and pain, the body will appear threatened and vulnerable-signs of doubt in the ability to perform an assignment becomes evident (Bandura, 1986). Negative emotional tendencies, such as stress or anxiety, may reduce self-efficacy beliefs whereas positive tendencies such as good mood, may heighten self-efficacy beliefs (Kiili, Kauppinen, Coiro, & Utriainen, 2016). The feelings of pleasure or joy a preservice teacher experiences from teaching a successful lesson may increase a sense of efficacy, but high levels of stress or anxiety accompanied by a fear of losing control might result in lower self-efficacy beliefs (Tschannen-Moran & Woolfolk Hoy, 2007). Bandura (1997) therefore stressed that it is prudent to develop self-efficacy at early stages for one to be able to persist in the midst of negative emotional states. It also noted that ensuring strong efficacy beliefs early in one's teaching career is very important (Tschannen-Moran & Johnson,

2010).

Teacher Self-Efficacy

The conceptualisation of teacher self-efficacy has not been different among various scholars. Tschannen-Moran and Woolfolk Hoy (2001) defined teacher self-efficacy as a "teacher's judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated" (p. 783). Isiksal (2010) regarded it as a teacher' view about the capability to exact positive student outcomes. Hunter (2016) considers teachers' self-efficacy as teachers' ability to meet learners' needs. It is clear that a teacher's self-efficacy focuses on two issues: inner belief in capability and meeting the learning needs of learners. A teachers' belief in inner ability affects their view and identity (Wilson, 2013). Therefore a positive belief in inner ability is likely to positively affect view and enhance identity as a professional to enforce teaching that would help in meeting the needs of learners. Hence, PMTs' self-efficacy is their belief in their capability to meet the learning needs of business management students. Their belief is considered as an important predictor of teaching management anxiety (Saçkes, Flevares, Gonya, & Trundle, 2012).

Allen (2011) noted that if preservice teachers are not confident and efficacious to teach their subject, it would be difficult for them to inspire confidence in their students. Demonstrating confidence and inspiring confidence is one of the cherished attributes in management education and management teacher education. This is due to the many business risks encountered in the business environment. Examining PMTs' efficacy remains significant as their perceived readiness is theoretically connected with their

development of self-efficacy (Giallo & Little, 2003). Also, generalising findings of previous studies on teachers' self-efficacy in other subject areas over PMTs is inappropriate. This is because teacher self-efficacy is based on contextual factors such as subject taught and class (Ross, Cousins, & Gadalla, 1996; Tschannen-Moran & Woolfolk Hoy, 2001).

Measuring Preservice Teachers' Self-Efficacy

Several instruments have been developed to measure preservice teachers' self-efficacy. Among these are the Teacher Sense of Efficacy Scale (TSES) developed by Tschannen-Moran and Woolfolk Hoy (2001), the Self-Efficacy Questionnaire (SEQ) by El-Okda and Al-Humaidi (2003) and the Self-Efficacy Scale (SES) by Tsai**,** Chaichanasakul, Zhao, Flores and Lopez (2014). TSES has been widely used by various researchers (e.g. Senler & Sungur, 2010; İnceçay & Dollar, 2012; Cahill, 2016; Ma & Cavanagh, 2018) to measure preservice teachers' self-efficacy. Duffin, French, and Patrick (2012) noted that this is due to its unified factor structure. A unified factor structure provides a brief measurement scale, shows high item homogeneity and makes better theoretical sense (Shachar, Aderka, Gilboa-Schechtman, 2013). Tschannen-Moran and Woolfolk Hoy (2001) stated that TSES assesses a broad range of abilities deemed essential to effective teaching. These abilities are categorised in the content of the instrument as instructional strategy efficacy, classroom management efficacy and student engagement efficacy.

Instructional strategies are the methods and materials employed in teaching (Weston & Cranton as cited in Onweh & Akpan, 2014). It is how content is transmitted to students, consisting of methodology and procedure (Young-Lovell, 2009). It is obvious that it is the instructional strategy that

connects the teacher and the students and thereby sustain interaction. The methods employed could be teacher-centred (e.g. demonstration, lecture) or student-centred (e.g. discussion, brainstorming). The selection of the teaching methods depends on the content taught. However, using varied instructional strategies is important in meeting educational goals and students' needs (Saskatchewan Education, 2009). Onweh and Akpan (2014) indicated that the poor performance of students is due to poor instructional strategies and skills. The scale, therefore, examines preservice teachers' instructional efficacy with various indicators. Examples are 'I can implement alternative strategies in my classroom', 'I can provide an alternative explanation when students are confused', 'I can adjust my lesson to the proper level of each student' and 'I can use a variety of assessment strategies'.

Classroom management concentrates on skills and techniques that allow a teacher to control students effectively to create a quality learning environment (Sternberg & William, 2010). Feiman-Neimser (2001) defined effective classroom management as "arranging the physical and social conditions so that learners have growth-producing experiences" (p.17). Wong (2005) sees it as the "organization of students, space, time, and materials" (p. 84) with the goal that an ideal learning condition can be attained. It deals with students' misbehaviour, establishing rules and routines (Mosaddaq, 2016). Studies supporting these assertions (e.g. Vallance 2000; Malikow, 2006; Daniels, 2010) showed that effective teachers create a positive learning environment which triggers students' learning and satisfaction in learning. Examples of indicators of classroom management on the scale are 'I can control disruptive behaviour in the classroom', 'I can make my expectation clear about student behaviour', and

'I can establish routines to keep activities running smoothly'.

Student engagement remains key to students' learning and development of relevant skills. Kuh (2003) noted that where students learn is of less importance to their success and development than what they do during their time as students. Implied in this is the significance of active learning focused on relevant tasks. Trowler (2010) defined student engagement as

> the investment of time, effort and other relevant resources by both students and their institutions intended to optimise the student experience and enhance the learning outcomes and development of students and the performance, and reputation of the institution (p. 6).

Engaged students are therefore self-motivated to learn (Wasserstein, 1995), and a teacher' ability to ensure that such students are highly engaged is critical to teaching and learning. Three key components of engagement identified by Fredricks, Blumenfeld and Paris (2004) are behavioural engagement, emotional engagement and cognitive engagement. Behavioural engagement addresses issues such as attendance, involvement and absence of dysfunctional behaviours. Emotional engagement addresses issues of affective reaction such as interest, enjoyment or a sense of belonging. Cognitive engagement focuses on students' investment in their learning seeking to go beyond standards and appreciation of challenge. Student engagement has been found to be positively related to students' success and development (Klem & Cornell, 2004; Pascarella & Terenzini, 2005; Kuh, Kinzie, Schuh, & Whitt, 2005). Reese (2012) stated that the quality of learning depends on the quality of engagement provided for learners in a social environment. Examples of student engagement indicators on the scale are 'I can help students to value learning', I

can motivate students who show low interest in schoolwork', 'I can help my students to think critically', 'I can foster students creativity' and 'I can get through to the most difficult students'. Bryson and Hardy (2010) stressed that teacher behaviour is critical to students' engagement.

Processing Efficiency Theory

Eysenck (1979) espoused in his theory two conceptually distinct components of anxiety in any learning context. These are worry and emotionality (arousal). According to Eysenck, worry focuses on the cognitive component of anxiety which metamorphose into concern about a person's performance and self-evaluation. The worry component of anxiety makes individuals entertain fear about the task given to them to execute. Included in worry is task-irrelevant information that competes with task-relevant information for space in the processing system, affecting processing effectiveness in highly anxious individuals (Eysenck, 1979). Therefore, highly anxious task-driven individuals have to deal with many issues at a particular time which might negatively affect their performance.

The second component, emotionality or arousal, relates to the physiological changes resulting in feelings of nervousness and tension. To Eysenck, emotionality might lead to increased attention capacity to provide an antidote to deal with the negative repercussion of worry on task performance through increased effort to enhance the quality of performance. Anxiety can, therefore, facilitate or harm performance depending on the degree to which an increased effort is used to compensate for the reduction in processing effectiveness.

The processing efficiency theory communicates two important issues that must be noted if some level of success is expected in every activity. Anxiety must be reduced to increase processing effectiveness. Also, an anxiety-inducing agent cannot guarantee that an anxiety absorbing organism can develop the necessary increased capacity to address possible ill performance. Even if such increased efforts can be developed, anxiety in its entirety does not permit preservice teachers to examine more effective ways (Burns, 2004).

Teaching Anxiety

Scholars have defined teaching anxiety in various ways with many similarities. Işık (1996) defines it as fear, state of uneasiness and distress a teacher feels about the aspect of teaching. Kyriacou (2001) sees it as the tension, anger, frustration emanating from aspects of a teacher's work. Peker (2006) defines teaching anxiety to include a feeling of tension when teaching theories and concepts in a subject. It is the tension experienced by a teacher during the teaching process (Peker & Ertekin, 2011). Teaching anxiety is when a teacher experiences excessive and uncontrollable worry about future and past teaching, excessive concern about performing competently and significant self-consciousness (Soriano, 2017, p. 79). These definitions do not deviate from the critical components, worry and emotionality Eysenck (1979) raised. As seen, most of the scholars defined anxiety to highlight the emotionality component of anxiety by the use of the words fear, uneasiness, and tension. These words provide evidence of worry experienced by anxious teachers. Since teaching anxiety can be normal and necessary for work (Azimi, 2018), Soriano (2017) focused on the dysfunctional aspect of anxiety and hence the use of the phrase 'excessive concern'.

PMTs' anxiety is defined as worry, fear and tension expressed by PMTs in teaching as they employ various pedagogical strategies in delivering content to students. Oral (2012) explains that the cause of such anxiety can stem from classroom management, lack of field knowledge and lack of enough application experience. Trujillo and Hadfield (1999) and Lampadan (2014) believe it could be personality factor such as low efficacy, shyness among others. The cause of teaching anxiety could also be environmental factors such as negative experiences in classrooms and the use of teaching methods (Idris, 2006). Hart (1987) identified five key sources of teaching anxiety: evaluation, class control, professional preparation, school staff and unsuccessful lesson anxiety. Of all the causes, Hart (1987) and Ngidi and Sibaya (2003) stated that evaluation anxiety is key to preservice teachers' teaching anxiety. Determining PMTs' anxiety in teaching practicum would help to gauge its dysfunctional level by recourse to whether it is high (dysfunctional) (Ekşi & Yakışık, 2016) and moderate to low (functional) (Csizér & Piniel, 2013; Azimi, 2018). Hence, the focus on PMTs' level of teaching anxiety in this study and possible causes.

Measuring Preservice Teachers' Anxiety

The Student Teacher Anxiety Scale (STAS) has been the main instrument used by researchers (e.g. Otanga & Mwangi, 2015; Ekşi &Yakışık, 2016; Soriano, 2017) in measuring preservice teachers' anxiety. Even though other anxiety scales (e.g. Teacher Anxiety Scale and Foreign Language Student-Teacher Anxiety Scale) have been used, these scales were modelled from STAS. The STAS was originally developed by Hart (1987) with four factors: evaluation anxiety, pupil and professional concerns anxiety, class control anxiety and teaching practice requirements anxiety. Morton, Vesco, Williams,

and Awender (1997) modified it to five factors. The modification refined the names of the factors and the fifth factor was created out of the existing anxiety scale. These five factors are evaluation anxiety, class control anxiety, professional preparation anxiety, school staff anxiety, and unsuccessful lesson anxiety.

Hart (1987) provides an explanation of the various anxiety factors. Evaluation anxiety explains preservice teachers' anxiety over evaluation by the teaching practice supervisor and by the staff at the school, especially of classroom performance. Examples of evaluation anxiety indicators are: 'I am anxious about assessment by the supervisor'; 'I am anxious about what lesson the supervisor would come in to see'; and 'I am anxious about being observed by my supervisor while teaching.'

Class control anxiety also explains preservice teachers' anxiety over discipline and techniques of class control. Examples of class control anxiety indicators are: 'I am anxious about class control'; 'I am anxious about setting work at the right level for the learners'; and 'I am anxious about how to give each learner the attention he/she needs without neglecting others.'

Professional preparation anxiety explains preservice teachers' anxiety over the need to meet and keep up with teaching practice requirements, expectations and routines, especially the required paperwork such as lesson plans. Examples of professional preparation anxiety indicators are: 'I am anxious about maintaining a 'robust' approach'; 'I am anxious about completing lesson plans in the required form'; and 'I am anxious about whether my lesson plans will be adequate.'

School staff anxiety explains preservice teachers' anxiety over co-operation with the school staff, but especially over the preparation and delivery of suitable material in a suitable manner to meet students' needs. Examples of school staff anxiety indicators are: 'I am anxious about co-operation with my colleagues during the teaching practice'; and 'I am anxious about selecting suitable lesson content.'

Finally, unsuccessful lesson anxiety explains anxiety experienced by preservice teachers as to whether or not their teaching would be successful. Examples of unsuccessful lesson anxiety indicators are: 'I am anxious about how the supervisor will react to one or more unsuccessful lessons if they should occur during the teaching practice'; 'I am anxious about incidents of misbehaviour in class during the teaching practice' and 'I am anxious about whether I will cover the material adequately'.

Conceptualising Preservice Teachers' Self-Efficacy-Anxiety Construct

Self-efficacy and teaching anxiety were found to be unrelated (Güngör & Yaylı, 2012). However, recent studies (e.g. Szymańska-Tworek, & Turzańska, 2016; Halet & Sanchez, 2017) have conceptually perceived self-efficacy and anxiety to be indirectly related. The most recent studies (e.g. Tahsildar & Kabiri, 2019) found the two constructs to be positively related. Theoretically, Bandura' self-efficacy theory postulates that when a teaching task is to be performed by PMTs, they would first consider their capacity to perform based on cognitive evaluations. When they perceive that they are capable to execute the teaching task (self-efficacy) they are less likely to entertain negative emotional tendencies such as fear, stress or anxiety. This implies that high teaching self-efficacy would reduce teaching anxiety. The self-

efficacy theory supports the use of path analysis in studying the effect of PMTs' self-efficacy on teaching practicum anxiety (Hair, Risher, Sarstedt, & Ringle, 2019). The argument is that the analysis is concerned with testing the self-efficacy theoretical framework from a predictive perspective. Supporting the likely nexus between self-efficacy and anxiety, Kiili et al. (2016) were of the view that negative emotional tendencies, such as stress or anxiety, may result from reduced self-efficacy. Self-efficacy seems to manifest first, hence considered as an independent variable. Analytically observable, anxiety depends on self-efficacy, hence anxiety is considered as a dependent variable in the study. The path observed is that self-efficacy is likely to influence anxiety: self-efficacy → anxiety. Hence, the hypothesis that *there is no statistically significant influence of preservice management teachers' self-efficacy on their anxiety about teaching practicum* was tested.

Examining the stated hypothesis means that self-efficacy and anxiety constructs must first be measured. Since PMTs have been engaged in content and methods courses (concrete experience) and also vicariously experienced the teaching performance of their management teacher educators, the measurement of their self-efficacy is reasonable. Hence, the formulated research question for the study is: *What is preservice management teachers' level of self-efficacy about the teaching practicum*? PMTs' teaching self-efficacy is indicated by the three factors: instructional strategies efficacy, classroom management efficacy and student engagement efficacy (Tschannen-Moran & Woolfolk Hoy, 2001). These are believed to have been provided by the methods courses in the management teacher education programme. After the practicum, PMTs might develop self-efficacy from mastery experience, vicarious experience (observing

other preservice teachers), verbal persuasions and physiological and affective states. Likely differences were addressed by the hypothesis: *There is no statistically significant difference in the self-efficacy level of preservice management teachers before and after their on-campus teaching practicum*.

Also, since they are likely to experience anxiety (either functional or dysfunctional) on the teaching practicum, measuring their level of anxiety is needful and also to confirm or disconfirm the earlier assertion made by Ngidi and Sibaya (2003) that globally preservice teachers are anxious about the teaching practicum. Therefore, the research question: *What is preservice management teachers' level of anxiety about the teaching practicum* was formulated. PMTs' anxiety is indicated by factors such as evaluation anxiety, class control anxiety, professional preparation anxiety, school staff anxiety and unsuccessful lesson anxiety (Hart, 1987). Similar to efficacy, anxiety after the ONCTP might differ from the condition prior to the ONCTP, hence the hypothesis: *There is no statistically significant difference in the anxiety level of preservice management teachers before and after the on-campus teaching practicum.*

Some studies (e.g. Merc, 2015a; Halet & Sanchez, 2017) argue that gender, age, prior teaching experience influence efficacy and anxiety whilst others (e.g. Ngidi & Sibaya, 2003; Gelman, 2004; Paker, 2011; Sarfo, Amankwah, Sam, & Konin, 2015, Önder & Öz 2018) argue that such variables do not influence efficacy and anxiety. Hence the hypothesis: *There is no statistically significant difference in preservice management teachers' levels of self-efficacy and anxiety about the teaching practicum based on their sex, age, teaching experience and intention to teach* was examined. Figure 1 presents the

self-efficacy-anxiety construct used as a conceptual framework for the study.

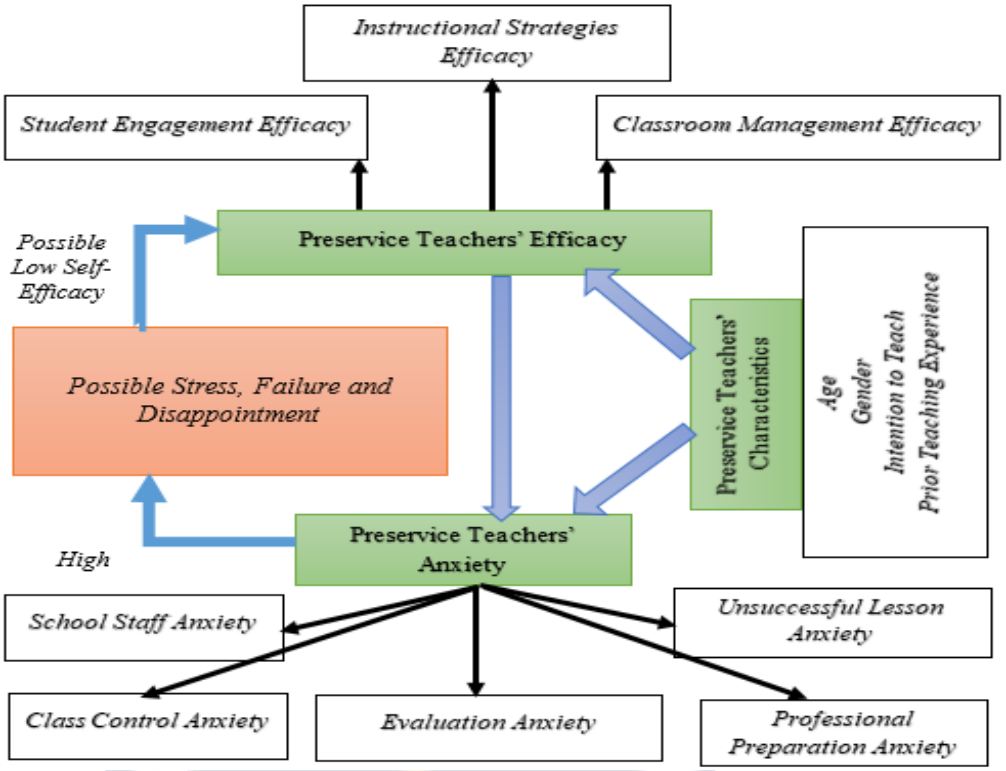

Figure 1: Conceptual framework
Source: Author's construct (2019).

If PMTs' experience high anxiety, and are not able to develop increased attention capacity, there is the possibility to perceive the management teacher education programme as a failure and disappointment which might negatively influence their intention to enter the teaching profession.

Assumptions

Two assumptions were held for the purposes of examining PMTs' efficacy-anxiety nexus on the teaching practicum.

1. Preservice management teachers perceive the teaching practicum to be relevant and needed in the teacher education programme.
2. Their efficacies or inefficacies are solely dependent on their personal factors controllable by them rather than external factors emanating from the management teacher education programme and the institution.

Hence, focus on agent-means rather than means-ends (Skinner, 1996).

Empirical Review

This part of the chapter concentrates on empirical studies that are related to the current study. In this section, the review is organised under various themes couched out of the formulated research questions and hypotheses. These are studies on preservice teachers' self-efficacy; changes in preservice teachers' self-efficacy; teachers' characteristics and self-efficacy; preservice teachers' anxiety; changes in preservice teachers' anxiety, preservice teachers' characteristics and anxiety; and self-efficacy and anxiety. The summary and implications for the current study end the chapter.

Studies on Preservice Teachers' Self-Efficacy

In Egypt, El-Deghaidy (2006) investigated preservice science (chemistry, physics, biology and primary science) teachers' self-efficacy and self-image. In all, 36 preservice teachers participated in the study. Data was gathered through the Science Teaching Efficacy Belief Instrument-Preservice (STEBI-B). This measured the Personal Science Teaching Efficacy (PSTE) – the confidence in the preservice science teachers' ability to teach science; and Science Teaching Outcome Expectancy (STOE) – the science teachers' beliefs that student learning can be influenced by effective teaching. The instrument was developed on a five-point Likert scale from strongly disagree to strongly agree. To determine the efficacy scores, the mean and standard deviation were run.

Means scores from the PSTE showed that the participants felt confident that they would be able to teach science effectively to make a difference in students' academic achievements. The study noted that the preservice teachers'

high level of self-efficacy was because of the nature of the methods class they had undergone; the class adopted the constructivist teaching and learning approach. The study concluded that increased personal efficacy is associated with increased student-centred teaching. This clearly shows that the development of self-efficacy starts right from the theoretical classroom. If educators fail to engage preservice teachers in the theoretical classroom, they might not believe in themselves to be capable to execute the complex teaching task.

In Nigeria, Zuya, Kwalat and Attah (2016), in a correlational study, examined preservice teachers' self-efficacy in mathematics and mathematics teaching. The study gathered data from 49 final year preservice teachers through the Mathematics Self-efficacy (MSE) and Mathematics Teaching Self-efficacy (MTSE) instruments. Both instruments were measured on a five-point Likert scale from strongly disagree to strongly agree. Self-efficacy was interpreted to mean confidence, hence high self-efficacy meant high confidence. Through the means and standard deviations, the self-efficacy scores were generated and the relationship was tested through the Pearson Product Moment Correlation Coefficient (PPMCC).

It was reported that the preservice teachers had a high level of confidence in mathematics and in mathematics contents. They also rated their level of confidence high in the teaching of mathematics. The correlation coefficient revealed a significant positive relationship between preservice teachers' self-efficacy in mathematics and the teaching of mathematics. These findings underscore the reason inefficacious preservice teachers are likely to be traced to the content knowledge provided to them on the teacher education

programme. Inefficacious preservice teachers, therefore, implies a failure on the part of the teacher educators to play their role in boosting the self-confidence of student teachers. Other learner-specific factors could be responsible.

In Turkey, Senler and Sungur (2010) examined preservice teachers' teaching efficacy in the areas of students' engagement, instructional strategies and classroom management. A total of 1794 (876 males, 905 females) preservice science teachers participated in the study. The researchers employed the TSES to gather data which were analysed through mean and standard deviation. Inferentially, repeated-measures ANOVA was used to determine if the preservice teachers differed in their efficacy with regard to student engagement, instructional strategies and classroom management.

A mean value greater than the scale midpoint of 5 was obtained on each of the three subscales, revealing that the preservice teachers were highly self-efficacious on each of the subscales of the TSES. The preservice teachers were able to use new approaches and strategies based on students' needs, utilize management techniques that enhance students' autonomy, and encourage the students to study science. The repeated measures ANOVA results showed that the level of instructional strategies and classroom management was significantly higher than student engagement. This means that the preservice teachers were highly efficacious in the use of instructional strategies and classroom management than student engagement. The researchers noted that the low self-efficacy in student engagement as compared with instructional strategies and classroom management was as a result of the teacher education programme deemphasizing it in theoretical courses in Turkey. The study is quite remarkable in terms of the use of relatively large sample.

In another Turkish study, İnceçay and Dollar (2012) investigated preservice English teachers' classroom management self-efficacy and readiness to teach. The motivation for the study was that some skills are important for preservice teachers to develop of which teaching self-efficacy related to classroom management is one. Thirty-six English language students were selected from the Foundation Department in a University in Istanbul. For the teacher efficacy in classroom management variable, TSES was used to gather data and Teacher Readiness Scale for Managing Challenging Classroom Behaviours was used to measure their readiness. The PPMCC was used to determine the relationship between classroom management efficacy and readiness to teach.

The study found a significant moderate positive relationship between classroom management efficacy and readiness to teach. This means that if preservice teachers' level of classroom management efficacy is increased, then their readiness to teach will also increase and vice versa. However, the degree to which such increase or otherwise would be recognized is not explained in the study.

In the USA, Cahill (2016) explored, in her doctoral dissertation, the level of efficacy of special education preservice teachers through the cross-sectional survey design. These preservice teachers (n = 223) were selected from a convenient sample and were made to complete TSES online survey about their self-efficacy beliefs. Seventy-four (74) of them responded to the survey with a poor return rate of 33.1%. The study analysed the preservice teachers' self-efficacy through mean and standard deviation and examined the differences in their self-efficacy about classroom management, instructional strategies and

student engagement through one-way repeated measures ANOVA irrespective of the failure in the normality assumption.

The results revealed that special education teachers reported a high level of self-efficacy. The author noted that their high level of self-efficacy could be attributed to the numerous teaching experiences they had (taught in schools). Also, the verbal feedback from their instructors and cooperating teachers as well as vicarious experiences could be responsible for such efficacy. When the three efficacy sub-factors were compared, the preservice teachers reported the highest self-efficacy in classroom management.

In Virginia, Riddle (2018) examined the nexus between grit and self-efficacy. Grit, as explained in grit theory by Duckworth in 2009, is the "combination of passion and perseverance" (Duckworth, 2016, p. 8). To Duckworth, grit aid teachers to be higher achievers. In terms of long-term success, the combination of passion and perseverance is more significant than talent and ability (Duckworth, 2016). Therefore, Riddle's motivation was to determine through the correlational design, the extent to which grit predicted preservice teachers' self-efficacy. Out of an accessible population of 534 preservice teachers, 73 of them were selected for the study. The TSES and Short Grit Scale (Grit-S) were used to gather data on preservice teachers' self-efficacy and grit respectively and relationship analysed through the PPMCC. Simple linear regression was used to examine the effect of grit on self-efficacy. Evidence provided in the study showed that the assumptions of the statistical test used were met.

The study found a significant positive moderate relationship between grit and self-efficacy [$r(71) = .612$, $p < .001$, $r^2 = .37$]. The positive relationship

between grit and self-efficacy means that highly efficacious teachers are likely to be high achievers. The bivariate regression also indicated that grit score explained 27.63% of the variance in self-efficacy. Robertson-Kraft and Duckworth (2014) also found that grittier teachers performed better than their counterparts who were less gritty.

In the development and retention of novice teachers, Robertson-Kraft and Duckworth (2014) noted that grit is a key personality factor. This means self-efficacious teachers are likely to remain in the teaching field due to the positive correlation between grit and self-efficacy. Secondly, passion is key in influencing self-efficacy; after all, teaching is no longer a forceful job when a high level of interest (evidence of passion) is shown during teaching which turns into inspiration for students (Fried, 2001). Passion is fostered in students engaged in activities for themselves and not for pressures in the external environment (Fredricks, Alfeld, & Eccles, 2010; Bonneville-Roussy, Vallerand, & Bouffard, 2013). Such activities should be optimally challenging in line with their interest, focusing on process and the offering of positive constructive feedback (Fredricks et al., 2010; Carvalho, Martins, Santana, & Feliciano, 2014; Santana Vega, 2015). Passion is built on support, encouragement and care (Coleman & Guo, 2013).

In Australia, Christian (2017) examined the course-related factors perceived by primary preservice teachers as enhancing their instructional self-efficacy. The study adopted a qualitative approach and used a focus group discussion to gather data from 50 preservice teachers. The data was analysed into themes.

The results showed that vicarious and enactive modelling complemented by professional conversations and a supported learning culture were contributory factors to instructional self-efficacy. The study points out important lessons for teacher education. The author recommended that teacher educators must strive to demonstrate the art and science of teaching to preservice teachers and must provide the opportunity for them to practice during the course work. The environment in which such activities take place should be quality and supportive to allow preservice teachers to learn and enhance their teaching self-efficacy.

In another Australian study, Ma and Cavanagh (2018) sought to determine if preservice teachers were ready for the classroom, based on the premise that preservice teachers' readiness for the classroom communicates their likely effectiveness. The study assessed 90 preservice teachers' level of self-efficacy for their first professional experience placement. The Scale for Teacher Self Efficacy (STSE) developed by Pfitzner-Eden, Thiel and Horsley (2014), a modified version of TSES, was used to collect data, which was reported in means and standard deviations. The survey also yielded qualitative data which was analysed through the reflexive iteration process to determine the influential factors for preservice teachers' self-efficacy.

It was found that the preservice teachers had a relatively lower level of self-efficacy. Among all the efficacy factors, classroom management was the greatest concern (recorded lowest efficacy score) to them. It became evident through the qualitative results that preservice teachers' low self-efficacy was influenced by lack of teaching experience; previous informal teaching; their teacher education programme; personal qualities and characteristics; and the

teacher-student relationship. Lack of teaching experience in a formal setting appeared to have mostly influenced their practicum anxiety since they did not know what they should expect on their first professional placement. Also, the study found that the teacher education programme contributed positively to all the aspects of the efficacy scale. This latter finding contradicts the previous finding. If the teacher education programme was instrumental then a moderate to a high level of self-efficacy would have been expected. The qualitative results seem not to align with the quantitative findings.

Studies on Changes in Preservice Teachers' Self-Efficacy

In Australia, Pendergast et al. (2011) investigated changes in preservice teachers' self-efficacy before and after their teaching practicum. The TSES was used to gather data from 76 graduate preservice teachers and analysed using mean and standard deviation. It was found that their self-efficacy declined from the beginning to the end of the practicum on all the three efficacy factors (student engagement, classroom management and instructional strategies). The conclusion was that the reality of being in the classroom was different from what the preservice teachers earlier expected; they had overestimated their level of self-efficacy during the first administration. The actual teaching practicum revealed to them the real work of teaching. The researchers did not attribute any other conditions that might have prevailed on the practicum to reduce their self-efficacy.

In the USA, Gunning and Mensah (2011) focused on preservice elementary teachers' development of self-efficacy and confidence to teach the science curriculum. The researchers were interested in examining changes that might have occurred in the development of self-efficacy of the elementary

preservice teachers (no formal teaching experience in science teaching) over 16-week participation in science teaching. These teachers found themselves in a constructivist environment which allowed for multiculturalism, inquiry, social justice and relevance of science to daily life. Data was gathered through interviews, artefacts examination, and class observations. Open and axial coding was used to analyse the data gathered.

The study found that experiences through course assignments – a meaningful discussion of assignments; and classroom environment – created for the preservice teachers to interact in discussing assignments increased preservice teachers' self-efficacy. The coursework allowed the preservice teachers to practice teaching to gather mastery experiences through these two important activities. The study draws attention that the coursework of teacher education is the beginning point where self-efficacies can be developed and points to the fact that methods courses must be handled in an environment that allows preservice teachers to share ideas and first practice the act of teaching.

A similar study in the USA by Brown, Lee, and Collins (2015) investigated the effect of teaching experiences on the teaching self-efficacy of preservice teachers on the elementary education programme. The study employed the mixed-methods approach. The TSES was used to gather data on self-efficacy from these preservice teachers prior to and after the teaching practicum. Differences observed in the means were analysed through the paired samples t-test. The study found statistically significant differences in all the efficacy factors. The qualitative evidence showed that the hands-on teaching, observing experienced teachers and relationship with cooperating teachers contributed to the enhancement of their self-efficacy.

Again, in California, USA, Flores (2015) was motivated to examine preservice teachers' development of self-efficacy through field-based science teaching practice. The aim was to determine if preservice teachers' confidence would rise in a teacher preparation environment that included the exposure of preservice teachers to authentic teaching practice. In all, 30 preservice teachers from a mid-sized, four-year university in Southern California were involved in the study. Data was gathered through the STEBI-B which was administered before and after the teaching practice in order to track the changes in the preservice teachers' level of efficacy. Accordingly, the dependent samples t-test was run to track the changes.

The results showed that the self-efficacy of the preservice teachers increased significantly at a higher degree. Also, it was found that the preservice teachers increased in scores on their science teaching outcome expectancy. The author noted that mastery experiences and personal accomplishments were shown to influence and drive self-efficacy. This suggests that preservice teachers' self-efficacy is likely to be hindered when they are not made aware of the extent to which they are performing on the teaching practicum. Such communication is important to consolidate their strengths to propel them to demonstrate such desired teaching behaviours in the future.

In New Zealand, Berg and Smith (2018) examined the effect of school-based experience on preservice teachers' self-efficacy beliefs. The study adopted the randomised pre-post design. This allowed the researchers to gather data on their self-efficacy before and after the teaching practicum. Through the convenience sample, 75 preservice teachers participated in the study; their ages ranged from 20-44 with a mean age of 22 years and a median of 21 years. The

TSES was used to gather data on the preservice teachers' self-efficacy and the effect determined through the independent samples t-test.

The study found a significant increase in the self-efficacy beliefs of preservice teachers. The study, therefore, concluded that teaching practicum provides student teachers with the opportunities to develop their confidence to teach. Hence, if preservice teachers' teaching self-efficacies are not increased after teaching practicum, then there is the possibility that the experiential practicum environment is problematic to create the impression of present inherent limiting factors.

Studies on Teachers' Characteristics and Self-Efficacy

In Botswana, Moalosi and Forcheh (2015) examined the self-efficacy level of preservice teachers and how they differed in terms of gender and age. The TSES was used to gather data from 598 of the preservice teachers and analysed with the use of means. Differences in their self-efficacy based on age and gender were analysed with the use of factorial ANOVA. The study found that preservice teachers were moderately efficacious to teach. The female preservice teachers were better in engaging students than the male preservice teachers. No gender differences were found in their instructional and classroom management efficacies. However, age and gender had a significant interaction effect on their instructional strategies self-efficacy.

In Turkey, Merc (2015a) further scrutinised differences in the preservice EFL teachers' self-efficacy in terms of gender. The independent samples t-test did not find significant differences between male and female preservice teachers' levels of self-efficacy beliefs. However, there was a significant difference in the sub-category 'learner management', according to which female

preservice teachers were found to be feeling more efficient to manage learners than their male counterparts. More so, there were no significant differences in terms of student teachers' perceived self-efficacy beliefs both in overall level and in the sub-categories when the type of practicum school (primary or high school) was considered. Only classroom management made a difference; specifically, preservice teachers teaching in high schools were more anxious than the ones teaching in primary schools about managing the class.

In Ghana, Coffie and Doe (2019) examined preservice science teachers' self-efficacy in relation to gender through the descriptive cross-sectional survey. The STEB-B instrument was used to gather data from 227 (139 males, 88 females) preservice teachers. The mean scores showed that they were generally highly efficacious to teach. Also, the independent samples t-test revealed gender disparities in their self-efficacy; the male preservice science teachers were highly efficacious than their female counterparts. However, the effect size was small to suggest that the difference was by chance. The study concluded that there might not be uniformity in the classroom instructional practices between the male and female preservice science teachers.

Again, Sarfo et al. (2015) examined the self-efficacy beliefs among SHS teachers in Ghana. The cross-sectional survey design was adopted for the study, and the TSES was used to gather data from a sample of 437 teachers. The mean results showed that teachers generally had a high level of self-efficacy. When the mean scores of the self-efficacy factors were compared, student engagement efficacy was found higher than instructional strategies and classroom engagement efficacy. The independent samples t-test revealed that female teachers were higher in instructional strategies efficacy than male teachers.

However, no significant differences were found in student engagement and classroom management efficacy. When the overall efficacy scale was considered, no significant gender differences were identified. The study concluded that such high efficacy points to the fact that the teachers had adequate knowledge and teaching skills for effective teaching.

Concentrating at the basic level of education in Ghana, Cobbold and Boateng (2015) explored kindergarten teachers' instructional practices efficacy. This study was to find out if the teachers believe they could implement a newly developed curriculum during the time of the study and to find out if such efficacy could differ when the type of school (public or private) and type of teacher (trained and untrained) were considered. An adapted version of the TSES was used to gather data from a sample of 299 kindergarten teachers, which was analysed into means and standard deviations. Differences in efficacy beliefs based on the type of school and teacher were also examined with the use of independent samples t-test. The kindergarten teachers' efficacy belief in instructional practices was found high. The type of school did not influence their instructional efficacy beliefs but the type of teacher influenced it, where trained teachers were found significantly better than untrained teachers. The study recommended that teachers' capacity to teach should be enhanced for both in-service and preservice teachers through developmental training which should focus on knowledge in child growth and appropriate use of teaching techniques, methods and strategies.

Similarly, Cobbold and Boateng (2016) examined kindergarten teachers' confidence in classroom management in Ghana. The descriptive survey design was employed and 299 of the teachers were sampled. The

classroom management subscale of the TSES was adapted to gather data for the study. The mean results found the teachers to be self-efficacious in classroom management. The independent samples t-test did not find the type of teacher (trained or untrained) and school type (public or private) to influence their self-efficacy. The study, therefore, concluded that institutional placement and professional status of teachers are not factors which could influence self-efficacy. The study recommended to teacher education programmes to pay attention to both preservice and in-service teachers' efficacy in classroom management, especially in managing pupils' behaviour and establishment of classroom management systems appropriate for learners.

In Canada, Klassen and Chiu (2010) examined the effect of gender and years of experience on teachers' self-efficacy. The TSES was used to gather data from 1,430 practising teachers. Ordinary least square regression and Structural Equation Modelling (SEM) were used to examine the relationship. Differences observed in self-efficacy based on gender was as a result of the different workload of the teachers. Female teachers had low classroom management self-efficacy. The finding suggests that gender on its own does not influence self-efficacy. Teaching experience showed a non-linear relationship with self-efficacy which appears to be directly unrelated to teachers' self-efficacy.

In Iran, Karimvand (2011) examined the relationship of self-efficacy, teaching experience and gender. The Teachers' Efficacy Beliefs System-Self (TEBS-Self) measured on a four-point Likert scale was used to gather teaching self-efficacy data from 180 Iranian EFL teachers. Their teaching experiences ranged from 3 to 3.5 years. The relationship was assessed through the use of

ANOVA regression. Findings showed no significant interaction effect (when teaching experience and age are considered together) of teaching experience and gender on self-efficacy. The main effect (when either teaching experience or age is considered alone) showed that those with more teaching experience had a significantly higher teaching self-efficacy than those with less teaching experience. Finally, female teachers had a significant higher teaching self-efficacy than the male teachers. The author explained that the high self-efficacy for the female teachers could result from the higher teaching experiences they had than the male teachers. To validate the effect of gender on self-efficacy, the study recommended that further studies should hold years of teaching experience constant between male and female teachers.

In Pakistan, Shaukat and Iqbal (2012) examined the teachers' self-efficacy on the basis of gender and age. A convenient sample of 198 teachers was sampled (108 male and 90 female). The TSES was used to gather teaching self-efficacy data. Independent samples t-test examined differences in self-efficacy on the basis of gender and one-way ANOVA for age (20-30 years; 31-40 years; 41-50 years). The study found classroom management efficacy to be significantly higher for male teachers than female teachers. Also, younger teachers were found to be better in engaging students and managing classrooms than older teachers.

In Ireland, Comerford (2013) analysed the relationship between years of teaching experiences and teachers' sense of efficacy. Data was gathered through the TSES from 102 primary school teachers. The Spearman rank correlation results showed a negative relationship between years of teaching experience and teacher' sense of self-efficacy. By implication, as years of teaching experience

increases, sense of efficacy decreases. One might find it very strange that years of continuous practice could not positively influence self-efficacy. But this draws attention to the quality of teaching practices over time.

In the USA, Concannon and Barrow (2009) surveyed the self-efficacy beliefs of 519 undergraduate engineering students. Differences in their self-efficacy were examined based on gender with the use of independent samples t-test. No significant differences were found in engineering self-efficacy on the basis of gender. The non-significant difference was attributed to the similarities in the abilities of the students in terms of grades in their high school and college entrance exams.

Again, in the USA, Guo, Justice, Sawyer and Tompkins (2011) explored the relationship between teaching experience and self-efficacy. Data were gathered from 38 preschool teachers. The results showed that teaching experience has no influence on teacher self-efficacy.

The inference made from Klassen and Chiu (2010) and Guo et al.'s (2011) finding is that the quality of the experience is what might create the difference and not the number of years in teaching. It must be noted that teaching experience in these studies was defined to mean the number of years a teacher has taught.

A further study in the USA by Infurna, Riter and Schultz (2018) also focused on years of teaching experience and age as factors influencing self-efficacy. Self-efficacy data were gathered with TSES from 83 preschool teachers. Linear regression modelling was then used to analyse for the effect of the factors on self-efficacy. The study found teaching experience to negatively influence self-efficacy. However, teachers' age positively correlated with their

self-efficacy.

In Albania, Lesha (2017) examined differences in teachers' classroom management efficacy, student engagement efficacy, instructional strategies efficacy based on age (0-25 years; 26-34 years; 35-49 years). Data on teachers' self-efficacy was gathered through the TSES from 850 teachers. One-way ANOVA was used to examine the differences in their self-efficacy. The study found student engagement efficacy, instructional strategies efficacy and classroom management efficacy to be sensitive to age. The study found that self-efficacy increases with increase in age. This finding appears to contradict earlier finding where young teachers had been found to have stronger self-efficacy (Robinson & Edwards, 2012).

Studies on Preservice Teachers' Anxiety

In Turkey, Merc (2011) used qualitative methods to inquire into foreign language preservice teachers' (n = 150) sources of practicum anxiety. The preservice teachers were made to keep diaries on the teaching practicum. After the practicum, a semi-structured interview guide was used to randomly interview 30 of them to triangulate their reported anxieties in their diaries. The constant comparative method was used to analyse the data. Six reported categories of factors from the preservice teachers' diaries which made them more anxious were student and class profiles (poor class control, class unfamiliarity, and poor language proficiency); classroom management (problem with maintaining discipline, lesson pacing, and time management); teaching procedures (problem with ensuring students' attention, teaching difficult topics and using voice effectively); evaluation (preservice teachers' sweating, shaking hands, and trembling voice); mentors (interruptions); and

miscellaneous (negative ideas from other teachers and students, use of teaching materials). The author concluded that the teacher education programme failed to create connections between theory and practice. Also, preservice teachers were not made to reflect on their experiences after teaching practicum session which is believed to create self-awareness.

In a similar Turkish study, Mahmoudi and Özkan (2016) investigated the anxiety preservice English language teachers (n = 16) held about teaching practicum and the coping strategies they adopted. The explorative case study design was employed and data was gathered via classroom observation during the practicum and a semi-structured interview guide after the completion of the practicum. Content analysis assisted the researchers in coding the data into themes with the observation data triangulating the interview data. The critical sources of practicum anxiety found were from supervisors and mentors. Supervisors provided inappropriate feedback, had too high expectations, and poor relationship with preservice teachers. Other sources were overcrowded classes, inexperience in lesson planning, learners not recognising preservice teachers as authorities, preservice teachers' poor knowledge of learner characteristics, communication breakdown with their learners, low self-confidence, and inability to deliver lessons. The researchers concluded that anxiety negatively affected the performance of preservice teachers. Anxiety was noted as key for the teacher educators to address during the initial stages of the programme.

Again, in Turkey, Ekşi and Yakışık (2016) studied why preservice teachers experienced or did not experience anxiety about the teaching practicum. The study took the qualitative line of enquiry where statements on

the STAS instrument were converted to questions for the preservice teachers (11 males and 41 females with a mean age of 22.8 years) to explain why they felt easy or anxious. The data gathered were analysed into themes through the constant comparative method and quantified into frequencies. Those who were anxious saw factors such as evaluation, classroom problem behaviours, possibility of making mistakes, and failing to meet supervisors' expectations to be responsible for their anxiety. The preservice teachers who felt at ease explained that staff in the practising schools were helpful and supportive. They were also comfortable with their supervisors due to the partnership they had with them right from the micro-teaching to the practicum. The study concluded that differences observed in anxiety experienced by preservice teachers can be attributed to differences in culture, the educational system, the role of the teacher, and level of formality between parties involved. Interpersonal relationship was deemed important if anxiety was to be reduced.

Following the earlier study in Turkey, Can (2018) also examined foreign language preservice teachers' anxiety about the teaching practicum with a focus on factors that provoked them. The study was purely qualitative which employed a background questionnaire, semi-structured interview guide, written reflection and essay papers to gather data from 25 preservice teachers (7 males, 18 females and mean age of 23.6 years). The analysis coded statements into themes. Their anxiety was influenced by cognitive factors (inability to properly teach the subject, making grammar and vocabulary errors, inability to answer students' questions, being assessed by supervisors among others); affective factors (fear of class management, fear of receiving negative evaluation from supervisors, intolerance of supervisors, fear of speaking in public and low self-

confidence) and socio-cultural factors (negative attitudes of students, crowded classroom setting, excessive class noise and indifference nature of the students). The study highlighted self-confidence as the key factor. This suggests that if self-confidence is boosted it might likely serve as an antidote to their teaching anxiety. The study, therefore, recommended that preservice teachers' curriculum should include concrete resolutions to overcome these anxiety-provoking factors and should also train them cognitively, affectively and socio-culturally to overcome their teaching anxiety.

In Pakistan, Shahid and Hussain (2011), in determining the weakness in the practicum component of the teacher education programmes, conducted a study into the expectations and experiences of student teachers about the teaching practicum. The essence was to determine the possibility of theoretical coursework providing student teachers with a make or break opportunities to succeed on the teaching practicum. The qualitative line of enquiry involved 35 randomly selected student teachers enrolled in the Master of Art Early Childhood Education programme. Interviews were conducted which focused on discovering expectations and experiences concerning coursework contribution towards teaching practicum, classroom behavioural problems, lesson planning, assessment practices and supervisors attitudes towards student teachers. Miles and Huberman (1994) qualitative model of analysis was used to analyse the data.

Evidence gathered indicated discrepancies between coursework and practical teaching work. Even though the student-teachers exhibited a passion to teach, the cooperating teachers showed ill professional attitudes to them which made them anxious. The teacher education coursework was described as

professionally weak, especially in classroom management, evaluation techniques, educational psychology and interactive teaching methods. The study recommended that teacher education should infuse practical and training sessions into the course work with better supervision. The theoretical nature of the course work seems to contribute to preservice teachers' anxiety.

In Indonesia, Agustiana (2014) studied preservice English teachers' anxiety about teaching practicum. Using questionnaire and interview data, the anxiety of 50 preservice teachers was quantitatively described. The mean results found evaluation, lack of teaching experience, first-day teaching stress, large class size, worry about students' answers to questions, practicum assessment, content knowledge, and attracting students' attention, to be factors influencing teaching practicum anxiety. Lack of teaching practice experience and inadequate understanding of material usage were considered as key issues in the preservice teachers' anxiety.

In Albania, Bilali and Tarusha (2015) examined factors influencing student teachers anxiety about the practicum. The study employed the quantitative approach which involved 100 elementary student teachers within the ages of 19-25 years. Teacher Anxiety Scale (TCHAS), developed by Parsons (1973), was used to gather data on anxiety-provoking factors. The mean results found lesson planning; competency in analysing problems and learning; classroom management; teaching competency; and supervision to influence student teachers anxiety.

In Kenya, Otanga and Mwangi (2015) explored student teachers' anxiety during and their satisfaction with the teaching practicum. The researchers were motivated to determine whether student-teacher anxiety is

related to satisfaction with teaching practice. The Student Teachers Sources of Anxiety Questionnaire (STSAQ) modelled on STAS was used to gather data from 101 statistics student teachers. The mean scores revealed that higher anxiety was recorded on the evaluation factor whilst lower anxiety was experienced on school staff anxiety factor. Generally, even though student teachers were satisfied with the teaching practicum, findings related it to low-class control anxiety and lesson execution. The researchers recommended that university supervisors, mentors, administrators and student teachers should jointly hold orientation sessions prior to the start of teaching practice in order for student teachers to deal with their fear of evaluation.

In Palestine, Mosaddaq (2016) qualitatively explored English student teachers (n = 22) sources of anxiety about the teaching practicum. The student teachers were made to keep diaries during the teaching practicum and reflect on their sources of anxiety. Analysis of the diaries revealed that student teachers were anxious in the area of time management, classroom management, use of educational technology, lesson planning, being observed, lack of support, unmotivated students, overcrowded classes and speaking English. These findings are not different from findings of earlier studies on English student teachers' anxiety (e.g. Merc, 2011; Agustiana, 2014).

In Poland, Szymańska-Tworek and Turzańska (2016) examined the concerns of 108 postgraduate English preservice teachers (97 females, 11 males) about the teaching practicum. The study's objective was to identify the contextual anxiety factors among the preservice teachers. The qualitative approach was adopted which took the form of a survey composed of 14 open-ended questions. All, except 29 preservice teachers, had formal teaching

experience before taking the practicum. Evidence showed that the predominantly cited problems of preservice teachers about the teaching practicum were pupils' misbehaviour and indiscipline. Difficulty in preparing lessons plans was noted as a critical problem affecting preservice teachers' pacing and systematic flow during lessons. They also lacked motivation to teach and supervision compounded their teaching anxiety. Despite these problems, over two-thirds of the student teachers indicated they were able to overcome the problems due to the sufficient linguistic and teaching methods knowledge they obtained on the coursework. Also, the student teachers stated that their formal teaching experiences contributed to their teaching success. The study, therefore, concluded that lack of self-confidence in teaching, inability to introduce order and demotivated learners were responsible for teaching anxiety.

Studies on Changes in Preservice Teachers' Anxiety

In Turkey, Paker (2011) examined the changes in English student teachers anxiety before and after the teaching practicum. The STAS was used to gather quantitative data from a sample of 101 (28 males, 73 females and their ages ranged between 21-34 years) student teachers, and 25 of them were randomly selected and interviewed using a semi-structured interview guide. Mean and standard deviation were used to determine the student teachers' level of anxiety and the qualitative data was analysed through Miles and Huberman's (1994) model of qualitative analysis. Results showed that student teachers' anxiety prior to the teaching practicum was high. Evaluation, pedagogy, classroom management, and staff relations were influential factors with evaluation and classroom management as key influential factors. The qualitative evidence gathered after the teaching practicum showed that the student teachers

had no or insufficient feedback on their performance and high expectations from their supervisors and mentors.

Other factors were inconsistencies in supervisors' evaluation, lack of conformity among mentors about their approach to teaching practicum, and poor quality feedback offered to preservice teachers by mentors and supervisors. After the teaching practicum, their anxiety on evaluation, management, pedagogy, and staff relations had significantly reduced. However, the magnitude of reduction in the anxiety factors was not determined. The reduction in the anxiety factors was attributed to the teaching experience that they had acquired. However, the interview results did not make it clear in that direction. The author noted that sufficient constructive feedback and evaluation based on the process rather than the product could reduce anxiety. The study recommended that supervisors and mentors should be comprehensively aware of student teachers' anxiety. Accordingly, they should reflect on their roles as supervisors and cut off any irrelevant behaviours that exacerbate student teachers' anxiety.

Finally, in a similar Turkish study, Merc (2015b) reinvestigated student teachers' anxiety with a focus across disciplines (computer education and instructional technologies, mathematics, primary school teaching, social sciences, German language, French language, and English language). A total of 403 student teachers were involved in the study and anxiety data was gathered through the STAS questionnaire before and after the teaching practicum. Mean and standard deviation was used to determine their level of anxiety and one-way between-groups ANOVA was used to identify differences among disciplines.

The study found that before the teaching practicum, the student teachers were moderately anxious. Those from social sciences and English language were the most anxious groups with the least anxious being those in the mathematics group. After the teaching practicum, the level of anxiety was still moderate among student-teachers. The paired samples t-test revealed a significant difference (reduction) between their anxiety before and after the teaching practicum. The mixed-design ANOVA results showed a significant difference in anxiety across disciplines. French student teachers were found to be the most anxious group. The English language student teachers who were most anxious prior to the practicum were the least anxious group. The researcher noted that differences observed in anxiety among disciplines were due to differences in the implementation of the practicum in each discipline (department) and the inconsistency in the organisation of the practicum exercise.

Studies on Preservice Teachers' Characteristics and Anxiety

In South Africa, Ngidi and Sibaya (2003) examined student teachers' practicum anxiety. The study employed the accidental non-probability sampling technique to select 75 preservice teachers. The STAS questionnaire was used to gather data on their level of anxiety and the Eysenck Personality Questionnaire (EPQ) to gather data on their personality characteristics. The results through the chi-square analysis showed that the preservice teachers were distributed among three levels of anxiety: low (n = l9), moderate (n = 33) and high (n = 23) without any significant difference. The ANOVA results showed that there was a three-way interaction effect of student teachers' demographic variables (gender, age and grade placement) on their practice teaching evaluation and unsuccessful

lesson anxiety. Younger male student teachers placed at primary schools experienced relatively greater evaluation anxiety than the older males at primary schools, younger males at secondary schools and older males at secondary schools. Regardless of age and grade placement, the younger male student teachers experienced greater anxiety than their female counterparts.

In the USA, Gelman (2004) investigated the level of anxiety experienced by foundation-year master's social work student teachers entering field placement. The study employed the exploratory survey design with a convenience sample of 61 student teachers. The student teachers completed anticipating field placement questionnaire on the first day of class, one week prior to beginning of the practicum. Data were analysed through frequency, percentage and mean and standard deviation. Out of the 61 respondents, 57 valid questionnaires were obtained.

The study found that 46% (n = 26) of the student teachers rated themselves as moderately anxious or higher. Their concerns for agency-related anxiety showed that they did not see themselves to possess the skills, experience and readiness to work in such an agency with an unfamiliar population. They also perceived their clients would be difficult to work with for reasons such as client resistant, lack of motivation, complex and multiple problems as well as the client being different from interns. The greatest concern was found with the supervisory relationship in that supervisors would not take their roles seriously and provide guidance and mentorship when necessary. Others were that supervisors would not make time for the exercise, prepare them adequately or provide the required attention. The intimidating nature of some supervisors was also underscored. In relation to their social work education, their anxiety was

due to perceived work overload. Some of the respondents thought that they would be unable to balance the field and academic requirements with familial and other personal obligations. Further, the study found younger student teachers (ages 25 years and below) to be significantly anxious than their older colleagues. Student teachers who had taken even one social work class prior to entering their practicum were significantly less anxious than those who had not.

In Turkey, Paker (2011) analysed for preservice teachers' anxiety in relation to their gender, time (pre and post), across four anxiety factors (evaluation, pedagogy, management, staff relations) in a three-way factorial ANOVA (2*2*4). The within-groups results for the pre- and post-tests did not show significant differences. However, significant differences were observed between male and female student teachers prior to the teaching practicum. Thus, the female student teachers were more anxious than the male student teachers. However, both male and female student teachers experienced the same level of anxiety after the teaching practicum.

In a similar study in Turkey, Merc (2015a) confirmed the findings of Paker (2011). In Merc's study, EFL preservice teachers' (n = 77) characteristics and teaching anxiety were examined. The study, through the independent samples t-test, found that teaching anxiety was sensitive to gender. The female preservice teachers were found to be significantly highly anxious than the male preservice teachers on the overall anxiety level. The differences were found in language proficiency anxiety, fear of what others and pupils thought about them. The type of practicum school, however, did not predict the EFL preservice teachers' teaching anxiety. This could mean that the practising schools might have provided for levelled ground to the preservice teachers on the practicum.

Again, in Turkey, Önder and Öz (2018) examined student teachers' (educational sciences and pedagogical formation programme) anxiety focusing on the variables that predicted classroom management anxiety. The relational survey design was adopted for the study, which covered 468 (302 females, 166 males and mean teaching experience of 3.5 years) student teachers. Classroom management anxiety scale developed by Önder and Karataş in 2016 was used to gather data with the subscales of professional competence, providing motivation, facing unexpected situations, management of difficult groups and creating a positive learning environment. Evidence of statistical assumptions was provided to strengthen statistical validity. The mean results showed that student-teachers generally experienced low classroom management anxiety. Professional competence was found as a relatively highly anxious factor for them, with the lowest anxiety factor being management of difficult groups. Those with teaching experiences exhibited higher anxiety than those without teaching experiences in the management of difficult groups. No differences were obtained between those with teaching experiences and those without in facing an unexpected situation and creating a positive learning environment. Differences in the overall classroom management anxiety based on teaching experiences were not subjected to statistical analysis.

The stepwise regression results found teaching experience, duration of experience and bachelor's degree program as significant predictors of classroom management anxiety, explaining 18% of the variance in classroom management anxiety. The researchers recounted that experiences in social sciences, language, philosophy, literature, teaching and duration of experience

reduce preservice teachers' classroom management anxiety. If teaching experience reduces teaching anxiety, then the implication is that practical knowledge obtained during the methods course and on the teaching practicum would reduce their anxiety before and after the teaching practicum. The study concluded that it is essential to provide concrete theoretical knowledge to preservice teachers through practical classroom activities. To confirm the findings, the study also recommended that subsequent research should explain the changes in preservice teachers' level of classroom management anxiety.

In Iran, Aslrasouli and Vahid (2014) examined teaching anxiety of student teachers and experienced EFL teachers across gender. A questionnaire was used to gather teaching anxiety data from 114 teachers (46 males and 68 females). In terms of prior teaching experience, 19 of the novice teachers had up to 2 years of experience, 36 of them were partially experienced with 3-5 years of experience and 59 experienced teachers with more than 5 years of teaching experience. The relationship among teaching experience, gender and teaching anxiety was determined with the use of PPMCC. The results revealed a negative weak relationship between teaching experience and teaching anxiety. However, no relationship was found between gender and teaching anxiety.

In the Philippines, Soriano (2017) analysed the anxiety level of preservice teachers (n = 141) in order to correlate with their personal characteristics. Stratified and lottery sampling techniques were used in selecting them for the study. Data was gathered through the STAS questionnaire which measured their anxiety on evaluation, class control, professional preparation, unsuccessful lesson and school staff anxiety, and analysed with means. Analysis of the preservice teachers' demographic data showed that most of them aged

19-21 years. Also, analysis of the demographic data of their cooperating teachers revealed that they held Master of Art degrees with a minimum of 20 years of teaching experience.

The preservice teachers were found moderately anxious about professional preparation and school staff. However, they were highly anxious about evaluation, class control, and unsuccessful lesson. The study did not find preservice teachers' sex and ages to influence anxiety, creating the impression that anxiety experienced by preservice teachers is not sensitive to these demographic variables. It could be that they were provided with the same environmental conditions to practice. The preservice teachers who taught one subject significantly influenced anxiety because they had more time to prepare and master content knowledge, thereby increasing their teaching competency. The increasing level of anxiety of preservice teachers resulted in the study to recommend that cooperating teachers should be selected on the basis of a master's degree in education with a minimum of three years of teaching experience.

In Ghana, Kwarteng (2018) in a survey study examined the teaching anxiety of preservice accounting teachers (n = 100) about the teaching practicum. The study took into consideration their age, prior teaching experience and intention to take teaching as a career. Before they started the practicum, the STAS questionnaire was administered to measure their prior teaching practicum anxiety. The mean results found them to be moderately anxious on all the components of STAS. The impression created is that student teachers' evaluation anxiety in Ghana is different from others in different countries. However, when the factors were compared, evaluation anxiety

appeared to be the highest among all the anxiety factors. The independent samples t-test did not find significant differences in preservice accounting teachers' anxiety on the basis of their prior teaching experiences and intention to teach. The PPMCC also indicated that age is unrelated to preservice teachers' anxiety. The unresponsiveness of age and prior teaching experiences was argued on the basis of preservice teachers' cravings for marks to better their cumulative grade point averages.

Studies on Self-Efficacy and Anxiety

In Australia, Campbell and Uusimaki (2006) examined preservice teachers' level of anxiety in order to boost their ability to teach with confidence. The study employed the qualitative approach with 18 self-identified anxious preservice teachers who participated in the study. The student teachers were placed in a workshop and provided with an intervention referred to as teaching with confidence grounded on cognitive behavioural therapy recognised as effective for addressing adult anxiety. The intervention consisted of a warm-up session covering the teaching process, content and theories on performance and general anxiety. The second session covered personal strategies and the third session on empowerment. To determine student teachers' level of anxiety, they were made to complete three sets of questionnaire prior to the commencement and after finishing their field experience. The three sets of questionnaire are the State-Trait Anxiety Inventory (STAI) and Depression Anxiety Stress Scale (DASS) and Coping Scale for Adult (CSA).

Results from the STAI showed that there were no significant differences between the student teachers' pre and post anxiety scores. However, from the DASS significant differences were found between their pre and post anxiety

scores. Those who exhibited high anxiety prior to the field experience, experienced low anxiety after the field experience. The researchers were confident in the results provided by DASS than that of the STAI due to the lowered anxiety as a result of the intervention. However, the researchers indicated that the student teachers wanted full intervention and not the workshop. The authors believed that building confidence in preservice teachers would reduce their anxiety and recommended the adoption of interventions to reduce preservice teachers increasing anxiety about the teaching practicum.

In the USA, Gresham (2008) examined the relationship between mathematics anxiety and mathematics teacher efficacy in elementary pre-service teachers. Data was gathered from 156 teachers using the Mathematics Anxiety Rating Scale (MARS) and the Mathematics Teaching Efficacy Beliefs Instrument (MTEBI).

Through PPMCC, the study established a significant negative moderate relationship between mathematics anxiety and mathematics teachers' efficacy ($r = -.475$, $p < .05$). The preservice teachers with the lowest degree of mathematics anxiety had the highest levels of mathematics teaching efficacy. Interviews with the pre-service teachers indicated that mathematics courses had been effective in reducing mathematics anxiety. The study, therefore, concluded that if teacher education programmes hope to influence the development of effective instructional practices, the focus should be placed on the development of mathematics teacher beliefs and the reduction of mathematics anxiety in pre-service teachers.

Again, in the USA, Gresham and Burleigh (2018) explored early childhood preservice teachers' mathematics anxiety and efficacy beliefs. The

Revised Mathematics Anxiety Rating Scale gathered data on their anxiety before and after the practicum and differences subjected to independent samples t-test. The preservice teachers (n = 34) were made to describe in a journal entry their views of mathematics in terms of how they see mathematics as learners and as mathematics teachers in the future. The multiple case study design involved 12 of the preservice teachers in interviews based on those who had the greatest difference in mean anxiety scores, thus before and after the teaching practicum. A cross-case synthesis (a strategy for multiple cases) was used to analyse and code data from the journal entries and the interview.

The use of varied strategies through teaching and modelling, positive classroom atmosphere, emphasis on correct mathematics vocabulary, class presentations and teaching experiences with children were found as influential factors in reducing mathematics anxiety. This suggests that early teaching practice assists in developing confidence in preservice teachers in order to reduce their anxiety. The researchers recommended that teacher educators must incorporate field experiences and peer tutoring opportunities into subject methods courses.

In Turkey, Güngör and Yaylı (2012) explored the relationship between preservice EFL teachers' self-efficacy and anxiety about the teaching practicum. An adapted version of the TSES and Foreign Language Student Teacher Anxiety Scale (FLSTAS) were used to gather data from 77 preservice teachers who had completed their teaching practicum. The mean scores showed that the preservice teachers' level of self-efficacy was above average yet they were anxious. The Spearman's rank correlation coefficient indicated a negative weak relationship between the two variables; however, it was not significant.

The study concluded that self-efficacy and anxiety are unrelated, and that this could be as a result of the self-report nature of the instrument used. Further studies into this was suggested.

Again, in Turkey, Merc (2015a) examined foreign language teaching anxiety and self-efficacy beliefs of preservice EFL teachers. The SEQ and FLSTAS were used to gather self-efficacy and anxiety data respectively from 117 preservice teachers. The mean scores revealed that student teachers rated their general level of efficacy high. This was influenced by the theoretical knowledge they received, practicum exercise and feedback from supervisors, cooperating teachers and peers. They saw themselves relatively less efficacious in classroom management. Even though the general level of anxiety was low, the relationship with their mentors stood high as an anxiety-provoking factor. The qualitative evidence gathered through a semi-structured interview guide highlighted anxieties about supervision, language proficiency, unexpected classroom situation and ill preparation to teach. The PPMCC found a negative moderate relationship (r = -.361) between foreign language student teachers' anxiety and perceived self-efficacy belief.

In a further study in Turkey, Senler (2016) investigated preservice science teachers' self-efficacy which focused on the role of attitude, anxiety and locus of control. The object of interest in this study was the relationship between self-efficacy and anxiety. Interestingly, the study conceptualized anxiety to be an antecedent to self-efficacy, suggesting that anxiety manifest before self-efficacy is developed. Hence, anxiety was measured as independent variable and self-efficacy as a dependent variable. The STEB-B instrument and Teaching Anxiety Scale were used to gather efficacy and anxiety data from 356

preservice elementary science teachers. To establish the relationship between self-efficacy and anxiety, the researchers employed the path analysis, a form of SEM. The study found that teaching anxiety had a stronger direct effect (β = -0.52) on science teaching self-efficacy. This means that the anxious preservice teachers lacked the confidence to effectively teach science. The study concluded that increased teaching practice in preservice science teacher education is very essential in enhancing their efficacy. Anxiety preceding self-efficacy looks a bit suspicious. This is because it is after the cognitive evaluation to perform a task (self-efficacy) that the preservice teachers begin to show emotionality.

In Turkey, Mede and Karaırmak (2017) assessed the influence of speaking anxiety and English self-efficacy on foreign language speaking anxiety. The study was a survey which gathered data from 205 undergraduate students. Multiple linear regression was used in examining the effect. The results showed a strong negative correlation between English self-efficacy and foreign language speaking anxiety. The researchers believed students' confidence to speak would be boosted when they are given the opportunity to speak in class. A cursory analysis of the regression results showed that the test statistic that examines the regression coefficient between English self-efficacy and foreign language anxiety was not estimated or reported, creating a suspicion. Hence, the study focused only on the relationship

Finally, in Afghanistan, Tahsildar and Kabiri (2019) also examined the relationship between English students' academic self-efficacy and English language speaking anxiety. Data were gathered from 202 students and the relationship examined through the PPMCC. The results revealed a significant positive strong correlation between the variables. An unstable direction is

observed between self-efficacy and anxiety

Summary and Implications for Current Study

The literature review indicated that preservice teachers are moderately or highly anxious about the teaching practicum. This was found mainly among preservice science, English and mathematics teachers. The key factors which influenced their teaching anxiety were evaluation, lack of teaching experience, and ill understanding and difficulty in the preparation of lesson plans (e.g. Agustiana, 2014; Bilali & Tarusha, 2015; Szymańska-Tworek, & Turzańska, 2016). Their high level of teaching anxiety was attributed to the course work of their programme being too theoretical (e.g. Shahid & Hussain, 2011; Önder & Öz, 2018).

The studies which tracked the anxiety and self-efficacy of the preservice teachers before and after the teaching practicum found that the decrease in anxiety and increase in self-efficacy after the practicum was as a result of numerous practices the preservice teachers had, and concluded that mastery experience and personal accomplishment were the best influencers of one's self-efficacy (e.g. Flores, 2015; Brown, Lee, & Collins, 2015; Berg & Smith, 2018). Those studies which found a decrease in self-efficacy after the practicum (e.g. Pendergast et al., 2011) attributed it to reality shock. Also, most of the studies which focused on the influence of gender, age and teaching experience on teachers' self-efficacy and anxiety produced inconclusive findings. Finally, the few studies that focused on the relationship between self-efficacy and anxiety had inconsistent findings.

Several gaps (context and methodological) and reporting flaws were found in some of the studies. In terms of context, most of the studies on

preservice teachers' anxiety were conducted in Europe, especially in Turkey. The subject areas of concentration were English, science and mathematics. Contexts in which preservice teachers are trained and the subjects they study have been found to influence their levels of self-efficacy and anxiety (e.g. Ross, Cousins, & Gadalla, 1996; Tschannen-Moran & Woolfolk Hoy, 2001; Merc, 2015b). The determination of preservice teachers' anxiety is important since it helps to gauge their success, failure or disappointments. This study is, therefore, important in unearthing in Ghana, the self-efficacy and anxiety levels of PMTs about the teaching practicum.

The review also shows that researchers do not agree on the resilient source(s) of preservice teachers' self-efficacy (i.e. enactive mastery experience and personal accomplishments), and have recommended that future studies work on the resilient source(s) of preservice teachers' teaching self-efficacy. Therefore, this current study is necessary in addressing the issue. In measuring self-efficacy and anxiety, most of the studies (e.g. Senler & Sungur, 2010; İnceçay & Dollar, 2012; Otanga & Mwangi, 2015; Merc, 2015b; Cahill, 2016; Soriano, 2017) used TSES and STAS but did not appropriately rank the factors to focus attention on their intensity on the preservice teachers' self-efficacy and anxiety. It was noted that the majority of the studies (e.g. Paker, 2011; Merc, 2015a; Soriano, 2017; Kwarteng, 2018) relied on the means in their ranking without testing the means. The current study appropriately tests the means and computes the magnitude of intensity of the anxiety and self-efficacy factors on the PMTs.

The majority of the studies followed the quantitative approach and the few studies that followed the mixed methods approach did not appropriately

integrate the quantitative and qualitative data. It was, therefore, not surprising that in one study (i.e. Ma & Cavanagh, 2018) the teacher education programme was judged instrumental in all aspects and yet the preservice teachers were found inefficacious without any explanation provided by the qualitative strand of the mixed methods approach. Some of the quantitative studies also used non-probability sampling techniques which prevent the use of inferential statistics, however, inferential statistics were used.

Some of the studies that considered the sensitivity of self-efficacy to age, gender and teaching experience gathered data from in-service teachers and obtained contradictory findings. The few studies which considered preservice teachers also showed contradictory findings. Such studies also did not consider the preservice teachers' intention to teach. Literature suggests that highly efficacious teachers are likely to enter and remain in the teaching profession. The current study, therefore, added the intention to teach variable and reinvestigated the sensitivity of self-efficacy to such characteristics (age, gender, prior teaching experience, and intention to teach) of the preservice teachers under high and reduced models.

The studies which examined self-efficacy and anxiety mostly focused on in-service teachers and provided contradictory findings in terms of their relationship. Almost all the studies used PPMCC in examining the relationship which is highly influenced by the mean as a centre of distribution (requires normal distribution). Yet, the distribution of most of the studies remained unknown which could mean that the centre of the distribution might have been affected by outliers. Once the centre (mean) changes, there is the possibility for the relationship to change. Using a different approach to study the relationship

will help to understand the exact relationship between the two variables. The study, therefore, adopted binomial logistic regression and SEM in examining beyond correlation, the causal relationship that exists between the two variables.

In the findings, some of the studies stated that preservice teachers were efficacious without communicating the degree. The self-efficacy theory sees it as important since the degree (level of self-efficacy) helps to gauge the extent to which preservice teachers can perform the teaching tasks. Other studies also did not indicate the sampling techniques and designs employed.

The stated gaps in the literature informed the current study, the issues investigated and the overall design for the study. The study, guided by the self-efficacy-anxiety construct which hinges on the self-efficacy and processing efficiency theories, addresses the 'what' and 'why' of the problem and establishes the nexus between self-efficacy and anxiety through the use of varied methods.

CHAPTER THREE

RESEARCH METHODS

Overview

The study elaborates and clarifies PMTs' levels of self-efficacy and anxiety about the teaching practicum in the University of Cape Coast. In this chapter, the methods adopted are described to enable researchers who want to replicate the study to exactly follow the procedures used in arriving at the findings. The chapter describes the research philosophy based on which the study design was selected. The chapter describes the research design, study context, population, respondents and participants, data collection instruments, validity and reliability tests, the empirical model formulated, data collection procedures, ethical considerations and data processing and analysis.

Research Philosophy

All research needs a foundation which represents the worldview selected by the researcher (Creswell & Plano Clark, 2007). This foundation is the philosophy or research paradigm that regulates and governs the conduct of research. These paradigms, according to Lincoln and Guba (2000), are assumptions which guide researchers about how they should learn and what they should learn during scientific enquiries. Saunders (2009) sees these paradigms as a system of beliefs and assumptions about the development of knowledge. They are the most significant philosophical paradigms which underpin empirical social research (Sarantakos, 2005; Uddin & Hamiduzzaman, 2009; Scotland, 2012). Three basic research paradigms readily come to mind; positivism, interpretivism and pragmatism. The viewpoints of these paradigms are described from the ontological, epistemological and methodological

perspectives. Ontology is concerned with the nature of existence (Crotty, 1998). Epistemology deals with the nature of knowledge which emphasises the relationship between the knower and the known (Crotty, 1998). Methodology is the range of approaches used in educational research to gather data which are to be used as a basis for inference and interpretation (Cohen, Manion, & Morrison, 2003; 2007).

The philosophy of positivism was founded by Auguste Comte, a French social philosopher (Pring, 2000). Ontologically, the positivist assumed reality to exist and driven by immutable natural laws and mechanisms (Guba & Lincoln, 1994). Pring (2008) explains that social reality is external to individuals. This means that independent objects exist and have no connection to the knower (Cohen et al., 2003; Sarantakos, 2005; Creswell, 2008). Therefore, epistemologically, the dualistic and objectivistic view is held by the positivists. Being objective is a central aspect of a scientific inquiry where the knower does not exert influence on the object (Creswell, 2009). The interest is the facts and it should be value-free. Knowledge is only obtainable through sensory experiences (the observation of a phenomenon) and that positivism holds an empiricist epistemology (Sarantakos, 2005; Breen & Darlaston-Jones, 2008).

Methodologically, the positivist aims at explaining cause and effect relationships as its main tenet and therefore generalization and replicability become possible (Grix, 2004; Creswell, 2009). In that case, experimental designs provide a parasol to explain this causal relationship (Creswell, 2009). Best and Khan (1993) stated that true experiment and quasi-experiment are both experimental. Creswell (2003) and Krauss (2005) also stressed that survey

designs are normally employed in this paradigm. The positivists employ data collection methods to gather quantitative data that can be statistically analysed. Data sources are performance type data (e.g. norm-referenced tests, criterion-referenced test), individual attitude and use of affective scale, observation of behaviour (use of a behavioural checklist), and factual data. Researchers can also rely on public documents or school records to gather data. In summary, positivism drives the conduct of quantitative studies.

Interpretivism stands at the opposite side of the same coin with positivism which is credited to Max Weber, a German sociologist (Crotty, 1998). Ontologically, Cohen et al. (2003) detailed that the interpretivists hold a realist and anti-foundationalist ontology. This is rooted in relativism, where reality is individually constructed, leading to multiple realities (Pring, 2000; Leitch, Hill & Harrison, 2010; Scotland, 2012). Earlier, Guba and Lincoln (1994) stated that relativism is the view that reality differs from a person to a person. Grix (2004) documented that according to the interpretivist, the world is constructed via interactions of individuals and that the natural and social worlds are not distinct; researchers are part of that social reality and not detached from the subjects being studied.

Therefore, epistemologically, interpretivist adhere to a subjective view in that subjective meanings and subjective interpretations have great importance (Pring, 2000). There is a relationship between the knower and the subject. Knowledge emerges from social constructions such as language, consciousness and shared meanings (Rowlands, 2005). Consequently, interpretivist methodology aims at exploring and understanding phenomenon inductively. They deploy a wide range of interconnected interpretive methods seeking better

ways to make more understanding of the world of experiences (Denzin & Lincoln, 2008). They employ methodologies such as case studies, ethnography and phenomenology. Contrary to the positivist paradigm, a theory is generated from the data of the interpretivist (Creswell, 2003). Holliday (2007) emphasised that it is the involvement that enables researchers to have a thick description of a situation. In terms of the methods, Creswell (2008) points out that unlike positivists, interpretivists use non-probability sampling techniques to select individuals and sites. Also, data gathered are qualitative in nature and categorised into four such as observations (participant and non-participant), interviews, questionnaires, and documents and audio-visual materials. The most dominant data collection tool used by them is the interview guide (Punch, 2009). Due to the immense data likely to be collected, qualitative researchers use data reduction, data display, conclusion drawing and verification to organise data (Miles & Huberman, 1994). The critics of this paradigm hold the view that it does not uphold objectivity and therefore results cannot be generalised (Mack, 2010). In summary, interpretivism drives the conduct of qualitative studies.

Finally, the philosophy of pragmatism was founded by John Dewey, an American philosopher, psychologist and educational reformer (Goldkuhl, 2004). Pragmatism has a foundation in empiricism but extends beyond a pure orientation to the observation of a given reality (Goldkuhl, 2004). It has been recognised as the viable alternative to the combatant positivism and interpretivism philosophies. Creswell (2003) asserted that in pragmatism, knowledge claims arise out of actions, situations and consequences rather than antecedent conditions. Pragmatism gives less influence to philosophical assumptions for the use of research methods (Creswell, 2003; Goldkuhl, 2004).

It, therefore, does not rigidly restrict researchers in terms of how research should be conducted. This does not mean that research can be conducted haphazardly with the use of pragmatism (Denscombe, 2008). It should, therefore, be adopted with much thoughtfulness and considerations (Bryman, 2006; Denscombe, 2008).

Ontologically, the pragmatists believe in an external world free of the mind as well as that embedded in the mind. Hence, epistemologically, the truth is what works at the time and shaped by human actions (Creswell, 2003). Pragmatism considers 'what works' to answer research questions, rather than making a choice between positivism and interpretivism (Johnson & Onwuegbuzie, 2004; Onwuegbuzie & Johnson, 2006). Johnson and Onwuegbuzie (2006) were of the view that pragmatism is outcome-oriented and interested in determining the meaning of things. Biesta (2010) agrees by stating that it focuses on the product of research. Tashakkori and Teddlie (2003) indicated that it places key importance on research questions and endorses methodological pluralism. Therefore, Creswell (2003) and Johnson and Onwuegbuzie (2004) stated that researchers have the right to select the methods, techniques and procedures of investigation that appropriately address issues of concern in a research study. Morgan (2007) stresses that pragmatism believes in complementarity, which is combining quantitative and qualitative approaches in mixed methods to complement the advantages and disadvantages present within each approach.

The purpose of mixed methods approach is to provide a more complex understanding of a phenomenon that would otherwise not have been accessible by using a mono-method (Morse & Niehaus, 2009; Creswell & Plano Clark,

2011). It can increase confidence in findings, providing more evidence while offsetting possible shortcomings from a single approach (Bryman, 2004; Tashakkori & Creswell, 2008; Albert, Trochelman, Meyer & Nutter, 2009; Creswell & Plano Clark, 2011; Caruth, 2013). Teddlie and Tashakkori (2009) point out that consolidating questionnaires and interviews in a solitary research study harmonises the benefits of expansiveness and profundity related to these two individual methods. The impact of integrating the results of these two methods is likely to give a total image of a research topic that can address the scope of research questions and by so doing can give a total knowledge for theory advancement and practice (Johnson & Onwuegbuzie, 2004). However, its implementation is time-consuming (Creswell & Plano Clark, 2011).

Research Design

The study, in line with the philosophy of pragmatism, adopted the repeated measures sequential explanatory design of the mixed methods research. Specifically, the follow-up explanations model was employed. This was to elaborate and clarify PMTs' levels of self-efficacy and anxiety about teaching practicum. Sequential explanatory design permits the gathering and analysis of quantitative data in a first phase, planning and executing a second phase based on the quantitative results where qualitative data is gathered for the purposes of explaining the quantitative results (Plano Clark & Creswell, 2015). This design incorporates both extensive quantitative and rich qualitative evidence from respondents in a particular study with the purposes of seeking elaboration, enhancement, illustration, and clarification from one method with the results from the other method (Plano Clark & Creswell, 2015). In using this design, Creswell, Plano Clark, Gutmann and Hanson (2003) indicated that the

researcher must pay attention to its variants. These are the follow-up explanations model and the participant selection model. Even though quantitative data on PMTs' self-efficacy and anxiety is gathered first before qualitative data is gathered, the variants connect the two phases in different ways.

The follow-up explanations model focuses on the results to be examined in more detail. Creswell et al. (2003) asserted that it is used when the researcher needs qualitative data to explain or expand on quantitative results. In this variant, the researcher identifies specific quantitative findings that need additional explanation such as individuals who scored on a particular construct at extreme levels, statistical differences among groups, or unexpected results. The investigator's responsibility is to gather qualitative data from participants who can best help explain these findings. In this variant, the quantitative data is emphasised, hence the dominant-less-dominant design is selected (QUAN→qual). An example of a researcher who adopted this variant is Ivankova (2004). In Ivankova's study, she initially gathered quantitative survey data in the quantitative phase to identify factors that were predictive of students' persistence. After, she moved to the second phase where she used a qualitative multiple case study method to explain why certain factors in the first phase were significant predictors of student persistence in a programme.

The second variant, the participant selection model, is employed when an investigator requires quantitative information to identify and purposefully select participants for a follow-up in-depth qualitative phase. In this variant, the qualitative data is emphasised, hence the less-dominant-dominant design is selected (quan→QUAL). It is clear at this point that the follow-up explanations

model places emphasis on the results to be explained whilst the participant selection model emphasises the participant needed to provide the explanations.

When using a mixed-methods design, the mixing decision is an important issue a researcher must bear in mind (Creswell & Plano Clark, 2011). This is the point in the research process when the quantitative data and the qualitative data are brought together or related. A study that employs both quantitative and qualitative methods without explicitly mixing the data derived is simply employing multiple methods (Creswell & Plano Clark, 2011). Hence, merging, embedding and connecting strategies can be used in mixing the two datasets.

In the merging strategy, the researcher explicitly brings the two datasets together or integrates them. This can be done during the interpretation: analysing them separately in a results section and then merging the two sets of results together during the interpretation phase or discussion phase. The strategy can also be employed during the analysis stage by quantitising the qualitative data or qualitising the quantitative data or transforming them as a single variable.

In the embedding strategy, mixing takes place at the design level where a researcher decides to embed data of one type within a design of the other type. This means that a researcher can embed qualitative data within a quantitative design in an experimental study or embed quantitative data within a qualitative design in a phenomenological study. One form of data can be embedded in a concurrent data collection with the other dataset; alternatively, the embedded data may be collected sequentially before or after the other dataset. Researchers may make interpretations from using the secondary, embedded dataset by

bringing the two datasets together in the concurrent approach and keeping them separate in the sequential approach.

In the connecting strategy, a researcher can decide to link the two data types. This occurs when the analysis of one type of data leads to the need for other types of data. This can manifest in one of two ways. A researcher can obtain quantitative results that lead to the subsequent collection and analysis of qualitative data and vice versa. The mixing occurs in the way that the two data types are connected which can occur in different ways, such as in specifying research questions, selecting participants, or developing an instrument or other materials.

By the selected design, quantitative data was first gathered in the first phase before and after the ONCTP. This was to ensure that adequate survey responses were gathered from the respondents to describe their levels of self-efficacy and anxiety. However, this took place in two-time points, thus before and after the ONCTP, hence repeated measures. The collection of the quantitative data influenced the gathering of the qualitative data in order to elaborate and clarify significant quantitative results as permitted by the selected design and the connecting strategy (Plano Clark & Creswell, 2015). Griffin and Ragin (1994) and Alhojailan (2012) indicated that views and concepts can be linked by comparing data on quantitative and qualitative research from different situations and time. Even though the same questionnaire was used to gather the quantitative data at different time points, it helped to track PMTs' self-efficacy and anxiety about teaching practicum between two-time points to focus the attention of teacher educators in the employment of appropriate strategies in training PMTs. The high self-efficacy and transient anxiety experienced by the

PMTs served as significant issues which the qualitative method provided explanations to that effect. King and Horrocks (2010) and Marshall and Rossman (2011) remarked that within social science, qualitative research has become a prominent approach that allows the researcher to delve deeper into finding out what people think and feel; and how people cope with experiences (Seale, 2004). By extension, the qualitative aspect of this study would help the researcher to appreciate how PMTs feel and think about their self-efficacy and anxiety about teaching practicum. Braun and Clarke (2008) stated that themes can emerge from the findings, which will provide the study with a detailed and rich account of the data gathered.

In the results section of the research report, separate sections were devoted to the presentation of the quantitative and qualitative results as permitted by the embedded strategy in a sequential design. However, during the discussion of the results, the connecting strategy was employed to elaborate and clarify the quantitative findings with the qualitative results. In other words, the qualitative results were linked to the quantitative results in the discussion section to make knowledge claims clearer and enforce the understanding of the study findings. Figure 2 presents the model for the research design.

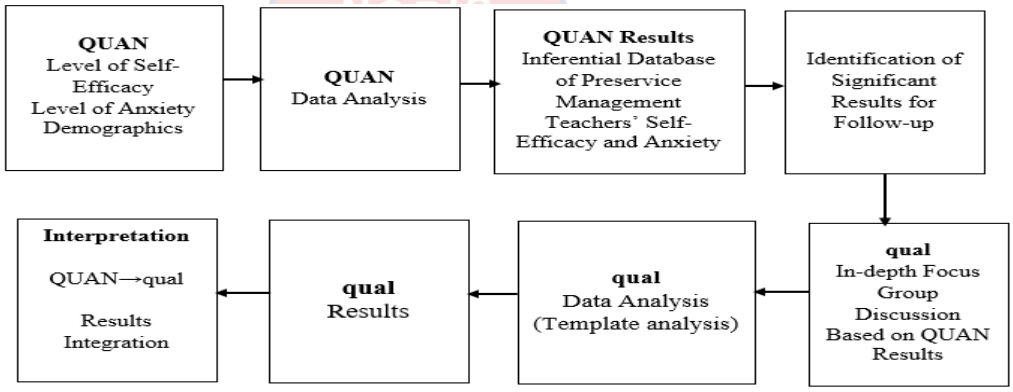

Figure 2: Sequential explanatory design, follow-up explanations model of preservice management teachers' self-efficacy and anxiety.
Source: Fieldwork (2019)

Several benefits were obtained from the use of the sequential explanatory design. The two-phase structure made it straightforward to implement. This was because the researcher executed the two methods in separate phases and collected one data type at a time. Also, apart from the design affording the researcher in-depth understanding of the quantitative findings, the final report was written in two phases making it straightforward to write and providing a clear delineation for readers. Finally, the design appeals to quantitative researchers because of its strong quantitative orientations (Creswell & Plano Clark, 2011). However, the use of the design came with some challenges. It took a considerable amount of time for implementing the phases, especially for the qualitative phase. The repeated measures aspect took enough consciousness in appropriately matching the two quantitative datasets. The design increased the complexity in the execution of the study. However, a careful step by step plan was followed in executing the study.

Study Context

The ONCTP practice was organised at the lecture theatres in the University of Cape Coast. The PMTs were placed in four groups of 30 each. Each group was assigned two supervisors who sat at the back of the lecture theatre to observe the PMTs go through the teaching practicum. Out of the eight supervisors, seven were academics and one was an administrative staff. Four of them (2 assistant lecturers and 2 senior research assistants) were management education experts, one SHS economics teacher, one basic education professor, one educational psychology lecturer (a senior lecturer) and one administrative staff of the University. It is evident that almost all, with the exception of one, are into teaching and hence assumed to possess pedagogical knowledge.

However, only four of them possessed both content and pedagogical knowledge. The implication is that four of them might suffer when it comes to critiquing the lesson content of the PMTs.

The pairing of the supervisors also did not take into consideration one management education expert in each group. A situation was observed where the educational psychology supervisor was paired with the basic education supervisor. Each group met at different times on a practice day. Mostly, the teaching practice was organised from 4 pm to 7 pm each day from Wednesday to Friday, hence the possibility that some of the PMTs might have gone through some level of stress (from normal lectures) which the study could not control. However, the use of the regression models captured all such factors as part of the error term, therefore the findings might not be affected.

Most important was the context in which the levels of self-efficacy of the PMTs were measured. It must be noted that it would be bizarre to measure the efficacy of a person for a particular task when the person has not been prepared for that task. The argument is that preservice teachers' preparation is likely to influence their ability. Hence, the measurement of the PMTs' level of self-efficacy before the ONCTP was influenced by their prior teaching experiences, knowledge in pedagogy (e.g. methods of teaching management and curriculum studies in management) and education and professional studies (e.g. educational psychology, special education). After the ONCTP, their efficacy was measured which was influenced by their prior teaching experiences, knowledge in pedagogy, education and professional studies, and experiences acquired on the ONCTP. It was, therefore, highly anticipated that their level of self-efficacy should be high after the ONCTP as their teaching

anxiety falls.

Population

The population of the study was all third-year PMTs cohort (N = 120) in the University of Cape Coast for the 2018-2019 academic year. They were being trained through the regular stream of the management teacher education programme. The first and second-year PMTs were not included in the study because they had not undertaken enough courses in pedagogy at the time of the study and were also not ready for teaching practice. Methods of teaching management is one of the critical courses which prepare PMTs for teaching. This course is only taught in the first semester of the third year on the programme. It is at this time (third year) that PMTs are much conscious of teaching in order to progress into the behaviour of a professional teacher. The fourth-year PMTs were also excluded because they had gone through the process a year before the execution of this study.

The population was made up of a disproportionate number of male and female PMTs found within different age groups. Some were already professional teachers and others were being trained to be professional teachers. Some of them did not desire to take teaching as a career. Hence, these characteristics in the population are likely to influence their levels of self-efficacy and anxiety about the teaching practicum. Table 1 presents the population distribution of the PMTs.

Table 1: Population Distribution of Preservice Management Teachers

Sex	Total Number	Percentage
Male	79	65.8
Female	41	34.2
Total	120	100

Source: Department of Business and Social Sciences Education 2018-2019, University of Cape Coast.

Respondents and Participants

All 120 PMTs were involved in the quantitative phase of the study. The census method was used to involve all of them. Ogah (2013) enforces the idea of gathering data from every member in a population such as this when the population size is relatively small. In such a case, the researcher is free from worrying about sampling errors. When all population elements are covered in such an enquiry, the highest accuracy can be presumed since no element of chance is left (Kothari, 2004).

During the qualitative phase, eight of the PMTs were involved in the focus group discussion. This was obtained after 31 PMTs were invited to be part of the focus group discussion, where 10 of them consented. However, eight of them (six male and two female PMTs) were present as panel discussants. The reduction in the number of panel discussants was due to time and availability of the participants which limited the discussion to one session; this is noted as one of the problems with focus group discussion (Wong, 2008). Nevertheless, such a number is considered reasonable since a focus group usually consists of a relatively small group usually between six and nine (Denscombe, 2007) or six and 12 (Wong, 2008).

In the qualitative aspect, the extreme case sampling technique was used to involve eight PMTs for the study. Patton (1987, p. 52) stated that "the logic of extreme case sampling is that lessons may be learned about unusual conditions or extreme outcomes which are relevant…." The unusual conditions of PMTs' high level of self-efficacy and transient anxiety about the teaching practicum in the quantitative phase of the study, warranted the use of the extreme case sampling technique to draw out further insight to influence policy

in the University.

Data Collection Instruments

The study relied on three primary data collection instruments. Data for the quantitative phases were gathered through the TSES (Appendix A) and STAS (Appendix B). The Follow-up Focus Group Discussion (FFGD) guide (Appendix C) was used to gather qualitative data to elaborate and clarify the quantitative findings.

Teacher Sense of Efficacy Scale (TSES)

The TSES, also referred to as the Ohio State Teacher Efficacy Scale (OSTES), was adapted and used to gather data on PMTs' level of self-efficacy. The instrument was developed by Tschannen-Moran and Woolfolk Hoy in 2001. It is made up of three principal factors: instructional strategies efficacy (8 items), classroom management efficacy (8 items) and student engagement efficacy (8 items). Its 24 items were structured on a 9-point Likert-type scale ranging from 'nothing' to 'a great deal'. The adaptation of the TSES was appropriate for the study. This is because it covered the standards in the University used for assessing teaching capacity of preservice teachers. The standards focus on lesson plan preparation, use of teaching methods and delivery; classroom organisation and management; and professional commitment. Its use also ensured a fair comparison of the current findings with previous studies. Finally, it can be used to assess preservice teachers' self-efficacy from across levels, context and subjects (no specific recourse to any subject); this makes it applicable to use in the Ghanaian context. However, few changes were made due to three contextual factors.

First, the 9-point scale nature of the instrument did not parallel the STAS 5-point Likert scale. Therefore, the TSES was reduced to a 5-point Likert scale to parallel it with the STAS. The new scale adopted was 'never = 1', 'rarely = 2', 'moderately = 3', 'much = 4', and 'very much = 5'. Such modification has been a normal practice. An example is seen when Morton et al. (1997) modified the 9-point anxiety Likert-type scale developed by Hart (1987) into a 5-point Likert-type scale with a similar reason to parallel the anxiety rating scale with their Cognitive Failures Questionnaire (CFQ). Second, the items on the TSES were in the form of questions instead of statements which were not likely to be familiar to the study respondents, hence, the items were changed from questions to statements to make it familiar to them and align it with the adapted STAS. Third, some of the words were relatively complex and were therefore changed to facilitate respondents understanding of the import of the statements. Table 2 provides an example of items on each factor and how they were changed or modified.

Table 2: Examples of Modifications made on the TSES

Factors	Original Items	Items Modified
Instructional Strategies Efficacy	How much can you use a variety of assessment strategies?	I can use a variety of assessment strategies.
	To what extent can you craft good questions for your students?	I can craft good questions for my students.
Classroom Management Efficacy	How well can you respond to *defiant* students?	I can respond to *disobedient* students.
	How well can you establish routines to keep activities running smoothly?	I can establish routines to keep activities running smoothly.
Student Engagement Efficacy	How much can you do to foster student creativity?	I can foster student creativity
	How much can you do to motivate students who show low interest in school work?	I can motivate my students who show low interest in schoolwork.

Source: Fieldwork (2019)

Student-Teachers' Anxiety Scale (STAS)

The STAS modified by Morton et al. (1997) was adapted for the study. It was originally developed by Hart (1987) on a 7-point Likert-type scale of 26 items which measures the extent to which each of the sub-scales causes anxiety. The instrument originally had four factors namely evaluation anxiety, pupil and professional concerns anxiety, class control anxiety and teaching practice requirements anxiety. However, Morton et al. (1997) modified the instrument into a five-point Likert-type scale with five factors such as evaluation anxiety (8 items), class control anxiety (4 items), professional preparation anxiety (4 items), school staff anxiety (5 items), and unsuccessful lesson anxiety (5 items). The scale was structured as 'never = 1', 'rarely = 2', 'moderately = 3', 'much = 4', and 'very much = 5'. In modifying the instrument some words were changed which did not fit the ONCTP context in the University. Examples of some of these words are faculty advisor, school staff, buoyant and children which were changed to supervisor, colleagues, robust and learners respectively. Table 3 presents some of the exact modifications.

Table 3: Examples of Modifications made on the STAS

Factors	Original Items	Items Modified
Evaluation Anxiety	I am anxious about being observed by my *advisor*	I am anxious about being observed by my *supervisor while teaching.*
	I am anxious about how the practice teaching will go in my *faculty advisor's* eyes.	I am anxious about how the practice teaching will go in my *supervisor's* eyes.
Class Control Anxiety	I am anxious about setting work at the right level for the *children.*	I am anxious about setting work at the right level for the *learners.*
	I am anxious about how to give each *child* the attention he/she needs without neglecting others.	I am anxious about how to give each *learner* the attention he/she needs without neglecting others.

Table 3, continued

Professional Preparation Anxiety	I am anxious about how to handle *defiance* from a *child*.	I am anxious about how to handle *disobedience* from a *learner*.
	I am anxious about maintaining a '*buoyant'* approach.	I am anxious about maintaining a '*robust'* approach.
School Staff Anxiety	I am anxious about whether the *principal* will be happy with my *works*.	I am anxious about whether the *supervisor* will be happy with my *teaching*.
	I am anxious about co-operation with the *school staff*.	I am anxious about co-operation with my *colleagues during the teaching practice.*
	I am anxious about getting on with the *school staff*.	I am anxious about getting on with *my colleagues during the teaching practice*.
Unsuccessful Lesson Anxiety	I am anxious about how the *faculty advisor* will react to one or more unsuccessful lessons if they should occur.	I am anxious about how the *supervisor* will react to one or more unsuccessful lessons if they should occur *during the teaching practice*.

Source: Fieldwork (2019)

Follow-up Focus Group Discussion Guide

In order to follow-up and explain the quantitative findings, the FFGD guide was used to gather the qualitative data for the study. The guide consisted of seven unstructured items sectioned under six areas. Section A covered the preparatory issues which included welcome address, objective for discussion, ground rules and estimated duration for the discussion. Section B had only one item which focused on their self-efficacy. Section C had three items which focused on PMTs' anxiety. Section D had only one items which focused on changes in PMTs' level of self-efficacy. Section E covered the possibility of high self-efficacy and high anxiety with one item. Section F solicited PMTs' general conclusion on the discussion.

The FFGD provided insight into the unusual issues identified from the quantitative results. It is more feasible and productive in generating ideas than individual interviews (Christian, 2017). This is important to use due to its ability to stimulate the thoughts of discussants, coupled with the advantage of providing a setting for the relatively homogeneous PMTs to reflect on the questions asked (Dilshad & Latif, 2013). Patton (2002) stressed that it provides an avenue to collect high-quality data in a social context. Such rich qualitative data can be gathered through reasonable speed (Gorman & Clayton, 2005). Finally, unanticipated aspects of the problem under study might be explored. The effectiveness of the FFGD was determined through objective clarity, appropriate selection of participants, suitable setting and use of effective questions as recommended by Krueger (1998).

Validity and Reliability Test

Validity and reliability tests were conducted for both the quantitative and qualitative instruments. This was to ensure that the instruments gathered credible data for the study, since they represents measures of quality in research (Sim & Wright, 2000).

Validity and reliability of quantitative instruments

Vogt (2007) indicated that it is critical for researchers to always establish content and construct validity. The TSES was well validated by Tschannen-Moran and Woolfolk Hoy (2001) through a 10-member expert who reviewed the items on the instrument for content validity before testing. The items were also subjected to factor analysis by the developer with high factor loadings of .4 and above. However, the items were modified and the study's supervisors further validated its content validity. In that case, Samuels (2017)

suggests that Confirmatory Factor Analysis (CFA) should be used to re-confirm the factors. Said, Badru and Shahid (2011) earlier emphasised that CFA should be run on a standardised instrument using Analysis of Moment Structures (AMOS) and focus placed on the results of the regression weights. Therefore, the TSES was piloted on 40 randomly selected fourth-year PMTs based on the guideline provided by Baker (1994). Baker stated that 10-20% of the actual study's sample should be selected for a pilot test. However, the study selected 33% for the pilot. To confirm the three-factor self-efficacy construct, CFA was run on the pilot data gathered (also for actual data). Figure 3 presents the CFA model that guided the analysis.

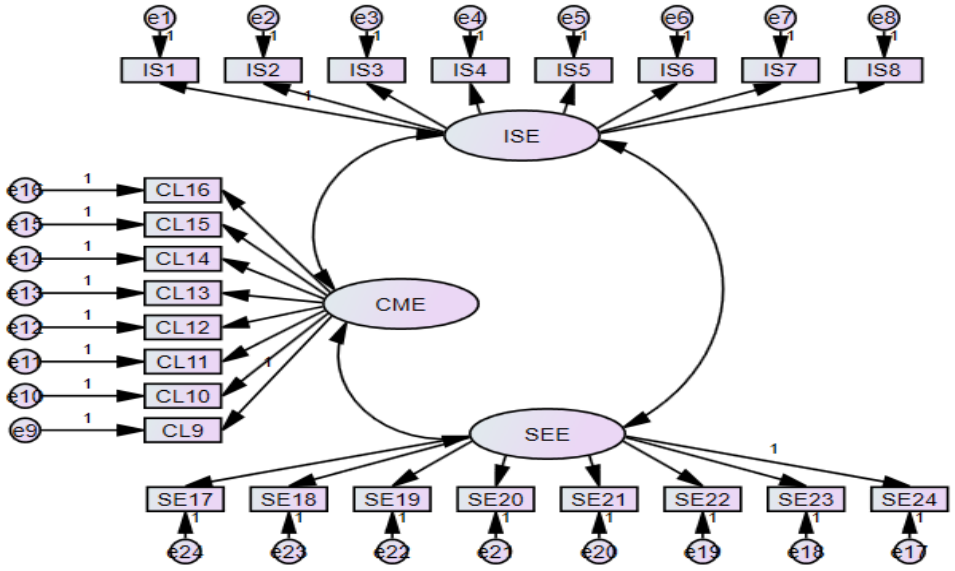

Figure 3: A confirmatory factor analysis for self-efficacy three-factor model. Source: Field data (2019).

The result of the CFA test on the three-factor self-efficacy measurement model of eight items each for its sub-construct was estimated through the Maximum Likelihood (ML) technique. The goodness of fit indices determine whether exact fit (χ^2 not significant) or approximate fit (SRMR $\leq$ .08) is tenable (Asparouhov & Muthén, 2018) in order to allow for the examination of the standardised regression weights (loading) and Average Variance Extracted

(AVE) for construct validity. Table 4 presents the goodness of fit results.

Table 4: Goodness of Fit Indices for Self-Efficacy Scale

Fit Indices	Pilot	Efficacy Time 1	Time 2	Threshold	Reference
χ^2	313.53*	354.40**	424.53**	> .05	Hair et al. (2006)
CMIN/DF	1.29	1.47	1.76	≤ 2 or 3	Schreiber et. al (2006)
CFI	.90	.93	.91	≥.90	Kline (2013)
NFI	.67	.82	.81	≥.90	Kline (2013)
IFI	.90	.93	.91	≥.90	Kline (2013)
TLI	.88	.92	.89	≥.90	Kline (2013)
RMSEA	.08	.06	.08	≤ .08	Schreiber et. al (2006)
SRMR	.08	.05	.06	≤ .08	Kline (2016)

Note: CMIN/DF: Ratio of χ2 to df; CFI = Comparative Fit Index; NFI = Normed Fit Index; IFI = Incremental Fit Index; TLI = Tucker-Lewis Index; RMSEA= Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Residual; *p < .05; **p < .001.
Source: Fieldwork (2019).

Exact fit was not obtained since the χ^2 = 313.53 (Pilot), χ^2 = 354.40 (Time 1) and χ^2 = 424.53 (Time 2) were statistically significant (p = .002, p < .001, p < .001 respectively). However, except for the NFI, the rest of the FIT indices communicate that approximate fit has been attained on each time period. It is, therefore, concluded that the data gathered at the pilot, Times 1 and 2 approximately fit the three-factor self-efficacy model proposed by Tschannen-Moran and Woolfolk Hoy (2001). Table 5 presents the item loadings and AVE.

Table 5: Self-Efficacy Item Loadings and AVE

Factors	Items	Loading 1	AVE 1	Loading 2	AVE 2	Loading 3	AVE 3
Instructional Strategies	IS1	.664**	.57	.729**	.50	.643**	.54
	IS2	.748**		.747**		.736**	
	IS3	.777**		.732**		.739**	
	IS4	.765**		.780**		.747**	
	IS5	.792**		.677**		.786**	
	IS6	.831**		.689**		.720**	
	IS7	.742**		.632**		.736**	
	IS8	.685**		.637**		.758**	
Classroom Management	CL9	.858**	.61	.701**	.50	.796**	.58

Table 5, continued

	CL10	.725**		.682**		.811**	
	CL11	.772**		.631**		.808**	
	CL12	.773**		.626**		.750**	
	CL13	.681**		.710**		.620**	
	CL14	.863**		.743**		.714**	
	CL15	.775**		.738**		.765**	
	CL16	.766**		.628**		.790**	
Student Engagement	SE17	.472**	.50	.695**	.51	.727**	.51
	SE18	.677**		.726**		.691**	
	SE19	.565**		.569**		.632**	
	SE20	.429*		.633**		.533**	
	SE21	.671**		.839**		.775**	
	SE22	.882**		.712**		.818**	
	SE23	.813**		.770**		.785**	
	SE24	.782*		.744**		.709*	

Source: Fieldwork (2019). *p < .03, **p < .001

The minimum and maximum standardised loadings for the items at the Pilot were .429 and .882 respectively; at Time 1, .569 and .839 respectively, and at Time 2, .533 and .818 respectively. Almost all of the items were statistically significant (p < .001). The AVE estimates were also .50 and above with the highest estimate being .61 (classroom management) suggesting that construct validity has been achieved (Fornell & Larcker, 1981).

Next was the issue of the reliability of the TSES. The original reliability for the TSES was 0.94. Specifically, instructional strategies efficacy, classroom management efficacy and student engagement efficacy had an original reliability coefficient of .91, .90 and .87 respectively. In order to confirm the reliability coefficients, Cronbach's Alpha was computed and the results presented in Table 6.

Table 6: TSES Reliability Coefficient

Variable	Subscales	Alpha Pilot	Alpha Time1	Alpha Time2
Self-Efficacy	Instructional Strategies	.91	.89	.90
	Classroom Management	.92	.88	.91
	Student Engagement	.88	.89	.90
Cronbach's Alpha	TSES	.96	.95	.96

Source: Fieldwork (2019).

The overall Cronbach's Alpha was .96 which shows an improvement in the instrument' reliability as compared with the original instrument's alpha level (.94). At the pilot, the alpha for instructional strategies did not change (.91). However, the alpha improved for classroom management (.92) and student engagement efficacy (.88). At Time 1, the overall reliability coefficient (.95), improved over the original scale coefficient (.94), however, a marginal decline in instructional strategies (.89) and classroom management efficacy (.88) alpha. Student engagement efficacy alpha (.89) improved over the original (.87) and pilot test alpha (.88).

Finally, at Time 2 (After ONCTP), the overall Cronbach's Alpha was restored to .96, still an improvement over the original (.94) and Time 1 (.95) Cronbach's alpha. Instructional strategies alpha (.90) fell marginally below the original alpha (.91) but an improvement over Time 1 (.89). Both classroom management (.91) and student engagement (.90) efficacy alpha showed an improvement in the original constructs (.90 and .87 respectively). The TSES was, therefore, judged reliable for gathering quality data based on two reasons. First, the overall reliability of the instrument at each time point was higher than the original instrument. Secondly, the Cronbach's alpha obtained at each time point was above the threshold of .7 which suggested that the instrument gathered

credible data (Fraenkel & Wallen, 2000; Büyüköztürk, 2002; Huck, 2004; Abington-Cooper, 2005). A similar procedure was followed for the STAS. Figure 4 presents the CFA model that guided the analysis.

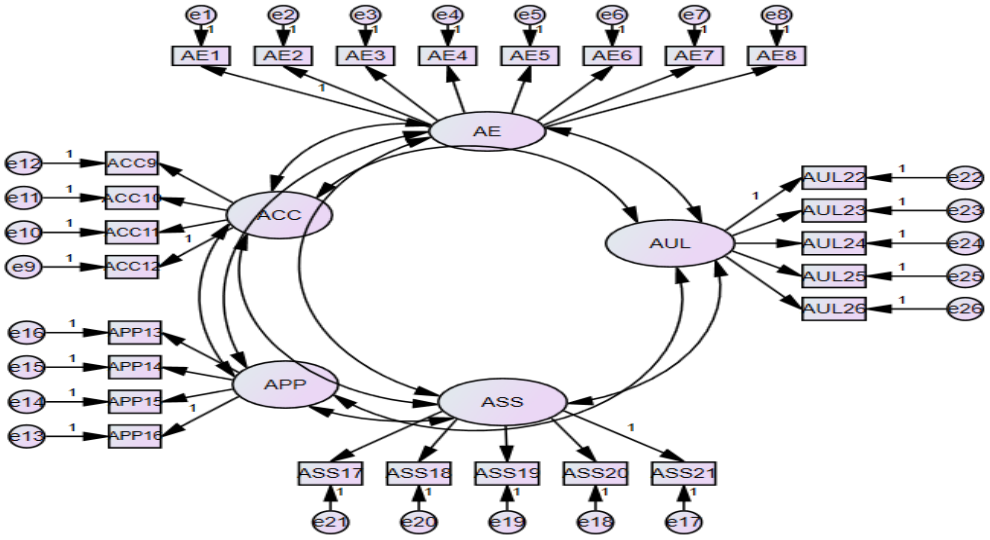

Figure 4: A confirmatory factor analysis for anxiety five-factor model.

The result of the CFA test on the five-factor anxiety measurement model of eight items evaluation anxiety, four items class control anxiety, 4 items professional preparation anxiety, five items school staff anxiety and five items unsuccessful lesson anxiety was examined through the ML estimation technique. Table 7 presents the goodness of fit indices.

Table 7: Goodness of Fit Indices for Anxiety Scale

		Anxiety			
Fit Indices	Pilot	Time 1	Time 2	Threshold	Reference
χ^2	491.48*	489.30*	525.03*	> .05	Hair et al. (2006)
CMIN/DF	1.72	1.75	1.88	≤ 2 or 3	Schreiber et. al (2006)
CFI	.84	.91	.92	≥.90	Kline (2013)
NFI	.69	.82	.85	≥.90	Kline (2013)
IFI	.84	.91	.92	≥.90	Kline (2013)
TLI	.81	.90	.91	≥.90	Kline (2013)
RMSEA	.14	.08	.08	≤ .08	Schreiber et. al (2006)
SRMR	.07	.05	.05	≤ .08	Kline (2016)

Note: CMIN/DF: Ratio of χ2 to df; CFI = Comparative Fit Index; NFI = Normed Fit Index; IFI = Incremental Fit Index; TLI = Tucker-Lewis Index; RMSEA= Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Residual; *p < .001
Source: Fieldwork (2019).

Again, exact fit was not obtained since the χ^2 = 491.48 (Pilot), χ^2 = 489.30 (Time 1) and χ^2 = 525.03 (Time 2) were statistically significant (p < .001). However, except for the NFI, the rest of the FIT indices communicate that approximate fit has been attained at each time period. It is, therefore, concluded that the data gathered at the pilot, Times 1 and 2 approximately fitted the five-factor anxiety model. Table 8 presents the item loading and AVE.

Table 8: Anxiety Item Loadings and AVE

Factors	Items	Loading 1	AVE 1	Loading 2	AVE 2	Loading 3	AVE 3
Evaluation	AE1	.797**	.64	.674**	.50	.579**	.58
	AE2	.802**		.614**		.775**	
	AE3	.807**		.709**		.745**	
	AE4	.733**		.670**		.732**	
	AE5	.772**		.685**		.760**	
	AE6	.778**		.709**		.842**	
	AE7	.866**		.723**		.755**	
	AE8	.821*		.815**		.847**	
Class Control	ACC9	.838**	.70	.731**	.66	.874**	.75
	ACC10	.761**		.857**		.894**	
	ACC11	.885**		.854**		.845**	
	ACC12	.867**		.798*		.847**	
Professional Preparation	APP13	.633**	.66	.711**	.56	.707**	.66
	APP14	.868*		.760**		.847**	
	APP15	.836**		.758**		.844**	
	APP16	.876**		.759**		.836**	
School Staff	ASS17	.929**	.79	.782**	.64	.861**	.72
	ASS18	.900*		.820**		.817**	
	ASS19	.861**		.825**		.831**	
	ASS20	.871*		.815**		.906**	
	ASS21	.880**		.757*		.818**	
Unsuccessful Lesson	AUL22	.846**	.67	.766**	.59	.771**	.66
	AUL23	.798**		.749**		.797**	
	AUL24	.728**		.788**		.796**	
	AUL25	.836**		.801**		.818**	
	AUL26	.881**		.723**		.887**	

Source: Field data (2019). *p < .03, **p < .001

The minimum and maximum standardised loadings for the items at the pilot were .633 and .929 respectively; at Time 1, .614 and .857 respectively; and

at Time 2, .579 and .906 respectively. Almost all the items were statistically significant ($p < .001$). The AVE estimates were also .50 and above with the highest estimate of .79 (school staff anxiety) signifying that construct validity has been achieved (Hair et al., 2019). Reliability analysis was also conducted for the confirmation of the original instrument's reliability coefficient of .91 (Hart, 1987). The Cronbach's alpha was used to examine the reliability of the STAS. The results obtained are presented in Table 9.

Table 9: STAS Reliability Coefficient

Variable	Factors	Alpha Pilot	Alpha Time 1	Alpha Time 2
Anxiety	Evaluation	.94	.90	.92
	Class Control	.90	.88	.93
	Professional Preparation	.89	.85	.89
	School Staff	.95	.91	.94
	Unsuccessful Lesson	.91	.88	.90
Cronbach's Alpha	STAS	.98	.97	.98

Source: Fieldwork (2019).

The whole scale reliability coefficient of the STAS after the pilot (.98) was greater than the original reliability coefficient (.91). Hart (1987) did not provide the specific reliability coefficients for each anxiety construct. When the instrument was compared with Morton et al. (1997), with the exception of professional preparation < .9, each anxiety construct reliability was greater, thus evaluation > .87, classroom management > .87, school staff > .84. Apart from professional preparation anxiety which was again marginally low in Time 1, the rest of the constructs' reliabilities were higher as compared with that of Morton et al. (1997). At Time 2, each anxiety construct's reliability was higher than that of Morton et al. (1997). It can be vividly seen that the reliabilities obtained on the anxiety constructs at Time 2 marginally improved over Time 1. The whole

STAS reliability coefficient at each time point appeared the same, proving the internal consistency of the instrument over time. The STAS was, therefore, judged credible for data gathered at each time point of the study.

Generally, both TSES and STAS met the three important reliability attributes (homogeneity, stability and equivalence) as suggested by Heale and Twycross (2015). Homogeneity is the extent to which all the items on a scale measure one construct. Stability considers the consistency of results when an instrument is used repeatedly. Equivalence focuses on the consistency among responses of multiple users of an instrument or among alternate forms of an instrument. Kerlinger (2000) noted that a reliable instrument will always provide an identical score as obtained for the scales at each time points.

Validity and reliability of the qualitative instrument

Lewis and Ritchie (2003) stated that it is useful to consider the qualitative study's internal and external validity. Lincoln and Guba (1985) coined the term 'trustworthiness' to represent quality in qualitative studies. Lincoln and Guba (1985) proposed the "naturalist's equivalents" of internal validity, external validity, reliability and objectivity (as argued by positivist researchers) as credibility, transferability, dependability and confirmability respectively.

Credibility

Qualitative researchers need to ensure that the findings are true and believable and represent the views provided by the research participants. In this study, I established a long term rapport with the participants so that they see me as part of them and not influenced by my presence during the focus group discussion. They clearly understood that it was wrong if a third party knew their

identities. Also, I took into consideration the context in which the teaching practice was conducted by going there to understand how it was carried out so that I could easily understand misinformation either coming from me or the study participants. This allowed for the appropriate use of probing questions. Since I was quite privy to how teaching practice is conducted in the University, I wrote down my biases so they could not influence me in the data analysis. Also, data triangulation was undertaken where some participants who exhibited a particular level of significant anxiety (caused by a particular anxiety factor) were interviewed to determine the exact fact about the situation. Finally, I checked with the participants the representativeness of the data to what they really said or implied. This was carried out at the end of the FFGD where I reviewed a synopsis of the interview consolidating the themes that had been inspired by the data and enabled participants to decide whether the summary was the right representation of their position.

Transferability

This quality criterion, a type of external validity, refers to the degree to which the phenomenon or findings described in one study are applicable or useful to theory, practice and future studies (Lincoln & Guba, 1985). Even though qualitative research is not much interested in generalisation, when the context in which a study is carried out is well described, others who find themselves in similar context can apply the research findings to their unique needs. Therefore, I provided a rich and thick description of the participants of the study, their selection and the study context.

Dependability

Similar to reliability in quantitative research, dependability "determines whether the findings of an inquiry would be consistently repeated if the inquiry was replicated with the same (or similar) subjects in the same (or similar) context" (Guba, 1981, p. 80). Shenton (2004) asserted that detailed coverage of the methodology and methods employed allows the reader to assess the extent to which appropriate research practices have been followed. Hence, I provided complete documentation of the research design, implementation, methodology, methods and details of data collection used in the study as advised by Shenton (2004) and Streubert-Speziale (2007). The purpose of the qualitative data employed in this study was to elaborate and clarify the quantitative findings. Hence, a clear description of the methodology for qualitative data has been provided. The approach for data analysis has also been detailed in order to strengthen the dependability of the qualitative findings.

Confirmability

Similar to objectivity in quantitative research, confirmability is concerned with "the degree to which the finding of an inquiry is a function solely of the participants and conditions of the inquiry and not of the biases, motivations, interests, perspectives, etc. of the inquirer" (Guba, 1981, p. 80). I ensured that the data gathered spoke for itself and interpretations made are the true reflections of the positions of the participants. The data transcribed were crosschecked by colleague researchers and the themes that were generated examined for its correctness.

Empirical Model

Structural Equation Modelling (SEM) through Smart-Partial Least Squares (Smart-PLS) path modelling algorithm and Analysis of Moment Structures (AMOS), and standard logistic models were generated to study the effect of the PMTs' self-efficacy on their anxiety about teaching practicum. The objective of the SEM through Smart-PLS was to determine the effect of self-efficacy on teaching anxiety. The use of Smart-PLS was appropriate because the relatively small population restricted the sample size (Hair et al., 2019). In order to determine the effect of the efficacy factors (instructional strategies, classroom management and student engagement efficacy) on teaching anxiety, AMOS was used. AMOS is a covariance SEM which assist in determining the precise effect of independent variables on a dependent variable by controlling for the relationship (covariance) that exist between the independent variables in a model. The standard binomial logistic regression was then used to determine the probability of the PMTs falling in a low teaching anxiety category.

The structural model, through Smart-PLS, was simply stated as

$$ANX = f\ (EFF)$$

$$ANX = \beta_1 EFF + \varepsilon \text{ …….....Equation 1}$$

where the variables are defined as;

ANX = Anxiety

EFF = Efficacy

β_1 = Path Coefficient

The structural model, through AMOS, was also stated as:

$$ANX = f\ (ISE, CME, SEE)$$

$$ANX = \beta_0 + \beta_1 ISE + \beta_2 CME + \beta_3 SEE + \varepsilon \text{……..Equation 2}$$

ISE = Instructional Strategies Efficacy

CME = Classroom Management Efficacy

SEE = Student Engagement Efficacy

For the standard logistic regression,

let $P\ (ANX = 1) = P$, success probability (low anxiety) and

$P\ (ANX = 0) = 1 - P$, failure probability (high anxiety).

The standard logistic regression models can be defined as follows:

$$\text{Log}\left[\frac{P}{1-P}\right] = f\ (EFF)$$

$$\text{Log}\left[\frac{P}{1-P}\right] = \beta_0 + \beta_1 EFF \quad \text{.....Equation 3}$$

$$\text{Log}\left[\frac{P}{1-P}\right] = f\ (Sex, Age, TE, ITT, EFF)$$

$$\text{Log}\left[\frac{P}{1-P}\right] = \beta_0 + \beta_1 Sex + \beta_2 Age + \beta_3 TE + \beta_4 + \beta_5 EFF \quad \text{.....Equation 4}$$

where the variables are defined as;

ANX = Anxiety

TE = Prior teaching experience

ITT = Intention to teach

EFF = Efficacy

$\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = Regression parameters

Data Collection Procedures

After obtaining ethical clearance from the University and permission from teaching practice group supervisors, the quantitative data was immediately gathered from the respondents before the start of the teaching practicum on 6th February, 2019. Precisely, the respondents were informed that the study intended to understand their anxiety prior to the teaching practicum as well as the belief in their self-efficacy to teach. They were assured that the exercise was

not meant to victimise anyone but to generally understand their level of self-efficacy and anxiety. Their telephone and registration numbers were documented for the purpose of tracing them for the follow-up data collection. After, with the help of two trained research assistants, the TSES and STAS were administered. The training of the research assistant focused on understanding about the scale items and how to administer a questionnaire. Since they were in different groups as earlier indicated and had their sessions separately, it afforded the use of the entire week for data collection (one week). Most importantly, the processing of the instruments started right in the field; as and when the questionnaires were submitted, a quick scan was made and respondents were alerted in an event the questionnaires were not thoroughly completed. This allowed for the gathering of complete data on all the variables. One of the respondents was absent, hence a return rate of 99.17% was obtained.

The respondents were informed that data would be gathered from them after the ONCTP. In preparation for the opportune time, an online survey version of the questionnaires was developed to facilitate the process. The online survey captured the same items on the TSES and STAS. Three reasons necessitated the use of the online survey. First, there was the need to break the respondents' familiarity with the questionnaires that had already been used in order for them to read the items and provide the required responses as it related to them. Secondly, it was to ensure that all items on the instruments were responded to so that data could be matched appropriately. This became possible due to the forced field function of the online survey. Finally, the online survey saved time for data entry and hence speeded up data analysis. Before its usage, the researcher joined the WhatsApp group of the respondents. Familiarity was

strengthened so that respondents remained truthful in their responses.

The PMTs were informed that right after the ONCTP, an internet address would be sent to them through their WhatsApp group page to follow to complete an online survey about their current self-efficacy and anxiety about the teaching practicum. They were again reminded that the exercise was important to understand how the two variables played out. The respondents were enthused about the whole exercise which was made evident when they called for the internet address to complete the online survey a day before the end of the exercise. However, it was sent to them on the WhatsApp group page the very day the ONCTP ended. They were taken through how to go through the process in completing it and what they should expect when the online survey was successfully submitted. A 7-day window was earmarked for the end of the online exercise. On the 5th day, about 80% of the respondents had completed it. A reminder was again sent to the respondents who were yet to complete the survey on the WhatsApp group page. By the end of the 7th day, all the respondents who were involved in the first data collection had successfully completed the online survey. After, they were informed that some of them would be contacted and invited for a focus group discussion so that they could provide explanations to deviant issues that were found during the quantitative phase.

In about four days, the results of the quantitative data were ready which directed the development of the FFGD guide. All the participants who had portrayed significant outcomes were identified and invitations sent to them. They were to indicate their acceptance and participation by choosing the date and time convenient to them. A conference room was then booked in the

University for the FFGD. A day before the FFGD, reminders were sent to them. Out of the 10 who consented to be part, eight of them actually attended. By the time they arrived, their names were already tagged on their tables which helped to know who sat at a particular place and who was talking at a particular time, for documentation to assist analysis. The sitting arrangement was quite circular in nature, balanced at both left and right with the moderator in the middle front. The field note-taker (one of the trained assistants) sat at the back. This assistant was trained on how to take records during discussions. Two recording devices were fixed at the centre of the table to capture the participants' voices at each angle. The participants were welcomed and I introduced myself as the moderator, and the trained assistant as the field note-taker. An overview of the topic of discussion was provided, the objective was communicated and ground rules and duration for the discussion stated.

The participants were informed they were recorded so that their responses could be captured and anonymously (pseudonyms were used) reported. They were encouraged to feel free to provide candid and objective responses as far as they knew and could speak to. They started by introducing themselves after which the moderator led the discussion. The participants were allowed to freely discuss issues without any interruptions from the moderator. The only point the moderator intercepted was when a particular participant had made the point and was being repetitive in responses. Data saturation was reached on an issue when participants had no new ideas to share. When the discussion ended, the field note-taker provided a synopsis of all that happened by reading out some of the responses for the participants to confirm. The discussion lasted three hours and 46 minutes. At the end of the meeting, I

thanked them and dissolved the meeting.

Ethical Considerations

The study followed all ethical procedures instituted by the University of Cape Coast. It first obtained ethical clearance from the Institutional Review Board to carry out the research. Also, an introductory letter (Appendix D) was obtained from the researcher's department to seek permission from appropriate authorities. Ethically, respondents needed to give their consent to be part of a study without any form of coercion and prejudice. Hence, a consent form (Appendix E) was presented to them to sign which made it clear that data would be gathered from them before and after the ONCTP to track their self-efficacy and anxiety. The respondents were made aware that their registration and phone numbers would be taken to enable their identification for subsequent data collection and to match their responses for each occasion of the data collection only for the purposes of analysis as required by the statistical tools. The purpose of the study and the nature of the data collected were adequately explained to them.

Assurance of utmost confidentiality and anonymity were provided to the respondents. They were also assured that the study was purposefully and solely for academic work and informed that should it become necessary to release the data to a third party their consent would first be solicited. They were again informed that they had the liberty to withdraw themselves in any stage of the study should they so desire. During the collection of the qualitative data, they provided their consent to be recorded on a recording device. In the report, key participants were represented with pseudonyms to hide their identities. "Anonymity and confidentiality are important ethical issues because their

violation can bring embarrassment, stigma, hardship, discrimination, incrimination, or loss of prestige to the individual group" (Ogah, 2013, p. 224).

Ethical considerations were also ensured during the data processing and analysis stage of the study. The data gathered through the TSES and STAS were sorted and cleaned without altering the responses provided by the respondents. The appropriate statistical tools were used with their assumptions thoroughly checked and reported. It should, however, be noted that the statistical tools were used within the knowledge framework of the researcher. Even though statistical significance is important, practical significance was also considered important in the study, and this prevented the tendency of massaging p-values to obtain significant results. The qualitative data were also transcribed and reported under themes that reflected the exact views of key informants. In places where the key informants were quoted to substantiate a claim, their actual words were used within the confinement of fidelity. Choice of words in this study was selected having in mind the research audience. Finally, all forms of plagiarism known to the researcher were avoided.

Data Processing and Analysis

The data collection instruments generated both quantitative and qualitative data, hence quantitative and qualitative approaches to data analyses were employed. The study employed quantitative-dominant mixed analysis, specifically sequential quantitative-qualitative analysis. In this analysis, the quantitative data is first analysed which direct the analysis of the qualitative strand (Onwuegbuzie & Teddlie, 2003). This part of the chapter is described under quantitative data processing and analysis and qualitative data processing and analysis.

Quantitative data processing and analysis

The quantitative data gathered through the TSES and STAS questionnaires were first filtered to remove irrelevant responses and cleaned for completeness. After, it was coded and entered into Statistical Product for Service Solutions (SPSS 22) for data processing. Data from the online survey version were also transferred in numeric form to an excel file and exported to SPSS for analysis. After, frequency and percentage and boxplot were used to check for data entry errors. Reverse coding was then carried out for the anxiety scale where 1 (never) = 5, 2 (*rarely*) = 4, 3 (*moderately*) = 3; 4 (*much*) = 2, and 5 (*very much*) = 1. Statistical tools employed for data analysis were frequency and percentages; cross-tabulations (chi-square); Mcnemar test, mean and standard deviation; 4-way factorial Multivariate Analysis of Variance (2*2*2*3-MANOVA); matched paired samples t-test; SEM (Smart-PLS 3, AMOS 22); and standard logistic regression. All the hypotheses were tested at 0.05 level of significance but in the case of the factorial MANOVA, the Bonferroni alpha level (.05/2) was used to establish statistical significance. The use of Bonferroni alpha is important when a single analysis has been conducted at multiple levels to help reduce the likely inflated alpha value (Field, 2009). However, no adjustment was made in the Bonferroni alpha for the pairwise analysis in the repeated-measures ANOVA.

Data gathered on respondents characteristics were analysed through the frequencies and percentages, cross-tabulations (chi-square) and McNemar test. The biographic variables for this analysis were all categorical (nominal and ordinal levels of measurement) and only appropriate to use such statistical tools. Specifically, the chi-square assisted in determining differences in prior teaching

experiences based on sex and intention to teach. The McNemar test assisted to determine differences in prior intention to teach and post intention to teach to determine the effect of self-efficacy and anxiety (if present) on their willingness to teach.

Data gathered on Research Questions One and Two were analysed through mean and standard deviation and repeated measures ANOVA. The research questions required the respondents' levels of self-efficacy and anxiety about teaching practicum. Hence, an average score was required to determine their levels on each construct. Since the mean is a composite score representing a distribution of scores in a given population, it was considered as an appropriate statistical tool. It is also the best measure of central tendency when a variable is measured in either interval or ratio level (scale). Both the efficacy and anxiety variables were measured on a five-point Likert scale which was considered as a scale.

Statistically, when the mean is reported, the best measure of dispersion is the standard deviation. The standard deviation was relevant in providing understanding to the degree to which responses on self-efficacy and anxiety are clustered or dispersed from the mean. When responses happen to be the same across all respondents, then a low standard deviation is expected (*SD* approaches zero), and the responses judged to be homogeneous in nature (agreed or disagreed at the same level). However, if the responses are not the same, the standard deviation is normally high (usually above one). The repeated measures ANOVA assisted in comparing the differences in the efficacy factors and anxiety factors for the same study cohort. Its relevance was to determine the factor(s) that significantly influenced PMTs' levels of self-efficacy and

anxiety about teaching practicum.

Hypothesis One and Two examined the differences in the levels of self-efficacy and anxiety of PMTs before and after the ONCTP respectively for the OFCTP. Therefore, the paired samples t-test was considered appropriate to analyse the hypotheses since data were gathered from the same group on two different occasions (before and after the ONCTP). The paired samples t-test, therefore, assisted in tracking increases or decreases in their levels of self-efficacy and anxiety about teaching practicum.

Data gathered for Research Question One and Two provided the characteristics of the respondents and therefore allowed for the inferential statistics to be run for Hypothesis Three. Research Hypothesis Three determined the differences in preservice teachers' levels of self-efficacy and anxiety about the teaching practicum based on their sex, age, prior teaching experience and intention to take teaching as a career. Self-efficacy and anxiety served as dependent variables. Sex, age, prior teaching experience and intention to take teaching as a career served as independent variables each at two levels with the exception of age at three levels. Pallant (2005) and Field (2009) stated that a 4-way factorial MANOVA is appropriate when differences are examined with four independent variables as against two dependent variables. The MANOVA analysis allowed for the examination of the differences in each independent variable as well as their interaction effects on the linear combination of self-efficacy and anxiety. The Wilk' Λ test statistic was used as a recommended statistic for examining the multivariate null hypothesis among others such as Pillai's Trace, Hotelling's Trace and Roy's Largest Root due to its robustness (Field, 2009). The test statistic for Wilk' Λ is given as follows:

$$\Lambda = \frac{W}{T} = \frac{W}{B+W}, \text{where } 0 \leq \Lambda \leq 1$$

where

B = Between-group sum of squares and crossed-product matrix

W = Within-group sum of squares and crossed product matrix

T = Total sum of squares and crossed product matrix

Finally, Research Hypothesis Four examined the influence of preservice teachers' level of self-efficacy on their level of anxiety about teaching practicum. To obtain the factor loadings on each construct as well as the path coefficient simultaneously, Smart-PLS was considered appropriate. Bhakar et al. (2012) indicated that it allows for simultaneously estimating both measurement and structural models. The Smart-PLS technique depends on an iterative mix of principal components analysis and regression. The measurement model evaluates the relationship between latent variables (efficacy and anxiety) and manifest variables (observed items). Through the assessment of the validity and reliability of the constructs measured, the model is tested for accurate prediction. By this, only reliable and valid constructs measured are used for assessing the relationship between self-efficacy and anxiety in the model (Hulland, 1999). The structural model specifies relations between self-efficacy and anxiety constructs. To test the structural model, the path coefficient between the constructs are estimated and analysed. The path coefficient is the model's predictive power. The R^2 assisted in explaining the variance in the anxiety variable as explained by self-efficacy. Frost (n.d.) indicated that studies that predict the success of preservice teachers' success in teaching should expect R^2 between 10% and 15%. This is because human behaviour inherently has much more unexplainable variability.

In an event a significant path coefficient between self-efficacy and anxiety was obtained, the study followed up to determine the efficacy factors responsible for such likely results. However, since the factors were related, the functionality of Smart-PLS was reduced. Therefore, AMOS, a covariance SEM, was used to determine the effect of the efficacy factors on anxiety. SEM assumes that proposed relations among variables can be represented in a set of structural regression equations and that these relations can be represented pictorially (Byrne, 2010). Kline (2005) indicated that other terms for SEM are covariance structure analysis, covariance structure modelling and analysis of covariance structures. However, only the structural model was considered since the Smart-PLS had already been used to determine the reliability and validity of the measurement model.

In order to determine the probability to which low anxiety can be obtained by the presence of increasing self-efficacy, standard binomial logistic regression was first used to examine the effect of self-efficacy on anxiety as indicated in the empirical model. The anxiety variable was dichotomised as low anxiety = 1 and high anxiety = 0. The probability of low anxiety being obtained was examined by the following equation provided by Field (2009, p. 266).

$$P(Y) = \frac{1}{1 + e^{-(b_0 + b_1 X_{1i})}}, i = 1, \ldots, n$$

Where,

$P(Y)$ = probability of event Y occurring

b_0 = constant

b_1 = coefficient of the predictor

X_1 = predictor variable

Qualitative data processing and analysis

The qualitative data gathered through the recording device were transcribed. The transcription was done by the researcher and another colleague researcher. The generated transcripts were compared to each other to determine errors. After, the corrected transcript (Appendix F) was again compared with the field note to fill the gaps in the transcript. Thematic template analysis was used to analyse the data. This analysis permits data analyst to analyse qualitative data with predetermined themes or codes referred to as a priori themes (Brooks & King, 2012). In the coding process, the analyst identifies ideas that fit the identified theme (deductive approach). However, template analysis also permits the development of new themes or revision of predetermined themes when ideas do not fit (inductive approach). Ideas can also be related in hierarchical order with major and sub-themes (Braun & Clarke, 2006).

Template analysis was, therefore, appropriate due to the already identified topical deviant issues (a priori theme) from the quantitative findings. These deviant issues were illuminated by the ideas generated from the qualitative results. The guideline provided by King and Brooks (2016) for template analysis was followed. These are familiarization with data, preliminary coding, clustering, producing an initial template, applying and developing the template, and finally interpreting the data. Colour coding was used to identify the ideas under the themes. Themes and narratives were employed in the reportage; the use of both themes and narratives have been noted as a good approach when reporting FFGD results (Anderson, 1990). Table 10 provides a summary of both quantitative and qualitative data analysis.

Table 10: Summary of Data Analysis

Research Questions/Research Hypotheses	Instrument	Analytical Technique
What is preservice management teachers' level of self-efficacy about the on-campus teaching practicum?	TSES FFGD guide	Mean, Std. Dev., One-Way Repeated Measures ANOVA, Template analysis
What is preservice management teachers' level of anxiety about the on-campus teaching practicum?	STAS FFGD guide	Mean, Std. Dev., One-Way Repeated Measures ANOVA, Template analysis
H_0: There is no statistically significant difference in the self-efficacy levels of preservice management teachers before and after the on-campus teaching practicum.	Data from TSES FFGD guide	Matched paired samples t-test Template analysis
H_0: There is no statistically significant difference in the anxiety levels of preservice management teachers before and after the on-campus teaching practicum.	Data from STAS	Matched paired samples t-test
H_0: There is no statistically significant difference in preservice management teachers' levels of self-efficacy and anxiety about teaching practicum based on their sex, age, teaching experience and intention to teach.	Data from TESE and STAS	4-way Factorial MANOVA
H_0: There is no statistically significant influence of preservice management teachers' self-efficacy on their anxiety about the on-campus teaching practicum.	Data from TSES and STAS FFGD guide	SEM (Smart-PLS AMOS) Standard Binomial Logistic Regression. Template analysis

Source: Fieldwork (2019)

Chapter Summary

The study, rooted in pragmatism, employed the repeated measures sequential explanatory design, the follow-up explanations model (QUAN→qual) to examine PMTs' levels of self-efficacy and anxiety about the teaching practicum. The selection of this design allowed quantitative data to be gathered (through TSES and STAS) from the PMTs (N = 120) to describe their

levels of self-efficacy and anxiety about teaching practicum. In order to understand their levels of self-efficacy and anxiety, qualitative data was gathered from eight of the PMTs in a FFGD to illuminate the quantitative findings. Both TSES and STAS met the attributes of internal consistency, stability and equivalence and were judged reliable for gathering quality data. The FFGD guide was also used to gather qualitative data which was validated for trustworthiness with focus on credibility, transferability, dependability, and confirmability. Descriptive (frequency and percentages, mean and standard deviation) and inferential (chi-square, repeated-measures ANOVA, 4-way factorial MANOVA, paired-samples t-test, standard binomial regression and SEM using Smart-PLS, and AMOS) statistics were used to analyse the data gathered on the research questions and hypotheses. Either tables and or figures were used in reporting the results where applicable. Where tables and figures had both been used, it was considered necessary to indicate that results had not been altered as per the used statistical software. The next chapter presents the results obtained and its discussion in order to address the research problem.

CHAPTER FOUR

RESULTS AND DISCUSSION

Overview

In this chapter, the results are presented and discussed to examine the levels of PMTs' self-efficacy and anxiety about the teaching practicum. Both quantitative and qualitative data were gathered for the study. During the quantitative phase, 120 questionnaires were administered to the respondents before the ONCTP. One hundred and nineteen of them who completed the initial survey were asked to complete a complementary online version after the ONCTP. No missing variable or data was realised. This was because the respondents were very cooperative in the entire exercise. On average, each respondent had two supervised scored teaching.

In the qualitative phase, a FFGD which involved eight participants through the extreme case sampling technique was conducted. During the FFGD, participants sat for approximately three hours and 46 minutes. No state of discomfort was observed among the participants. They had taken the exercise more serious than it was expected in trying to explain the quantitative findings.

In this chapter, for easy organisation of its contents, the key assumptions for the parametric statistical tools used in the study are first presented. These are the normality and correlation tests. The quantitative results (both before and after ONCTP), follow-up qualitative results and discussion are organised under their respective research questions or hypotheses to facilitate readers understanding.

Normality Test

A normality test was conducted on both self-efficacy and anxiety variables to determine the test statistics to employ in analysing the data. Data is normally distributed for a given variable when the mean and median are all equal or approximately equal. Data gathered on self-efficacy before the ONCTP had a mean of 3.89 and a median of 3.96; anxiety had a mean of 2.37 and a median of 2.25. After the ONCTP, self-efficacy had a mean of 4.13 and a median of 4.21; anxiety had a mean 2.55 and median of 2.46. Approximately, the mean and the median for both variables were equal which give credence to the normality assumption. Again, data is normally distributed when each construct's skewness magnitude is less than 1.96; $p > 0.05$ (Chua, 2008; Ghasemi & Zahediasl, 2012). Table 11 shows the skewness evidence for all the constructs.

Table 11: Test for Normality of Variables

	Skewness (Before)		Skewness (After)	
Variable/Construct	Statistic	Std. Error	Statistic	Std. Error
Instructional Strategies Efficacy	-.49	.22	-.62	.22
Classroom Management Efficacy	-.58	.22	-.74	.22
Student Engagement Efficacy	-.84	.22	-1.37	.22
Efficacy	-.76	.22	-1.08	.22
Evaluation Anxiety	.81	.22	.62	.22
Class Control Anxiety	.64	.22	.42	.22
Professional Preparation Anxiety	.45	.22	.19	.22
School Staff Anxiety	.36	.22	.24	.22
Unsuccessful Lesson Anxiety	.42	.22	.29	.22
Anxiety	.55	.22	.42	.22

Source: Fieldwork (2019).

It can be observed that each of the skewness statistic is less than 1.96. Hence, normality was assumed to permit the use of parametric statistics for the

hypothesis testing. In confirming the normality as suggested by the descriptive statistics, the Quantile-Quantile plot (Q-Q plot) was generated. This was to help with the visual examination of the observed data as against an expected normal diagonal distribution line. Field (2009) indicated that normality can be assumed when the observed data is on or close to the expected normal diagonal line generated from a theoretical probability distribution. Figures 5 and 6 present the normality for self-efficacy and anxiety variables respectively before the teaching practicum.

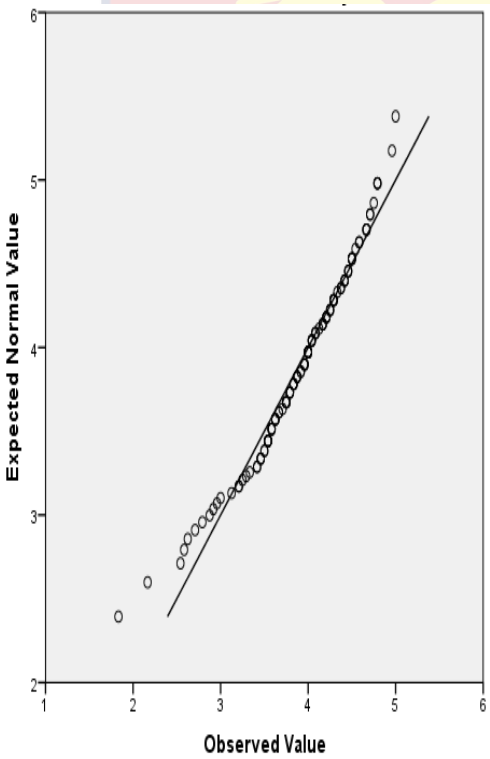

Figure 5: Q-Q plot for self-efficacy (Before ONCTP)
Source: Fieldwork (2019)

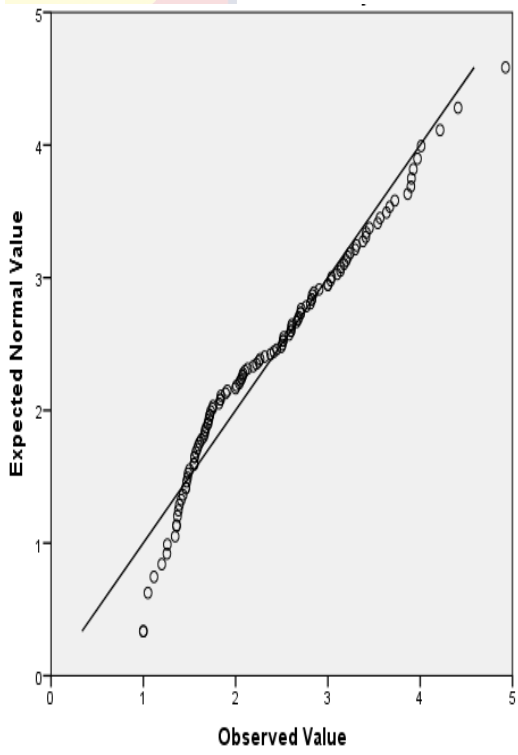

Figure 6: Q-Q plot for anxiety (Before ONCTP)
Source: Fieldwork (2019)

The normal Q-Q plot for self-efficacy shows that the observed scores are very close to the diagonal line with marginal deviations at the tails. Also, with that of anxiety, the observed scores are very close with little deviations at the centre and tails. These deviations observed are not widely far from the expected normal distribution line, hence the two variables are confirmed to be

approximately normal. The normality results after the ONCTP for self-efficacy and anxiety are also presented in Figures 7 and 8.

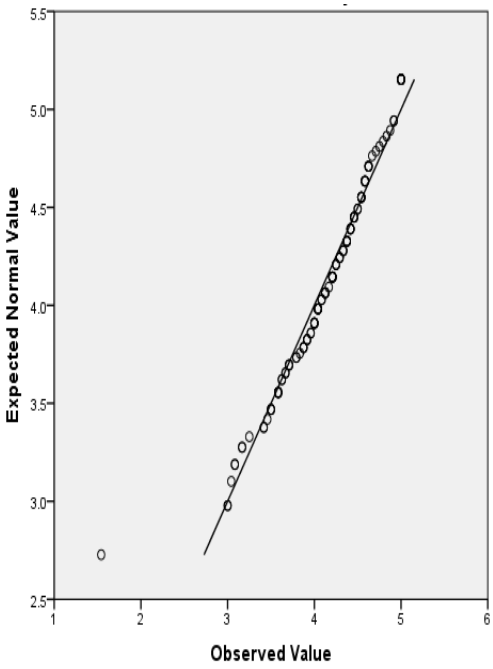

Figure 7: Q-Q plot for self-efficacy (After ONCTP)
Source: Fieldwork (2019)

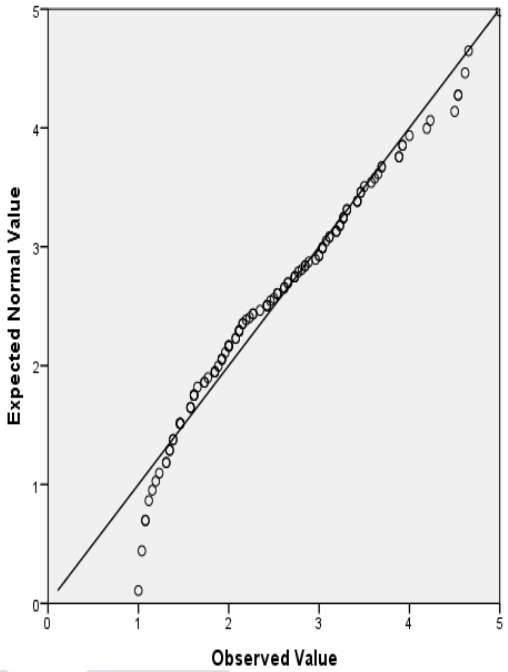

Figure 8: Q-Q plot for anxiety (After ONCTP)
Source: Fieldwork (2019)

Results obtained from data collected after the teaching practicum, a similar acceptable marginal deviation of the observed scores from the expected normal diagonal line is seen in Figure 8 for self-efficacy and Figure 9 for anxiety. Once again, the two variables were considered to be approximately normal. For the purposes of multivariate normality, the Mahalanobis distance is recommended in addition to the univariate normality (Pallant, 2005). Pallant indicated that the maximum value for Mahalanobis distance should not be greater than the chi-square critical value of 13.82 (two dependent variables) for multivariate normality to be assumed. The obtained maximum values for Mahalanobis distance were 10.68 (before ONCTP) and 9.92 (After ONCTP). Accordingly, multivariate normality was assumed for the MANOVA test.

Correlation Results

The correlation between self-efficacy and anxiety is also required for the purposes of the MANOVA test and regression. Tabachnick and Fidell (2007) indicated that MANOVA 'works best with highly negatively correlated dependent variables, and acceptably well with moderately correlated dependent variables in either positive or negative direction and that MANOVA is wasteful when dependent variables are uncorrelated. Cohen (1988; 1992) describes the cut-offs of correlation coefficient as follows: "moderate" ($.1 \leq r \leq .23$), "medium" ($.24 \leq r \leq .36$) and "large" ($r \geq .37$). Maxwell (2001) in agreement specified that dependent variables should correlate from about .3 to .7 to consider MANOVA appropriate. Table 12 presents the correlation results between self-efficacy and anxiety.

Table 12: Correlation Results for Self-Efficacy and Anxiety

Variables		Efficacy	Anxiety
Efficacy	Pearson Correlation	1	-.294**
	Sig.		.001
Anxiety	Pearson Correlation	-.294**	1
	Sig.	.001	

Source: Fieldwork (2019). **$p < .01$ (2-tailed).

In Table 12, there is a negative moderate correlation between efficacy and anxiety. The results suggest that self-efficacy and anxiety can be combined in a MANOVA analysis. Field (2009) also stated that it is not a good idea to lump all dependent variables together in a MANOVA unless there is a good basis for doing so. It is well established that there is a conceptual understanding that self-efficacy and anxiety are inversely related (Szymańska-Tworek, & Turzańska, 2016; Halet & Sanchez, 2017). Again, the significant relationship ($r = -.294$, $p = .001$) between the two variables meet the condition of linearity and

hence examining differences in their linear combination among independent variables is valid.

Characteristics of Respondents

According to Vogt (2007), in order to run a meaningful analysis of the data, the use of descriptive statistics is a critical tool. This is because it is used to describe the demographics of a sample or population, tell who was chosen, why they were chosen, what methods were used to collect the data, and what was done with the data. In this study, frequency and percentage were used as descriptive measures for population demographics, such as sex, age, prior teaching experience and intentions of the respondents to teach. These variables were measured on a nominal scale questionnaire with the exception of age which was measured on the ordinal scale. Hence, the use of the frequency and percentage was appropriate. It should be noted that the respondents were third-year PMTs in the University of Cape Coast. Table 13 presents their demographics, which is followed by its description categorised under biological characteristics (sex and age) and academic and experiential characteristics (prior teaching experience and intention to teach).

Table 13: Results of Preservice Management Teachers' Characteristics

		Before		After	
Variable	Subscale	Freq.	%	Freq.	%
Sex	Male	78	65.5	78	65.5
	Female	41	34.5	41	34.5
Age (in years)	20-22	57	47.9	45	37.8
	23-25	45	37.8	56	47.1
	26 years +	17	14.3	18	15.1
Teaching Experience	Yes	37	31.1	37	31.1
	No	82	68.9	82	68.9
Intention to Teach	Yes	92	77.3	89	74.8
	No	27	22.7	30	25.2

Source: Fieldwork (2019).

The male (n = 78, 65.5%) PMTs were almost twice the number of the female (n = 41, 34.5%) in the study. Their dominance in the study is indicative that the findings are likely to be influenced by them. All of the PMTs (N = 119) were involved in both surveys. This means that there was no respondent mortality in the quantitative phase of the study. The majority (n = 57, 47.9%) of them were within the ages of 20-22 years before the ONCTP. After the ONCTP, the majority age group shifted to the age group of 23-25 years. This was because some of them advanced a year more in age on the three-month teaching practicum. The change in PMTs' ages assisted in examining by tracking over time, the influence of age on their teaching self-efficacy and anxiety.

Preservice teachers so far studied by researchers seem to fall within these age categories (e.g. Ngidi & Sibaya, 2003; Paker, 2011; Ekşi & Yakışık, 2016). The preservice teachers used in Ngidi and Sibaya's study ranged from 20-25 years. Paker (2011) and Ekşi and Yakışık (2016) identified a minimum age of 22.9 years and 22.8 years (21-25 years) respectively. This study through census also recruited similar preservice teachers in terms of age. Even though the subject investigated and cultural context of the study are dissimilar with that of previous studies, the similarity in age categories provide an opportunity for a fair comparison of current and previous findings and to project the current findings to similar preservice teachers in these age categories.

The majority (n = 82, 68.9%) of them seem to have no formal prior teaching experiences before their admission into the management teacher education programme. Such PMTs are likely to expect that they are well exposed to the art and science of teaching. This is the very essence of the pedagogical courses and teaching practicum. If these two components of teacher

education fail them, there is a high possibility of heightening their anxiety and reduce their self-efficacy to teach. Their intention to take teaching as a career (n = 92, 77.3%) was remarkable and hence their admission into the programme was in the right direction. Few of them did not express the intention to teach (n = 27, 22.7%). It is assumed at this point that the majority of the PMTs are likely to be disappointed if they are made highly anxious about the teaching practicum. It can be observed that after the ONCTP, three of them who had earlier indicated their intention to teach were no more interested. It is conjectured that something might have gone wrong on the teaching practicum. In providing details about the number of male and female preservice teachers that had prior teaching experiences and the intention to teach, a cross-tabulation was run for sex and teaching experience, and sex and intention to teach. The results are presented in Tables 14 and 15.

Table 14: Chi-square Test of Sex and Prior Teaching Experience (Before ONCTP)

Sex	Teaching Experience			χ^2	*df*	*p*
	Yes	No	Total			
	n (%)	n (%)	n (%)			
Male	20 (25.6)	58 (74.4)	78 (100)	3.140	1	.076
Expected	24.3	53.7	78.0			
Female	17 (41.5)	24 (58.5)	41 (100)			
Expected	12.7	28.3	41.0			
Total	37 (31.1)	82 (68.9)	119 (100)			

Source: Fieldwork (2019).

In Table 14, it can be observed that out of the 37 PMTs with teaching experiences prior to their admission into the programme, 20 were male and 17 were female. In relation to those who did not have any prior teaching experiences, 58 were male and 24 were female. This disproportionate number

of male and female preservice teachers in each teaching experience category was subjected to a chi-square test of independence. The result shows that there is no statistically significant difference between sex and teaching experience of the PMTs, χ^2 (1, 119) = 3.140, p = .076. It is concluded that both sexes had comparable prior teaching experiences before the ONCTP.

Table 15 provides the results of the cross-tabulation between sex and intention to teach.

Table 15: Chi-square Test of Sex and Intention to Teach (Before ONCTP)

Sex	Intention to Teach			χ^2	*df*	*p*
	Yes	No	Total			
	n (%)	n (%)	n (%)			
Male	62 (79.5)	16 (20.5)	78 (100)	.611	1	.434
Expected	60.3	17.7	78.0			
Female	30 (73.2)	11 (26.8)	41 (100)			
Expected	31.7	9.3	41.0			
Total	92 (100)	27 (100)	119 (100)			

Source: Fieldwork (2019).

The majority (n = 62, 79.5%) of the male PMTs had the intention to teach as compared to their female counterparts (n = 30, 73.2%). Likewise, more (n = 16, 20.5%) of the male PMTs did not have the intention to teach as compared with the female (n = 11, 26.8%). The chi-square test of independence for assessing the observed difference showed no statistical significance, χ^2 (1, 119) = .611, p = .434). This suggests that based on the sex of the PMTs, there exist no difference in their intention to teach. Table 16 presents the result of the chi-square test of independence after the ONCTP.

Table 16: Chi-square Test of Sex and Intention to Teach (After ONCTP)

Sex	Intention to Teach			χ^2	*df*	*p*
	Yes	No	Total			
	n (%)	n (%)	n (%)			
Male	59 (75.6)	19 (24.4)	78 (100)	.087	1	.768
Expected	58.3	19.7	78.0			
Female	30 (73.2)	11 (26.8)	41 (100)			
Expected	30.7	10.3	41.0			
Total	89 (74.8)	30 (25.2)	119 (100)			

Source: Fieldwork (2019).

As earlier indicated, three of the PMTs lost their interest to teach after the ONCTP. Table 16 shows that these preservice teachers were male, increasing the number of male preservice teachers who did not have the intention to teach from 16 (20.5%) to 19 (24.4%). The numbers for the female PMTs remained unchanged. Evidence from the chi-square test of independence, χ^2 (1, 119) = .087, p = .768, proved again that their intention to teach remained independent of their sex. The conclusion reached was that both male and female PMTs had comparable intentions to teach. If these PMTs have comparable experiences, then it would be relevant to determine and inform the teacher educators and the practicum supervisors how the practicum experiences improved their intention to teach. Therefore, the prior intention to teach and post intention to teach were compared, and statistical significance was examined through the McNemar chi-square test which examines for marginal homogeneity. The results obtained are presented in Table 17.

Table 17: McNemar Chi-square Test of Prior Intention to Teach and Post Intention to Teach

Prior Intention to Teach	Post Intention to Teach Yes	No	Total	*p*
	n (%)	n (%)	n (%)	
Yes	83 (90.2)	9 (9.8)	92 (100)	.607
No	6 (22.2)	21 (77.8)	27 (100)	
Total	89 (74.8)	30 (25.2)	119 (100)	

Source: Fieldwork (2019).

It can be observed that out of the 92 PMTs who had the prior intention to teach, 83 had the intention to teach after the ONCTP and nine did not have the intention to teach after the ONCTP. Also, out of the 27 PMTs who did not have the prior intention to teach, six of them exhibited their intention to teach after the ONCTP and 21 did not exhibit the intention to teach after the ONCTP. The McNemar chi-square test through the binomial distribution showed that the differences observed are not statistically significant (p = .607). By implication, there was no improvement in PMTs' intention to teach after the ONCTP. The results create the impression that something went wrong in the teaching practicum which probably demotivated some of the PMTs to develop the intention to take teaching as a career. It could be that some of them were made excessively anxious during the teaching practicum.

Results

Preservice Management Teachers' Level of Self-Efficacy

The PMTs' level of self-efficacy was examined as a proxy to their confidence to teach. It also helped to gauge their instructional effectiveness on their prospective teaching career. To achieve these objectives, the following research question was formulated: What is preservice management teachers' level of self-efficacy about the on-campus teaching practicum? The TSES

afforded the collection of relevant quantitative data before and after the ONCTP. The summarised descriptive results prior to the ONCTP are presented in Table 18, and the detailed results can be found in Appendix G.

Table 18: Preservice Management Teachers' Level of Self-Efficacy (Before ONCTP)

Self-Efficacy Factors	Mean Score	*SD*	Interpretation
Instructional Strategies (1)	3.74	.62	High
Classroom Management (2)	3.83	.63	High
Student Engagement (3)	4.09	.63	High
Level of Self-Efficacy	3.89	.63	High

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 (2019).

Generally, the PMTs' indicated that they are highly efficacious (M = 3.89, SD = .63). This was triggered by high instructional strategies efficacy (M = 3.74, SD = .62), high classroom management efficacy (M = 3.83, SD = .63) and high student engagement efficacy (M = 4.09, SD = .63).

In relation to instructional strategies efficacy, the PMTs indicated several things they believed they could do as a result of going through the management teacher education programme. Among such critical things as highlighted by the mean scores were: ability to provide alternative explanations when students are confused during lessons (M = 3.92, SD = .90); ability to implement alternative strategies in their classrooms during lessons (M = 3.86, SD = .76); and ability to craft good questions for their students (M = 3.81, SD = .86). These are part of the important classroom activities that are believed to enforce students understanding of content taught. Their ability to provide alternative explanations and examples portray their knowledge of

metalanguage. Ability to implement different strategies shows that each individual student needs are likely to be addressed as far as classroom instruction is concerned. Contemporary classrooms come with learner diversities and complexities, hence such an ability is regarded as useful and relevant. Finally, learners seem to be mostly engaged through teachers' questioning skills. Almost all the teaching methods used in an instructional session employ the use of questions. One's ability to craft good questions is therefore central to the teaching process. It is refreshing to note that the PMTs believe they can craft good questions. In all the survey questions on instructional strategies efficacy, the minimum efficacy score (M = 3.54, SD = .83) was obtained on their ability to provide appropriate challenges for very capable students. The obtained standard deviations for the responses seem to communicate a high level of congruence in their responses.

The abilities professed by the PMTs in exercising their classroom management practices seem not different from their instructional strategies efficacies. The dominant indicators of their classroom management abilities were they doing much to get students to follow classroom rules (M = 3.96, SD = .77), establishing routines to keep classroom activities running smoothly (M = 3.92, SD = .83) and calming disruptive or noisy students (M = 3.92, SD = .87). Quality learning environment would definitely be promoted when classroom interactions are free from distractions. If PMTs believe they can ensure sanity in the classroom during lessons, then they can create an environment that enforces learners understanding. The lowest classroom management efficacy mean score (M = 3.66, SD = .86) was obtained on their ability to keep a few problem students from ruining an entire lesson. This suggests that their

programme must provide them with adequate techniques to deal with all manner of deviant students. The level of homogeneity observed in their responses was quite high as highlighted by the dispersion estimates.

Finally, the PMTs affirmed that they were highly efficacious in engaging their students (M = 4.09, SD = .63). They believed in their abilities to help students to value learning (M = 4.39, SD = .76); make them accept that they can do well in school (M = 4.34, SD = .75); and motivate those who have low interest in school work (M = 4.13, SD = .93). This would help their students to operate at the highest level of Blooms' cognitive taxonomy where they are expected to apply, synthesise, evaluate and create new knowledge. The PMTs' confirmation that they can engage their students is remarkable. This signifies that the teacher educators did their best in providing them with the ability to engage students. The lowest mean classroom engagement efficacy score (M = 3.84, SD = .88) was obtained on their ability to get through to the most difficult students. Again, the high congruity in their responses appears not compromised by the examination of the dispersion estimates.

In summary, the PMTs' level of self-efficacy was high on all the three defining efficacy factors prior to the ONCTP. However, the means of the efficacy factors suggested that they were highly efficacious on student engagement (M = 4.09, SD = .63) as compared with instructional strategies (M = 3.74, SD = .62) and classroom management efficacy (M = 3.83, SD = .63). In order to determine the influential self-efficacy factor, differences in the mean scores of the factors were examined through one-way repeated measures ANOVA. The results are presented in Table 19.

Table 19: Repeated ANOVA Tests of Within-Subjects Effects for Self-Efficacy (Before ONCTP)

Source		Type III Sum of Squares	*df*	Mean Square	F	*p*	η_p^2
Self-efficacy	Sphericity Assumed	7.705	2	3.853	48.780	.000	.292
	Greenhouse-Geisser	7.705	1.955	3.942	48.780	.000	.292
	Huynh-Feldt	7.705	1.987	3.877	48.780	.000	.292
	Lower-bound	7.705	1.000	7.705	48.780	.000	.292
Error (Self-efficacy)	Sphericity Assumed	18.639	236	.079			
	Greenhouse-Geisser	18.639	230.666	.081			
	Huynh-Feldt	18.639	234.506	.079			
	Lower-bound	18.639	118.000	.158			

Source: Fieldwork (2019).

Mauchly's test indicated that the assumption of sphericity had not been violated, $\chi 2$ (2) = 2.737, p = .254. The results of the tests of within-subjects effects show that the differences in the self-efficacy factors are statistically significant, F (2, 236) = 48.780, p < .001. The magnitude of the partial eta squared (.292) was large following the guidelines provided by Cohen (1988). According to Cohen (1988), eta squared of 0.14 is considered a large effect. In order to determine where the differences lie between the self-efficacy factors, pairwise comparisons through the Bonferroni test (no adjustment) was conducted and the results are presented in Table 20.

Table 20: Pairwise Comparisons of Self-Efficacy Factors (Before ONCTP)

(I) Self-efficacy	(J) Self-efficacy	Mean Diff (I-J)	S.E.	*p*	95% Confidence Interval for Difference LLCI	ULCI
1	2	-.093*	.034	.019	-.175	-.012
	3	-.348*	.038	.000	-.440	-.255
2	1	.093*	.034	.019	.012	.175
	3	-.254*	.037	.000	-.345	-.163
3	1	.348*	.038	.000	.255	.440
	2	.254*	.037	.000	.163	.345

Note: *Instructional strategies* (1)*; classroom management* (2)*; student engagement* (3).
Source: Fieldwork (2019).

The pairwise comparison identified the level of instructional strategies efficacy, class management efficacy and student engagement efficacy to be significantly different from each other. The mean score (M = 3.74) of instructional strategies efficacy was significantly less than the mean scores of class management efficacy (M = 3.83) and student engagement efficacy (M = 4.09). Also, the mean score (M = 3.83) of class management efficacy was significantly less than the mean score (M = 4.09) of student engagement efficacy. It can be concluded that the PMTs perceived that they possess a high level of student engagement efficacy than class management efficacy and instructional strategies efficacy. By this, it can be deduced that the programme did not pay much attention on PMTs' development of capabilities in using various instructional strategies.

Their level of self-efficacy was again examined after the ONCTP. The essence was to determine if the level of self-efficacy was still high. The results obtained are presented in Table 21.

Table 21: Preservice Management Teachers' Level of Self-Efficacy (After ONCTP)

Self-Efficacy Factors	Mean Score	SD	Interpretation
Instructional Strategies (1)	4.03	0.61	High
Classroom Management (2)	4.13	0.59	High
Student Engagement (3)	4.22	0.59	High
Level of Self-Efficacy	4.13	0.60	High

Scale: 1.00-1.49 (*Very low*); 1.50-2.49 (*low*); 2.50-3.49 (*Moderately*); 3.50-4.49 (*High*); 4.5-5.00 (*Very High*).
Source: Fieldwork (2019).

Again, the PMTs' level of self-efficacy was high (M = 4.13, SD = .60) after the ONCTP. They seem to believe that they had the ability to teach. All

the efficacy factors such as instructional strategies (*M* = 4.03, *SD* = .61), classroom management (*M* = 4.13, *SD* = .59) and student engagement (*M* = 4.22, *SD* = .59) efficacy provide evidence to the fact that they are efficacious. The mean scores for self-efficacy seem to have increased from Time 1 (*M* = 3.89) to Time 2 (*M* = 4.13). The lowest mean score observed among the self-efficacy factors in Time 1 was 3.74 and Time 2 was 4.03.

Their instructional strategies efficacy seem to have been influenced by the same dominating activities as realised prior to the ONCTP. These are ability to craft good questions for their students (*M* = 4.13, *SD* = .76), implement alternative strategies in their classroom lessons (*M* = 4.13, *SD* = .77) and provide alternative explanation for or example when their students are confused during lessons (*M* = 4.11, *SD* = .87). The lowest mean score obtained was on their ability to provide appropriate challenges for very capable students (*M* = 3.82, *SD* = .81). In Time 1, the ability to provide appropriate challenges for capable students also recorded the lowest score (*M* = 3.54, *SD* = .83). It would, therefore, be difficult to doubt the responses of the PMTs on their level of instructional strategies efficacy due to the consistency in their responses.

Similar Time 1 results were obtained on PMTs' classroom management efficacy after the ONCTP. They again professed that they can do much to get students to follow classroom rules (*M* = 4.23, *SD* = .71). Just as they earlier indicated that they can calm students who are disruptive (Time 1), they further indicated that they can respond to disobedient students (*M* = 4.19, *SD* = .73). Such an ability to keep the classroom in order is important to effectively achieve classroom results. Part of the dominant classroom management efficacy was their ability to make expectation clear about student behaviour (*M* = 4.18, *SD* =

.67). Most often than not, students need the assistance of their teachers to do the right things, hence they must be directed and guided to exhibit appropriate behaviours. If PMTs believe they can help to achieve good student behaviour, then sanity would be ensured in management lessons.

Finally, the PMTs' responses on their student engagement efficacy appear to completely affirm the earlier responses. Once again, they intimated that they have the ability to help students to value learning (M = 4.50, SD = .74), help them believe that they can do well in school work (M = 4.46, SD = .70) and can motivate the students who show low interest in school work (M = 4.34, SD = .84). The lowest efficacy score was again obtained on their ability to get through to the most difficult students (M = 4.02, SD = .77). The responses on both Time 1 and 2 appear to converge and reinforce their claim that they are efficacious. This implies that teacher educators and practicum supervisors have been effective in preparing the PMTs for the teaching profession.

The practicum seems to have improved PMTs' level of self-efficacy. The conclusion is that their level of self-efficacy is high. An observation of the mean scores of the efficacy factors again suggests that they were highly efficacious on the student engagement factor. In order to confirm this observation, the differences in the mean scores of the self-efficacy factors were subjected to one-way repeated measures ANOVA test and the results are presented in Table 22.

Table 22: Repeated ANOVA Tests of Within-Subjects Effects for Self-Efficacy (After ONCTP)

Source		Type III Sum of Squares	*df*	Mean Square	F	*p*	η_p^2
Efficacy	Sphericity Assumed	2.351	2	1.176	14.077	.000	.107
	Greenhouse-Geisser	2.351	1.950	1.206	14.077	.000	.107
	Huynh-Feldt	2.351	1.982	1.186	14.077	.000	.107
	Lower-bound	2.351	1.000	2.351	14.077	.000	.107
Error (Efficacy)	Sphericity Assumed	19.711	236	.084			
	Greenhouse-Geisser	19.711	230.103	.086			
	Huynh-Feldt	19.711	233.919	.084			
	Lower-bound	19.711	118.000	.167			

Source: Fieldwork (2019)

The Mauchly's test of sphericity shows that the assumption of sphericity had not been violated, χ^2 (2) = 3.037, p = .219. Accordingly, the results of the test of within-subject effects show that there are statistically significant differences between the self-efficacy factors, F(2) = 14.077, p < .001, partial η^2 = .107. The partial eta squared (.107) shows that the difference observed was moderate. Again, the Bonferroni (no adjustment) pairwise comparison was conducted to determine between the efficacy factors which exhibited significant differences. Table 23 presents the results.

Table 23: Pairwise Comparisons of Self-Efficacy Factors (After ONCTP)

(I) Efficacy	(J) Efficacy	Mean Difference (I-J)	S.E.	*p*	95% Confidence Interval for Difference *LLCI*	*ULCI*
1	2	-.108*	.035	.008	-.194	-.023
	3	-.199*	.040	.000	-.296	-.101
2	1	.108*	.035	.008	.023	.194
	3	-.090*	.037	.047	-.180	-.001
3	1	.199*	.040	.000	.101	.296
	2	.090*	.037	.047	.001	.180

Note: *Instructional strategies* (1)*; classroom management* (2)*; student engagement* (3).
Source: Fieldwork (2019)

The pairwise comparison recognises the level of instructional efficacy, classroom management efficacy and student engagement efficacy to be significantly different from each other. The mean score of student engagement efficacy (M = 4.22) was significantly higher than the mean scores of instructional strategies efficacy (M = 4.03) and classroom management efficacy (M = 4.13). The mean score of Classroom management efficacy (M = 4.13) was also significantly higher than the mean score of instructional strategies efficacy (M = 4.03). This means that the PMTs' believed that they are highly efficacious in student engagement followed by classroom management and instructional strategies.

Follow-up Explanations of PMTs Self-Efficacy

The quantitative phase of the study was proceeded by the qualitative phase to elaborate and explain PMTs' high level of self-efficacy about the teaching practicum. This was carried out in a FFGD which involved eight participants whose characteristics follow next.

Characteristics of Participants

The eight participants were selected through the extreme case sampling technique. Therefore, they represented extreme cases in the dataset which were deemed appropriate to explain PMTs' high level of self-efficacy discovered during the surveys. These participants took the pseudonyms Kaka, Pinto, Guru, Jona, Wata, Josi, Lisa and Mona. Table 24 presents the characteristics of the participants (discussants).

Table 24: Characteristics of Discussants

Participants	Sex	TE	ITT	Before		After	
				Efficacy	Anxiety	Efficacy	Anxiety
Kaka	Male	Yes	Yes	VH	H	VH	VH
Pinto	Male	Yes	Yes	VH	L	H	M
Guru	Male	No	Yes	H	VH	H	H
Jona	Male	Yes	Yes	VH	VH	H	H
Wata	Male	No	No	H	H	H	VH
Josi	Male	No	No	VH	VH	VH	VH
Lisa	Female	Yes	No	M	M	M	H
Mona	Female	No	Yes	H	H	H	VH

Note: L = Low; M = Moderate; H = High; VH = Very High; TE = Prior teaching experience; ITT = Intention to teach.
Source: Fieldwork (2019)

Some of the participants appeared to have had prior teaching experiences in a formal school before coming to read the Bachelor of Education in Management at the University of Cape Coast. Even though they believed in themselves to be highly efficacious, they were also highly anxious about the teaching practicum. Apart from Guru and Jona who had a slight reduction in their anxiety from very high to high anxiety, the rest of them increased in their levels of anxiety with the exception of Josi who did not exhibit any change in both efficacy and anxiety. Kaka, Pinto, Guru, Jona and Mona had the intention to take teaching as a career. The theoretical knowledge and the practicum experiences provided to them by their programme should have lowered their anxiety. However, they experienced high anxiety before and after the teaching practicum.

Perspectives of Preservice Management Teachers on Self-Efficacy

In a focus group discussion, the PMTs' provided their views on their sources of self-efficacy, and dominant sources of self-efficacy. This was to explain their high level of self-efficacy.

Sources of self-efficacy

According to the PMTs, their self-efficacy was influenced by a number of sources. These are talent (natural gift), vicarious experience, passion, prior teaching experience, pedagogical knowledge, content knowledge and professional image. The following sub-themes describe PMTs' sources of self-efficacy.

Intimacy of passion, talent and prior teaching experience

The PMTs acknowledged the relationship among passion, talent and prior teaching experience for the enhancement of their self-efficacy. Their interest for teaching and teaching talent enhanced their capability. This teaching talent made them to believe that it is not only the school which contributes to one's teaching self-efficacy but it also depends on one's artistic flair. Also, prior teaching experience assisted in the consolidation of their self-efficacy. The existing relationship among passion, talent and prior teaching experience is summarised by one of them in the quote that,

> *I believe in myself that I can teach because I started teaching even when I completed SHS before going to the training college* (Kaka). *Even when I was teaching them before I was leaving for my further studies, my children* [learners] *were crying ah sir where are you going, we do not want you to go. So meaning when am teaching them they love it. So I could see it's in the blood. So you see, I have that passion for teaching*

(Kaka).

The opportunity for one of them to experience teaching with authentic school children, created the requisite teaching passion. One participant detailed that it is through

> *the exposure I had with the kids, that was the very first time I stepped my foot into the classroom to go and teach. That relationship between myself and the student drew me much closer to teaching and my passion for it* (Lisa).

This appears to suggest that the relationship among passion, talent and prior teaching experience is valuable to the development of one's teaching self-efficacy.

Talent creates teaching success

Teaching talent seems to strongly influence their self-efficacy not just because it aided some of them in teaching but in addition, it reflected as evidence in their peers' academic performance. This is what one participant had to say,

> *I believe in myself that I could teach during my SHS days when I sat my fellow mates* [class] *down and taught them certain topics. The way they reacted: sitting down attentively and nodding their heads, asking questions which I answered to their satisfaction made me believe that I can be a teacher one day and I know I can do it and do it well* (Wata).

Such a success achieved by an untrained teacher at that time would definitely create surprises and boost teaching morale.

> *Though I have not taught in a formal setting before with this formal skills, when I was in SHS, I was teaching my own class elective maths,*

which was the whole business block throughout that particular term. I was surprised by the grade that people had. It was a shock to the elective math teacher himself. So because of that natural art of teaching in me, I think I have that skill in teaching (Guru).

The informal setting in which teaching talent was demonstrated assists in endorsing the relevance of informal teaching and peer tutoring for one's teaching self-efficacy. As informal teaching and peer tutoring provided the opportunity in the exercise of one's natural ability, it seemingly prepared the teaching career path. This observation is permissible because the earlier teaching success achieved ensured confident teaching during the teaching practicum. Hence, success today could influence teaching success tomorrow.

Prior teaching experience builds confidence

The PMTs reported the significance of prior teaching experience for one's teaching confidence. Some of them had the opportunity to teach in private schools after their senior high education. Such an exposure seems to have built their confidence to teach. One of the PMTs hinted that in a private school,

…I stood there and started teaching without finding myself wanting. I was able to speak confidently to the students and it was like I have taught before. So I wasn't finding myself wanting so much (Pinto).

This creates the impression that as prior teaching experience is gained, it is possible to build teaching confidence. However, it is not clear at this point if it is the number of prior teaching experience gained over time or the quality of the teaching experience, which heightened the self-efficacy or confidence to teach.

Observing the 'must observe' creates the difference

The PMTs' self-efficacy was further influenced by the opportunity they had to directly observe (conscious observation) teaching from some agents in society. The experience obtained from such observation is termed vicarious experience. Whilst some observations took place in formal classrooms, others rather occurred in places that were least expected. This was intimated by a participant thus,

> *actually, I learnt it from a pastor of mine. This pastor, formally he was our Sunday school teacher but whenever he comes to Sunday school to teach, he will tell us that whatever he is coming to teach we have it already. So we should make it a point that we know it already just that he is coming to elaborate on it. So this man when he comes to class the way he will joke with us, he will make himself part of the class. So I learnt it in that way. I developed love for teaching that I am also going to be a teacher one day* (Jona).

It is possible for one to trivialise the impact of the teaching behaviours of religious leaders and some agents of socialisation on the training of teachers for schools. However, the PMT's profound acknowledgement of the contribution of pastors' modelling of teaching behaviours to the development of teaching self-efficacy is relevant for consideration. What is realised is that the school and its agents formalise and concretise the experiences and the skills needed for successful teaching.

Teaching passion strengthens inner motivation for instructional success

The passion for teaching appears to energise the PMTs to the extent that they believe teaching must be impactful to students. Hence, teaching to them is

not carried out for teaching sake but was considered in the words of a participant as having

> *… the passion to teach and if I teach I want the students to understand. I don't teach for teaching sake* (Mona)*…. I have time for everyone* [learners]*…. This makes me feel that I can teach students to understand very well* (Mona).

The passion for teaching seems to differentiate the intrinsically motivated ones from the salary motivated ones. The issue is that passion motivates teaching and serves as a foundational force to transmitting content knowledge to learners rather than salary. This to them communicates teacher effectiveness where selflessness is nurtured. This is not to say that salary was unimportant to them as one participant unadulteratedly summed it,

> *looking at teaching if you don't have passion for the work you can't teach it well. So any teacher who has passion for teaching can teach very well. So if you can teach very well or you know the content and you don't have passion for it even you going to the classroom you will think that it is a curse or something like it is a pressure being placed on you. So most of the teachers, they just come to the class to teach not because they want to teach but to satisfy their selfish ambition like getting salaries out of it at the end of a month. But if you have passion for the work you can do it massively with all your heart* (Jona).

The participant sounding spirited about the issue of teaching passion is quite remarkable. This demonstrates the extent to which he seems to love teaching and the positive impact that he is likely to make in students' learning to the extent that,

even when I was teaching them before I was leaving for my further studies, my children [learners] *were crying ah sir where are you going? We do not want you to go. So, meaning when am teaching them they love it. So you see I have that passion for teaching* (Kaka).

The two-bedrock for teaching

In the midst of all these stated sources of self-efficacy, the PMTs' appeared to have forgotten if their self-efficacy also had a foundation from the content and pedagogical courses read and taught in the University, to create the impression that those courses never contributed to their confidence. It was when they were asked the contribution of the content and pedagogical courses that they recounted how beneficial the courses have been to their development of self-efficacy. Amidst laughter, a participant cut in,

hahaha, …I could say they influence our way of teaching in the classroom. They even give you the way you go about introducing your lesson and if the students do not understand, you know which other methods you should use. So I can say the content and method we did over here, they do a lot in our teaching (Kaka).

Narrating some specific contributions afforded by the content and pedagogical courses, the participants took turns to clarify,

talking about the methods that we use in the classroom, since we came to this school, I can say that it has helped us also. Me per se it has helped me a lot.… I have learnt so many ways of introducing my lesson to my pupil whenever I get the opportunity to teach and also talking about how to present the lesson as a whole the skills that you put in place to make the students also participate in the lesson. All these things have helped

me. Also, classroom management, when a student is coming outside the classroom, how you have to pay attention and all those things, evaluating the students understanding of the lesson and also making the students part of the classroom activities. They have all helped me (Jona**)**.

With my experience in teaching and as compared to this place, I have learnt a whole lot of things. Because here, when we came the way we even frame our questions when we want to ask students questions was different from what we used to do before coming here. When I was teaching before coming here, some time we repeat learners' responses. We don't know that it shouldn't be done. Those kind of things shouldn't be done. But when we came here, we were taught that we are not supposed to repeat learners' responses. So all these things have helped us in such a way that when now we go back to teach we will not repeat some of these mistakes again (Josi).

...I have also had personal experience from the pedagogical skills that we were taught in class. For instance, I have been influenced by the study that we had pertaining to how a teacher has to dress to class. Because at first, I was contemplating on how to dress to class as a teacher but my knowledge in methods of teaching management as a management teacher has helped me to know the kind of dresses that I can take to class as a management female teacher. Yes, so I think this one has also influenced my teaching efficacy (Lisa).

Generally, the PMTs appreciated the pedagogy and content courses offered in the university. This is because, the courses exposed them to good teaching. It also taught them how to professionally appear in the classroom.

Teacher appearance builds confidence

The PMTs strongly argued that teacher appearance is very important in enhancing teacher confidence. My thinking that a teacher's appearance in the classroom was not a serious issue to capture was invalidated by the submission of Lisa and other participants.

> *Sir, talking about dressing enhancing my ability to teach, you see if you are not comfortable with the dress that you are wearing, when you go to class, trust me you will be confused with whatever you are going to teach* (Lisa).

The participants clearly drew attention to teacher professional appearance in class. To them, the appearance of a teacher can influence his/her self-efficacy and this cannot be disregarded.

Summary of PMTs' sources of self-efficacy

It is clear that PMTs' teaching self-efficacy was influenced by several sources. Figure 9 summarises PMTs' sources of teaching self-efficacy.

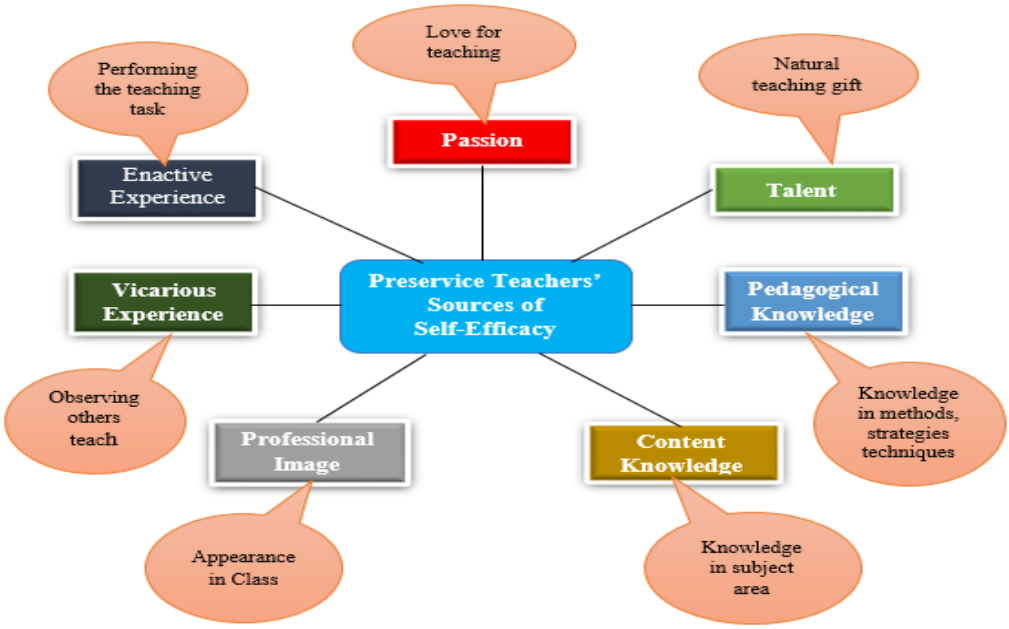

Figure 9: Preservice teachers' sources of teaching self-efficacy.
Source: Empirical evidence from preservice management teachers (2019).

Dominant sources of self-efficacy

Out of these seven sources, some of them dominated in influencing PMTs' high level of self-efficacy. They ranked their sources of self-efficacy to communicate the dominant ones. The ranking had in descending order passion, talent, enacted experience, pedagogical knowledge, content knowledge, vicarious experience and professional image. These sources are further presented under sub-themes: pedagogy and content are 'useless' without passion; passion, talent and prior teaching experience are formidable forces in teaching; and passion creates perseverance and enhances capability.

Pedagogy and content knowledge are 'useless' without passion

In teaching, pedagogy and content knowledge are two important knowledge bases which are known to ensure quality instruction. Their amalgamation form the pedagogical content knowledge framework, which assist in demystifying students' misconceptions, addressing students' unique needs and ensuring students' understanding of lessons taught. As important as these knowledge bases are to teaching and teacher professionalism, they were not considered as the very end to effective instruction. Their optimum relevance seem to be enhanced by passion for teaching. Arguments had been put forward by the study's participants to sustain this contemporary claim. To one participant, content knowledge has no grounds when the teacher has no passion to teach because

> *looking at teaching, if you don't have passion for it you can't teach it well. So any teacher who has passion for teaching can teach very well. Therefore, if you can teach very well or you know the content and you don't have passion for it, even you going to the classroom you will think*

that it is a curse or pressure placed on you (Jona).

They [pedagogical and content knowledge] *are relevant because without them you cannot deliver very well* (Josi) …but '*not as the passion'* (Mona).

The pedagogical courses and content courses are very necessary. When you go through these courses you get everything on point but if you don't have the passion you will go and stand in front of the students and in one or two weeks you will be bored with the profession. So they are very necessary but in order to be confident, in order to enjoy what you are doing as a teacher you have to get the passion for the job (Pinto).

These clearly prove that passion is critical to one's teaching self-efficacy. The impression created is that it is not capability, rather the love to teach, which empowers pedagogy and content knowledge to produce effective teaching. To the PMTs, whether this claim is subjected to several discussions or arguments, it will not change their position. Hence, pedagogy and content knowledge remain as 'orphans' or 'useless' knowledge bases for teaching without teaching passion.

Passion, talent and prior teaching experience are formidable forces in teaching

One can teach by relying on his/her artistic flair without the scientific knowledge obtained from teacher education institutions. This seems not to make pedagogy and content knowledge as the most influential sources of one's teaching self-efficacy. These two scientific knowledge might be pursued in formal schools to perfect teaching and meet professional teaching requirement. Hence, passion, talent and prior teaching experience have been identified by the

PMTs as the most formidable sources of a teacher's teaching self-efficacy. In his words,

> *…passion, talent, then teaching experience comes before you will go and consider the content that you want to teach and then the skills that you will apply to the content so that the learner will understand whatever you are teaching* (Jona).

By implication, teaching success is highly likely to be hindered when passion, talent and prior teaching experience are missing during teaching. This is likely to be the case in that, passion would motivate the execution of teaching, talent would ensure the ease in its execution and prior teaching experience would consolidate how well it must be executed.

Passion creates perseverance and enhances capability

The performance of the teaching tasks, just like any other professional tasks, needs the motivation to sustain efforts in the long run. This sustained efforts over time is highly likely to enhance capability for successful teaching. Accordingly, some of the PMTs provided various reasons to support this assertion. Two of the participants strongly believed that,

> *… passion has been ranked as number one because in actual sense also means natural booster for a particular thing to be done. For instance, I had a teacher way back in SHS, a core maths teacher, the man just loves to teach not because he is being paid for but he loves to teach. Sometimes, he will teach a particular topic and the whole class, only one person understands it. If it were to be somebody who is paid for teaching he would have left and gone but this man will go and come back with new strategies and how to make us understand the content*

very well and that is passion, love for the job. If you are doing something and there is no love for it, I tell you it is 'Cos 90' (Guru).

…if you don't have the desire to teach what will make you go ahead for more skills for the students to understand whatever you are teaching, …. So before you can go for the methods and content and everything, you must first have the love and passion for it before all these things will come in. So that is why pedagogy is number 4 and content is number 5 (Guru).

To Lisa, passion drives them to even teach other subject curricula that they have limited training. In her submission,

here is the case we have all studied management and we are being trained to be management teachers. But here is the case that we are even going for off-campus and this person is going to teach ICT, going to teach Economics, this is going to teach management. So if you don't have passion for teaching, if you are not experienced enough and if you are not naturally gifted, I don't think you being trained as a management teacher you will agree that okay then I will go and teach Econs (Lisa).

This does not suggest that the PMTs are made to teach or practice in subject curricular other than their trained area. PMTs teaching Economics is feasible because it is their minor subject area. The emphasis here is that, the passion they have for teaching would not make them decline on teaching on the grounds of unavailability of vacancies in their major subject area. By implication, if they believe they can succeed even in their minor subject area and unrelated areas of expertise, one can approximately gauge their level of self-efficacy in their major subject area. The ranking remained as passion, talent,

and prior teaching experience as the top three sources of PMTs' self-efficacy about the teaching practicum.

Discussion for Research Question One

This study, which is also about PMTs' level of self-efficacy, was necessitated by the previous studies conducted on preservice teachers' practicum anxiety, which concluded that they lack the confidence to teach due to the evidence of increasing teaching anxiety among them. If confidence is believed to be strengthened through knowledge acquired and these preservice teachers have been taught the content in the various subject curricula, and the knowledge needed to pedagogically transform content to students, then they are not expected to lack confidence when teaching. The study, therefore, assessed PMTs' level of confidence to teach by focusing on their level of self-efficacy which literature identified as a proxy to their confidence to teach. Hence, the research question posed was: What is preservice management teachers' level of self-efficacy about the teaching practicum?

The quantitative evidence gathered revealed that the PMTs were highly efficacious prior to and after the teaching practicum. This means they believed in their capability to professionally teach in order to address the needs of their students. The PMTs high level of self-efficacy can profile their teaching effectiveness in implementing the SHS business management curriculum in which they have been trained to teach (Pendergast et al., 2011). This is because self-efficacy can reliably predict teacher practice (Graham et al., 2001).

This high level of self-efficacy was due to their high level of synergy in instructional strategies, classroom management and student engagement efficacies; these are the competencies needed to plan and execute classroom

instruction, use reinforcement strategies and conduct an effective assessment classified as relevant teaching skills (Lewin & Stuart, 2003). These factors are also important teaching practices which create a quality learning environment for students' success (Sternberg & William, 2010).

The PMTs' high self-efficacy in instructional strategies implies that they can select and use most of the methods of teaching such as discussion, guided discussion, brainstorming, lecture, among others to present business management content to their students (Young-Lovell, 2009). Also, they can use various teaching-learning materials or resources to concretise management contents for students' understanding (Weston & Cranton as cited in Onweh & Akpan, 2014). In addition, their high self-efficacy in classroom management implies that they can exercise class control as they organise the classroom environment for effective teaching and learning (Sternberg & William, 2010). This is likely to promote learners growth experiences (Feiman-Neimser, 2001). Further, the PMTs' high level of student engagement efficacy suggests that they can enforce their students to invest their time and resources on important academic tasks (Trowler, 2010). This further extends that they can engage them cognitively, behaviourally and emotionally (Fredricks et al., 2004). This may translate to students' success and development (Klem & Cornell, 2004; Pascarella & Terenzini, 2005; Kuh et al., 2005).

Even though some previous studies (e.g. El-Deghaidy, 2006; Senler & Sungur, 2010; Merc, 2015a; Sarfo et al., 2015; Cahill, 2016; Hunter, 2016; Zuya et al., 2016) had also found that preservice teachers are highly efficacious and therefore highly confident to teach, the current and the previous studies' point of divergence were the dominant and or the least influencing self-efficacy

factor, and the resilient source(s) of preservice teachers' self-efficacy.

The current study found that the PMTs' high self-efficacy was highly influenced by student engagement, followed by classroom management and instructional strategies. Evidence gathered at Times 1 and 2 show that the effect sizes were large and moderate respectively. This means that even though they are highly efficacious on all three factors, comparably student engagement efficacy stands out. The relatively low self-efficacy in instructional strategies is explained by the qualitative evidence that the PMTs found it relatively difficult to effectively use various instructional resources and remain creative in their delivery. A similar situation was found by Sarfo et al. (2015) that Ghanaian SHS teachers were less efficacious in instructional strategies as compared with student engagement and classroom management. The issue was not different from that observed among special education preservice teachers in USA (Cahil, 2016). However, in Turkey, preservice science teachers were found to be less efficacious in student engagement (Senler & Sungar, 2010), whilst their foreign language counterparts were less efficacious in classroom management (Merc, 2015a). In Australia, preservice teachers, in general, were less efficacious in classroom management (Ma & Cavanagh, 2018). The impression is that context, area of specialization (subject) and probably teacher education programmes may have created the differences being observed.

The general conclusion drawn is that both American preservice special education teachers and Ghanaian PMTs might not optimize the use of teaching pedagogies in classrooms. Also, Turkish preservice foreign language teachers and Australian preservice teachers, in general, might not organise an effective classroom environment for teaching and learning. Finally, Turkish preservice

science teachers might not fully engage their students cognitively, behaviourally and emotionally in classrooms.

The qualitative evidence also showed that the generally high level of PMTs' self-efficacy was influenced by enactive mastery experience, vicarious experience and passion (physiological and affective state). For enactive mastery experience, three sources identified were content and pedagogical knowledge, prior teaching experiences and peer tutoring. The pedagogical courses such as curriculum studies in management and methods of teaching management had exposed them to scientific teaching. They believe they can prepare lesson plans, appropriately introduce lessons, transform contents to students, and use questioning techniques among other basic teaching tasks. The knowledge they had acquired in pedagogy would certainly form their pre-existing knowledge structures or systems that would inform their approach to teaching. Similarly, other empirical evidence found preservice teachers' high level of self-efficacy to be related to the teaching methods class. El-Deghaidy (2006) in Egypt found that teacher educators adopted the constructivist teaching and learning approaches which influenced the efficacy of their preservice teachers. Similarly, Merc (2015a) in Turkey attributed it to the quality of preservice teachers' education (theoretical knowledge).

The prior teaching experience the PMTs obtained in schools and from peer tutoring seems to have laid a good foundation for their teaching self-efficacy, especially when they saw improvements in the academic achievements of those (students and peers) they taught. This is considered a morale booster to teach due to success achieved under such informal settings. In sharp contrast, in Australia, Ma and Cavanagh (2018) found preservice teachers' relatively low

level of self-efficacy to be explained by previous informal teaching. It could be that the informal teaching experience was awful since this current study endorses the relevance of informal teaching and peer tutoring for enhancing self-efficacy.

PMTs' high self-efficacy was influenced by vicarious experience they had through the observation of various agents of socialization in both the school and the society. The key agent in the school was the various professional teacher educators who modelled the teaching behaviour to them. Others were parents and religious leaders, who exhibited various teaching roles which influenced the PMTs' high level of self-efficacy.

The PMTs' physiological and affective state further heightened their self-efficacy. Of such an important emotional state is their passion for teaching which was found as the most powerful or resilient source of self-efficacy. They explained that they had unflinching love for teaching and believe that such an emotional state can never fail them in teaching. They have categorically stated that a teacher's ability without passion is not likely to yield desired results in students' achievement. To them, greater results in students' learning can be observed when this passion is combined with talent. The evidence cited by the PMTs to support their point was their ability to ignite students' interest in learning through teaching when they had not even been formally exposed to the rudiments of teaching. Hence, to them, passion and talent remained as critical sources to self-efficacy which explain their high level of self-efficacy.

Previous studies did not rank preservice teachers' sources of self-efficacy neither did the studies explore the efficacy source(s) preservice teachers' considered the most important. Therefore, the study makes a novel

contribution to the literature by the evidence found that teaching passion is the most significant influencer of preservice teachers' self-efficacy about the teaching practicum. The evidence seems to disagree with Bandura' (1997) self-efficacy theory and the assertion by Wallace (2001) that enactive mastery experience is the most powerful influencer of self-efficacy. The new evidence that teaching passion is the most powerful influencer of preservice teachers' self-efficacy is supported by the grit theory. The grit theory strongly states that grit, a combination of passion and perseverance, is the strongest factor in ensuring long term success in teaching than talent and ability (Duckworth, 2016). Evidence from Riddle (2018) showed that there is a significant moderate relationship between grit and self-efficacy ($r = .612$, $p < .001$, $r^2 = .37$); this relationship is considered strong by Cohen (1988; 1992). Hence, it is not about ability which is normally obtained from enactive mastery experiences but rather the passion for teaching which strongly enhances self-efficacy.

The study strongly argues that when teaching passion (ranked first) and talent (ranked second) are considered together, if not excellent, it will be a good combination in enhancing preservice teachers' self-efficacy. It should be noted that the relevance of enactive mastery experience was recognised by the PMTs, however, ranked as third before pedagogical and content knowledge. Accordingly, enactive mastery experience was found essential than knowledge in teaching methods (Kiggundu & Nayimuli, 2009). The PMTs emphasised that it is the passion that will drive a teacher to teach and further develop self-acquired knowledge (professional development).

Out of the four sources of self-efficacy per Bandura's self-efficacy theory (1997), verbal persuasions was not recounted by the PMTs as a

contributory factor to their high self-efficacy. This does not mean that verbal persuasions cannot influence their self-efficacy, but rather individuals they encountered failed to provide them with such encouragement that they needed to enhance their teaching self-efficacy.

In summary, the PMTs' high self-efficacy about the teaching practicum was influenced in order of decreasing intensity by passion (most important source), talent, enactive experience, pedagogical knowledge, content knowledge, vicarious experience and professional image. They were relatively less efficacious on instructional strategies when the self-efficacy factors were compared. However, they have shown readiness for the teaching profession (Senler & Sungur, 2010; İnceçay & Dollar, 2012).

Results

Preservice Management Teachers' Level of Anxiety

Extant educational literature in other parts of the globe suggests that preservice teachers are anxious about the teaching practicum component of their programme, especially when it comes to them being supervised. Therefore, it is very important in determining if PMTs in Ghana are also anxious and to provide explanations for their anxiety (if any). Hence, the research question formulated was: What is preservice management teachers' level of anxiety about the on-campus teaching practicum? Quantitative data were gathered from the PMTs (before and after ONCTP) through the STAS and were analysed using descriptive statistics. The summarised results are presented in Table 25, and the detailed results can be found in Appendix H.

Table 25: Preservice Management Teachers' Level of Anxiety (Before ONCTP)

Anxiety Factors	Mean Scores	*SD*	Interpretation
Evaluation Anxiety (1)	2.16	.82	High
Class Control Anxiety (2)	2.33	.99	High
Professional Preparation Anxiety (3)	2.50	.03	Moderate
School Staff Anxiety (4)	2.52	.04	Moderate
Unsuccessful Lesson Anxiety (5)	2.34	.89	High
Level of Anxiety	2.37	.95	High

Scale: 1.00-1.49 (*Very High*); 1.50-2.49 (*High*); 2.50-3.49 (*Moderately*); 3.50-4.49 (*Low*); 4.50-5.00 (*Very Low*).
Source: Fieldwork (2019).

The average mean score (2.37) indicates that the PMTs were highly anxious about the teaching practicum. Evidence from the anxiety factors show that they were highly anxious about evaluation (M = 2.16, SD = .82), class control (M = 2.33, SD = .99) and unsuccessful lesson (M = 2.34, SD = .89). Moderately influencing anxiety factors were professional preparation (M = 2.50, SD = .03) and school staff anxiety (M = 2.16, SD = .04).

Various indicators pointed to PMTs' high evaluation anxiety. The dominant indicators were they being anxious about assessment by supervisors (M = 1.92, SD = 1.05), how the practice teaching will go in their supervisors' eyes (M = 1.93, SD = 1.01) and what the supervisors will expect from them (M = 2.04, SD = 1.02). They seem to battle with supervisors' unknown expectations which might not match their teaching performance. The lowest influencing indicator was their anxiety about how helpful colleagues in the practice group will be (M = 2.46, SD = 1.12). Such colleagues might either offer help or even make their teaching difficult in an attempt to substantiate themselves better when it gets to their turn to teach.

The PMTs' anxiety was further compounded in the area of class control. They were anxious about setting work at the right level for their learners (*M* = 2.33, *SD* = 1.17), how to give each learner the attention needed without neglecting others (*M* = 2.34, *SD* = 1.24) and controlling the class (*M* = 2.40, *SD* = 1.14). The feeling of keeping the class in order seems to be stressing them. They seem to appreciate the fact that an orderly class is necessary for effective teaching and learning.

Unsuccessful lesson anxiety contributed to PMTs' high anxiety. They were anxious about how their supervisors (*M* = 2.04, *SD* = 1.05) and colleagues (*M* = 2.34, *SD* = 1.04) will react to one or more unsuccessful lessons if they should occur during the teaching practicum and as to whether they will adequately cover prepared material (*M* = 2.32, *SD* = 1.16). They seem much concerned about mistakes they would commit during the practicum. Such feelings can impair areas of teaching that they would have delivered well. Risking failure in such a practicum environment should not have been a problem since they are still under training. However, failure in executing the teaching tasks might be inappropriately handled by their supervisors and colleagues, hence their anxiety.

The PMTs experienced moderate anxiety on professional preparation and school staff. The indicators for professional preparation anxiety were their anxiety to handle disobedient learners (*M* = 2.45, *SD* = 1.18), anxiety about completing lesson plans in the required form (*M* = 2.46, *SD* = 1.35) and anxiety about the adequacy of their lesson plans (*M* = 2.53, *SD* = 1.28). Also, they were anxious about maintaining a robust approach in lesson delivery (*M* = 2.55, *SD* = 1.09). For school staff anxiety, the indicators were their anxiety about

controlling the noise level during the practicum (*M* = 2.60, *SD* = 1.20), anxiety about cooperation with their colleagues during practicum (*M* = 2.66, *SD* = 1.21) and anxiety about getting on with their colleagues during the practicum (*M* = 2.72, *SD* = 1.21). Generally, if the PMTs fail to obtain the necessary cooperation from their supervisors and practicum colleagues, their instructional creativity might be impeded.

In summary, the preservice teachers experienced high anxiety before the start of the teaching practicum. High congruence in their responses was observed on professional preparation (*SD* = .03) and school staff anxiety (*SD* = .04). However, the mean score for evaluation anxiety (*M* = 2.16) was the lowest among all the anxiety factors with the second-lowest homogeneity estimate (*SD* = .82), implying that there might be some differences among the PMTs in experiencing this anxiety. Closest to evaluation anxiety in mean score was class control anxiety (*M* = 2.33) with the lowest congruence in the respondents' responses (*SD* = .99). A visual inspection of the means was therefore difficult to communicate the most influencing anxiety factor. Hence, differences in the mean scores of the anxiety factors were examined through one-way repeated measures ANOVA and the results are presented in Table 26.

Table 26: Repeated ANOVA Tests of Within-Subjects Effects for Anxiety (Before ONCTP)

Source		Type III Sum of Squares	*df*	Mean Square	F	*p*	η_p^2
Anxiety	Sphericity Assumed	9.948	4	2.487	11.777	.000	.091
	Greenhouse-Geisser	9.948	3.581	2.778	11.777	.000	.091
	Huynh-Feldt	9.948	3.707	2.684	11.777	.000	.091
	Lower-bound	9.948	1.000	9.948	11.777	.001	.091

Table 26, continued

Error (Anxiety)	Sphericity Assumed	99.677	472	.211
	Greenhouse-Geisser	99.677	422.579	.236
	Huynh-Feldt	99.677	437.436	.228
	Lower-bound	99.677	118.000	.845

Source: Fieldwork (2019).

The Mauchly's test indicated that the assumption of sphericity had been violated, $\chi 2$ (9) = 27.179, p = .001. Hence, the Greenhouse-Geisser statistic or Huynh-Feldt statistic can be used to correct the degrees of freedom. The epsilon statistic of sphericity was greater than .75; therefore, Field (2009) recommends that the Huynh-Feldt statistic in the tests of within-subject effects should be used to establish statistical significance. Using the Huynh-Feldt corrected estimates of sphericity (ε = .927), the results show that the differences in the anxiety factors are statistically significant, F(3.71) = 11.777, p < .001. The magnitude of the partial eta squared (.091) was moderate following the guidelines provided by Cohen (1988). A post hoc multiple comparisons were then conducted through the Bonferroni test (no adjustment). The results are presented in Table 27.

Table 27: Pairwise Comparisons of Anxiety Factors (Before ONCTP)

(I) Anxiety	(J) Anxiety	Mean Difference (I-J)	S.E.	*p*	95% Confidence Interval for Difference *LLCI*	*ULCI*
1	2	-.166*	.053	.022	-.317	-.015
	3	-.334*	.067	.000	-.526	-.142
	4	-.356*	.062	.000	-.533	-.178
	5	-.179*	.061	.042	-.355	-.004
2	1	.166*	.053	.022	.015	.317
	3	-.168	.060	.061	-.340	.004
	4	-.190*	.058	.014	-.356	-.024
	5	-.013	.066	1.000	-.201	.174

Table 27, continued

3	1	.334*	.067	.000	.142	.526
	2	.168	.060	.061	-.004	.340
	4	-.022	.050	1.000	-.165	.121
	5	.155	.059	.097	-.014	.323
4	1	.356*	.062	.000	.178	.533
	2	.190*	.058	.014	.024	.356
	3	.022	.050	1.000	-.121	.165
	5	.176*	.058	.027	.012	.341
5	1	.179*	.061	.042	.004	.355
	2	.013	.066	1.000	-.174	.201
	3	-.155	.059	.097	-.323	.014
	4	-.176*	.058	.027	-.341	-.012

Note: *Evaluation* (1); *class control* (2); *professional preparation* (3); *school staff* (4); *unsuccessful lesson* (5).
Source: Fieldwork (2019).

The pairwise comparison identified the level of evaluation anxiety to be statistically lower than all the other anxiety factors. Class control anxiety (M = 2.33) was not statistically different from professional preparation anxiety (M = 2.50) and unsuccessful lesson anxiety (M = 2.34) but statistically lower than school staff anxiety (M = 2.52). Professional preparation anxiety (M = 2.50) was not statistically different from school staff anxiety (M = 2.52) and unsuccessful lesson anxiety (M = 2.34). School staff anxiety (M = 2.52) was also not statistically different from unsuccessful lesson anxiety (M = 2.34). It can be concluded that PMTs experienced the highest anxiety on the evaluation factor. The extreme level of evaluation anxiety (deviant case) experienced by the PMTs before the ONCTP necessitated the examination of their anxiety after the ONCTP. This is particularly critical if concentration must be placed on the evaluation anxiety factor. The anxiety results in Time 2 are presented in Table 28, and detailed results in Appendix H.

Table 28: Preservice Management Teachers' Level of Anxiety (After ONCTP)

Anxiety Factors	Mean Scores	*SD*	Interpretation
Evaluation Anxiety (1)	2.40	0.95	High
Class Control Anxiety (2)	2.54	1.12	Moderate
Professional Preparation Anxiety (3)	2.72	1.08	Moderate
School Staff Anxiety (4)	2.65	1.11	Moderate
Unsuccessful Lesson Anxiety (5)	2.54	0.92	Moderate
Level of Anxiety	2.57	1.04	Moderate

Scale: 1.00-1.49 (*Very High*); 1.50-2.49 (*High*); 2.50-3.49 (*Moderately*); 3.50-4.49 (*Low*); 4.50-5.00 (*Very Low*).
Source: Field data (2019).

It can be observed that PMTs' general level of anxiety had reduced from high (*M* = 2.37, *SD* = .95) to moderate (*M* = 2.57, *SD* = 1.04). Even though some of the anxiety factors reduced marginally, they still remained in a high or moderate category. It can be observed that evaluation anxiety (*M* = 2.16) was high in Time 1. It marginally reduced (*M* = 2.40) in Time 2, but was still within the high category. The respondents were still anxious about what their supervisors expected (*M* = 2.14, *SD* = 1.07) and their assessment (*M* = 2.16, *SD* = 1.20). They were as well anxious about how the practice teaching would go in their supervisors' eyes (*M* = 2.29, *SD* = 1.14). The lowest evaluation anxiety indicator experienced was on how helpful their colleagues in the practice group would be (*M* = 2.62, *SD* = 1.24). It clearly stands that the PMTs were so concerned about the actions of their supervisors.

Professional preparation and school staff anxiety all remained at a moderate level even though a reduction was observed in their mean scores. Professional preparation anxiety reduced from Time 1 (*M* = 2.50) to Time 2 (*M* = 2.72) yet observed in the moderate category. PMTs were still moderately

anxious about whether their lesson plans would be adequate (*M* = 2.68, *SD* = 1.34), about completing lesson plans in the required form (*M* = 2.72, *SD* = 1.33) and about how to handle disobedient learners (*M* = 2.74, *SD* = 1.20). The lowest moderate professional preparation anxiety indicator was maintaining a robust approach during teaching (*M* = 2.75, *SD* = 1.07).

School staff anxiety reduced from Time 1 (*M* = 2.52) to Time 2 (*M* = 2.65), however within the same moderate category. The PMTs were still anxious about whether their supervisors would be happy with their teaching (*M* = 2.20, *SD* = 1.12). They were anxious about co-operation with their colleagues during teaching practicum (*M* = 2.74, *SD* = 1.21) and how to get on with colleagues during the teaching practicum (*M* = 2.82, *SD* = 1.25).

Both class control and unsuccessful lesson anxiety reduced from high to moderate. Class control anxiety saw a reduction in the mean scores from 2.33 (Time 1) to 2.54 (Time 2). The PMTs were moderately anxious about how to give each learner the attention needed without neglecting others (*M* = 2.50, *SD* = 1.29) and about whether their practice performance would be satisfactory from their colleagues' point of view (*M* = 2.50, *SD* = 1.16). Anxiety about setting work at the right level for their learners (*M* = 2.55, *SD* = 1.27) was also moderate with class control anxiety being the lowest (*M* = 2.60, *SD* = 1.24) among all the class control anxiety indicators.

Unsuccessful lesson anxiety reduced from Time 1 (*M* = 2.34) to Time 2 (*M* = 2.54). The PMTs were now moderately anxious about whether they could cover the prepared material adequately (*M* = 2.53, *SD* = 1.11), handle incidents of misbehaviour in class during the teaching practicum (*M* = 2.54, *SD* = 1.10) and address possible problems in the class with individual disruptive learners

during the teaching practicum (*M* = 2.65, *SD* = 1.07). The least moderately unsuccessful lesson anxiety indicator was about how their colleagues would react to one or more unsuccessful lessons if they should occur during the teaching practicum (*M* = 2.72, *SD* = 1.07).

In summary, the PMTs experienced moderate anxiety after the teaching practicum. The highest congruence in their responses was observed on unsuccessful lesson anxiety (*SD* = .92) followed by evaluation anxiety (*SD* = .95). However, the mean score for evaluation anxiety (*M* = 2.40) was the lowest among all the anxiety factors, implying that the PMTs experienced the highest anxiety on this factor. The evaluation factor indeed was seen as a deviant case in which the qualitative data provided further explanations. Examination of the anxiety factors across time showed that some of the factors remained in the same category. For example, evaluation anxiety was high whilst professional preparation and school staff anxiety were moderate at Time 1 and Time 2. Both class control and unsuccessful lesson anxiety reduced from a high level on Time 1 to a moderate level on Time 2. Again, a visual examination of the means and standard deviations was difficult to communicate the most influencing anxiety factor. Hence, differences in the mean scores of the anxiety factors were once again examined through one-way repeated measures ANOVA. The results are presented in Table 29.

Table 29: Repeated ANOVA Tests of Within-Subjects Effects for Anxiety (After ONCTP)

Source		Type III Sum of Squares	*df*	Mean Square	F	*p*	η_p^2
Anxiety	Sphericity Assumed	7.061	4	1.765	10.014	.000	.078
	Greenhouse-Geisser	7.061	3.581	1.972	10.014	.000	.078
	Huynh-Feldt	7.061	3.707	1.905	10.014	.000	.078
	Lower-bound	7.061	1.000	7.061	10.014	.002	.078
Error	Sphericity Assumed	83.208	472	.176			
(Anxiety)	Greenhouse-Geisser	83.208	422.616	.197			
	Huynh-Feldt	83.208	437.476	.190			
	Lower-bound	83.208	118.000	.705			

Source: Fieldwork (2019)

The sphericity assumption was violated as indicated by Mauchly's test of sphericity, χ^2 (9) = 25.708, p = .002. The Huynh-Feldt correction estimate was used to adjust the degrees of freedom. Therefore, using the Huynh-Feldt corrected estimate of sphericity (ε = .927), the results show that there is a statistically significant difference between the anxiety factors, F(3.71) = 10.014, p < .001, partial η^2 = .078. The partial eta squared shows that the difference observed is moderate (.078) following Cohen's (1988) guidelines. The post hoc multiple comparisons were run through the Bonferroni test (no adjustment) to determine the anxiety factors that portrayed significant differences. Table 30 presents the results.

Table 30: Pairwise Comparisons of Anxiety Factors (After ONCTP)

(I) Anxiety	(J) Anxiety	Mean Difference (I-J)	S.E.	*p*	95% Confidence Interval for Difference *LLCI*	*ULCI*
1	2	-.132	.057	.209	-.294	.029
	3	-.319*	.058	.000	-.485	-.154
	4	-.244*	.055	.000	-.401	-.087
	5	-.133	.054	.149	-.287	.021
2	1	.132	.057	.209	-.029	.294
	3	-.187*	.047	.001	-.321	-.053
	4	-.111	.050	.266	-.253	.031
	5	.000	.061	1.000	-.175	.174
3	1	.319*	.058	.000	.154	.485
	2	.187*	.047	.001	.053	.321
	4	.076	.045	.932	-.052	.203
	5	.187*	.058	.016	.021	.352
4	1	.244*	.055	.000	.087	.401
	2	.111	.050	.266	-.031	.253
	3	-.076	.045	.932	-.203	.052
	5	.111	.059	.625	-.058	.280
5	1	.133	.054	.149	-.021	.287
	2	.000	.061	1.000	-.174	.175
	3	-.187*	.058	.016	-.352	-.021
	4	-.111	.059	.625	-.280	.058

Note: *Evaluation* (1); *class control* (2); *professional preparation* (3); *school staff* (4); *unsuccessful lesson* (5).
Source: Fieldwork (2019).

The pairwise results show that some of the anxiety factors statistically differed from each other. For example, evaluation anxiety (M = 2.40) was statistically lower than professional preparation anxiety (M = 2.72) and school staff anxiety (M = 2.65). However, it was not statistically different from class control anxiety (M = 2.54) and unsuccessful lesson anxiety (M = 2.54). Class control anxiety (M = 2.54) was also statistically lower than professional

preparation anxiety (*M* = 2.72). However, class control anxiety (*M* = 2.54) did not statistically differ from school staff anxiety (*M* = 2.65) and unsuccessful lesson anxiety (*M* = 2.54). School staff anxiety (*M* = 2.65) was also not statistically different from unsuccessful lesson anxiety (*M* = 2.54). Unsuccessful lesson anxiety (*M* = 2.54) was statistically lower than professional preparation anxiety (*M* = 2.72). A careful analysis of these observed differences still seems to project evaluation anxiety as dominant among all the anxiety factors. Even though statistically significant differences were not found when evaluation anxiety was compared with class control and unsuccessful lesson anxiety, differences are observed in their means. Evaluation anxiety appears to present itself as a bane together with class control anxiety to PMTs in the teaching practicum.

Perspectives of Preservice Management Teachers on Teaching Anxiety

The PMTs indicated several sources which triggered their teaching anxiety in their execution of the teaching tasks. Their perspectives assisted in obtaining deep insight about their initial high anxiety and subsequent moderate anxiety about the teaching practicum.

Sources of teaching practicum anxiety

The PMTs' sources of anxiety are supervision (evaluation), lack of confidence, shyness, large class size, hesitancy in speech production, lack of enacted experience, lecturers' and past student-teachers' negative remarks. These sources are presented under the following sub-themes.

Intimidation and frustration of supervisors

In tandem with supervision, the marks teaching practice supervisors were likely to give, which might not meet the expectations of the PMTs together

with the intimidation and frustration perpetuated by these supervisors precipitated the anxiety of the PMTs. Evidence gathered was that,

> *…as a PMT you are fighting for your marks and so you want to make your 'A' or 'B+'…you enter the classroom and you are afraid. Even the way some supervisors will address you why this and that, you feel so intimidated. So that is why I am very anxious. I am very anxious when it comes to marks. Because I want to make my nice class over here to further my education. So since I want to make my grade and further my education it makes me tensed even in preparing lesson note and TLM* (Kaka).

The euphemized concern of the PMT is clearly about the utterances of some of the supervisors which stained their professionalism. Such unprofessional utterances heightened the already existing anxiety the PMT had about the desire for a particular grade. This created practicum atmosphere is likely to interfere with quality learning.

Supervision as a witch-hunting event

The issue of the supervision has been like a witch-hunting event frustrating the PMTs. This is because the focus has been on identifying errors to the extent that as you

> *…try your best to make sure they* [students] *are getting it, you are failing because the supervisor is looking at your weakness. In my case, the supervisors, they were not telling us the strength only the weakness, oh you didn't do this one well. Next time when you come don't… tension no ato woso* [tensed at that moment] …. (Guru).
>
> *…I realised as my friend* [Wata] *was talking about it, our time …*

> *anything you do she* [supervisor] *makes sure you feel you haven't done anything at all. A friend of mine said that I have to finish teaching before this woman comes. So some of the supervisors are also making the work so difficult for some of us and then you don't have the kind of feeling for doing anything* (Kaka).

The concentration of these novice PMTs was placed on error-free teaching rather than freely exploring the teaching tasks in their own ability. One participant specified that

> *when you are teaching to be supervised you are doing it for marks, so you will be very careful. Especially, when teaching and delivering you are very careful not to commit certain errors or mistakes* (Josi).

The likely errors seem to be considered as stimulus to punitive measures of negative remarks from supervisors. This might make the PMTs to be over cautious.

Marketing channels for practicum anxiety

In exacerbating the agony of the PMTs, the past student-teachers and lecturers of various content and pedagogical courses provided early reminders (before the ONCTP) about the nature of practicum supervisors. Whilst past student-teachers acted as marketing channels, sending negative comments about supervisors, some lecturers scared the PMTs into suspense as to what they would see in the teaching practicum. Reported evidence are that,

> *sometimes, you will meet your colleagues who have been through this on-campus teaching and to be frank with you, the remarks they* [supervisors] *give you, the negative remarks will make you feel like me Charley* [brother] *this thing …. So let's say from the onset you are*

scared. So that one also demolish you and you will be like this thing I can't …. So that is also part of why sometimes our anxiety is also high (Wata)…. *our lecturer was teaching us and I think some of the students were joking or fooling around. So our lecturer just turned and the next statement was you don't worry you are coming, it will get to your on-campus, you will see. So at once, there was absolutely silent in the class and we were looking at each other's faces and was like Charley this on-campus how, why, what will go on when we are having the on-campus?* (Wata).

Sir, sometimes your colleagues or your seniors will tell you, that woman supervising you, oh then you are dead. So… with that kind of perception, you have a problem already (Kaka).

The teaching practicum is being used as an inimical instrument in getting students to learn desired teaching behaviours. This seems to create an unhealthy state of mind for the PMTs which might affect their creativity when teaching.

Porosity of practicum context

The PMTs were concerned about the unfavourable practice context which they were exposed to. Their colleagues, who acted as simulated SHS students, misconducted themselves during the practicum to disturb them. This makes them perceive that the practicum environment does not mimic the actual teaching context at the various SHS in Ghana. To Kaka,

… this on-campus teaching, some of your colleagues will tell you that they are going to drag your feet in the classroom. So already you have that anxiety, and then you are fighting for your mark…. So as you enter

the classroom you are afraid (Kaka).

Even though some of these antics are likely to be displayed on the real teaching context, the PMTs engagement with their colleagues makes them feel that it is a deliberate intention to frustrate them and unleash the anger of some of the unprofessional supervisors. In his words,

> *… when you are teaching and to you, you have done everything, everything is on point and one student will just raise up his or hand and be like, Sir, I don't understand what you said so start all over again. So this means you have to use another strategy which I don't think you have enough time to do so. So, listening to the remarks given by that colleague of yours, you will be like Charley what is my supervisor going to say that have I performed or I did nothing at all. Because to them when you are teaching you have to make sure that everyone understands it and everyone goes in accordance with what you are teaching. So if a student is to raise his or her hand and say to you that sir I don't understand anything at all, it means what you did has no impact on them or maybe you will feel like I have failed* (Wata).

Lack of enacted mastery experience: three evidential factors

The lack of enacted mastery experience was also considered as an anxiety factor. This resulted from not being practically exposed to teaching, teaching following new approaches or guidelines for the first time and a considerable time elapsed from when one engaged in teaching. Some of the preservice teachers were not practically exposed to teaching. One participant acknowledged that

> *the anxiety was high because of lack of experience. Some have never in*

> *their life taught before because they never had any plan of coming to teach but due to some counselling that is why they are in the teaching field. So because of lack of experience, they have that fear that if I don't teach well…, I have not taught before, how do I go about stuffs like that?* (Guru).

Others have taught before but following new approaches and guidelines were problematic which created anxiety. In his words,

> *the reason why the anxiety is high is that with my experience in teaching at the private school, there was nothing like doing an introduction or whatever, it was just like chew and pour. You just memorise the thing and when you go to class you teach and go but when you come here, you learn to follow some particular steps. You have to introduce and all sort of things so it makes you anxious; how will I fix in this because you are not used to it. It is something new to you so you have to adjust to the new thing which makes also the person anxious and it raises a lot of anxiety* (Josi).

Finally, others had also taught for a considerable length of time and yet teaching is basically serving as a new learning task.

> *… if you have stopped doing something for a very long time and you coming to start over again, there is that kind of anxiety because we have taught before but is been a long time we taught. I am coming to teach, will I be applauded for what they did to me when I was teaching at some time ago.… So there is that kind of anxiety* (Pinto).

Natural friends of Anxiety

Large class size, shyness and fear were also considered as factors that triggered anxiety of the PMTs. Some seem to find it difficult to stand in front of relatively large classes to teach. Others are just fearful and nervous displaying clear signs of anxiety. These are the perspectives of two of the participants:

> *Sir please, I think shyness is one. There could be a situation whereby someone has never spoken in front of, let's say not more than 20 people. So when the number increases it brings that tension. Especially when the person is an introvert, a person not sociable, it brings some kind of tension when the person is teaching* (Lisa).
>
> *Also, the fear of being accepted by the students or supervisor. You see most students have been taught by different teachers, so they have the experience of most of the teachers. So you being a new teacher if you are going to teach, you will fear that these students, what am going to teach them am I going to fall within their category? So that is another factor* (Jona).

These three anxiety factors (large class size, shyness and fear) create the need for constant practice so that enough confidence can be built. It is this confidence that is believed to assist a teacher during instructional delivery.

Trade-off between confidence and anxiety

It was not surprising when one of the participants indicated that the level of confidence is a key factor in reducing anxiety. Low level of confidence was associated with a preservice teacher experiencing anxiety.

> *What I will say is that sometimes your confidence level is one of the key issues that can influence your anxiety in a class. Some people don't have*

> *that confidence to stand before people and then talk. So if your confidence level is low, probably you are going to face that kind of anxiety whenever you happen to teach* (Jona).

The assertion that the absence of confidence can increase anxiety whenever a teacher is engaged in teaching shows a trade-off that exists between the two factors. This implies that if one's teaching confidence is high, anxiety is likely to reduce and vice versa.

Medium of instruction

Finally, hesitancy in speech production was identified as an anxiety-causing factor. This problem was palpable among the preservice teachers. It was rightly pointed out by one participant that

> *…your fluency in English or the language used to teach can also influence your anxiety level. If you are somebody that you are not fluent in the speaking of English and you are going to teach using English, the basic language, probably …it will affect you* (Jona).

It was observed during the FFGD that the PMTs find it relatively difficult to fill time with talk, speak coherently and imaginatively in using language.

Summary of PMTs' sources of anxiety

It is clear that several factors are responsible for preservice teachers' teaching anxiety. Figure 10 provides a summary of the factors.

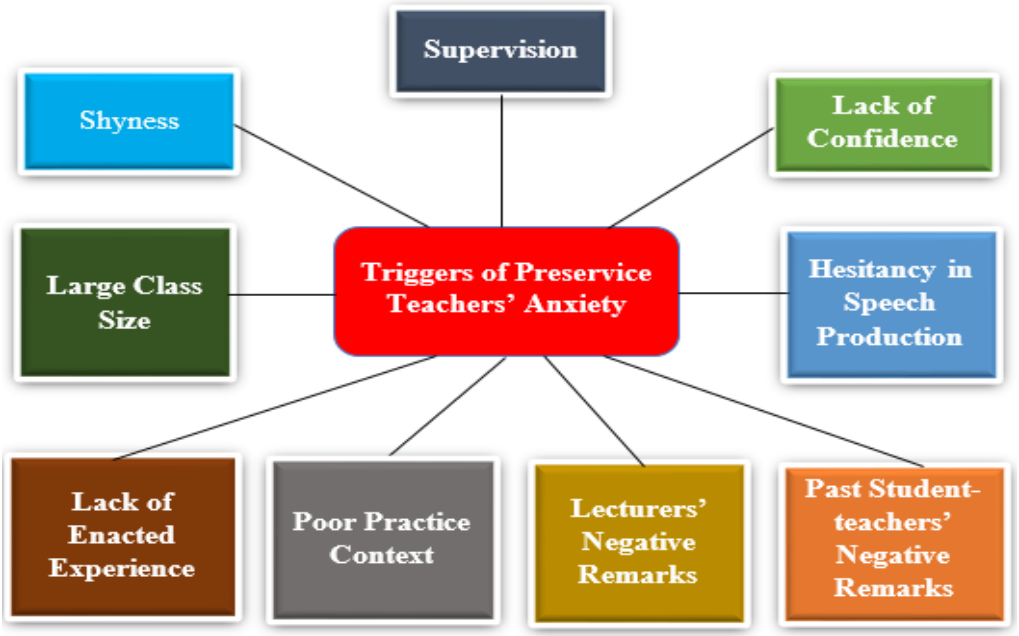

Figure 10: Preservice teachers' sources of teaching anxiety.
Source: Empirical evidence from preservice management teachers (2019).

Dominant sources of anxiety

The PMTs ranked their sources of anxiety to communicate the most influential ones. The ranking had in order of decreasing intensity supervision anxiety, lack of confidence, shyness, large class size, poor practice context, hesitancy in speech production, lack of teaching experience, lecturers' negative remarks and past student-teachers' negative remarks.

Supervision anxiety

Supervision or evaluation anxiety is clearly outstanding among all the factors which necessitated a further examination. The preservice teachers' highlighted various issues about their practice supervisors which made them more anxious. The issues comprised supervisors' posture and behaviour in class, negative and offensive remarks and their inability to offer required assistance.

Supervisors' appearance and behaviour

The posture and behaviour in the class were worrying to some of the PMTs. To them, the way the supervisors positioned themselves to observe their teaching frightened them; to the extent that the two supervisors who were present to observe them teach engaged in conversations whilst they were teaching. The conversations were normally perceived by them to be something negative identified in their teaching and therefore made them engage in metacognition to discover their wrong actions and inactions as they continued teaching. They uttered,

> *supervisors, the way they sometimes appear and the way they sit down to look at you not necessarily because they want to give you a negative compliment or negative remarks but their appearance alone. You are teaching and you look at somebody like that it will make you anxious* (Guru).

> *Personally, when I was teaching in the middle of the lesson, I saw that the two supervisors were talking to each other so my confidence level just came down …. I thought they have already seen something negative that is what affected me. They should jot the thing (comment) down, after they discuss but while am teaching and they are discussing I can look at them and it affects me* (Mona).

Supervisors' constantly offered negative remarks

The PMTs who thought that supervisors engaged in discussing something negative about them when they were teaching was confirmed when supervisors eventually provided negative and offensive remarks. Various converging claims were put forward.

> *I can say most of the supervisors give out negative remarks more than the positive ones. We the students hardly do hear positive remarks throughout. I think it is always negative remarks. You forgot to do this, why didn't you do that, next time wear this, your belt and that stuff. Mostly, we hear negative remarks instead of positive remarks which could encourage us to do more or even better* (Wata).

A divergence in response on supervisors' negative remarks by one participant provides an indirect confirmation to make claims significant and valid.

> *No, they want you to be better that is why they are focusing on the negative than the positive. So you must work on the negative well so that the positive will complement whatever thing you are supposed to do* (Guru).

Such a comment elicited the speech frustration of another participant in the manner that

> *... we are doing education over here and we have different ways of evaluating students. So if lecturers* [supervisors] *what they know is to use negative remarks, it is intimidating and it is not even motivating* [voice high]. *To say that they are correcting us, we have ways of correcting the negative aspect but the way they do it is so frustrating. I don't want to be personal in this issue per the on-campus that I had. So you do everything possible and what you are doing - so they say is that all you can do? It is so intimidating* [voice very high]. *Supervisors remarks, the way they do it that is the problem* (Kaka).

In all, the supervisors appeared not to provide the assistance that the PMTs needed in order to appreciate the comments made. *They will not teach*

you the right one and it makes it so annoying (Kaka). In light of appreciating how supervisors spoke when providing the remarks, two of the participants were made to role-play how it was normally done. This ensued between the participants:

Josi: *You are teaching money, is that not it?*

Kaka: *Yes*

Josi: *Why didn't you bring money? Everywhere you go you have money on you and you can use it in your lesson. Why didn't you just bring that money rather than using the placard? Can't you just be creative enough as a student? Should they be teaching you everything?* [voice very high].

The responding participant was asked to tell how he felt and this is what he had to say:

Sir, I feel so intimidated. The way he spoke to me is bad, I believe it shouldn't be that way. We were taught within methods that we can bring realia to the classroom not necessarily bringing the original or real teaching and learning materials to the classroom. Bringing money or not bringing money to the classroom is not an issue because I believe the students have money in their pocket. So if we come to the classroom I can ask the students to bring out their money, then we use it as TLM (Kaka).

The responding participant was then made to offer the expected comment by acting as a supervisor and this is what he offered:

You have done well in your lesson delivery. But I will advise you anytime you come to the classroom bring the real money to the classroom or if

possible ask students to bring money to the classroom so that you use it as your teaching and learning material [low voice] (Kaka).

Two of the participants could not restrain themselves than to comment on the remarks made by Kaka as a supervisor. These are what they had to say:

For me, I can say that when the supervisor gives such a remark it wouldn't hurt you and it will make you feel he is giving you advice (Jona).

It makes you feel good although it is a negative something, you will feel good and relax. That oh you have done well but I think if you had brought money, you would have done better. So if you go out and they (friends) ask you how was it? Oh, madam said I did well but if I should have brought money it would have been better (Mona).

This clearly shows that the PMTs want their efforts to be appreciated and mistakes corrected in a manner that is not offensive. Remarks that are offensive and offered in a high pitch were not welcomed. It is not only about the words but also about how the words are articulated.

In summary, the PMTs ranked supervision or evaluation as the topmost anxiety factor as a result of supervisors' posture and behaviour in class, negative and offensive remarks and high pitch in providing negative remarks. Even though other contradictory pedagogical issues were raised, it remained as a shared problem between the supervisors and the PMTs. This problem is presented in detail under professional preparation anxiety.

Professional preparation anxiety

The PMTs' anxiety under professional preparation related to issues of the lesson plan, use of teaching-learning materials, and their relationship with their colleague preservice teachers. These issues are presented under the following themes.

Problem of crafting instructional objective and its place in the lesson

The issue of the lesson plan manifested in terms of how to craft the preamble for the instructional objective. Particularly, the preamble 'at the end of the lesson' and 'by the end of the lesson' remained as a contention between the PMTs and the supervisors. As reported,

> *I quite remember our supervisor said that we should write 'by the end of the lesson' … and a friend of mine met me and said he did write 'by the end of the lesson' and the supervisor was saying it shouldn't be that case. It should be 'at the end of the lesson'. But here is the case we will go for off-campus you don't know the kind of supervisor you are going to meet and you will be thinking that you have done the right thing by writing what one of the supervisors' told you. Let's say by writing 'by the end of the lesson', but another supervisor will come in and say 'at the end of the lesson'* (Pinto).

What should be taken from the supervisors cannot be determined by the PMTs. Added on is the writing of either 'by the end of the lesson' or 'at the end of the lesson' at the end of the introduction as against omitting it in the lesson plan and just vocalising during teaching to communicate the expected behaviours students are to demonstrate after an instructional session.

> *Sir with the 'by the end of the lesson' issue, in the methods of teaching*

class, they asked us to write it as part of our introduction, that after you introduce your lesson, you should write that 'by the end of the lesson student should or be able to' but when you go to the field, that is the on-campus, the supervisors will tell you don't bring it but just say it. Don't write it in your lesson note but just say it (Lisa).

Inflexibility in lesson plan implementation

The PMTs' worry about the lesson plan is the inflexibility in which supervisors expected them to implement it. Their argument is that classroom factors determine how the lesson plan should be implemented, and some demands might mean doing something different from the lesson plan. However, in such situations, supervisors are not ready to cooperate with them.

Earlier, I said that most at times we solely depend on the lesson plan but you go to the classroom and the classroom will tell you what you should do …. The lesson plan should not be the only thing we depend on but the classroom should be the dictator (Kaka).

Sticking rigidly to the lesson plan during instruction regardless of classroom demands seem to create anxiety for them. The PMTs seem to appreciate the contextual factors that affect the implementation of a lesson.

Saga about the use and preparation of teaching and learning materials

The issue of the use of teaching-learning materials compounded their anxiety. They lamented that supervisors insisted that always teaching and learning materials should be used in teaching. Their problem was that some topics in the business management syllabus do not readily lend themselves to the use of teaching-learning materials. In typifying the situation, one PMT showed that

> *…some of the topics in the management syllabus are very difficult for you to get resource materials to use in your delivery, i.e. the TLM. So with this at times you go to class because you don't have any tangible thing, for instance, you know that you can get money, cheque book, pay-in slips and other stuff as a practical TLM when you are teaching money and banking as a topic. But when it comes to the other aspects of teaching management, let me use the first chapter of management, 'nature of management' or let's say 'planning'; how are you going to use or what is the TLM that you are going to use to teach? If you try to do something on the cardboard and take it to your class to go and teach, the supervisors are going to tell you that but this thing you could have just written it on the board. Meanwhile, you* [supervisors] *also want us to bring something visible to the classroom* (Lisa).

Their frustration is that if it is easily possible to obtain teaching-learning materials in other teacher education programmes, they should not be compared to such programmes because of their uniqueness in order not to make them feel bad and useless. One participant lamented that

> *…when we were having our on-campus, one of our supervisors was like you B.Ed. Management students, you don't do well at all. When I went to B.Ed. Votech, one lady was teaching about the sewing machine, and she brought the sewing machine to class and that stuff. So we were down. So what we are doing are we doing it in vain or what. Comparing us to other education students make us feel so bad* (Wata).

The PMTs were worried about the constant complains supervisors offered about the preparation of the TLMs. To one of the PMTs,

> *concerning the teaching-learning materials, at times you will get placard or whatever, a nice one but when you bring it to class then the supervisor will say the writings are too small, he cannot see the writings and all sort of things. So making what you brought meaningless or useless. I don't know the size of writings they want us to ensure before they will know that this thing is visible to the class* [spoke aggressively] (Josi).

If the characters cannot be read very well, then there is the possibility that it was not well prepared. So the problem is not just about the use of TLM but also its preparation. This is a good highlight for the methods class in intensifying teaching on the preparation and the use of TLMs.

Ill professional harmony between preservice teacher and colleagues

Finally, the relationship between the PMT and their colleagues (serving as SHS students) seemed to create anxiety. The issue was that their colleagues behaved above the normal levels of senior high students. Complains were that they asked above normal questions making it difficult for them to adequately provide responses to such questions which breaks the professional cooperation that must be maintained between the PMT and their colleagues (simulated SHS students). One aggrieved participant articulated that

> *I think when we are teaching here we are supposed to teach SHS students. But our colleagues, the questions that they ask, it is above the questions that SHS students will ask. So at times, you will see that when they ask certain questions, you the teacher if you are not very careful you would be found wanting because this is not the type of questions that SHS students can ask. So it is also one challenging thing with our*

colleagues, how to cooperate with them (Josi).

Such professional cooperation was even made worse when likely comments from colleagues are provided about the PMT' instructional performance. Such comments are seen as intentional to reduce their scores (grade awarded by supervisors) and hence a counter-attack strategy is mapped for the colleague who is yet to teach. The story goes,

> *at times too after you have taught the supervisor will ask the class to give their comment. So maybe you saw some negative thing and you talked about it, but your colleague will see that the comment you gave was like a counter-attack or something like that. So he will also plan that during your time, he will do something to make you uncomfortable* (Jona).

Even though such behaviours seem to have been tagged by supervisors as normal, the PMTs do not seem to appreciate such practice. They see it as excessively abnormal. Being quite emotional, one participant indicated that

> *Sir with a colleague's behaviour if you complain about it, the supervisors will tell you that yes he or she is behaving exactly how students are going to behave in SHS. The same guy he was talking about will intentional do something while you are teaching and as you try to correct him, he will still be misbehaving, like trying to behave exactly like SHS students. Meanwhile not all SHS students will do that. But even if they will do that they will regard you as a teacher. But here, I am your colleague and I am trying to behave like an SHS student. He will do it, you the student-teacher correcting him, he will still be doing, and after everything the comment coming here and there. Supervisor commenting*

about the behaviour of that particular student though, you the student-teacher you corrected him, the supervisor will tell you that you will go and meet worst things over there so just be cooperative. But sir, on a real note, I am a teacher, you are SHS students that kind of respect is there. But because you are in the university, being a colleague student you try to do excess and it is bad (Lisa).

This explains why they see the practice context as poor in mirroring the authentic teaching context at the various SHSs. The high professional preparation anxiety during the teaching practice seems to heighten PMTs' teaching anxiety.

Discussion for Research Question Two

The teaching practicum has been seen as a frightening environment making preservice teachers anxious. To narrow the problem, Ngidi and Sibaya (2003, p. 18) stated that "student teachers worldwide are anxious about evaluation". Such assertion was due to evidence of teaching anxiety gathered from preservice teachers in mathematics, science, English language, and social studies. Other subject areas were neglected. However, the context and subject preservice teachers teach have been noted to contribute to their teaching anxiety (Merc, 2015b). High levels of teaching anxiety may cause high levels of stress, failure and disappointment in preservice teachers (Ekşi & Yakışık, 2016). Hence, the current study focused on management teachers and therefore the research question formulated was: What is preservice management teachers' level of anxiety about the on-campus teaching practicum?

The quantitative evidence gathered revealed that the PMTs were highly anxious prior to the teaching practicum and thereafter they were moderately

anxious. Such a high level of anxiety prior to the teaching practicum signalled an early fear for success. These are preservice teachers who have indicated that they are highly efficacious, and yet highly anxious. The examination of the anxiety scale showed that evaluation anxiety was high prior to and after the teaching practicum among all the anxiety factors.

To confirm why evaluation anxiety statistically remained high, the PMTs were asked to state their sources of anxiety during the FFGD. Interestingly, from the qualitative evidence, nine sources of teaching anxiety were discovered. These are supervision (evaluation), lack of confidence, hesitancy in speech production, shyness, large class size, lack of enacted experience, poor practice context, lecturers and past student teachers' negative remarks. The PMTs once again ranked the supervision anxiety as the highest followed by lack of confidence and shyness. Most of the studies (e.g. Ngidi & Sibaya, 2003; Gelman, 2004; Paker, 2011; Merc, 2011; Agustiana, 2014; Chui, 2012; Otanga & Mwangi, 2015; Ekşi & Yakışık, 2016; Mahmoudi & Özkan, 2016; Mosaddaq, 2016; Can, 2018) had found evaluation anxiety to be the major factor influencing the anxiety of preservice teachers.

The context-specific explanations that were obtained from the relatively few qualitative studies were that those supervisors did not take their roles seriously and provide guidance (e.g. Gelman, 2004); were intimidating (e.g. Gelman, 2004); provided poor and inappropriate feedback (e.g. Paker, 2011; Mahmoudi & Özkan, 2016); and had high expectations (e.g. Paker, 2011; Mahmoudi & Özkan, 2016). Others showed that supervisors were inconsistent in their evaluation (e.g. Paker, 2011); interrupted classes (e.g. Merc, 2011), had a poor relationship with preservice teachers (e.g. Chui, 2012; Mahmoudi &

Özkan, 2016) and created fear through observation and assessment (e.g. Merc, 2015a; Ekşi & Yakışık, 2016; Mosaddaq, 2016; Can, 2018). The current study, through its qualitative strand, newly discovered negative remarks from past student teachers and lecturers, supervisors' posture and behaviour in class, high pitch negative remarks, and evaluation inconsistencies in the professional areas of the teaching practicum as further reasons which heightened the PMTs' evaluation anxiety.

The PMTs' high evaluation anxiety before the teaching practicum was due to the connection evaluation anxiety seems to have with negative remarks from past student-teachers and lecturers about the entire practicum supervision. This was because some of the supervisors' unprofessional behaviours were made known early to the PMTs by past student teachers which triggered their evaluation anxiety. Evidence from the qualitative strand explains that the horrific experiences that these past preservice teachers went through served as early warnings to the PMTs. These past preservice teachers had painted some of the supervisors as 'killers' and no matter what the PMTs did they would be 'killed'. Some of the content and pedagogical teacher educators (who also served as supervisors) also scared the PMTs in the theoretical classes that they would see what would happen to them on the practicum.

These two sources of anxiety (negative remarks from lecturers and past student-teachers) seem to indirectly project evaluation fear in the PMTs before the teaching practicum. It was, therefore, not surprising that even though the PMTs were highly efficacious, they were also highly anxious. Such early high anxiety was not because they evaluated themselves that they could not teach but rather whatever they did they would not be recognised as good. This is why

Bandura (1977) indicated that it is possible for both phenomena to be high since their anxiety was not based on the teaching task. Eysenck (1979) processing efficiency theory called these non-teaching tasks as irrelevant tasks that affect processing effectiveness. The high evaluation anxiety influenced the PMTs' overall teaching anxiety prior to the practicum.

An insight about the supervisors' posture and behaviour in class showed that they sternly observed the PMTs' teach. They (two supervisors) failed to sit apart and were spotted by the PMTs to be engaged in conversations as they taught. To them, the supervisors had spotted something negative as they taught which made them uncomfortable and worried. Again, the supervisors were seen to continually provide negative and offensive remarks. Hence, the PMTs were never encouraged and felt their efforts were not appreciated. Reese (2012) earlier stated that the quality of learning depends on the quality of engagement provided for the individuals learning in a social environment. Therefore, negative and offensive feedback are likely to break the high level of engagement expected in such a structured teaching practicum environment. The PMTs need to develop their competencies by effectively engaging themselves in the practicum environment as they move into more dynamic and complex activities, and transition into the role of the professional teacher.

Negative and offensive feedback are not likely to smoothen the process. It was, therefore, not surprising that the PMTs never mentioned verbal persuasion as one of their sources of self-efficacy since they were accordingly deprived of such from some of their lecturers, supervisors and even past student teachers. Paker (2011) and Chui (2012) found that preservice teachers expect constructive feedback from their supervisors and the provision of alternative

ways of doing things. Surprisingly, when the PMTs received negative feedback, they were not assisted to know exactly what they should have done. If they did not have a resilient passion for teaching, their self-efficacy could have been eroded (Bandura, 1997). The offering of positive constructive feedback build preservice teachers' passion for teaching (Fredricks et al., 2010; Carvalho et al., 2014; Santana Vega, 2015) and passion combined with perseverance will ensure their long term teaching success (Duckworth, 2016).

The inconsistencies in supervisors' evaluation were found in the areas of professional requirement, specifically associated with the preparation of lesson plans and the use of teaching-learning resources. In relation to the lesson plan, supervisors could not indicate clearly as to how to prefix the instructional objective. Whilst some were of the view that it should be stated "By the end of the lesson the student should be able to…'', others were of the view that it should be stated as "At the end of the lesson the student should be able to…" It cannot be accepted that anyone of them is suitable since it might be philosophically supported.

In the teaching process, students can learn at any point in the lesson, so when the objective is stated "By the end of the lesson the student should be able to…" would make the teacher check understanding at each point in time during the lesson. However, stating it as "At the end of the lesson, the student should be able to…" means that learning can only occur at the end of the lesson, hence there is no need for the teacher to worry checking for students understanding during the instructional session but rather to wait and examine students' understanding when the lesson ends. So it is legitimate the PMTs were worried as to why these differences were not reconciled by the supervisors. If preservice

teachers have difficulty in preparing lesson plans (as argued by Szymańska-Tworek & Turzańska, 2016), then some of these difficulties could be attributed to the inconsistencies in its preparation fashioned by supervisors.

Supervisors' strict enforcement of lesson plans implementation without considering classroom contextual factors was a worrying issue to the PMTs. The PMTs believed that the classroom can dictate what they do and they should be allowed to deviate a bit from the lesson plans when such events (e.g. time, learner misconception) warrant. However, the fidelity approach to the implementation of lesson plans seems to be the only guiding post to some of the supervisors, where plans must be implemented hook, line and sinker. Hence, the cooperation between the PMTs and their supervisors was slightly marred which might have affected PMTs' acquisition of some relevant teaching skills.

The mandatory transformation of the PMTs understanding of management content through the use of teaching-learning resources each time in a lesson without recourse to the topic was a huge worry to them. They were of the view that TLRs cannot always be used for each topic in the business management syllabus. They held the views that other representations such as analogies, explanations, board illustrations, among others, could be employed to facilitate students understanding. These equally important pedagogical representations are well accepted in teaching so that the unknown can come to know, those without understanding can discern and understand, and the untrained can become adept. However, supervisors compelled them to use the TLR irrespective of the topic.

An example of a topic mentioned was the concept of planning. As to whether or not this topic can use a TLR was not the problem of the supervisors.

The supervisors were guided by a scoring framework which specifies that marks should be awarded for the appropriate use of TLRs. Irrespective of the success in delivering a lesson, once the TLRs were not brought to the class, supervisors picked problems with them. The PMTs were, therefore, compelled to use placards to represent knowledge that can easily be written on the board. This might waste time and impede the smooth presentation of lessons. Such an act was not appreciated by the supervisors, yet no assistance was provided to them. This had a negative tone on teaching by hindering PMTs' pedagogical reasoning. It is, therefore, not startling that evaluation or supervision anxiety stood as the hottest issue in the teaching practicum.

Apart from the evaluation anxiety, the problem of class control which reflected as a context problem was discovered. Even though class control was seen as second-ranked anxiety factor on the quantitative strand, the qualitative strand saw lack of confidence, shyness and large class size to precede it. The reason being that these issues were not captured on STAS. As already indicated, the STAS focused on anxiety in performing basic teaching tasks. Hence, the relevance of the qualitative strand in explaining issues that were not captured on the STAS.

Class control to the PMTs was quite a worry due to the nature of students they taught. These are students who are their colleagues and hence do not recognise them as authorities; a similar finding was obtained in Turkey (e.g. Mahmoudi & Özkan, 2016). The PMTs lamented that these students were found to ask questions beyond the level of SHS students in an attempt to trouble the practice teacher before their supervisors, and did not obey their instructions. Even though evidence suggests that supervisors see it as normal, the PMTs

regarded it as abnormal since it differed from the authentic context. The so-called antics of the simulated SHS students climaxed when they were given the opportunity to comment on the teaching performance of the preservice teachers. Some of the comments they provided were seen as counter-attacks. The PMTs believe this context does not mimic the real-classroom situation. In addition, the supervisors did not allow the PMTs to reflect on their own teaching after the practice session to identify their own strengths and weakness for further deliberations; an observation considered by Merc (2011) as a worrying issue. Preservice teachers' reflection over their teaching is important for them to learn from their own experience. This creates self-awareness and it can reduce their stress and anxiety (Rice, 2003). Therefore, supervisors and teacher educators should note that the expectation of preservice teachers is to be given the opportunity to reflect on their own teaching (Chui, 2012).

Another critical source of PMTs' anxiety is the lack of confidence exhibited by some of them prior to the teaching practicum. Some of the PMTs were shy; this is due to fear in public speaking (Can, 2018). However, they believed they started gaining much confidence during the teaching practicum, which explains why anxiety was high at the start and moderate at the end of the teaching practicum. Studies (e.g. Mahmoudi & Özkan, 2016; Halet & Sanchez, 2017; Can, 2018) have equally found through qualitative evidence that the lack or low level of teaching confidence in preservice teachers raises their level of anxiety.

High-moderate teaching anxiety was explained by PMTs' hesitancy in speech production. They recognised and stated that the business management course is too theoretical in nature and a lack of fluency in the English language

(medium of instruction) would affect the teaching of its content. This is well established in the literature that two beliefs co-exist stating that the business management course centres on its linguistic or communication nature (e.g. Peng, 2013). Hence the affinity with the assertion that communication is the lifeblood of businesses. Therefore, PMTs' inability to fluently fill time with talk, speak coherently and imaginatively in using language will make them anxious. This is because good content knowledge without good communication skills and strategies would definitely impair the use of instructive language in management lessons. This explains the relatively low instructional strategies efficacy.

The PMTs' hesitancy in speech production also draws attention to other productive skill in communication such as writing. They stated that their supervisors complained about their illegible board writings. These (speaking and writing) could have implications for both auditory and visual learners. While the inability of PMTs to speak fluently could negatively affect auditory learners' appreciation of issues during lessons, their illegible board writings could negatively affect visual learners in that same regard. This condition (hesitancy in speech production) was also found among preservice English language teachers in Turkey and Palestine (e.g. Merc, 2011; Merc, 2015a; Mosaddaq, 2016; Mahmoudi & Özkan, 2016; Can, 2018) and therefore should raise much concerns in the training of non-English language preservice teachers.

Lastly, PMTs' lack of enacted mastery experience explains their high-moderate teaching anxiety. The results on their characteristics showed clearly that most of them did not have prior formal teaching experience. Hence, prior

to the practicum, the PMTs speculated about the exact teaching expectations required from them. The qualitative evidence also confirmed that those who had taught for a very long time could not immediately connect to the teaching practicum. They believed that recent enacted mastery experience is better than the experience obtained for a very long time. However, after the practicum, they had acquired some experiences which they believed resulted in their moderate teaching anxiety.

In summary, the PMTs were initially highly anxious and subsequently moderately anxious about the teaching practicum, which suggests that they experienced transient teaching anxiety. Their sources of anxiety were evaluation (supervision), lack of confidence, shyness, large class size, poor practice context, hesitancy in speech production, lack of enactive experience, lecturers' and past student teachers negative remarks. The study, therefore, confirms the global assertion (Ngidi & Sibaya, 2003) that "student teachers worldwide are anxious about evaluation" and provides enough explanations to understand this global teaching practicum problem.

Results

Preservice Management Teachers' Level of Self-Efficacy before and after ONCTP

H_0: There is no statistically significant difference in the self-efficacy levels of preservice management teachers before and after the on-campus teaching practicum.

The descriptive statistics on the PMTs' level of self-efficacy was both high prior to and after the practicum. A gap analysis was therefore performed to determine two issues. First, whether there are differences in the levels of

efficacy scores. Secondly, to determine the significance of such a difference (where a difference exists). The paired samples t-test permitted the examination of these issues. It first allowed the examination of the correlation between the self-efficacy constructs at each time period and the correlation among the self-efficacy factors also at each time point. The correlation matrix results obtained are presented in Table 31 and the gap analysis in Table 32.

Table 31: Self-efficacy Correlation Matrix for Paired Samples T-test

	Variables	1	2	3	4	5	6	7
1	Efficacy (1)	1						
2	Efficacy (2)	**.416****	1					
3	Instructional Strategies Efficacy (1)	.933**	.391**	1				
4	Instructional Strategies Efficacy (2)	.427**	.919**	**.425****	1			
5	Classroom Management Efficacy (1)	.938**	.347**	.827**	.334**	1		
6	Classroom Management Efficacy (2)	.345**	.929**	.325**	.794**	**.315****	1	
7	Student Engagement Efficacy (1)	.921**	.423**	.779**	.434**	.791**	.323**	1
8	Student Engagement Efficacy (1)	.373**	.907**	.324**	.733**	.308**	.767**	**.407****

Source: Fieldwork (2019). **$p < .001$

It can be observed that the pair of efficacy constructs are positively and strongly correlated (r = .42), which is statistically significant ($p < .001$). The result indicates the likelihood of a significant difference in the gap analysis. Both pair of instructional strategy (r = .43) and student engagement efficacy (r = .41) are positively and strongly correlated, which are statistically significant ($p < .001$). Even though the pair of classroom management was significantly correlated (r = .32, $p < .001$), it was at a moderate degree. Table 32 presents the gap analysis.

Table 32: Self-efficacy Paired Samples T-test Results

Variable	Mean Diff	*t*	*df*	*p*	η^2
Efficacy Pair	-.24	-4.298	118	.000*	.14
Instructional Strategies Pair	-.29	-4.731	118	.000*	.16
Classroom Management Pair	-.30	-4.609	118	.000*	.15
Student Engagement Pair	-.14	-2.230	118	.028*	.04

Source: Fieldwork (2019). Mean Diff = Time 1 – Time 2 *p < .05

The mean difference (-.24) suggests differences between PMTs' level of self-efficacy before and after the ONCTP. The paired samples t-test results showed that there is a statistically significant difference in the level of self-efficacy of PMTs before (M = 3.89 = .63) and after (M = 4.13, SD = .60) the ONCTP; t (118) = -4.298, p < .001 (two-tailed), η^2 = .14. The null hypothesis is therefore rejected, signifying that PMTs' level of self-efficacy after the ONCTP was higher than before the ONCTP. The implication is that the experience provided to them during the ONCTP influenced their level of self-efficacy. This communicates that the teaching practicum exercise was useful for teacher professional preparation. The eta squared (η^2 = .14) also showed that the effect is large. The practicum, therefore, seems to have had a tremendous effect on the level of self-efficacy of the PMTs.

Also, the mean difference for instructional strategies (-.29), classroom management (-.30) and student engagement efficacy (-.14) suggest that these efficacy factors improved after the ONCTP. The paired sample t-test results show that there is a statistically significant difference in PMTs' instructional strategies efficacy before (M =3.74, SD = .62) and after (M = 4.03, SD = .61) the ONCTP, t (118) = -4.731, p < .001 (two-tailed), η^2 = .16; classroom management efficacy before (M = 3.83, SD = .63) and after (M = 4.13, SD =

.59) ONCTP, t (118) = -4.609, p < .001 (two-tailed), η^2 = .15; and student engagement efficacy before (M = 4.09, SD = .63) and after (M = 4.22, SD = .59) the ONCTP. It is, therefore, concluded that the efficacy factors all improved after the ONCTP which influenced their overall level of efficacy about the teaching practicum. Comparably, the large effect sizes of instructional strategies efficacy (η^2 = .16) and classroom management efficacy (η^2 = .15) seem to have influenced the overall efficacy level than student engagement efficacy (η^2 = .04). The small effect size observed on the student engagement efficacy implies that the practicum probably did not pay much attention in improving that self-efficacy factor in the PMTs. The type of students used in the practicum could be responsible.

Teaching Practicum and Preservice Management Teachers' Self-Efficacy

The ONCTP has generally been considered a worthy experience for the PMTs. This was determined during the FFGD after the PMTs' had completed the exercise. The sub-theme which follows describes their perspectives

Teaching practicum enhances self-efficacy

The teaching experience seems to have made the PMTs to further believe in themselves that they can transact the business of the classroom in their capacity as professional teachers. They openly expressed their experiences after the teaching practicum in relation to how their self-efficacy increased over time. These are the views of some of the participants:

> *Before we started the on-campus, I was having high efficacy and I went in to teach. When I had my first teaching, the comment and the shooting that was coming at a point in time my efficacy reduced, but when I decided to gather vim* [confidence] *and then go into my next teaching,*

after I saw that I can do it and as at now I see myself as highly efficacious (Jona).

I began with a moderate efficacy because am not a professional teacher but after the first teaching it was almost dying because I was scared. It wasn't easy but the second one it boosts up. Now I see myself as efficacious (Guru).

Before I was highly efficacious and I was anxious as well. But after that, I can see that it is still high because the comment coming as she said that am shy but when I went surprisingly they said I was confident now. I was able to talk, my class control was okay. So with that, I see that I will be able to teach (Mona).

It is notable that if anything had reduced their self-efficacy or made them confused, then it was the negative feedbacks that they had received from the practice supervisors. It was not that they saw themselves as unable to perform any aspect of the basic teaching task. Generally, the practice has improved their self-efficacy.

Discussion for Hypothesis One

In gauging PMTs' level of confidence over time, the study assessed their level of self-efficacy prior to and after the teaching practicum. By this assessment, the effectiveness of the teaching practicum is determined in the Ghanaian context. Hence, the formulated hypothesis which guided this assessment was: there is no statistically significant difference in the self-efficacy level of preservice management teachers before and after the on-campus teaching practicum.

The quantitative evidence revealed that the general self-efficacy of the

PMTs increased (moderate effect) after the teaching practicum. An examination of the self-efficacy factors showed that both PMTs' instructional strategies efficacy and classroom management efficacy moderately increased whilst student engagement efficacy had a marginal increment. The marginal increment observed in student engagement efficacy was not a perturbing because it was consistently the highest factor when the self-efficacy factors were compared. It is therefore implied that the teaching practicum assisted in developing PMTs' competencies in instructional strategies, classroom management and student engagement competencies.

The qualitative evidence showed that the PMTs were able to overcome their teaching anxiety. They had indicated that the negative feedbacks supervisors offered to their colleagues as they observe them and that which they received themselves reduced their confidence to teach. However, as they continued practising the teaching task, they were able to gather the confidence to teach. The negative feedback from the supervisors triggered the emotionality of worry, stress and fear in them. However, the PMTs were able to increase their attention capacity to learn the skills in using various instructional strategies such as questioning, using various pedagogies (methods) and gauging students' level of comprehension. They were also able to learn the skills of controlling disruptive behaviours, making their expectations clear to students and establishing classroom rules among others. The processing efficiency theory explains that emotionality triggers the need to increase attention capacity to enhance quality performance. In the midst of supervisors' negative feedbacks, the PMT still saw themselves as highly efficacious. However, they had rejected such unprofessional practices from the supervisors since it might not help them

to develop more effective ways of teaching (Burns, 2004).

In line with extant studies (e.g. Gunning & Mensah, 2011; Brown et al., 2015; Flores, 2015; Berg & Smith, 2018), the enactive mastery experience received on the practicum is one of the significant contributors increasing self-efficacy. Hence, the practicum environment, as well as the knowledge obtained on the content and pedagogical courses, were relevant to the PMTs. They had earlier indicated that knowledge obtained from the content and pedagogical courses influenced their level of teaching self-efficacy. Pendergast et al. (2011) found that the Australian preservice teachers' self-efficacy reduced after teaching practicum, which was attributed to classroom reality shock in their study. Even though there is dissimilarity in the context of the current study and that of Pendergast et al., it is argued that the Australian preservice teachers could lack resilient teaching passion if their teacher education programme provided them with the relevant content and pedagogical knowledge. This is because the PMTs' strong passion for teaching sustained their high level of self-efficacy in the midst of teaching anxiety. Bandura (1997) indicated that a resilient sense of self-efficacy can reduce preservice teachers' teaching anxiety. It was, therefore, not strange when they (PMTs) indicated that knowledge without teaching passion cannot ensure teaching success.

It is concluded that the practicum environment as well as the management teacher education programme assisted in boosting the PMTs' teaching self-efficacy. However, some of the awful experiences from the supervisors might have prevented the PMTs in discovering further authentic ways of teaching. This is premised on the assertion that a sound mind can explore more creative ways (Burns, 2004).

Preservice Management Teachers' Level of Anxiety before and after ONCTP

H_0: There is no statistically significant difference in the anxiety levels of preservice management teachers before and after the on-campus teaching practicum.

The exploratory analysis on the PMTs' level of anxiety was high prior to and moderate after the teaching practicum. Again, a gap analysis was undertaken to determine two issues. First, whether there are differences in the levels of anxiety scores. Secondly, to determine the significance of such differences (where a difference exist). The paired samples t-test permitted the analysis of these issues. It first allowed the examination of the correlation between the anxiety construct and the factors at each time period. The results obtained are presented in Table 33 and 34.

Table 33: Anxiety Correlation Matrix for Paired Samples T-test

	Variables	1	2	3	4	5	6	7	8	9	10	11
1	Anx (1)	1										
2	Anx (2)	**.495****	1									
3	Eval (1)	119	119	1								
4	Eval (2)	.452**	.937**	**.496****	1							
5	Class Cont. (1)	.913**	.445**	.814**	.384**	1						
6	Class Cont. (2)	.449**	.940**	.479**	.836**	**.442****	1					
7	Prof. Prep. (1)	.921**	.414**	.706**	.371**	.789**	.368**	1				
8	Prof. Prep. (2)	.472**	.937**	.442**	.813**	.433**	.894**	**.423****	1			
9	Sch. Staff (1)	.939**	.459**	.760**	.423**	.808**	.412**	.861**	.450**	1		
10	Sch. Staff (2)	.462**	.949**	.489**	.841**	.413**	.883**	.389**	.901**	**.433****	1	
11	Uns. Less (1)	.881**	.420**	.698**	.387**	.716**	.343**	.785**	.392**	.799**	.377**	1
12	Uns. Les (2)	.483**	.901**	.486**	.803**	.430**	.805**	.395**	.812**	.428**	.814**	**.466****

Source: Fieldwork (2019). $^{**}p < .001$

It can be observed that the pair of anxiety constructs are positively and strongly correlated (r = .495), which is statistically significant ($p < .001$). The result indicates the likelihood of a significant difference in the gap analysis. All

the pairs of anxiety factors were positively and strongly correlated which were statistically significant: evaluation anxiety (r = .496, $p < .001$); class control anxiety (r = .442, $p < .001$); professional preparation anxiety (r = .423, $p < .001$); school staff anxiety (r = .433, $p < .001$); and unsuccessful lesson anxiety (r = .466, $p < .001$). The strong positive relationship implies that the gap analysis is likely to assume a significant increase or decrease in PMTs' anxiety. Table 34 presents the results of the gap analysis.

Table 34: Anxiety Paired Samples T-test Results

Variable	Mean Diff	*t*	*df*	*p*	η^2
Anxiety Pair	-.18	-2.099	118	.038*	.04
Evaluation Pair	-.24	-2.948	118	.004*	.07
Class Control Pair	-.21	-2.020	118	.046*	.03
Professional Preparation Pair	-.23	-2.192	118	.030*	.04
School Staff Pair	-.13	-1.232	118	.220	-
Unsuccessful Lesson Pair	-.19	-2.264	118	.025*	.04

Source: Fieldwork (2019). Mean Diff = Time 1 – Time 2 *$p < .05$

The mean difference (-.18) suggests differences between PMTs' level of anxiety before and after the ONCTP. The paired samples t-test results show that there is a statistically significant difference in the level of anxiety of the PMTs before (M = 2.37 = .95) and after (M = 2.57, SD = 1.04) the ONCTP; t (118) = -2.099, p = .038 (two-tailed), η^2 = .04. The null hypothesis is, therefore, rejected. This means that the PMTs' level of anxiety reduced after the teaching practicum. However, the eta squared estimate (.04) shows that the reduction in the level of anxiety was small.

The anxiety factors were also examined to determine the factors which did not reduce after the ONCTP. The mean difference for evaluation anxiety (-

.24), class control anxiety (-.21), professional preparation anxiety (-.23), school staff anxiety (-.13), and unsuccessful lesson anxiety (-.19) show that there were differences in the anxiety factors after the ONCTP. The paired samples t-test indicated that there is a statistically significant difference in the PMTs' evaluation anxiety before (M = 2.16, SD = .82) and after (M = 2.40, SD = .95) the ONCTP, t (118) = -2.948, p = .004 (two-tailed), η^2 = .07; class control anxiety before (M = 2.33, SD = .99) and after (M = 2.54, SD = 1.12) the ONCTP, t (118) = -2.020, p = .046 (two-tailed), η^2 = .03; professional preparation anxiety, before (M = 2.50, SD = 1.03) and after (M = 2.72, SD = 1.08) the ONCTP, t (118) = -2.192, p = .030 (two-tailed), η^2 = .04; and unsuccessful lesson anxiety, before (M = 2.34, SD = .89) and after (M = 2.54, SD = .92) the ONCTP, t (118) = -2.264, p = .025 (two-tailed), η^2 = .04.

The effect sizes of all the anxiety factors were small with the exception of evaluation anxiety (η^2 = .07) which was moderate. Interesting to note, the moderate reduction in the evaluation anxiety still could not reduce the evaluation anxiety from high to moderate. This means that the evaluation anxiety was really high before the ONCTP. A second look at the descriptive statistics before the ONCTP clearly shows that evaluation anxiety was high among all the anxiety factors and remained in the high anxiety category after the ONCTP. Further observation and analysis also showed that professional preparation anxiety did not change from its moderate category just as the school staff anxiety.

The results obtained on the school staff anxiety showed that there was no statistically significant difference in the PMTs' school staff anxiety before (M = 2.52, SD = 1.04) and after (M = 2.65, SD = 1.11) the ONCTP, t (118) = -

1.232, p = .220 (two-tailed). However, class control anxiety and unsuccessful lesson anxiety reduced from the high anxiety category to moderate anxiety category. Generally, the practicum experience seems to have improved on PMTs' class control and unsuccessful lesson anxiety.

Discussion for Hypothesis Two

The high (before the ONCTP) and moderate (after the ONCTP) teaching anxiety which was found by the initial exploratory analysis (see results under Research Question Two) presupposes differences in PMTs' level of teaching anxiety experienced prior to and after the teaching practicum. The significance of such differences would help to appreciate the arguments put forward by extant literature that preservice teachers normally experience high anxiety before the start of the practicum. To examine such differences, the hypothesis formulated was: There is no statistically significant difference in the anxiety level of PMTs before and after the on-campus teaching practicum.

The study found a significant reduction in the level of the PMTs' anxiety after the teaching practicum. A clear indication that the PMTs were faced with transient anxiety. This was expected because the practicum had provided them with more opportunity to learn and concretize their theoretical knowledge. Önder and Öz (2018) had earlier observed that teaching experience affords the acquisition of knowledge, the understanding of student behaviours in the classroom and the transfer of theoretical knowledge into practice. However, evaluation anxiety remained high among all the component of the STAS, affirming the assertion that evaluation anxiety is the most significant contributor of preservice teachers' anxiety (Ngidi & Sibaya, 2003).

In all, a trade-off is seen between teaching self-efficacy and anxiety. As self-efficacy significantly increased during the practicum, anxiety significantly reduced. This seems to portray an indirect relationship between self-efficacy and anxiety. The teaching practice experience is believed to be the underlying significant reduction in the anxiety observed (e.g. Merc, 2004; Paker, 2011). The teaching practicum experience boosted the confidence of the PMTs. Even though the finding gives some refreshing news to management teacher educators, the initial high anxiety is considered problematic. This is because the initial excessive anxiety might lead to errors that could have been avoided. Consequently, it might result in inappropriate behaviour and ineffectiveness in the teaching profession (Gardener & Leak, 1994). The study concludes that the PMTs experienced transient teaching anxiety.

Results

Differences in Preservice Management Teachers' Levels of Self-Efficacy and Anxiety based on Demographic Characteristics

H_0: There is no statistically significant difference in preservice management teachers' levels of self-efficacy and anxiety about the on-campus teaching practicum based on their sex, age, teaching experience and intention to teach.

The conceptual thinking that self-efficacy and anxiety have the tendency to influence the success or failure of preservice teachers in the teaching practicum created the impression that these two tendencies simultaneously manifest themselves in a preservice teacher. It was earlier established through the PPMCC that there is a statistically significant negative relationship between self-efficacy and anxiety (Table 12). Therefore, the study hypothesises that any differences in PMTs' self-efficacy and anxiety about teaching practicum based

on their characteristics (sex, age, teacher experience and intention to teach) might first be manifested on the linear combination of self-efficacy and anxiety about the teaching practicum. Hence, the differences being sought by the formulated hypothesis was examined through a 4-way factorial MANOVA. Table 35 shows the MANOVA results for assessing the research hypothesis.

Table 35: MANOVA Results for Self-efficacy and Anxiety (Before ONCTP)

Effect		Value	F	Hypothesis *df*	Error *df*	*p*	η_p^2
Intercept	Λ_w	.042	1121.70	2.00	98.00	.000	.958
Sex	Λ_w	.990	.479	2.00	98.00	.621	.010
Age	Λ_w	.992	.207	4.00	196.00	.934	.004
TE	Λ_w	.980	.988	2.00	98.00	.376	.020
ITT	Λ_w	.997	.137	2.00	98.00	.872	.003
Sex * Age	Λ_w	.953	1.183	4.00	196.00	.319	.024
Sex * TE	Λ_w	.999	.064	2.00	98.00	.938	.001
Sex * ITT	Λ_w	.997	.145	2.00	98.00	.865	.003
Age * TE	Λ_w	.986	.336	4.00	196.00	.853	.007
Age * ITT	Λ_w	.976	.611	4.00	196.00	.655	.012
TE * ITT	Λ_w	.983	.836	2.00	98.00	.437	.017
Sex * Age * TE	Λ_w	.988	.308	4.00	196.00	.873	.006
Sex * Age * ITT	Λ_w	.989	.556	2.00	98.00	.575	.011
Sex * TE * ITT	Λ_w	.994	.306	2.00	98.00	.737	.006
Age * TE * ITT	Λ_w	1.000	.021	2.00	98.00	.980	.000
Sex * Age * TE * ITT	Λ_w	1.000	.	.000	98.50	.	.

Note: Box's M = 50.179, F(39, 1697.07) = 1.016, p = .443; Λ_w = Wilks' Λ
Source: Fieldwork (2019).

The preliminary assumption test, thus the Box's M test of equality of homogeneity of variance-covariance matrices showed that the result is not statistically significant, M = 50.179, F(39, 1697.07) = 1.016, p = .443. Hence, the assumption of equality of homogeneity of variance-covariance matrices has been met. It is clearly evident that there exists no statistically significant difference in the interaction of PMTs' characteristics based on the linear combination of self-efficacy and anxiety about the teaching practicum. In particular, all the two-level interactions for example, interaction between sex

and age, F(4, 196) = 1.183, p = .319, Λ_w = .953, partial η^2 = .024; sex and prior teaching experience, F(2, 98) = .064, p = .938, Λ_w = .999, partial η^2 = .001; prior teaching experience and intention to teach, F(2, 98) = .836, p = .436, Λ_w = .983, partial η^2 = .017; and three-level interaction for example sex, age and prior teaching experience, F(4, 196) = .308, p = .873, Λ_w = .988, partial η^2 = .006; sex, age and intention to teach, F(2, 98) = .556, p = .575, Λ_w = .989, partial η^2 = .011, reported non-significant p-values. The partial η^2 (analysing for practical significance) seems to confirm that such interaction differences do not exist. None of the partial η^2 could explain a moderate to a large variance in the linear combination of self-efficacy and anxiety.

The main effect results also showed that there is no statistically significant difference between the characteristics of the respondents based on the linear combination of self-efficacy and anxiety. Specifically, sex, F(2, 98) = .479, p = .621, Λ_w = .990, partial η^2 = .010; age, F(4, 196) = .207, p = .934, Λ_w = .992, partial η^2 = .004; prior teaching experience, F(2, 98) = .988, p = .376, Λ_w = .980, partial η^2 = .020; and intention to teach, F(2, 98) = .137, p = .872, Λ_w = .997, partial η^2 = .003, did not statistically influence the linear combination of self-efficacy and anxiety. Further, statistical differences in PMTs' self-efficacy and anxiety based on their characteristics were examined at the univariate level. The results obtained are summarised in Table 36.

Table 36: Tests of Between-Subjects Effects (Before ONCTP)

Source	Dependent Variable	Type III Sum of Squares	*df*	Mean Square	F	p	η_p^2
Corrected Model	Efficacy	3.837	19	.202	.551	.931	.096
	Anxiety	8.349	19	.439	.543	.936	.094
Intercept	Efficacy	520.331	1	520.331	1418.360	.000	.935
	Anxiety	170.582	1	170.582	210.768	.000	.680
Sex	Efficacy	.005	1	.005	.013	.908	.000
	Anxiety	.625	1	.625	.772	.382	.008

Table 36, continued

Age	Efficacy	.180	2	.090	.245	.783	.005
	Anxiety	.134	2	.067	.083	.921	.002
TE	Efficacy	.205	1	.205	.559	.457	.006
	Anxiety	1.546	1	1.546	1.910	.170	.019
ITT	Efficacy	.043	1	.043	.118	.732	.001
	Anxiety	.197	1	.197	.243	.623	.002
Sex * Age	Efficacy	.605	2	.303	.825	.441	.016
	Anxiety	1.443	2	.722	.892	.413	.018
Sex * TE	Efficacy	.030	1	.030	.083	.774	.001
	Anxiety	.009	1	.009	.011	.918	.000
Sex * ITT	Efficacy	.054	1	.054	.149	.701	.001
	Anxiety	.193	1	.193	.238	.626	.002
Age * TE	Efficacy	.326	2	.163	.444	.643	.009
	Anxiety	.206	2	.103	.127	.881	.003
Age * ITT	Efficacy	.003	2	.001	.004	.996	.000
	Anxiety	1.769	2	.885	1.093	.339	.022
TE * ITT	Efficacy	.224	1	.224	.610	.437	.006
	Anxiety	.408	1	.408	.504	.480	.005
Sex * Age * TE	Efficacy	.025	2	.012	.033	.967	.001
	Anxiety	.769	2	.385	.475	.623	.010
Sex * Age * ITT	Efficacy	.118	1	.118	.322	.571	.003
	Anxiety	.868	1	.868	1.072	.303	.011
Sex * TE * ITT	Efficacy	.227	1	.227	.618	.434	.006
	Anxiety	.059	1	.059	.073	.787	.001
Age * TE * ITT	Efficacy	.014	1	.014	.038	.846	.000
	Anxiety	.012	1	.012	.015	.902	.000
Sex * Age * TE * ITT	Efficacy	.000	0	.	.	.	.000
	Anxiety	.000	0	.	.	.	.000
Error	Efficacy	36.319	99	.367			
	Anxiety	80.124	99	.809			
Total	Efficacy	1837.687	119				
	Anxiety	756.221	119				
Corrected Total	Efficacy	40.156	118				
	Anxiety	88.473	118				

Source: Fieldwork (2019). *Bonferroni adjustment $p < .025$

The test of homoscedasticity on self-efficacy showed that equality of variances was assumed, $F(19, 99) = 1.366$, $p = .162$. However, the homoscedastic test failed for anxiety, $F(19, 99) = 1.944$, $p = .019$. This test is relevant in directing the type of test statistic to use when conducting a post hoc comparison. In examining the stated null hypothesis, the test of between-subjects effects showed that the corrected model for self-efficacy was not statistically significant, $F(19, 99) = .551$, $p = .931$, partial $\eta^2 = .096$. Hence, no

significant differences were found in the main effects (sex, age, teaching experience) and the interaction effects (Sex * Age, Sex * TE, Sex * ITT, Age * TE, Age * ITT, TE * ITT, Sex * Age * TE, Sex * Age * ITT, Sex * TE * ITT, Age * TE * ITT, Sex * Age * TE * ITT).

The test of between-subjects effects showed that the corrected model for anxiety was not statistically significant, F(19, 99) = .439, p = .936, partial η^2 = .094. No significant differences were found in the main effects (sex, age, teaching experience) and the interaction effects (Sex * Age, Sex * TE, Sex * ITT, Age * TE, Age * ITT, TE * ITT, Sex * Age * TE, Sex * Age * ITT, Sex * TE * ITT, Age * TE * ITT, Sex * Age * TE * ITT). There is enough evidence from the results in support of the null hypothesis. Thus, there is no statistically significant difference in preservice management teachers' levels of self-efficacy and anxiety about the teaching practicum based on their sex, age, prior teaching experience and intention to teach. The hypothesis was again tested after the ONCTP to confirm whether the teaching practicum experience might have created differences in PMTs' characteristics on the linear combination of self-efficacy and anxiety. The results obtained are presented in Table 37.

Table 37: MANOVA Results for Self-efficacy and Anxiety (After ONCTP)

Effect		Value	F	Hypothesis *df*	Error *df*	*p*	η_p^2
Intercept	Λ_w	.035	1345.68	2.00	98.00	.000	.965
Sex	Λ_w	.959	2.108	2.00	98.00	.127	.041
Age	Λ_w	.964	.901	4.00	196.00	.465	.018
TE	Λ_w	.999	.031	2.00	98.00	.970	.001
ITT	Λ_w	.983	.846	2.00	98.00	.432	.017
Sex * Age	Λ_w	.979	.535	4.00	196.00	.710	.011
Sex * TE	Λ_w	.981	.940	2.00	98.00	.394	.019
Sex * ITT	Λ_w	.977	1.166	2.00	98.00	.316	.023
Age * TE	Λ_w	.992	.196	4.00	196.00	.940	.004
Age * ITT	Λ_w	.952	1.223	4.00	196.00	.302	.024
TE * ITT	Λ_w	.965	1.781	2.00	98.00	.174	.035
Sex * Age * TE	Λ_w	.979	.526	4.00	196.00	.717	.011
Sex * Age * ITT	Λ_w	.992	.373	2.00	98.00	.689	.008

Table 37, continued

Sex * TE * ITT	Λ_w	.974	1.292	2.00	98.00	.279	.026
Age * TE * ITT	Λ_w	.988	.619	2.00	98.00	.541	.012
Sex * Age * TE * ITT	Λ_w	1.000	.	.00	98.50	.	.

Source: Fieldwork (2019). Note: Λ_w = Wilks' Λ

The test of homogeneity of variance-covariance matrices based on Box's M test reported no statistical significance, M = 34.082, F(36, 3041.76) = .799, p = .799. Again, the MANOVA results obtained were not different from the results prior to the teaching practicum; this is evident in Table 37. Also, the main effects and interaction effects (both lower-order and higher-order interactions) were not statistically significant. This implies that the results provide enough evidence in support of the null hypothesis. Statistical differences in PMTs' self-efficacy and anxiety based on their characteristics was again examined at the univariate level. The results obtained are summarised in Table 38.

Table 38: Tests of Between-Subjects Effects (After ONCTP)

Source	Dependent Variable	Type III Sum of Squares	*df*	Mean Square	F	p	η_p^2
Corrected Model	Efficacy	5.073	19	.267	.874	.615	.144
	Anxiety	10.559	19	.556	.570	.919	.099
Intercept	Efficacy	629.410	1	629.410	2061.00	.000	.954
	Anxiety	262.876	1	262.876	269.71	.000	.731
Sex	Efficacy	1.219	1	1.219	3.992	.048	.039
	Anxiety	.015	1	.015	.015	.903	.000
Age	Efficacy	.138	2	.069	.227	.798	.005
	Anxiety	3.058	2	1.529	1.569	.213	.031
TE	Efficacy	.009	1	.009	.031	.862	.000
	Anxiety	.043	1	.043	.044	.835	.000
ITT	Efficacy	.239	1	.239	.784	.378	.008
	Anxiety	1.211	1	1.211	1.243	.268	.012
Sex * Age	Efficacy	.154	2	.077	.252	.778	.005
	Anxiety	1.455	2	.727	.746	.477	.015
Sex * TE	Efficacy	.001	1	.001	.004	.953	.000
	Anxiety	1.810	1	1.810	1.857	.176	.018
Sex * ITT	Efficacy	.715	1	.715	2.342	.129	.023
	Anxiety	.033	1	.033	.034	.854	.000

Table 38, continued

Age * TE	Efficacy	.103	2	.051	.168	.845	.003
	Anxiety	.551	2	.276	.283	.754	.006
Age * ITT	Efficacy	.096	2	.048	.158	.854	.003
	Anxiety	4.432	2	2.216	2.273	.108	.044
TE * ITT	Efficacy	1.096	1	1.096	3.589	.061	.035
	Anxiety	.209	1	.209	.214	.644	.002
Sex * Age * TE	Efficacy	.134	2	.067	.219	.803	.004
	Anxiety	1.298	2	.649	.666	.516	.013
Sex * Age * ITT	Efficacy	.000	1	.000	.000	.983	.000
	Anxiety	.701	1	.701	.719	.398	.007
Sex * TE * ITT	Efficacy	.744	1	.744	2.438	.122	.024
	Anxiety	.489	1	.489	.501	.481	.005
Age * TE * ITT	Efficacy	.066	1	.066	.215	.644	.002
	Anxiety	1.154	1	1.154	1.184	.279	.012
Sex * Age * TE *	Efficacy	.000	0	.	.	.	.000
ITT	Anxiety	.000	0	.	.	.	.000
Error	Efficacy	30.234	99	.305			
	Anxiety	96.494	99	.975			
Total	Efficacy	2062.573	119				
	Anxiety	877.969	119				
Corrected Total	Efficacy	35.307	118				
	Anxiety	107.052	118				

Source: Fieldwork (2019). *Bonferroni adjustment $p < .025$

The test of homoscedasticity on self-efficacy showed that equality of variances was assumed, $F(19, 99) = .843$, $p = .652$. However, the homoscedastic test failed for anxiety, $F(19, 99) = 1.713$, $p = .046$. In examining the stated null hypothesis, the test of between-subjects effects showed that the corrected model for self-efficacy was not statistically significant, $F(19, 99) = .874$, $p = .615$, partial $\eta^2 = .144$). Hence, no significant differences were found in the main effects (sex, age, prior teaching experience) and the interaction effects (Sex * Age, Sex * TE, Sex * ITT, Age * TE, Age * ITT, TE * ITT, Sex * Age * TE, Sex * Age * ITT, Sex * TE * ITT, Age * TE * ITT, Sex * Age * TE * ITT).

For anxiety, the test of between-subjects effects also showed that the corrected model was not statistically significant, $F(19, 99) = .570$, $p = .919$,

partial η^2 = .099. Hence, no significant differences were found in the main effects (sex, age, teaching experience) and the interaction effects (Sex * Age, Sex * TE, Sex * ITT, Age * TE, Age * ITT, TE * ITT, Sex * Age * TE, Sex * Age * ITT, Sex * TE * ITT, Age * TE * ITT, Sex * Age * TE * ITT). Therefore, the null hypothesis that there is no statistically significant difference in preservice management teachers' levels of self-efficacy and anxiety about the teaching practicum based on their sex, age, teaching experience and intention to teach was not rejected.

The results on the main and interaction effects that were not considered statistically significant suggested that any of the independent variables could be responsible if they are outliers. To validate the results, reduced models were used where one independent variable was removed at a time (and replaced for the removal of another) and the model was re-run to check if significance could be attained. The results remained unchanged which confirmed that preservice teachers' self-efficacy and anxiety are not sensitive to sex, age, prior teaching experience and intention to teach.

Discussion for Hypothesis Three

Researchers have argued without conclusion about the influence of gender, age, prior teaching experience and intention to teach on preservice teachers' self-efficacy and anxiety about the teaching practicum. Most of such arguments had been centred at the univariate level of analysis. The current study took interest in these variables and examined them at the multivariate and univariate levels under high and reduced models. Most importantly, the examination was to determine if PMTs' characteristics have an interaction effect on self-efficacy and anxiety. The hypothesis which guided the study was:

there is no statistically significant difference in PMTs' levels of self-efficacy and anxiety about the on-campus teaching practicum based on their sex, age, teaching experience and intention to teach.

The study found that the PMTs' self-efficacy and anxiety were not sensitive to their sex, prior teaching experience, age, and intention to teach. No main and interaction effects were found on self-efficacy and anxiety and on the linear combination of self-efficacy and anxiety. Sex did not influence self-efficacy because the PMTs' were found to have comparable experiences and exposure to teaching prior to and after the teaching practicum. Clear evidence is provided to firmly support some earlier studies (e.g. Concannon & Barrow, 2009; Sarfo et al., 2015; Merc, 2015a) that obtained the same findings. However, the study by Shaukat and Iqbal (2012) which found significant differences was disconfirmed.

The credibility the current study adds to other studies is the baseline it established in examining the effect of sex on self-efficacy; an earlier recommendation by Karimvand (2011). The study clearly established through the chi-square test that both the male and female preservice teachers did not differ in prior teaching experiences and intention to teach. Hence, the non-significant effect of sex on self-efficacy is valid. Any fair comparison must provide a common basis to establish the fact. Also, after the teaching practicum, the non-significant effect observed could be attributed to the unbiased training provided to both genders by the management teacher education programme. The teaching profession is cognitive and artistic in nature and therefore any gender can approach it provided they have rich content and pedagogical knowledge needed to practice the profession. Therefore, the study disagrees

with Infurna et al.'s (2018) finding that gender influences self-efficacy. The differences between the current and earlier finding could also be attributed to respondent type. The current study employed preservice teachers whilst Infurna et al.'s study recruited in-service preschool teachers.

Sex could also not in any way influence preservice teachers' teaching anxiety. In Africa, one might think that naturally, women are likely to be more fearful than men. Hence, female preservice teachers should experience higher teaching anxiety than their male counterparts. However, this is not supported by the evidence gathered in this study as far as teaching practicum is concerned. The PMTs indicated that the practicum supervisors showed no discrimination during the practicum experience. Both genders had complained about their anxiety due to the nature of supervised practicum among other sources of anxiety and the desired marks required by them to better their cumulative grade point average. Evidence showed that general negative remarks were offered by the supervisors to the preservice teachers without any consideration of their biological make-up.

The non-significant effect of gender on anxiety found by Aslrasouli and Vahid (2014) and Soriano (2017) is therefore confirmed. However, the study disagrees with the findings of other previous studies (e.g. Ngidi & Sibaya, 2003; Paker, 2011; Merc, 2015a) which suggested that gender has a significant effect on preservice teachers' teaching practicum anxiety. These studies failed to control the effect of prior teaching experience which literature suggested to have some relationship with teaching anxiety. Also, the possibility has been established in this current study that lack of prior teaching experience could trigger anxiety and not the presence of prior teaching experience as seen in

previous studies. Hence, if a particular gender lacks prior teaching experience, it is possible to find gender differences with respect to teaching anxiety. The current study clearly indicates that gender could not influence teaching anxiety.

The study concurs with other studies (e.g. Klassen & Chiu, 2010; Guo et al., 2011) that found non-significant differences in teachers' self-efficacy based on prior teaching experience. If in-service teachers' years of experience could not influence their self-efficacy, one would need to re-consider teachers' quality of teaching over time. This is also important because of the negative relationship that was found between prior teaching experience and self-efficacy (Comerford, 2013). The current study believes that it is this quality of experience that creates the difference in self-efficacy and not the years of teaching experience. The self-efficacy theory emphasised that enactive mastery experience influences one's self-efficacy. Hence, the more quality exposure one obtains, the more likelihood that self-efficacy would be enhanced and not the number of times of practice. However, the number of times one practices would provide the opportunity to be exposed to quality pedagogical issues for self-efficacy enhancement. The study, therefore, disagrees with previous literature (e.g. Karimvand, 2011; Infurna et al., 2018) that teachers with a higher number of teaching experiences have higher self-efficacy than those with lesser years of teaching experience. The PMTs' self-efficacy increased due to the quality of the practice environment (with the exception of supervisors' remarks).

Teaching anxiety was also not sensitive to prior teaching experience and this supports recent findings (e.g. Halet & Sanchez, 2017; Kwarteng, 2018). It is not surprising that an in-service teacher who had four years of teaching experience in East Asia was found anxious (Halet & Sanchez, 2017). Studies

(e.g. Gelman, 2004, Aslrasouli & Vahid, 2014; Önder & Öz, 2018) which saw significant differences in anxiety on the basis of prior teaching experiences (where teaching experience was defined to mean the number of years taught) argued on the basis of lack of experience which made the preservice teachers more anxious. This implies that if preservice teachers are anxious then attention should be given to their lack of experience and nature of the teacher education programme. Shahid and Hussain (2011) earlier found that the theoretical nature of the teacher education programme created anxiety for preservice teachers.

Similarly, the current study saw from the qualitative evidence that lack of teaching experience (not a limited number of experience) influenced their anxiety. The presence of prior teaching experience seems to have served as a 'hygiene factor' preventing anxiety to those who had it but the lack of it created anxiety to those who did not have it. Also, from the teacher education programme, increasing anxiety originated from their supervisors' negative remarks and contradictory feedback. The contradictory feedbacks defied their knowledge they had obtained in the theoretical classroom. The relevance of other factors that cause anxiety become important and must be controlled to validate the sensitivity of teaching anxiety to prior teaching experience. The current argument projected is that there is no significant difference in preservice teachers' anxiety about the teaching practicum on the basis of prior teaching experience. However, the lack of teaching experience could create anxiety. Also, no interaction effect was found between gender and prior teaching experience on teaching anxiety.

Age was also not found to influence PMTs' self-efficacy. Self-efficacy is a cognitive evaluation of one's capacity to perform an act. Hence, it is

believed to be highly focused on knowledge or skill acquired. Such knowledge or skill can be acquired in any time period once exposed to it. If the preservice teachers are efficacious, it is highly probable to result from the knowledge acquired in the teacher education programme. They had indicated that the programme was useful in providing them with pedagogical knowledge and skills to teach. These preservice teachers varied in terms of age from 20 to 26 years and above. Hence, one cannot accept that age influences self-efficacy to teach. Shaukat and Iqbal (2012) found that younger teachers were found to be better in engaging students' and managing classroom than older teachers. If self-efficacy to engage students and manage classroom increases with age then a reverse finding should have been observed by Shaukat and Iqbal (2012).

It will, therefore, be a fallacy to associate growth with the capacity to perform. This is due to the earlier evidence that younger teachers possess stronger self-efficacy than older teachers (Edward & Robinson, 2012). The study, therefore, disagrees with that of Lesha (2017) which found self-efficacy to be sensitive to age. This current finding draws attention to the importance of professional development in enhancing teachers' knowledge and skills to perform the teaching tasks than to just allow them to grow in the profession with the notion that their capacities would be enhanced. If age is still being argued to be sensitive to self-efficacy then future evidence must be provided for the partial correlation between self-efficacy and age controlling for factors such as knowledge, talent and passion.

Age was also not found to influence preservice teachers' anxiety about the practicum. Obviously, if prior teaching experience could not influence teaching anxiety it would be quite difficult to believe age could be significant

in influencing anxiety. Studies (e.g. Ferguson et al., 2012; Halet & Sanchez, 2017) that examined teachers teaching anxiety, and preservice teachers' anxiety (e.g. Soriano, 2017; Can, 2018; Önder & Öz, 2018; Kwarteng, 2018) found both groups to be anxious. In-service teachers who were examined by Ferguson et al. (2012) with ages close to 34 years and a minimum of 4 years of teaching experience were still found anxious. The preservice teachers examined so far aged from 20-26 years and were also found anxious. Clearly, anxiety was experienced irrespective of age. However, these two parties were anxious about different aspects of teaching. Recent studies (e.g. Soriano, 2017; Kwarteng, 2018) that specifically examined the sensitivity of anxiety to age found no relationship between the two. Upon several methods used in the current study, there was no proof that teaching anxiety and age are related. It is, therefore, misleading to rely on previous and older studies (e.g. Ngidi & Sibaya, 2003; Gelman, 2004) which found age to influence teaching anxiety.

Self-efficacy was also not sensitive to the PMTs' intention to teach. Two reasons were provided to explain such observation. They regarded the teaching profession to suffer from prestige and motivational factors, especially low salary. Their pursuance of the programme was because it provided them with opportunities to obtain other administrative positions in corporate institutions. Per adventure such opportunities fail, the teaching profession becomes a fall-back career. The consequence of such an act to the teaching profession is that effective teachers are likely to reject the profession for relatively better jobs. It cannot be accepted that highly efficacious preservice teachers would desire to teach. However, extant literature (e.g. Giallo & Little, 2003; İnceçay & Dollar, 2012; Ma & Cavanagh, 2018) direct that highly efficacious preservice teachers

are ready for the teaching profession, but the current evidence explains that poor prestige and motivational factors for teaching would lag their willingness to take up teaching.

Teaching anxiety was not sensitive to the PMTs' intention to teach. Some of the preservice teachers had specified that they were looking forward to advancing their education and needed better grades to actualise their dreams which could explain why no significant result was found. This explains the thought of Kwarteng (2018) that practicum served as a requirement for graduation and not just because the preservice teachers wanted to teach. Hence, the study provides enough evidence which confirmed the insensitivity of teaching anxiety to preservice teachers' intention to teach.

The non-significant result obtained could also be explained by the harmonising role self-efficacy seems to play on anxiety. It is difficult to endorse that preservice teachers' discouragement from entering the teaching profession is due to high anxiety experienced during the teaching practicum (Bronfrenbrenner, 2000; Kiggundu & Nayimuli, 2009). Most of these studies isolated the role of self-efficacy in influencing teaching anxiety. In the current study, the PMTs initially encountered high anxiety but were also highly efficacious. Such a high self-efficacy could have trivialised the sensitivity of teaching anxiety to their intention to teach. In the midst of such high anxiety, they had demonstrated their belief in their ability to increase their capacity to teach, an important observation enforced by the processing efficiency theory which cannot in any way be disregarded.

Results

Influence of Preservice Management Teachers' Self-Efficacy on Anxiety

There is no statistically significant influence of preservice management teachers' self-efficacy on their anxiety about the on-campus teaching practicum.

The hypothesis was formulated to determine the influence of self-efficacy on anxiety. The rationale is to assess the possibility of decreasing teaching practicum anxiety with increasing self-efficacy about teaching practicum. SEM (Smart-PLS path modelling algorithm and AMOS) and binomial standard logistic regression were employed to examine the causal relationship.

Structural equation modelling results from Smart-PLS

Through the bootstrap re-sampling tool of Smart-PLS, the estimates of the path coefficient, composite reliability, average variance extracted and R^2 were obtained to explain the variance of the model's constructs. Frazier, Tix and Barron (2004) stated that Smart-PLS places minimal demands on measurement scales, residual distributions, and sample size. Figure 11 (Time 1) and Figure 12 (Time 2) show the results of the measurement and structural models.

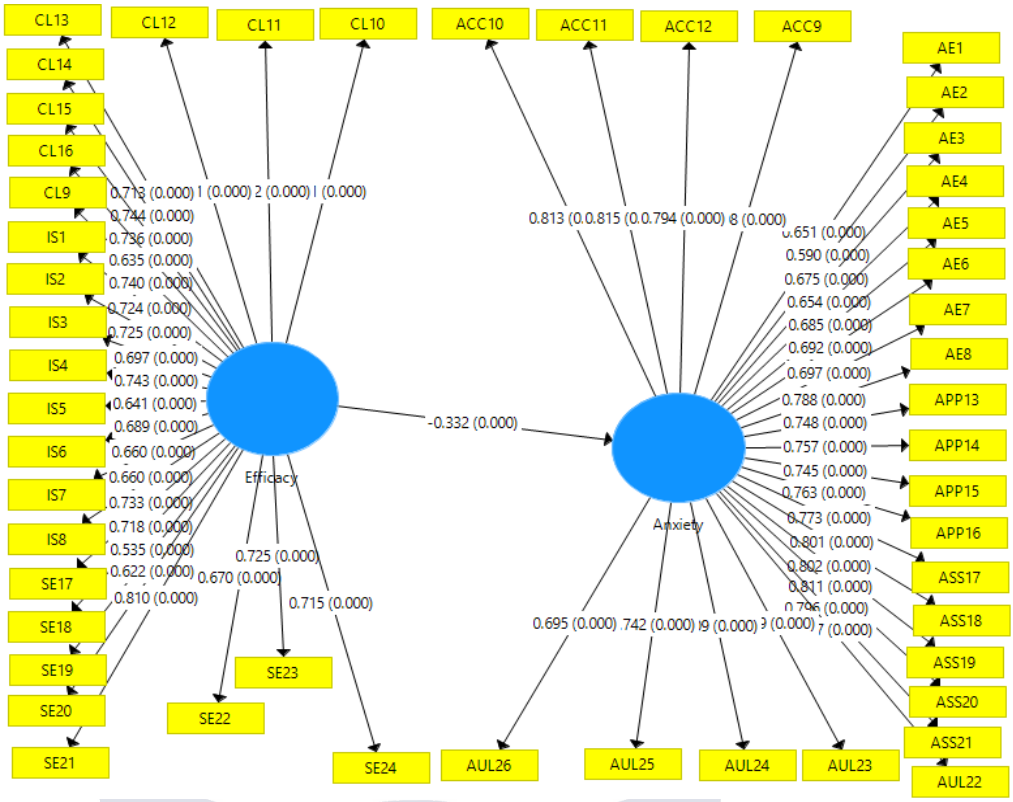

Figure 11: Efficacy-Anxiety relationship (Before ONCTP)
Source: Fieldwork (2019).

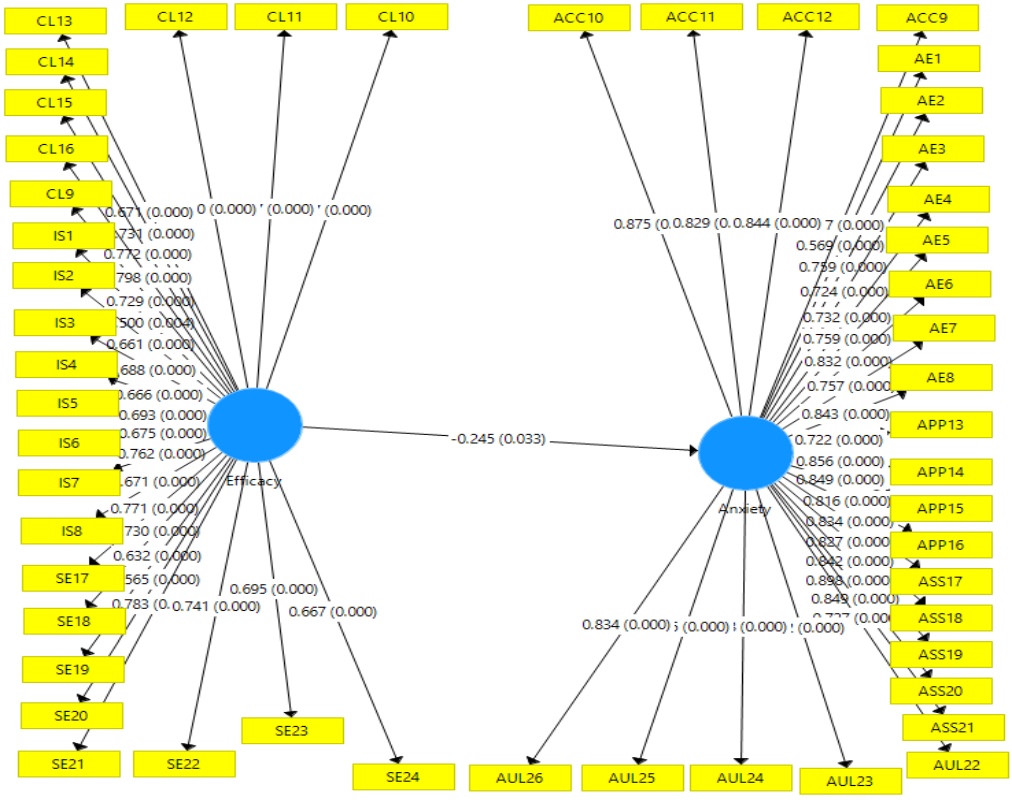

Figure 12: Efficacy-Anxiety relationship (After ONCTP)
Source: Fieldwork (2019).

Constructs Reliability and Validity

The measurement models were examined for construct reliability, convergent validity and discriminant validity. This was done before the hypothesis was analysed, thus, the structural models examined. Table 39 presents the results.

Table 39: Construct Validity for Self-efficacy and Anxiety

Time	Construct	Composite Reliability	Average Variance
1	Anxiety	.969	.548
	Efficacy	.958	.501
2	Anxiety	.979	.639
	Efficacy	.960	.503

Source: Fieldwork (2019).

The construct reliability was established using the composite reliability. Evident in Table 39, all the constructs have composite reliability greater than the threshold of .7. A clear indication that construct reliability has been ensured (Straub, 1989). Apostolakis and Stamouli (2006) provide a simple criterion for assessing standardised reflective constructs. By this criterion, all standardised constructs loadings must be at least .5. The results of the CFA in Chapter Three show that each of the items loaded very well on the constructs for both time periods. A cursory examination of the measurement model in Figure 11 and Figure 12 show that all the items have loadings above .5. In achieving convergent validity, Fornell and Larcker (1981) suggested a minimum average variance extracted (AVE) of .5 for a construct to show convergent validity. This is observable for all the constructs with the least AVE of .501 (Table 39).

Discriminant validity

Lastly, to validate the measurement model is the issue of discriminant validity. Brown (2006, p. 3) asserted that discriminant validity is evident when "indicators of theoretically distinct constructs are not highly intercorrelated", which suggest that the constructs are different from each other. Fornell and Lackers (1981) specified that discriminant validity is confirmed if the element in the matrix diagonal, which also represents the square roots of the AVE are greater than the off-diagonal values of all the corresponding rows and columns. Table 40 shows the results for discriminant validity.

Table 40: Discriminant Validity between Self-efficacy and Anxiety

		Fornell-Larcker Criterion		Heterotrait-Monotrait Criterion		
Time	Construct	Anxiety	Efficacy	HTMT Ratio	*LLCI*	*ULCI*
1	Anxiety	**.740**				
	Efficacy	-.332	**0.697**	.312	.191	.508
2	Anxiety	**.799**				
	Efficacy	-.245	**.709**	.200	.152	.393

Source: Fieldwork (2019).

Discriminant validity has therefore been met since .740 and .697 in Time 1, and 799 and .709 in Time 2 are greater than their off-diagonal values of -.332 and -.254 respectively. Hair et al. (2019) also indicated that the Heterotrait-Monotrait (HTMT) ratio should be less than .90 for conceptually similar constructs and .85 for conceptually different constructs. Its' ULCI should also be significantly different from one or the threshold value. The confidence interval helps in determining the significance of the HTMT ratio when it lies between the LLCI and the ULCI without the presence of zero within the confidence interval (Hair et al., 2019). The HTMT ratios for Time 1 (.312) and

Time 2 (.200) are lesser than .90 and .85 and statistically different from the threshold value or one for Time 1 (95% CI [.191, .508]) and Time 2 (95% CI [.152, .393]). It is palpable that discriminant validity has been achieved from both criteria.

Structural Models

After confirming that the measurement models meet the conditions of construct and indicator reliability in addition to the convergent and discriminant validity, the hypothesis that there is no statistically significant influence of preservice management teachers' self-efficacy on their anxiety about teaching practicum was examined. The examination focused on the direction and strength by means of the path coefficient (β), level of significance with *p*-values using 500 bootstrap samples, a coefficient of determination (R^2), and effect size (f^2) estimated by Smart-PLS. Table 41 presents the path coefficient results.

Table 41: Path Coefficient of Self-Efficacy on Anxiety

Time	Variable	Original Sample (β)	Sample Mean	*SD*	*t*	*p*	R^2	f^2
1	Efficacy -> Anxiety	-.332	-.375	.07	4.737	.000	.110	.124
2	Efficacy -> Anxiety	-.245	-.303	.12	2.134	.033	.060	.064

Source: Fieldwork (2019).

Evidently, the negative significant path coefficients between self-efficacy and anxiety at Time 1 (β = -.332, p < .001) and Time 2 (β = -.245, p = .033) shows that self-efficacy negatively influences anxiety. This implies that a 1% increase in standard deviation in self-efficacy is likely to result in a reduction in standard deviation in anxiety by 33.2% (Time 1) and 24.5% (Time

2). Self-efficacy seems to explain 11% of the variation in anxiety at Time 1 and 6% at Time 2 (see R^2 estimates). By implication, 89% of the variation in anxiety at Time 1 and 94% variation at Time 2 can be explained by other factors which are not captured in the models.

The differences observed in the R^2 could be as a result of the variations in the dispersion estimates in both time periods. The lower the dispersion estimate, the possibility of a higher R^2 estimate. This explains why the R^2 (.11) obtained at Time 1 is higher than the R^2 (.06) at Time 2. The effect sizes show that self-efficacy has a medium effect (f^2 = .124) on anxiety at Time 1 and low effect (f^2 = .064) at Time 2. The null hypothesis that there is no statistically significant influence of PMTs' self-efficacy on their anxiety about teaching practicum is therefore rejected, permitting the conclusion that self-efficacy has a negative influence on anxiety experienced by the PMTs. Therefore, the fitted models for Time 1 (Equation 5) and Time 2 (Equation 6) are as follows:

$ANX = -.332EFF$ .....Equation 5

$ANX = -.245EFF$ .....Equation 6

Since, self-efficacy is composed of three factors such as instructional strategies, classroom management and student engagement efficacy, then it remains unknown as to which one significantly predicted anxiety or is crucial in reducing anxiety. Hence, the effect of the self-efficacy factors was examined on anxiety. Before the effect was examined, multicollinearity diagnosis was conducted on the factors. The results are presented in Table 42.

Table 42: Multicollinearity Results for Efficacy Factors

Time		Efficacy Factors	1	2	3
1	1	Instructional Strategies Efficacy	1		
	2	Classroom Management Efficacy	.827**	1	
	3	Student Engagement Efficacy	.779**	.791**	1
2	1	Instructional Strategies Efficacy	1		
	2	Classroom Management Efficacy	.794**	1	
	3	Student Engagement Efficacy	.733**	.767**	1

Source: Fieldwork (2019). **$p < 0.01$ (2-tailed).

According to Sweeney and Williams (2005), multicollinearity is present when the correlation coefficient between variables exceeds 70%. Therefore, multicollinearity is evident among the efficacy factors since the least correlation coefficient was 77.9% in Time 1 and 73.3% in Time 2, suggesting that the self-efficacy factors are highly related. The presence of covariance limits the functionality of Smart-PLS since it fails to control the covariance between variables when establishing their effect on an endogenous construct. Therefore, AMOS was used to examine the effect of the self-efficacy factors on anxiety for both Time period.

Structural equation modelling results from AMOS

The structural models in Figure 13 (Time 1) and Figure 14 (Time 2) present the effect of the self-efficacy factors on anxiety. Once again, the self-efficacy factors are instructional strategies efficacy (ISE), classroom management efficacy (CME) and student engagement efficacy (SEE).

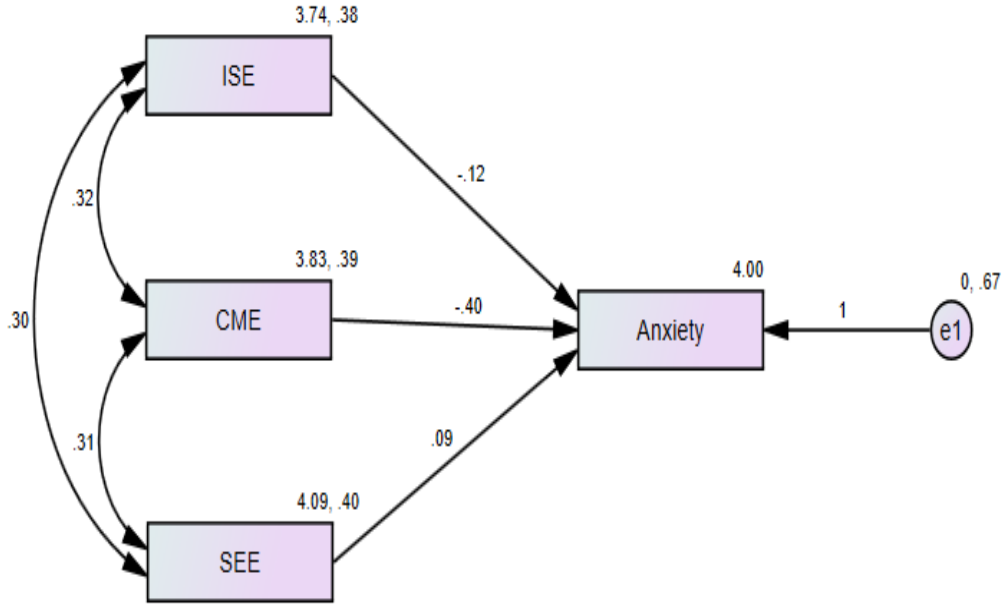

Figure 13: AMOS structural model showing the effect of self-efficacy factors on anxiety (Before ONCTP)
Source: Fieldwork (2019).

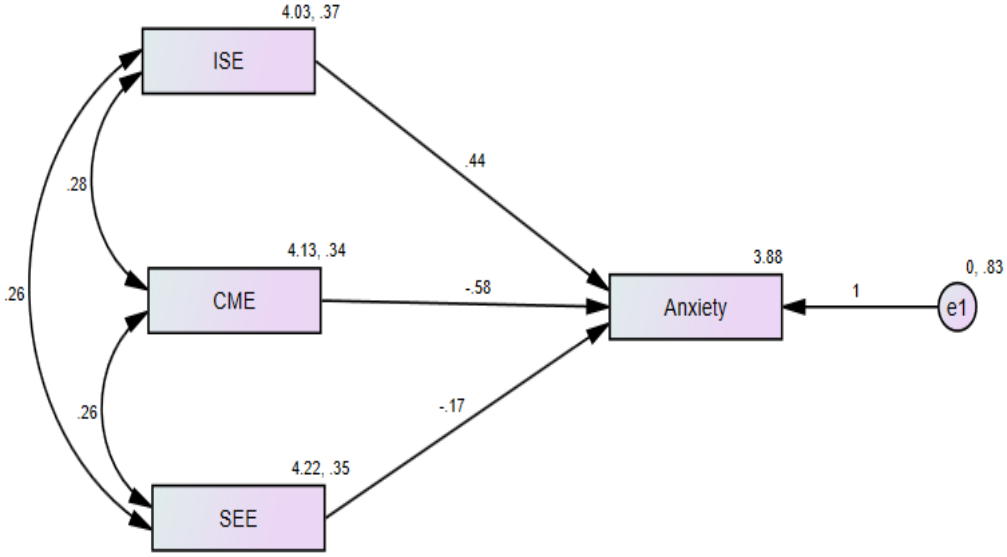

Figure 14: AMOS structural model showing the effect of efficacy factors on anxiety (After ONCTP)
Source: Fieldwork (2019).

The structural models shows that the covariance between the self-efficacy factors has been controlled to allow for the analysis of their actual effect on anxiety. At Time 1, the covariance between instructional strategies efficacy and classroom management efficacy was .32, instructional strategies and

student engagement efficacy was .30, classroom management and student engagement efficacy was .31. At Time 2, the covariance between instructional strategies efficacy and classroom management efficacy was .28, instructional strategies and student engagement efficacy was .26, classroom management and student engagement was .26. Table 43 presents the results on the estimates.

Table 43: Effect of Efficacy Factors on Anxiety

						95% CI	
Time	Path	*B*	*β*	*BSE*	*CR*	*LLCI*	*ULCI*
1	Constant	4.00		.513	7.797	2.90	5.130
	ISE ---> Anxiety	-.120	-.086	.233	-.515	-.565	.293
	CME --->Anxiety	-.401	-.290	.236	-1.699	-.792	.100
	SEE ---> Anxiety	.087	.063	.210	.414	-.309	.517
2	Constant	3.882		.611	6.354	2.264	5.019
	ISE ---> Anxiety	.443	.283	.237	1.869	.022	.961
	CME --->Anxiety	-.580	-.357	.216	-2.685	-1.029	-.155
	SEE ---> Anxiety	-.171	-.106	.190	-0.900	-.542	.223

Note: *B* = unstandardized path coefficient; *β* = standardized path coefficient; R^2 = .099 (Time 1); R^2 = .073 (Time 2).
Source: Fieldwork (2019)

The path coefficient and the confidence interval at Time 1 for the exogenous and endogenous variables, thus instructional strategies and anxiety (*B* = -.12, 95% CI [-.565, 5.293]), classroom management and anxiety (*B* = -.40, 95% CI [-.792, .100]), student engagement and anxiety (*B* = .09, 95% CI [-.309, .517]), show that individually the self-efficacy factors do not have a statistically significant effect on anxiety. The implication is that the synergistic effect of the self-efficacy factors on anxiety is important than their individual effect. However, a different observation is seen at Time 2, where a significant path coefficient was obtained for instructional strategies and anxiety (*B* = .44,

95% CI [.022, .961]), and classroom management and anxiety (B = -.58, 95% CI [-1.029, -.155]). This implies that the improvement in PMTs' self-efficacy to use instructional strategies and manage class would assist in significantly reducing their overall anxiety. This new observation could be as a result of the practicum experience. The model depicting the observed relationship at Time 2 is presented as follows:

$ANX = 3.882 + .443ISE - .580CME$ .....Equation 7

Standard binomial logistic

The effect of self-efficacy on anxiety was again examined with standard binomial logistic regression. This was to confirm or disconfirm the negative effect of self-efficacy on anxiety which was obtained through Smart-PLS and to determine the effect of other categorical covariates (such as sex, age, prior teaching experience and intention to teach) on anxiety. The binomial logistic regression, assisted in determining the probability of a PMT falling into a low teaching anxiety category.

In using the binomial logistic regression, the anxiety variable was dichotomised using the cut-offs of a mean below 3 as high anxiety and a mean of 3 and above as low anxiety. High anxiety was therefore identified with a code value of '0' and low anxiety '1'. Several logistic models were run to determine the best model for the data. The results are provided next.

Model selection

The Likert scale has been subjected to several arguments of it being categorical or continuous. It was, therefore, appropriate to explore the two possibilities for the variable type for self-efficacy and to allow the data gathered to provide the appropriate direction considering self-efficacy as both categorical

and continuous. Also, other covariates argued to influence anxiety such as sex, age, prior teaching experience and intention to teach were considered in the model. The model selection was based on Nagelkerke R^2, which measures the percentage of the variation in the dependent variable as explained by the independent variables. Table 44 presents the statistical models for Time 1 (before ONCTP).

Table 44: Statistical Models for On-Campus Teaching Practicum (Before)

	Model 1 β [Exp(B)]	Model 2 β [Exp(B)]	Model 3 β [Exp(B)]	Model 4 β [Exp(B)]	Model 5 β [Exp(B)]
Sex(1)	.49 [1.63]	.62 [1.85]	.50 [1.64]		
Age(1)	-.13 [.88]	-.06 [.95]	-.13 [.88]		
Age(2)	.56 [1.75]	.64 [1.90]	.55 [1.74]		
TE(1)	-.30 [.74]	-.07 [.93]	-.29 [.75]		
ITT(1)	.59 [1.81]	.69 [1.99]	.60 [1.81]		
Efficacy		-1.00* [.37]			-.93* [.39]
$Efficacy_b$			.08 [1.09]	.22 [1.24]	
Constant	-1.95* [.14]	1.59 [4.90]	-1.96* [.14]	-1.06* [.35]	2.51 [12.35]
R^2	.074	.155	.074	.001	.081

Note: β = logit coefficient; [Exp(B)] = Odds ratio; TE = Prior teaching experience; ITT = Intention to teach; Efficacy = Efficacy as a continuous variable; $Efficacy_b$ = Efficacy as a binary variable; R^2 = Nagelkerke R^2;*$p < .05$.
Source: Fieldwork (2019).

It is clear from Table 44 that Model 2 is the best for the data since it recorded the highest R^2 (15.5%). This means that Model 2 explains the highest variation in teaching anxiety when self-efficacy is considered as a continuous variable with sex, age, prior teaching experience and intention to teach as other covariates. When self-efficacy is considered alone without other covariates as seen in Model 5, the Nagelkerke R^2 reduces to 8.1%. By implication, sex, age, prior teaching experience and intention to teach assist in obtaining a better estimate for self-efficacy to explain the variation in teaching anxiety. None of the models showed that sex, age, prior teaching experience and intention to

teach significantly predict anxiety. Hence, Model 2 was selected as the best for the prediction of PMTs' teaching anxiety before the ONCTP. Following the same arguments, different models were considered for the after ONCTP data gathered for the study. Results are presented in Table 45.

Table 45: Statistical Models for On-Campus Teaching Practicum (After ONCTP)

	Model 1	Model 2	Model 3	Model 4	Model 5
	β [Exp(B)]	β [Exp(B)]	β [Exp(B)]	β [Exp(B)]	β [Exp(B)]
Sex(1)	-.84 [.43]	-.71 [.49]	-.86 [.42]		
Age(1)	-1.24 [.29]	-1.36 [.26]	-1.25 [.29]		
Age(2)	-.49 [.62]	-.60 [.55]	-.54 [.58]		
TE(1)	-.88 [.41]	-.81 [.44]	-.85 [.43]		
ITT(1)	-.07 [.93]	-.01 [.99]	-.12 [.89]		
Efficacy		-.77* [.46]			-.79* [.46]
$Efficacy_b$			21.75 [a]	21.83 [a]	
Constant	.93 [2.53]	4.03* [56.00]	.97 [2.64]	-.630* [.53]	2.62 [13.73]
R^2	.085	.129	.106	.024	.054

Note: β = logit coefficient; [Exp(B)] = Odds ratio; TE = Prior teaching experience; ITT = Intention to teach; Efficacy = Efficacy as a continuous variable; $Efficacy_b$ = Efficacy as a binary variable; R^2 = Nagelkerke R^2; a = odds ratio too large for table; *$p < .05$
Source: Fieldwork (2019).

A similar observation is seen after the ONCTP where Model 2 stands out for selection. The Nagelkerke R^2 for Model 2 explains 12.9% variations in PMTs' teaching anxiety when self-efficacy is once again considered as a continuous variable with sex, age, prior teaching experience and intention to teach as covariates. There is a clear indication that sex, age, prior teaching experience and intention to teach assist in enhancing the estimates. The examination of the relationship between self-efficacy and anxiety is therefore based on Model 2.

Standard binomial logistic regression results

Before the logistic parameters were examined, the correlation existing among the predictors were determined to check the assumption of multicollinearity and the goodness of fit estimates were also examined. Table 46 presents the results.

Table 46: Relationship among Predictors of Teaching Anxiety

Time		Sex(1)	Age(1)	Age(2)	TE(1)	ITT(1)	Efficacy
1	Sex(1)	1.000					
	Age(1)	.166	1.000				
	Age(2)	-.050	.749	1.000			
	TE(1)	.155	.245	.212	1.000		
	ITT(1)	-.006	.117	.160	-.018	1.000	
	Efficacy	-.124	-.062	-.089	-.178	-.079	1.000
2	Sex(1)	1.000					
	Age(1)	.299	1.000				
	Age(2)	.048	.713	1.000			
	TE(1)	.254	.266	.149	1.000		
	ITT(1)	-.008	.148	.171	-.086	1.000	
	Efficacy	-.134	.121	.100	-.039	-.087	1.000

Note: TE = Prior teaching experience; ITT: Intention to teach
Source: Fieldwork (2019).

A weak relationship is observed among all the variables except Age(1) and Age(2) which recorded a strong relationship (r = .75) at Time 1. Similarly, at Time 2, Age(1) and Age(2) were found to strongly correlate (r = .71). No other paired association was beyond the correlation coefficient of .299. Hence, the logistic parameters can confidently be studied. The strong correlation between Age(1) and Age(2) was expected since it was a breakdown of the age variable and does not pose any problems to any predictor in the model. Table 47 presents the effect of the logistic predictors on teaching anxiety.

Table 47: Effect of Logistic Regression Predictors on Teaching Anxiety

								95% C.I. for EXP(B)	
Time		*β*	S.E.	Wald	*df*	*p*	Exp(B)	*LLCI*	*ULCI*
1	Sex(1)	.615	.536	1.316	1	.251	1.849	.647	5.284
	Age			2.112	2	.348			
	Age(1)	-.057	.719	.006	1	.937	.945	.231	3.864
	Age(2)	.639	.708	.816	1	.366	1.895	.473	7.588
	TE(1)	-.071	.524	.019	1	.892	.931	.333	2.601
	ITT(1)	.686	.598	1.314	1	.252	1.985	.615	6.411
	Efficacy	-1.001	.393	6.472	1	.011*	.368	.170	.795
	Constant	1.589	1.646	.931	1	.335	4.897		
2	Sex(1)	-.706	.469	2.271	1	.132	.494	.197	1.237
	Age			4.550	2	.103			
	Age(1)	-1.364	.670	4.147	1	.052	.256	.069	.950
	Age(2)	-.600	.596	1.014	1	.314	.549	.171	1.765
	TE(1)	-.812	.479	2.873	1	.090	.444	.173	1.135
	ITT(1)	-.009	.476	.000	1	.984	.991	.390	2.519
	Efficacy	-.768	.395	3.774	1	.042*	.464	.214	1.007
	Constant	4.025	1.790	5.055	1	.025	56.00		

Chi-square Omnibus test = 13.32, p = .038 (Time 1), 11.67, p = .049 (Time 2); Hosmer and Lemeshow Test = 5.148, p = .742 (Time 1), 8.580, p = .379 (Time 2); -2 log-likelihood = 123.19 (Time 1), 142.85 (Time 2); Nagelkerke R^2 = .155 (Time 1), .129 (Time 2); *p < .05.
Source: Fieldwork (2019).

The chi-square omnibus tests at Time 1 (13.32, p = .038) and Time 2 show that the models are fit (11.67, p = .049) for the examination of the causal relationship between self-efficacy and anxiety. The Hosmer and Lemeshow Tests at Time 1 (5.148, p = .742) and Time 2 (8.580, p = .379) support the

models fit indicated by the chi-square omnibus tests. Initially, the Percentage Accuracy Classification (PAC) was 73.9% (Time 1) and 64.7% (Time 2) when only the constant was included in the models. After the introduction of the independent variables (sex, age, prior teaching experience, intention to teach, self-efficacy) in the models, the PAC increased to 75.6% (Time 1) and 68.1% (Time 2) indicating an improvement in the models for the relapse analysis. Also, the -2 log-likelihood (deviance) reduced from 136.68 to 123.19 (Time 1) and 154.53 to 142.85 (Time 2), suggesting that the models are good.

It can be seen that only self-efficacy significantly predict anxiety at Time 1 (Wald = 6.472, p = .011) and Time 2 ((Wald = 3.774, p = .042). The logit coefficients of self-efficacy at Time 1 (β = -1.00) and Time 2 (β = -.768) show a negative sign which means that self-efficacy has a negative influence on anxiety. The odds ratios at Time 1 (Exp(B) = .368) and Time 2 (Exp(B) = .464) show that as self-efficacy increases by a unit, a PMT is .368 (Time 1) and .464 (Time 2) less likely to be in a low anxiety category. From Table 47, the fitted models (Equations 8 and 9 for Times 1 and 2 respectively) are given by

$$\text{Log}\left[\frac{p}{1-p}\right] = -1.00EFF \quad \text{.....Equation 8}$$

$$\text{Log}\left[\frac{p}{1-p}\right] = 4.025 - .768EFF \quad \text{.....Equation 9}$$

Thus, all related probability computations on teaching anxiety should be based on the fitted models given in Equations 8 and 9.

The computed probability of success (low anxiety) given a self-efficacy score of one is .2689 (Time 1) and .9629 (Time 2). An increase in the probability of falling in a low anxiety category is seen after the teaching practicum. Such an observation legitimises the claim that an increase in self-efficacy would negatively influence teaching anxiety. The Nagelkerke R^2 shows that self-

efficacy explains 15.5% of the variation in anxiety at Time 1 and 12.9% of the variation in teaching anxiety at Time 2.

Reasons for the Possibility of High Self-Efficacy and High Anxiety

The examination of the nexus between self-efficacy and anxiety remained as one of the focal issues in the current study and anything that could change the nature of the relationship remained as a concern. It was evident during the FFGD that certain factors exists that could trigger the possibility of high self-efficacy and anxiety.

Assessment from unfamiliar supervisors

The PMTs indicated that their self-efficacy and anxiety was high because some of the supervisors did not teach them during their coursework. These are their views:

> *When the teacher* [supervisor] *is new, there is a possibility that the teacher* [preservice teacher] *will feel anxious. Sir the anxiety comes in when you have a supervisor sitting over there assessing you. At that particular moment, those lecturers over there are so new to you. Is not about your colleagues there because these people I know them very well I can go there and teach them without any problem. But you knowing very well that you are going to be marked and awarded a mark that is when the anxiety comes in* (Kaka).
>
> *I think I agree with what Kaka said. I quite remember when we were in SHS, this economics teacher came to tell us that a supervisor will be coming in and the following day the supervisor came and he started teaching us. There you could clearly see that everything has changed. The way he was teaching, talking, and responding to what the students*

were saying, everything has completely changed (Pinto).

By implication, if unfamiliar supervisors establish a good rapport with them, they are likely to feel less anxious and would be able to concentrate on their teaching practice. The assessment from such unknown supervisors seem to parallel high self-efficacy and high anxiety.

Shyness and high supervisors' expectation

The PMTs noted shyness and high supervisor expectation as additional factors that could ensure high self-efficacy and high anxiety. In her words,

> *Sir, you can have the ability to teach but because you are shy and then your supervisors, their remarks bring you down, I don't think the next time you will not be very anxious even though you have taught twice The next time you will be very anxious no matter how efficacious you are* (Mona).

The extremely high expectations from supervisors were also recounted. Using the football experience,

> *we all know Asamoah Gyan to be a striker and can really score goals. But at a point in his time when we were having the world cup, because of the degree of expectation on him, the penalty he missed it. So you see he is very skilful but because of the tension placed on him to win the match he missed the penalty. So you can be both efficacious and anxious* (Guru).

The attention drawn here is that a highly efficacious person can fail when the expectation is too high.

Poor fluency in the medium of instruction

The PMTs' were particular about their fluency in delivering their lessons. They noted that one's inability to fluently use language will heighten self-efficacy and anxiety. In reemphasising the contribution of language fluency to high self-efficacy and high anxiety,

> *I will once again say that fluency is also part. Because you are going to teach a subject like management full of English and if you are not abreast with the English language, you will go there and you may think ah these people am going to teach they are University students so any error that I will make they can identify it. So I think the fluency in the English language is also another key factor* (Jona).

The inability of PMTs to flow very well in the English language when they teach will continue to haunt them, and continue to raise their level of anxiety even though they can execute the teaching tasks. PMTs' feeling, that the university students could identify their errors when they speak, which increased their level of anxiety during the teaching practicum is not likely to change in respect of their interaction with SHS students. This is because some of the SHS students are good and smart and are likely to make fun of teachers who cannot flow well in the language.

In summary, it is indeed possible for one to experience high self-efficacy and high anxiety. The possible contributory factors were assessment from unfamiliar supervisors; shyness and high supervisor's expectation; and poor fluency in the medium of instruction.

Discussion for Hypothesis Four

Researchers (e.g. Gunning & Mensah, 2011; Szymańska-Tworek, & Turzańska, 2016; Halet & Sanchez, 2017) have conceptually perceived self-efficacy and anxiety to be negatively related. While some authors (e.g. Gresham, 2008; Merc, 2015a) claim there exists a negative relationship between anxiety and self-efficacy, others (e.g. Tahsildar & Kabiri, 2019) support a positive relationship. The uncertainty might be due to the use of PPMCC, since the statistical tool is based on a measure of centre, precisely, the mean which is not robust to outliers. However, most of these studies have not provided evidence on the nature of the distribution of self-efficacy and anxiety variables which create some kind of doubt in their findings. It may be needful to consider other robust correlation measures such as order statistic correlation or PPMCC with the centre as a median. The current study employed SEM and logistic regression in determining beyond relationship the causality that exists between the two variables. Hence, the hypothesis formulated was: There is no statistically significant influence of preservice management teachers' self-efficacy on their anxiety about the on-campus teaching practicum.

The study found PMTs' teaching self-efficacy to have a negative influence on teaching anxiety. The finding was consistently proven for both time periods in which the examination was conducted. Both the results of SEM and logistic regression converged to suggest an indirect causal relationship between self-efficacy and anxiety on the basis of the direction of their regression coefficients (βs). The magnitude of the beta and R^2 were not considered in the comparison of the results from the SEM and logistic regression. It would be erroneous to base the argument on the magnitude due to the different estimation

techniques. However, the R^2 for both techniques fell within the range of 10 to 15%; this is considered satisfactory due to the prediction of preservice teachers' teaching behaviour (Frost, n.d.; Hair et al., 2019). The SEM (Smart-PLS) is based on the least-squares technique whilst logistic regression on ML technique. Hence, the direction that both tools communicate should be the focus and not the magnitude observed in the estimates.

Both statistical tools (SEM and logistic regression) clearly emphasise a negative relationship between self-efficacy (independent variable) and anxiety (dependent variable) which is statistically significant. This suggests that the intrinsic relationship underlying the data is indeed negative regardless of the method of estimation. The basic interpretation of the observed relationship is that increasing PMTs' level of self-efficacy would assist in decreasing their level of teaching anxiety. The negative relationship was also evident in the exploratory data analysis conducted using descriptive statistics. As their level of self-efficacy increased from Time 1 (before ONCTP) to Time 2 (After ONCTP), their level of teaching anxiety decreased accordingly with respect to the same time periods.

The findings support the negative correlation found between self-efficacy and anxiety in the literature (e.g. Gresham, 2008; Merc, 2015a; Mede & Karaırmak, 2017). Similarly, through the qualitative evidence gathered, Gresham and Burleigh (2018) found that anxiety decreased when preservice teachers' self-efficacy was enhanced through teaching and modelling, correct vocabulary usage, class presentations and teaching experiences. The qualitative evidence gathered from the study saw the PMTs' fluency in the medium of instruction as relevant in reducing their anxiety. It is clear that teaching self-

efficacy and teaching anxiety are indirectly related as found in the study, and not unrelated (e.g. Çubukçu, 2008; Güngör & Yaylı, 2012) or positively related (e.g. Tahsildar & Kabiri, 2019). In addition to the findings of previous studies, the current study clearly states that a causal relationship exists between self-efficacy and teaching anxiety and therefore proffer a simple mathematical equation describing such a relationship. Thus, the study provides a standard way for estimating the teaching anxiety of preservice teachers for a given efficacy score as well as probabilities.

Other Results

Preservice Management Teachers' General Suggestions

The preservice teachers suggested several measures that they think when implemented could help in improving their self-efficacy to reduce their level of anxiety. Among them are implementing teacher educators' assessment results, training the trainers, revising the methods of teaching management content, organising supervisor-supervisee meeting before the teaching practicum, using Level 100 students as practice students and providing prompt feedback on preservice teachers' performance.

Implementing teacher educators' assessment results

The PMTs acknowledged that teacher educators are normally assessed. However, they did not believe that the outcome of the results are implemented or used to advise the teacher educators in order to improve practice. To the PMTs, such an assessment is deemed important only when it ends in improving quality. As indicated,

> *mine is lecturers' assessment, personally, I don't think it is working. The reason is that ah - the lecturers must be called and talked to so that some*

of the comments they have been making they stop because it is intimidating students and not encouraging them. (Kaka).

The participant seem to suggest that there has been a persistent behaviour of supervisors intimidating preservice teachers. This is because they have heard such ill practices before they were involved in the practicum exercise and they have also confirmed it. Hence, they could not believe the assessment of supervisors are actually used. It therefore looks like a ceremonial activity.

Train the trainers

The PMTs suggested that supervisors should go for workshops so that they can reduce their level of contradictory remarks. This was to humbly emphasise that the trainer must be trained to enhance quality. In his humble plea,

the supervisors should go for a workshop because this supervisor will say this and the other supervisor will say that. I quite remember our supervisor said that we should write 'by the end of the lesson' … and a friend of mine met me and said he did write 'by the end of the lesson' and the supervisor was saying it shouldn't be that case. It should be 'at the end of the lesson'. But here is the case we will go for off-campus you don't know the kind of supervisor you are going to meet and you will be thinking that you have done the right thing…. (Pinto).

Revision of the methods course

The methods of teaching management course provides the PMTs' knowledge about the appropriate pedagogies in teaching business management. Therefore, the PMTs suggested that the content should be revised so that any contradictions in contents are addressed and supervisors should be made to fit

into the content.

> *My comment is that the content of methods of teaching management must be revised because some of the lecturers will teach you as my colleagues were saying that this is how you write this and other people too will tell you that we don't write it this way. If not our time, we are not going to do it again, but those behind us. It should be looked at so that every lecturer who teaches methods will teach the same thing and supervisors should fit in* (Jona).

Ensuring first time meeting between supervisors and supervisees

An issue of relevance to the PMTs was the meeting between supervisors and supervisees before the commencement of the teaching practice. To them, all supervisors should be encouraged to meet the preservice teachers to encourage them that they can do the teaching. Such a meeting they believe would break the fear they have for their supervisors. As stated,

> *I will like supervisors to be encouraged to meet students for the first time on the practice. We, our supervisors met us for the first time and encouraged us that we can do it. So after that we were like our supervisors are good and we can teach but first, we were scared paa* [really scared] (Mona).

Using first year university students as simulated SHS students

The PMTs also requested that if it would be possible, the ONCTP should not use their own colleagues as their students. The reasons in support of this is that their colleagues do not approximate senior high students. In addition, their colleagues merely come to create problems for them during the teaching practicum. As noted by one participant,

…even if there will be any other way of not using our colleague, it would be good. Using Level 100 students will be better because they just came from the SHS. This is because colleagues in Level 300 are there to drag your feet that is what they do (Kaka).

Prompt feedback on assessment

The PMTs finally believed that prompt feedback on their teaching practicum performance would be good in boosting their teaching confidence and teaching performance before they move on with the OFCTP.

I think after the on-campus teaching it takes too long for the feedback, the grade to come out, for you to know that this is my performance so that you can improve upon it when going for off-campus teaching practice. It comes late so they should let it come early before so we can prepare for the off-campus (Josi).

The PMTs believe these suggested measures would go a long way in enhancing their level of self-efficacy as their level of anxiety reduces on the teaching practicum. This is not to benefit them but for those who are yet to go through the teaching practicum exercise.

Revisiting the Conceptual Framework: Efficacy-Anxiety Construct

The study proposed a conceptual framework which related PMTs' self-efficacy and anxiety about the teaching practicum. The framework first examined the levels of PMTs' self-efficacy and anxiety about the teaching practicum. Self-efficacy was examined using three fixed reflective indicators such as instructional strategies, classroom management and student engagement efficacy. Teaching anxiety was also examined using five fixed reflective indicators such as evaluation, class control, professional preparation, school

staff and unsuccessful lesson anxiety. Based on the inconclusive evidence in the literature on the sensitivity of self-efficacy and anxiety to preservice teachers' demographic characteristics (sex, age, prior teaching experience and intention to teach), the framework re-examined the influence of these demographic characteristics on self-efficacy and anxiety through several methods. The final framework is presented in Figure 15.

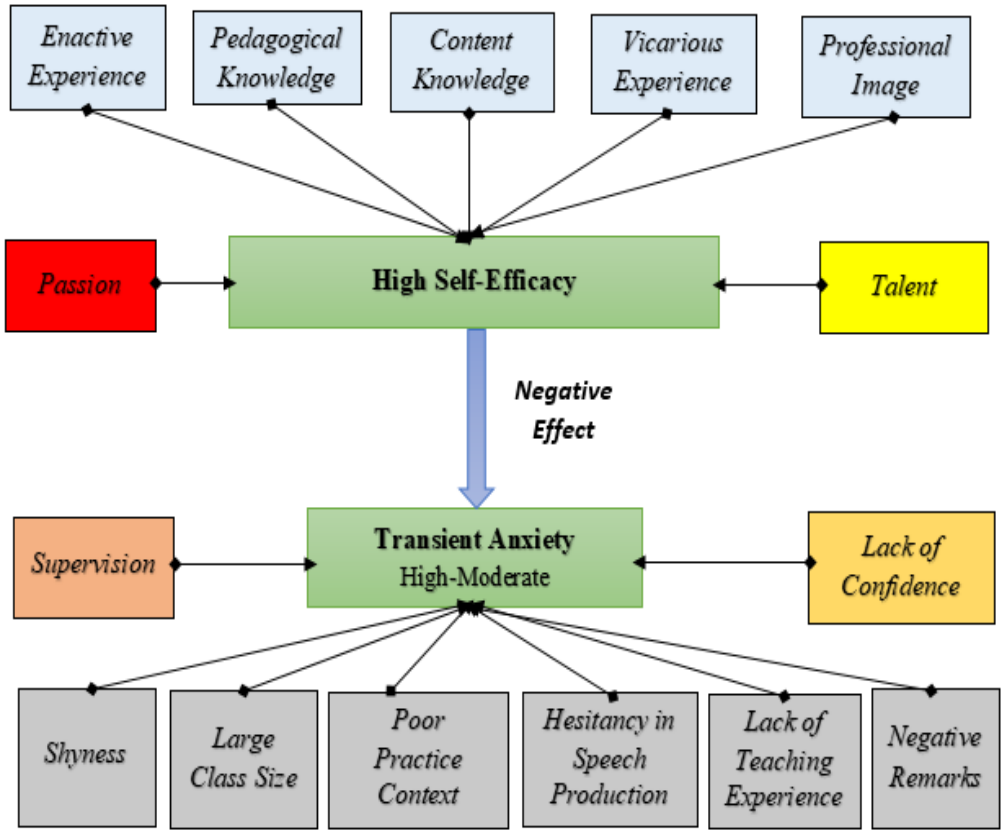

Figure 15: Revised self-efficacy-anxiety construct.
Source: Author's construct (2019).

The PMTs were by the revised framework highly efficacious to teach. They were highly efficacious in instructional strategies, classroom management and student engagement; these depict their pedagogical knowledge in the revised framework. Inherently, when these indicators were compared, instructional strategies efficacy was relatively the lowest with the highest being student engagement efficacy. Apart from the pedagogical knowledge, six other

sources of self-efficacy were identified which illuminated their high self-efficacy. These are passion, talent, enacted mastery experience, content knowledge, vicarious experience and professional image. Teaching passion and talent stood as the most important sources which explained their high self-efficacy. By the framework, enacted mastery experience is not considered as the most important source of self-efficacy.

The framework also shows that the PMTs experienced transient anxiety where anxiety started at a higher level and peaked at a moderate level. Even though all fixed five anxiety indicators had significantly reduced, evaluation anxiety continuously remained high. Their transient anxiety was explained by supervision anxiety, lack of confidence, shyness, poor practice context, hesitancy in speech production, lack of enacted experience and negative remarks from course lecturers and past student teachers. The proposition of no significant influence of sex, age, intention to teach and prior teaching experience on self-efficacy and anxiety was confirmed. Finally, the proposition that self-efficacy would negatively influence teaching anxiety was confirmed. Therefore, there is an intrinsic negative relationship between self-efficacy and anxiety which directs that self-efficacy is an important variable when dealing with preservice teachers' teaching anxiety.

Chapter Summary

The current study examined PMTs' levels of self-efficacy and anxiety about the teaching practicum. The findings clearly show that the preservice teachers' were highly efficacious creating the impression of their readiness and not their willingness to teach. Such willingness could be evoked by motivational factors such as high salary and prestige for the teaching profession as gathered

from the study. Teaching passion was ranked as the highest factor influencing their self-efficacy. Other factors were talent, enacted mastery experience, pedagogical knowledge, content knowledge, vicarious experience and professional image. Prior to the teaching practicum, they entertained high anxiety due to negative remarks from course lecturers and past student teachers. Such feedbacks seemed to have projected high supervision anxiety in them. Other factors which influenced their teaching anxiety were lack of confidence, shyness, poor practice context, hesitancy in speech production, and lack of enacted experience on the part of some of the PMTs. Among all the anxiety factors, supervision anxiety was ranked high validating the assertion that globally preservice teachers are anxious about evaluation. Finally, self-efficacy was found to have a negative influence on teaching anxiety. However, self-efficacy and anxiety were not sensitive to sex, age, prior teaching experience and intention to teach. The next chapter provides the summary, conclusions and recommendations.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Overview

The chapter summarizes the study, highlighting the research methods adopted in collecting and analysing data to obtain the main findings in addressing the research questions and hypotheses formulated on preservice management teachers' self-efficacy and anxiety about teaching practicum. Based on the key findings, conclusions are drawn for the provision of appropriate recommendations for policy development and to guide practice. The study's contributions to scholarship are also captured as well as suggestions for further research.

Summary of the Study

The study examined University of Cape Coast preservice management teachers' self-efficacy and anxiety about teaching practicum. The rationale was to provide elaboration and clarification into their levels of self-efficacy and anxiety about teaching practicum and to establish the causal relationship between self-efficacy and anxiety. Therefore, the following research questions permitted the exploration of the issues to achieve the stated purpose:

1. What is preservice management teachers' level of self-efficacy about the on-campus teaching practicum?
2. What is preservice management teachers' level of anxiety about the on-campus teaching practicum?

To fully appreciate these issues, the following hypotheses were formulated:

1. H_0: There is no statistically significant difference in the self-efficacy level of preservice management teachers before and after their on-

campus teaching practicum ($\mu_1 - \mu_2 = 0$).

2. H_0: There is no statistically significant difference in the anxiety level of preservice management teachers before and after the on-campus teaching practicum ($\mu_1 - \mu_2 = 0$).
3. H_0: There is no statistically significant difference in preservice management teachers' levels of self-efficacy and anxiety about the on-campus teaching practicum based on their gender, age, teaching experience and intention to teach ($\mu_1 = \mu_2 = \mu_3 = \mu_4$).
4. H_0: There is no statistically significant influence of preservice management teachers' self-efficacy on their anxiety about the on-campus teaching practicum ($\beta_1 = 0$).

The study drew knowledge and support from Bandura's self-efficacy theory (1977) and Eysenck's processing efficiency theory (1979). These theories assisted in explaining preservice teachers' self-efficacy and anxiety about the teaching practicum. The theories also directed the study in theorizing preservice teachers' self-efficacy-anxiety construct.

Rooted in pragmatism, the study employed the repeated measures sequential explanatory design, follow-up explanations model (QUAN→qual) to investigate the problem of preservice teachers' increasing anxiety. The population for the study was 120 third year preservice management teachers for the 2018-2019 academic year. Respondents and participants for the study were obtained through the census-extreme case sampling technique. The census included all the 120 respondents in the quantitative phases of the study. However, eight of them served as participants in the follow-up focus group discussion (qualitative phase) phase of the study. Teacher Sense of Efficacy

Scale developed by Tschannen-Moran and Woolfolk Hoy (2001) and Student Teachers Anxiety Scale developed by Hart (1987) and modified by Morton et al. (1997) were adapted and used to gather preservice teachers' self-efficacy and anxiety data about teaching practicum respectively. The quantitative instruments were piloted on 40 randomly selected fourth-year PMTs. After that, the efficacy factors (instructional strategies efficacy, classroom management efficacy and student engagement efficacy) and anxiety factors (evaluation anxiety, class control anxiety, professional preparation anxiety, school staff anxiety and unsuccessful lesson anxiety) were subjected to confirmatory factor analysis.

The goodness of fit indices (CFI, IFI, RAMSEA, SRMR) confirmed that the three-factor efficacy model and five-factor anxiety model approximately fitted the data gathered. The reliability coefficients for self-efficacy (instructional strategies = .91; classroom management = .92; student engagement = .88) and anxiety (evaluation anxiety = .94; class control = .90; professional preparation anxiety = .89; school staff anxiety = .95; unsuccessful lesson anxiety = .91) showed that internal consistency had been achieved. After the actual data (both Time 1 and Time 2) were gathered (personal and online administration in Time 1 and Time 2 respectively), the goodness of fit indices again proved that the self-efficacy factors and anxiety factors approximately fitted the data. The reliabilities were also similar suggesting that the homogeneity, stability and equivalence attributes had been met. Data gathered through the focus group discussion guide was also validated for trustworthiness (credibility, transferability, dependability and confirmability).

Empirical models were formulated to aid the examination of the causal relationship between self-efficacy and anxiety. Valid data were gathered from 119 (return rate of 99.17) respondents on the quantitative phase in Time 1 and Time 2. Subsequent to this, no respondent mortality and missing data were encountered. All ethical considerations prescribed by the University were adhered to in the study.

The study employed the quantitative-dominant mixed analysis, specifically, sequential quantitative-qualitative analysis. Before analysis was conducted for the quantitative phase, statistical assumptions were tested to determine the use of the appropriate tools. Both descriptive statistics (frequency and percentage, mean and standard deviation) and inferential statistics (chi-square, Mcnemar test, repeated-measures ANOVA, 4-way factorial MANOVA, matched paired samples t-test, standard binomial logistic regression and structural equation modelling through Smart-PLS and AMOS) were used to analyse the demographic data and the actual data which addressed the research questions and hypotheses formulated for the study. To illuminate the quantitative findings, template thematic analysis was used to analyse the qualitative data.

Key Findings

A thorough analysis and examination based on the proposed methods led to the following findings.

1. Preservice management teachers' level of self-efficacy was generally high on the teaching practicum. This was explained by passion, talent (naturally gifted), enacted mastery experience, pedagogical knowledge, content knowledge, vicarious experience and professional image. The

most influential self-efficacy and resilient factor was passion for teaching (physiological and affective state). Their high self-efficacy in student engagement, classroom management and instructional strategies informed their pedagogical knowledge. Comparably, they were highly efficacious on student engagement but less efficacious on the application of instructional strategies.

2. They experienced transient anxiety where teaching anxiety was high at the start of the teaching practicum and peaked at a moderate level after the teaching practicum. The dominant sources responsible for their transient anxiety were evaluation (supervision), lack of confidence, shyness, poor practice context and hesitancy in speech production. The strict usage of teaching-learning materials (as required by the teaching practice assessment tool) for teaching each business management topic in the SHS syllabus was identified to be unrealistic. Supervision anxiety remained as the most influential anxiety factor.
3. Their after-ONCTP level of self-efficacy was significantly higher when compared to their self-efficacy prior to the start of the teaching practicum. Therefore, the practicum was found to be relevant in the development of their self-efficacy.
4. Their level of anxiety after the teaching practicum was significantly lower than the high anxiety experienced prior to the start of the teaching practicum. However, in each case, supervision anxiety stood very high among all the anxiety-provoking factors.
5. There was no statistically significant difference in their levels of self-efficacy and anxiety about teaching practicum on the basis of gender,

age, prior teaching experience and intention to teach (i.e. the covariates gender, age, prior teaching experience and intention to teach do not influence the relationship between self-efficacy and anxiety).

6. Generally, PMTs' self-efficacy negatively influenced their anxiety about the teaching practicum. As self-efficacy of the PMTs is improving, anxiety reduces. Therefore, an inverse causal relationship exists between self-efficacy and anxiety.

Conclusions

The resilient passion which influenced the PMTs' high level of self-efficacy to teach clearly implies that passion supersedes talent. By this, when it comes to admissions unto the teacher training programmes, the quality of the grade obtained may be secondary to the passion for the teaching profession. Also, it is well acknowledged in the literature that pedagogical knowledge and content knowledge are important knowledge bases for teaching. This raises concerns about the relatively low instructional strategies efficacy of the PMTs when the self-efficacy factors were compared. However, their general high level of self-efficacy implies their readiness to teach and not their willingness to teach. This is because of the low prestige and salary associated with the teaching profession.

The high anxiety experienced by the PMTs at the start of the practicum sends a bit of a worry in eroding self-confidence. One would clearly appreciate that the negative conscience prior to the teaching practicum resulted in the initial high anxiety. This stemmed from hearsays from teacher educators and past preservice teachers. The impression created is that apporpriate stakeholders might have to commit more efforts in heightening PMTs' self-efficacy during

the coursework of the management teacher education programme. Even though anxiety was moderate at the end of the practicum, supervision anxiety was high. This is because of the ill-professional behaviours of some practicum supervisors. It cannot be assumed that such ill-behaviours are likely to challenge the preservice teachers to take the exercise seriously and work harder in learning how to teach. This is because of the knowledge that quality learning environment ensures quality learning. Hence, if supervisors are fond of using negative feedbacks and unprofessional utterances, the quality of learning cannot be guaranteed. The only conclusion that can be drawn is that such ill-professional behaviours might reduce preservice teachers' level of self-efficacy since self-efficacy and anxiety are indirectly related.

The significant increase in PMTs' level of self-efficacy improved their confidence. This, therefore, implies that confidence is built over time and time on practice reduces teaching anxiety. Consequently, reduction in anxiety affords the opportunity to apply every strategy possessed during teaching. The deduction is that confidence inspires efficacy, therefore time is needed to improve efficacy. This is necessary to reduce preservice teachers' error scores during teaching practice.

The transient anxiety which was experienced by the PMTs about the teaching practicum appears to reduce the exercise to accumulation of marks. Therefore, attention has always been on the supervision factor. This unwarranted attention on supervision renders the teaching practice ineffectual. If this continues over time, the relevance of the teaching practice would be lost.

Finally, self-efficacy and anxiety about teaching practicum are independent of preservice teachers' gender, age, prior teaching experience and

intention to teach. It is obvious that the expert guidance of the teacher educators and the supervisors is that which is needed if quality professional teachers are to be churned out into the various business schools. Therefore, the process (not the product) of the teaching practicum exercise should be given much attention for preservice teachers' learning of relevant teaching skills during the teaching practicum. In such a learning process constructive feedback, reflection and experience must be ensured to enhance quality.

Recommendations

The findings suggest some important actions that providers of teacher education must take in order to boost the self-confidence of the preservice teachers and reduce their level of anxiety. Most importantly to ensure that a quality environment is created and sustained for the teaching practicum exercise for the preservice teachers to learn all relevant teaching skills.

1. The Directorate of Academic Affairs should focus on teaching passion more than grades as the basis for considering admissions into the teacher training programmes. The passion could be assessed through interviews. However, if the numbers applying for admission will render interviews impractical, motivation letters submitted by students may be used to gauge their passion for the teaching profession. It should be noted that all prospective students must meet the minimum grade requirement before their passion to teach could be assessed for decision making. For those students who have already enrolled, teacher educators can build their passion by providing them with challenging teaching tasks in the classroom and given the opportunity to practice teaching during the methods class and should be supported and encouraged to learn to teach.

2. Teacher educators, especially methods of teaching management instructors, should focus on developing the instructional strategies competencies of preservice teachers.
3. The Centre for Teacher Professional Development should engage students in sensitisation programmes to dispel their fears about the teaching practicum. By extension, the Centre should alert all supervisors and the lecturers teaching the methods courses to engage the students with positive conversations regarding the teaching practicum exercise.
4. Since anxiety reduces over time to display the preservice teachers' true performance (self-efficacy), the Centre for Teacher Professional Development should consider a policy of allowing all the preservice teachers to teach their first and or second round of their sessions without being scored. This way they will be able to put up their true teaching performance to reflect their true score on the assessment.
5. The Centre for Teacher Professional Development should consider discarding the competency-based assessment with the use of the rating scale of various sub-competencies building up to the overall teaching competency. This is necessary following the pettiness of supervisors in looking at the trivia without focusing on the global performance of the preservice teachers in the practicum. Instead, a global scoring, even though subjective, appears to be a better alternative to ensure comprehensive and valid assessment of the preservice teachers in the practicum exercise.

6. Providers of teacher education should place teachers at a particular level that will require them to do the practicum even if they have accumulated some knowledge and acquired some skills in teaching before enrolling them on the programme. Furthermore, the placement should be without recourse to sex, age and intention to teach.
7. Preservice teachers should engage in self-reflection after every teaching practice session in order to take stock of the mistakes they made as well as the gains realised to ensure that they consolidate the gains and improve upon the mistakes on the next teaching cycle.

Contributions of the Study

The research has made significant contributions in informing policy, practice, knowledge and methods.

Contributions made to policy

The following findings improve policy:

1. The research identified that the key requirement of success in teaching is passion and for that matter a call has been made to inform admission policies of teacher education institutions to project the passion to teach as one of the cardinal considerations for admissions.
2. The study raised concerns about the policy of using competency-based assessment scale in evaluating preservice teachers on the teaching practicum and the need to replace it with a global assessment which is considered more potent and valid.

Contributions made to practice

The following contributions are important to enhance the pedagogical competencies of the preservice teachers:

1. The study highlighted preservice teachers' relatively low instructional strategies abilities and the need for teacher educators, especially methods of teaching management instructors, to develop their competencies in the selection and use of various instructional strategies during lessons.
2. Teaching passion was noted as key to the development of preservice teachers' teaching confidence and therefore teacher educators have been alerted to focus on building teaching passion in preservice teachers already on the teacher education programme.

Contributions made to knowledge

The following novel findings have been identified in the study:

1. Preservice teachers faced transient anxiety, and this study provides enough evidence to prove that self-efficacy has a negative influence on anxiety about the teaching practicum.
2. The insensitivity of preservice teachers' self-efficacy and anxiety to their sex, prior teaching experience, intention to take teaching as a career and age have been validated.

Contributions to methods

The study made the following contributions to methods:

1. Rigorous methods were adopted to address the drawbacks of existing methods used in the literature.
2. Statistical models in estimating the level of preservice teachers'

practicum anxiety have been formulated.

3. The study employed joint use of multiple statistical methods (SEM, logistic regression and MANOVA) to examine the relationship between self-efficacy and anxiety.

It is acknowledged that no single study could provide all the answers that are needed to address a research problem. Hence, this study provides grounds for further research to be conducted to contribute to the ongoing discussions on preservice teachers' levels of self-efficacy and anxiety about the teaching practicum.

Suggestions for Further Research

The study focused on preservice management teachers' self-efficacy and anxiety about the ONCTP. Of less focus was their capability to professionally teach, hence their instructional effectiveness. It rather focused on their belief in their capability to professionally teach and possible anxiety situations that could erode their self-efficacy to teach within the repeated measures sequential explanatory design, follow-up explanations model. Therefore, future efforts should focus on:

1. examining preservice teachers' levels of self-efficacy and anxiety about the teaching practicum based on the National Teaching Standards.
2. considering other variables with self-efficacy in a regression model to gauge the predictive power on teaching anxiety.
3. examining the relationship between preservice teachers' self-efficacy and their instructional effectiveness.
4. the extent to which anxiety is likely to reduce teaching effectiveness.
5. analysing preservice teachers' level of self-efficacy and anxiety using

Winsteps (Rasch analysis).

6. teachers' self-efficacy and students' academic achievement during the off-campus teaching practice.
7. professional qualification of teaching practice supervisors and preservice teachers' self-efficacy and anxiety about teaching.
8. formulating a unified model in examining the effect of preservice teachers' self-efficacy on their anxiety about the teaching practicum.

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APPENDICES

APPENDIX A

Teacher Sense of Efficacy Scale (TSES)

Dear Respondent,

This questionnaire is to help the researcher to collect data on preservice teachers' self-efficacy and anxiety about the on-campus teaching practice. 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.

Demography of Preservice Teachers

Please, write or put a check mark **(√)** where appropriate in the box corresponding to your choice concerning each statement.

1. **Code** [ ]
2. Registration Number (Index Number): ……..
3. Telephone Number: ……
4. Sex: Male [ ] Female [ ]
5. Age: 20-22yrs [ ] 23-25yrs [ ] 26-28yrs [ ]
   29-31yrs [ ] 32-34yrs [ ]
   Others (please, specify): ……..
6. I have ever taught in a school Yes [ ] No [ ]
7. I have a desire to take teaching as a career Yes [ ] No [ ]

Self-Efficacy about On-Campus Teaching Practice

S/N	Self-Efficacy Subscales	Never	Rarely	Moderately	Much	Very much
		1	2	3	4	5
IS1	I can use a variety of assessment strategies.					
IS2	I can provide an alternative explanation or example when					

	students are confused.					
IS3	I can craft good questions for my students.					
IS4	I can implement alternative strategies in my classroom.					
IS5	I can respond to difficult questions from my students.					
IS6	I can adjust my lessons to the proper level for each individual student.					
IS7	I can gauge student comprehension of what I have taught.					
IS8	I can provide appropriate challenges for very capable students.					
CL9	I can control disruptive behaviour in the classroom.					
CL10	I can do much to get my students to follow classroom rules.					
CL11	I can do much to calm my student who is disruptive or noisy.					
CL12	I can establish a classroom management system with each group of students.					
CL13	I can keep a few problem students from ruining an entire lesson.					
CL14	I can respond to disobedient students.					
CL15	I can make my expectation clear about student behaviour to a large extent.					
CL16	I can establish routines to keep activities running smoothly.					
SE17	I can get my students to believe that they can do well in schoolwork.					
SE18	I can help my students to value learning.					
SE19	I can motivate my students who show low interest in schoolwork.					
SE20	I can assist families in helping their children do well in school.					
SE21	I can improve the understanding of my student who is failing.					
SE22	I can help my students think critically.					
SE23	I can foster student creativity.					
SE24	I can get through to the most difficult students.					

APPENDIX B

Student Teacher Anxiety Scale (STAS)

Anxiety about On-Campus Teaching Practice

S/N	Anxiety Subscales	Never	Rarely	Moderately	Much	Very Much
		1	2	3	4	5
AE1	I am anxious about how helpful colleagues in my practice group will be.					
AE2	I am anxious about assessment by the supervisor.					
AE3	I am anxious about what lesson the supervisor would come in to see.					
AE4	I am anxious about being observed by my supervisor while teaching.					
AE5	I am anxious about how the practice teaching will go in my supervisor's eyes.					
AE6	I am anxious about getting all the paperwork done in time					
AE7	I am anxious about what my supervisor will expect.					
AE8	I am anxious about maintaining a good enough standard of preparation.					
ACC9	I am anxious about class control.					
ACC10	I am anxious about setting work at the right level for the learners.					
ACC11	I am anxious about how to give each learner the attention he/she needs without neglecting others.					
ACC12	I am anxious about whether or not my performance will be satisfactory from the point of view of my colleagues.					
APP13	I am anxious about maintaining a 'robust' approach.					
APP14	I am anxious about completing lesson plans in the required form.					
APP15	I am anxious about whether my lesson plans will be adequate.					
APP16	I am anxious about how to handle disobedience from a learner.					
ASS17	I am anxious about controlling					

	the noise level during the teaching practice.					
ASS18	I am anxious about co-operation with my colleagues during the teaching practice.					
ASS19	I am anxious about getting on with my colleagues during the teaching practice.					
ASS20	I am anxious about selecting suitable lesson content.					
ASS21	I am anxious about whether the supervisor will be happy with my teaching.					
AUL22	I am anxious about how the supervisor will react to one or more unsuccessful lessons if they should occur during the teaching practice.					
AUL23	I am anxious about incidents of misbehaviour in class during the teaching practice.					
AUL24	I am anxious about how my colleagues will react to one or more unsuccessful lessons if they should occur during the teaching practice.					
AUL25	I am anxious about possible problems in the class with individual disruptive learners during the teaching practice.					
AUL26	I am anxious about whether I will cover the material adequately.					

APPENDIX C

Follow-up Focus Group Discussion (FFGD) Guide

SECTION A: Preparatory Issues

Welcome Address
Introduction of moderator and field note-taker
Objective for Discussion
Ground rules
Estimated Duration for Discussion

SECTION B: Reason for PMTs' Teaching Self-efficacy

1. Why do you believe in yourself that you can teach?

SECTION C: Reason for PMTs' Teaching Anxiety

2. Why was your anxiety high before the on-campus teaching?
3. Supervision anxiety stood again as the hottest issue after the on-campus teaching practice. What is happening in the supervision that is making you anxious?
4. Why is professional preparation anxiety high after the on-campus teaching practice?

SECTION D: PMTs' Perspectives on Self-efficacy before and after the ONCTP

5. How do you see your level of efficacy before and after the on-campus teaching practice?

SECTION E: Reason for the Possibility of High Self-efficacy and Anxiety

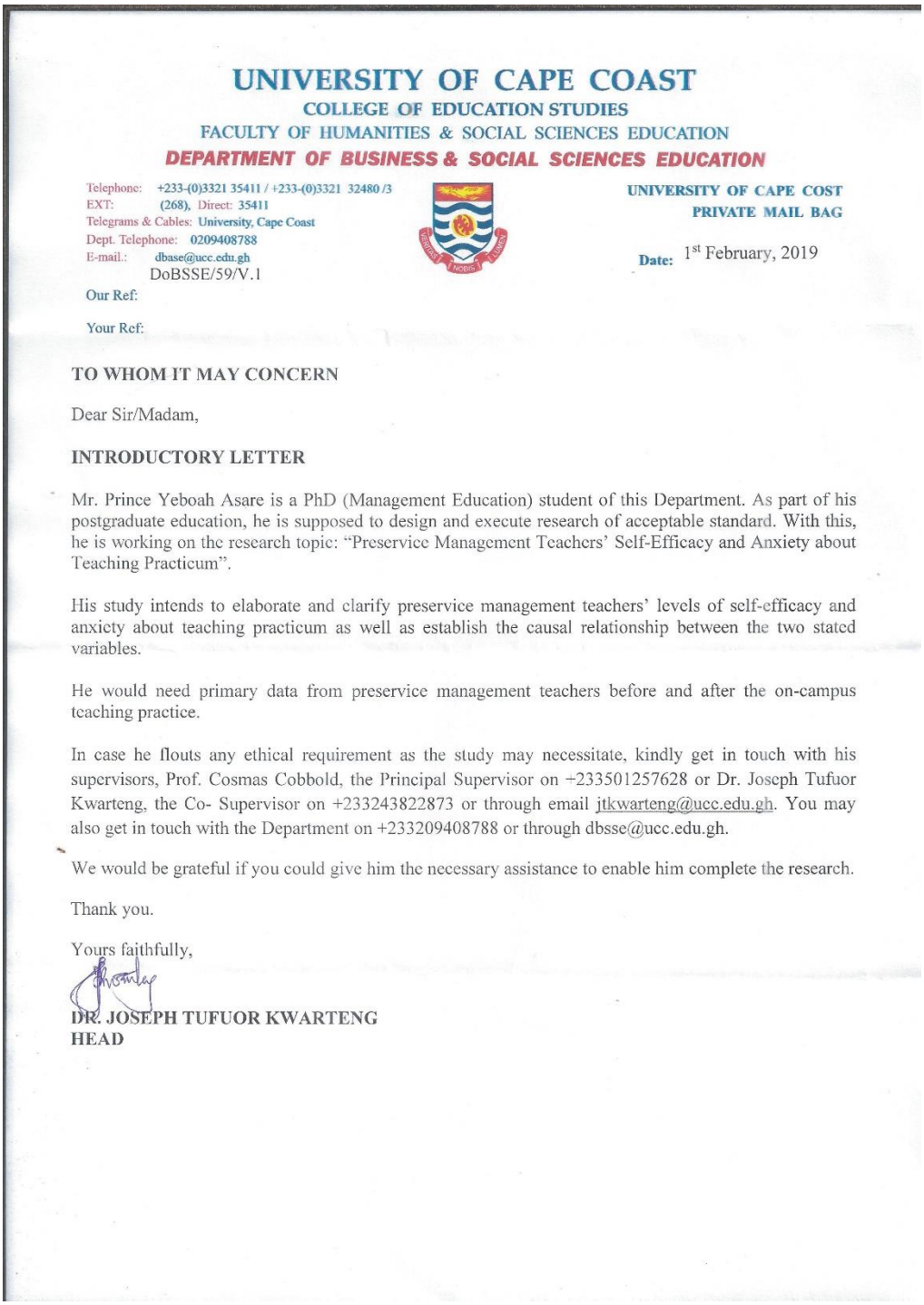
6. Is it possible for a student-teacher to be highly efficacious and highly anxious?

SECTION F: Concluding Remarks

7. Kindly submit your concluding remarks.

APPENDIX D

Introductory Letter



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UNIVERSITY OF CAPE COST
PRIVATE MAIL BAG

Our Ref: DoBSSE/59/V.1

Your Ref:

Date: 1st February, 2019

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

INTRODUCTORY LETTER

Mr. Prince Yeboah Asare is a PhD (Management Education) student of this Department. As part of his postgraduate education, he is supposed to design and execute research of acceptable standard. With this, he is working on the research topic: "Preservice Management Teachers' Self-Efficacy and Anxiety about Teaching Practicum".

His study intends to elaborate and clarify preservice management teachers' levels of self-efficacy and anxiety about teaching practicum as well as establish the causal relationship between the two stated variables.

He would need primary data from preservice management teachers before and after the on-campus teaching practice.

In case he flouts any ethical requirement as the study may necessitate, kindly get in touch with his supervisors, Prof. Cosmas Cobbold, the Principal Supervisor on +233501257628 or Dr. Joseph Tufuor Kwarteng, the Co- Supervisor on +233243822873 or through email jtkwarteng@ucc.edu.gh. You may also get in touch with the Department on +233209408788 or through dbsse@ucc.edu.gh.

We would be grateful if you could give him the necessary assistance to enable him complete the research.

Thank you.

Yours faithfully,

DR. JOSEPH TUFUOR KWARTENG
HEAD

APPENDIX E

Consent Form

Dear Valued Respondent,

I am conducting a research study and would like to ask for your assistance. If you are willing to participate, it should take about 10-15 minutes of your time. I would be most grateful if you could complete the attached questionnaire which seeks to assess your **levels of self-efficacy and anxiety about the on-campus teaching practice**.

You are assured of anonymity of the responses you give and that no personal information about you is sought for any use whatsoever.

Please, write in your **code** in the space provided below if you agree to participate in the study.

Thank you.

……..

APPENDIX F

Interview Transcript

Participants: Kaka; Lisa; Pinto; Guru; Jona; Wata; Josi; and Mona

Mod: Moderator

QUESTIONS AND RESPONSES	
Mod	Why do you believe in yourself that you can teach?
Kaka	I believe in myself that I can teach because I started teaching even when I completed SHS before going to the training college. So you see, I got that zeal for teaching from my father because even when I was a small boy he taught me, I started reading and writing before I started schooling. So, I have that passion for teaching from my father. So I could see is in the blood. Even when I was teaching them before I was leaving for my further studies, my children were crying ah sir where are you going, we do not want you to go so meaning when am teaching them they love it . So you see, I have that passion for teaching.
Mod	So with you it is the passion that you have for teaching that gives you the enablement to teach?
Kaka	Yeah because I believe I have that knowledge and I can impart that knowledge in somebody. Because I could remember when I was at certain area, a certain lady she was doing her internship oh sir! That lady she was not like that so I was like why oh sir. So I realised that she was one of my students that I taught. So I have that prestige and that prestige is still there, I have taught this person before. Some of them are now in military so it is great prestige to be a teacher.
Lisa	Ohk sir, this teaching field is not something that I personally had an interest in but due to circumstances I found myself in. So I think since I have myself in I have to go by it and then do what is being expected.
Mod	What gives you the enablement to teach?
Lisa	The exposure I had with the kids, that was the very first time I stepped my foot into the classroom to go and teach. That relationship between myself and the student drew me much closer to teaching and my passion for it.
Pinto	I remember when the headmaster of St Peters preparatory school where I was teaching and I think last three years ago. The headmaster showed me to my room to the class where I will teach thus Basic 5. We got there and I was expecting this man to go away but this man was standing there for me to start teaching so I thought I will find myself wanting and like I will be shaking in front of the students but I stood there and started teaching without finding myself wanting. I was able to speak confidently to the students and it was like I have taught before. So I wasn't finding myself wanting so much.
Mod	So it is your experience that gave you the opportunity to teach very well.
Pinto	Naa, it was my first time in teaching.
Mod	So what make you feel that you can teach? Because you have had

	that first time teaching before you started the On-Campus teaching.
Pinto	Yes
Mod	So it means there is an experience you brought to the on-campus teaching?
Pinto	Yes
Mod	So that is a premise in you believing in yourself that you can teach?
Pinto	Yes
Guru	We all know that teaching is in two categories, as an art and as a science. Art is naturally people who are natural and can teach very well and the science deals with the skills that people go through. Now I want to make this scenario for us to understand. Though I have not taught in a formal setting before with this formal skills, when I was in SHS, I was teaching my own class elective maths which was the whole business block throughout that particular term. I was surprised by the grade that people had. It was a shock to the elective math teacher himself. So because of that natural art of teaching in me, I think I have that skill in teaching.
Mod	So you have introduced another issue, as in you are naturally gifted.
Guru	Yes
Mod	So that was in teaching elective mathematics. In relating it to Business Management, do you still think this persist that you are naturally gifted to teach Business Management?
Guru	Yes, please
Jona	You see when I completed SHS for the first time which was on Wednesday so by next Monday a school called me to come and teach but when I went I was sent to K.G 2 to go and teach. But at the end of the term, the teachers came to me telling me that in fact you are a good teacher because our kids are performing, some words that they are able to spell, formally it wasn't like that. So they promoted me to go and teach in the JHS. So when I went there too I was able to put in so many procedures in the teaching. Like I introduce so many things in the school like cadet. So people were getting interested in my teaching. So anytime I go to class I make sure that I will create some jokes and other things so that people will get interest in my teaching. So when I was teaching I saw that there is something in me which when I introduce it my teaching will make my students very focused.
Mod	I realised you have had some kind of exposure, where from this exposure?
Jona	Actually, I learnt it from a pastor of mine. This pastor, formally he was our Sunday school teacher but whenever he comes to Sunday school to teach, he will tell us that whatever he is coming to teach we have it already. So we should make it a point that we know it already just that he is coming to elaborate on it. So this man when he comes to class the way he will joke with us, he will make himself part of the class. So I learnt it that way. I develop love for teaching that anytime I am also going to be a teacher one day.
Mod	You emphasised on vicarious experience or by observing someone teach in learning the art and science of teaching.
Wata	I believe in myself that I could teach during my SHS days when I sat

	my fellow mates down and taught them certain topics. The way they reacted: sitting down attentively and nodding their heads asking questions which I answered to their satisfaction made me believed that I can be a teacher one day and I know I can do it and do it well.
Mod	So are you saying that you are also naturally gifted?
Wata	Yes
Mod	Because at that time you have not had any formal training?
Wata	Exactly sir
Pinto	I want to say that I like talking a lot so I realised that teaching profession can fit me very well.
Mod	So are suggesting that those who talk a lot are efficacious?
Pinto	Yes (emphasised several times when question was repeated)
Mod	Could methods of teaching and content taught in the university influence efficacy? In terms of how you have been taught in class based on the content and pedagogy through Level 100 to Level 300.
Kaka	Sir most at times, if you get to the classroom, classroom determines what you should do. Because most at times you prepare the lesson note (intercepted).
Mod	Kindly come back to your lectures. What you have been taught in content and pedagogy through Level 100 and 300, if they have also influenced your self-efficacy?
Kaka	Yes, most of them they influences that because if you look at it when you are going, you want teach they give direction. How you go about your content with the methodology that you are going to adopt in the classroom. Hahaha so I could say they influence our way of teaching in the classroom. They even give you the way you go about introducing your lesson and if the students do not understand, you know which other methods you should use. So I can say the content and method we did over here they do a lot in our teaching.
Mod	What is making you efficacious in terms of methods or pedagogy?
Kaka	Sir, most at times, we are been limited to the use of our lesson notes because they say that whatever you are about to teach must be in lesson note. And you must go about it according to what you wrote in the lesson note which most at times shouldn't be the case. Earlier on I said that you go to the class and the classroom will tell you what you should do. So you wouldn't need the lesson note though your lesson not is there, you break time like you are using 45 minutes for a particular lesson. You might even use more than that 45 minutes. So I can say we are most at times limited to our lesson note which shouldn't be the case.
Mod	Yes I understand you but let's try and get the issues very clear. Now we have focus in the classroom. You are in a classroom and you have been taught, you go for management courses, human resource management and all that and they are found in SHS syllabus. You have also been taught pedagogy, methods of teaching, curriculum, principles, practice and all that. Normally these courses that you have gone through are to prepare you for teaching. Now we are focusing on the pedagogical ones thus if the curriculum courses taught have really prepared you to teach. If they have how have they prepared you to teach?

Jona	Talking about the methods that we use in the classroom, since we came to this school, I can say that it has helped us also. Me per se it has helped me a lot. Talking about how to introduce your lesson to your pupil. So me I have learnt so many ways of introducing my lesson to my pupil whenever I get the opportunity to teach and also talking about how to present the lesson as a whole the skills that you put in place to make the students also participate in the lesson. All these things have helped me. Also, classroom management, when a student is coming outside the classroom, how you have to pay attention and all those things, evaluating the students understanding of the lesson and also making the students part of the classroom activities. They have all helped me.
Josi	With my experience in teaching and as compared to this place, I have learnt a whole lot of things. Because here, when we came the way we even frame our questions when we want to ask students questions was different from what we used to do before coming here. When I was teaching before coming here, some time we repeat people's responses. We don't know that it shouldn't be done. Those kind of things shouldn't be done. But when we came here we were taught that we are not supposed to repeat people's responses. So all these things have help us in such a way that when now we go back to teach we will not repeat some of these mistakes again.
Lisa	Ok to add to what Josi said I have also had personal experience from the pedagogical skills that we were taught in class. For instance, I have been influenced by the study that we had pertaining to how a teacher has to dress to class. Because at first I was contemplating on how to dress to class as a teacher but my knowledge in methods of teaching management as a management teacher has helped to know the kind of dresses that I can take to class as a management female teacher. Yes, so I think this one has also influenced my teaching efficacy.
Mod	How has your dressing enhanced your ability to teach?
Lisa	Sir, talking about dressing enhancing my ability to teach, you see if you are not comfortable with the dress that you are wearing, when you go to class, trust me you will be confused with whatever you are going to teach.
Kaka	It is true that your dressing can also influence your teaching and I remember when we were doing on campus teaching, one of our lecturers supervisors told us that then she was doing her practice at a boy's school and she likes dressing that kind of high dresses. So it was not easy for her then because the guys will be saying a lot of things about her so it made her uneasy. So I believe even the backbiting from the students alone will make you uneasy in the classroom so it is good you dress nicely before we teach in our classrooms or instruction.
Mona	I have the passion to teach and if I teach I want the students to understand. I don't teach for teaching seek. So as we were introduced to special education I learnt that all of us have individual differences. Some people are slow learners, some are fast, so when am teaching I have time, I have to take my time because previously when am

teaching and you are not getting it I think you are wasting my time but because of special education I have time for everyone. This makes me feel that I can teach for students to understand very well.

Key efficacy issues raised

- Naturally gifted.
- Vicarious experience
- Teaching experience
- Dressing
- Pedagogical courses.
- Passion
- Content courses

Ranked Sources of Efficacy

1. Passion
2. Naturally gifted
3. Teaching experience
4. Pedagogical courses
5. Content courses
6. By vicarious experience
7. Dressing

Mod Why are pedagogical and content courses ranked as 4 and 5 and passion ranked as 1 on the chart?

Jona Looking at teaching if you don't have passion for the work you can't teach it well. So any teacher who has passion for teaching can teach very well. So if you can teach very well or you know the content and you don't have passion for it even you going to the classroom you will think that it is a curse or something like it is a pressure being placed on you. So most of the teachers they just come to the class to teach not because they want to teach but to satisfy their selfish ambition like get salaries out of it at the end of a month. But if you have passion for the work you can do it massively with all your heart.

Mod Can you explain why pedagogy and content courses were placed at 4 and 5?

Jona Ok for me with the ranking that we have done here when you have passion then there is the need for you to be naturally gifted. So when you have passion, talent, then teaching experience comes before you will go and consider the content that you want to teach and then the skills that you will apply to the content so that the learner will understand whatever you are teaching.

Guru I support what passion has been ranked as number one because in actual sense also means natural booster for a particular thing to be done. For instance, I had a teacher way back in SHS, a core maths teacher, the man just loves to teach not because he is being paid for it but he loves to teach. Sometimes, he will teach a particular topic and the whole class, only one person understands it. If it were to be somebody who is paid for teaching he would have left and go but this man will go and come back with new strategies and how to make us understand the content very well and that is passion, love for the job. If you are doing something and there is no love for it, I tell you it is Cos 90.

Mod Can you also explain why pedagogy and content were placed at 4

and 5 respectively?

Guru Ok, so pedagogy is talking about the methods, how to make the teaching understandable to your people and the content is like you being informed with the right information to give out to your people so if you don't have the desire to teach what will make you go ahead for more skills for the students to understand whatever you are teaching, you understand. So before you can go for the methods and content and everything, you must first have the love and passion for it before all these things will come in. So that is why pedagogy is at number 4 and content is number 5.

Mod So why is pedagogy not placed at 3 and teaching experience as 4?

Kaka Sir naturally I can say in our various homes we teach, so teaching even starts from the house so we already have the experience from the house because you have a sister in the house whom you assist in learning, so you are teaching. So from there you already have the experience. You have the passion for teaching, you that kind of love for it. So with the experience you have for it, and then to talk about you are naturally gifted that is number 2. You have the passion and then you are gifted naturally. So from there the experience that you have from the house is number 3 over there. So now that we have that experience, so how am I going to apply this in another domain? So that is where we come to pedagogy. Then no 4 which is the content knowledge. So, after having the experience over there and then you have the method of applying it in the classroom. Now, you now come for the content, what am I going to teach. So I will say the way they have been arranged over there is in order.

Lisa OK Sir I stand on the protocol raised for the passion, naturally gifted and the teaching experience as it has been raised in hierarchical order. But I want to talk about the pedagogical skills and the content courses. You see off late we teach because there is no work. Most of us teach because there is no work and find teaching as something that even if you don't get public school 'koraaa' (at all) you will get private school to teach. Here is the case we have all studied management and we are being trained to be management teachers. But here is the case that we are even going for off-campus and this person is going to teach ICT, going to teach Economics, this is going to teach management. So if you don't have passion for teaching, if you are not experienced enough and if you are not naturally gifted, I don't think you being trained as a management teacher you will agree that okay then I will go and teach Econs.

Mod So are you saying that the pedagogical and content courses being taught at the University are not making you to rank them as one or two or three or you think it not necessary to rank them, your basis for the ranking.

Lisa We have been trained using the pedagogies in teaching management that was the main programme that we came here for, pedagogy and content knowledge in teaching management. But at end we end up teaching ICT, we end up teaching Economics because there are no vacancies for management teachers. So if you don't have passion for it you cannot do it.

Pinto	The pedagogical courses and content courses are very necessary. When you go through these courses you get everything on point but if you don't have the passion you will go and stand in front of the students and in one or two weeks you will be bored with the profession. So they are very necessary but in order to be confident in order to enjoy what you are doing as a teacher you have to get the passion for the job.
Josi	We all know that the pedagogical courses and content courses are very important but people go through these training but when they go to the field we still experience poor performances in our education system. But someone who is having the passion although he has not even had enough content and pedagogy courses he can use that passion and the naturally gifted gift that he have to teach a particular subject for someone to understand and do well.
Mod	So looking at the ranking and the argument you just made will you still endorse pedagogical and content courses taught in this University as relevant?
Josi	They are relevant.
Mod	Why are they relevant?
Josi	They are relevant because without them you cannot deliver very well.
Guru	I think they are relevant because it will make you be a complete teacher. As I said earlier teaching is in two folds; art and science. The science will make you get all these skills, the content, how to apply all these things and the art you may not have all these things, you may have the passion, naturally gifted and you have some little experience but how to apply and make people to understand, how to endow yourself with the content and you may not have it this particular aspect it will help you to get that content to teach.
Jona	The content and then the pedagogical are very important in the sense that when you talk about the pedagogy it will allow you to know the methods and then the procedures' that you will take during teaching and then the content aspect will tell you the real thing that you are going to teach. So I think since the University is running all these courses it is helpful to the students because at end of it they are going to know their methods and what they are going to teach in particular.
Mona	The content and pedagogical courses they are relevant but if you go to our various schools you will not see any teacher coming to class with lesson note but we only do it here for the marks because we have supervisors coming to supervise in most of our aids we bring to classes. So we all do these to please them after that does it. But when we have the passion, as for that one, no one can take it because you have the passion, you love the work, you are naturally gifted you go class to do whatever you have to do accordingly. And with the pedagogical knowledge and the content that you have, because of the passion you would like to maintain that but if you don't have the passion you will go to class and do whatever you want and then go out because nobody is supervising you at the end you go for your money.
Mod	If the content courses are not taught very well do you think you can transact business in the classroom very well as far as the teaching of

management is concerned.

Mona That is why I said that they are relevant but not as the passion.

Mod So per the submissions made by the cohort seem to show that they are less efficacious in relation to instructional strategies that they employed in the classroom because when we compared their efficacy at three levels in relation to instructional strategies, classroom management and students engagement, instructional strategies were ranked as the least. Can the panel explain why it is so?

Jona Please when it comes to ICT and then we are looking at developing an information system, you could see that before information system can be classified as succeeding its purpose it means it must be satisfied by the user. In this sense we can see that students we are the consumers of whatever the teacher is teaching in the classroom. So if a student is not being participated or being engaged in the class, that means that whatever the teacher is teaching is nothing. Without the student the teacher is teaching nothing. So when the student is being part of whatever is taught in the classroom, it makes everything nice than you the teacher taking all the… you can take all the strategies that you want to take but if you don't involve the students in your lesson, the lesson can never be absorbed well.

Guru I think that instructional strategies was ranked the lowest because of ermm lack of teaching experience. Classroom management and student engagement would come up when somebody has passion and is naturally gifted. When it comes to the methods and the content aspects, we need an aspect of experience. Now most of us have been taught this methods and everything but some also lack experience. So after the off-campus that is where they will appreciate the pedagogical content and course, whatever thing they have done so far. So experience is the key factor that is the main reason why instructional strategies is ranked low because of lack of experience.

Mod Guru, can you clarify your answer.

Guru I was saying that according to the results that we had, you realised that instructional strategies is ranked the lowest as compared to classroom management and student engagement. I am saying that is the fact of the lack of teaching experiences. Because when a teaching is having passion, is naturally gifted, that teacher would be able to control classroom activities. He will try his best to engage students in whatever thing that he is doing. But if this same teacher lack some kind of experiences, he wouldn't find it easy trying to make up with the methods and how to make students understand whatever he is teaching. For instance all of us here have been taught this content and pedagogical skills of teaching but till now some people really do not really appreciate it until they go for off campus and they come back because of the experience that they have had with the students themselves. Experience is the key factor that is why instructional strategies is rank low.

Mod So would you then say that if we look at the courses that provide that kind of knowledge in the instructional strategies, will you see those courses to be working, that you only need the experience to materialise your knowledge in instructional strategies?

Guru	Yes**,** we need experience for instance until we engage ourselves in on-campus these methods and those stuffs it was like a theory thing. So now this on-campus has given us the ability to appreciate whatever thing that has been taught and off-campus would be an addition to it. After, the off-campus you will see how people will love it because they would have experienced it with whatever thing that has been taught.
Kaka	Sir, before lesson starts, you must make sure that your classroom is very conducive. So classroom management over here, you must put your class in order before you even think of instructional strategies. Then from there you must also know the psychological behaviour of your students at that moment whether they are fit for the lesson at that moment before you think of the instructional strategies over here. So in that case you must make sure that your classroom is in order, making sure that your students are fit for the study before you come to your instructional strategies. So I believe these are ranked higher than this one (instructional strategies) because these two are very important for the first thing before this one comes in.
Mod	Kaka, you seem to have change the argument. Come again noting that student engagement was one, classroom management was two and instructional strategies three in that order.
Kaka	Students over here they are the class, so you must make sure that the class is in order and the class being in order over there we are talking about the students. So making sure that your students are ready in the classroom, then now you come to how your class is to be arranged. For instance are we going to use the cyclical, the oval and then the row classroom? So if you are going to use that one, so you arrange it in that order before you think of the instructional strategies. So that is the reason why student engagement come first before the classroom management before you think of what to teach for that day.
Josi	I think the reason why instructional strategies is lower is that if you teaching and the students are not involve and may be some are concentrating somewhere, no matter the strategy that you use they well still not get what you are doing because some of them their minds are not there whiles you are think you are doing everything just to bring their mind to the class for them to understand. So you need to engage the class for their attention to be with you so that no matter the strategy that you use so that they can understand. So thus why student engagement is ranked higher than the instructional strategies
Mod	Don't you think that the instructional strategies you employ will also engage the students? Because if you are teaching and probably the sort of questions you are asking are not questions that should make students think. Because if students are highly engaged and highly involved they operate at higher level of cognition. So if you are asking questions at a lower level, don't you think it is an antidote for a person not to pay attention because you have challenging students in the class? And if you are teaching that is below the challenging students based on the questions you are asking, don't you think that

those students would not also be engaged that they will also be switched off.

Kaka Sir that is why am saying that you must make sure your students are attentive to what you want to do. Before you even think of what to teach. So if you make sure that your students are ready for the class you wouldn't have any problem of who is listening and who is not listening. Because you know they are all listening to what you are teaching. So making sure the class is in order, then you now introduce your lesson, that is you now applying your instructional strategies. So I can say that the students' engagement over here doesn't have anything to do with instructional strategies at that moment. It will be the last aspect of the arrangement here.

Mod Seven respondents support the argument made by Kaka that instructional strategies cannot be applied in the vacuum hence students' engagement and classroom management are ranked high.

Mod What becomes the basis of instructional strategies? Because here we looking at using a variety of assessment strategies, crafting good questions, implementing alternatives instructional strategies in a classroom, responding to student difficult questions, providing appropriation challenges for capable students. If we are not able to do these thing our efficacy is a bit low in this. Is it not a bit of a problem?

Lisa Sir you see teaching is something that has to be practical and we are being train as teacher is to go out there and teach. But here is the case that the University is providing us with a theoretical something of which we are all aiming at learn get your 'A' and go. So when you go to the field it is left with you and your God and the little that you remember from whatever you were taught. So I think if there could be a little or a lengthy practical on it, it will be ok. Because you see we have two teachers. We have training college teachers and we have university teachers (they call us professional teachers) and they call this people trained teachers. Before that we have to find out the difference between being a professional teacher and then a trained teacher. If they should put the two of us on the same scale and they should rank us, I can clearly tell you that I don't even know how to prepare the continuous assessment. I have been taught theoretical even it was read not written for me to see and practice. Here is the case my colleague is a trained teacher from Abetifi trained college centre he had a full one year training session, with this I think he has more experience so when he goes to the classroom he will be able to engage the pupil, manage a class more than what we the professional teachers will do, the supposed professional teachers. Let's take two courses here at a moment. We did on-campus as a course not as a practical something but then as a course and we did educational statistics where it talks about more of our entering the continuous assessment, marking and other stuff. We have benefited from the on-campus teaching practice as a course in the sense that we know how to prepare a lesson note, we know how to introduce a topic, we know how to evaluate, we know how to ask questions. Move on to the other course that is assessment or educational statistics, I don't know how

to enter the register, I don't know how to enter the continuous assessment, I don't know how to find the 30% or the 40% classroom assessment and then the 70% (for exams), I don't know (stressed). So if we should compare these two contents, they are far different. This one was practical and I had experience on how to introduce a topic but this is also another educational course I only learnt the theoretical aspect.

Mod We clearly see from the responses provided by Lisa that there is a problem in relation to some of the content course since instructional strategies are concerned and assessment is also a key issue.

Guru OH! Yeah if we could try to make some little evaluation of ourselves in Level 300 you realised that after we were taught methods of teaching management, the thing was normal we have written exams we have passed but until we had this on-campus teaching, I tell you some people wouldn't have personally sat down to think about how to make teaching practical. It was made theory, oh you see you start like this then then then they are going. But when we went for the on-campus, the lecturers or supervisors made us to feel the thing. They said ah this is how you are supposed to do it though we have been taught in the theoretical aspect, the practical will make you enjoy the theory.

Mod Why was your anxiety high before the on- campus teaching?

Kaka Sir, even this on- campus teaching, some of your colleagues will tell you that they are going to drag your feet in the classroom. So already you have that anxiety and then you are fighting for your marks and so you want to make your 'A' or 'B+'. So as you enter the classroom you are afraid. Even the way some supervisors will address you why this and that 'you feel so intimidated. So that is why I am very anxious. I am very anxious when it comes to marks. Because I want to make my nice class over here to further my education. So since I want to make my grade and further my education it makes me tensed even in preparing lesson note and TLM. You want to do everything in order to make your 'A' or' B+'. So the anxiety is there.

Guru The anxiety was high because of lack of experience. Some have never in their life taught before because they never had any plan of coming to teach but due to some counselling that is why they are in the teaching field. So because of lack of experience they have that fear that if I don't teach well, I have not taught before, how do I go about stuffs like that? That is point one. The point two is when somebody is supervising you to grade you it is not easy. You try your best to make sure they are getting it, you are failing because the supervisor is looking at your weakness. In my case, the supervisors, they were not telling us the strength only the weakness, oh you didn't do this one well. Next time when you come don't… *tension no ato woso* (tensed at that moment) you understand.

Pinto Mine, I will also talk about experience and if you have stopped doing something for a very long time and you coming to start over again, there is that kind of anxiety because we have taught before but is been long time we taught. You are coming to teach will I be applauded for what they did to me when I was teaching some time ago. Will I get

the same thing, ahaa! So there is that kind of anxiety. The second thing is the marks. The marks is very important. So when you are teaching you make sure that I don't do this mistake, I don't do this mistake, I don't do this mistake. Everything should be on point. So there is that kind of anxiety when you are teaching.

Mod This confirms that marks and break in teaching experience cause anxiety.

Josi The reason why the anxiety is high is that with my experience in teaching at the private school, there was nothing like doing introduction or whatever, it was just like chew and pour. You just memorise the thing and when you go to class you teach and go but when you come here, you learn to follow some particular steps. You have to introduce, you have do this and all sort of things so it makes you anxious; how will I fix in this because you are not used to it. It is something new to you so you have to adjust to the new thing so it makes also the person anxious and it raise a lot of anxiety.

Mod Initially you indicated that you are highly efficacious in the sense that you can teach following pedagogical steps, so why following through these steps again creating anxiety?

Josi There is a difference when you are teaching and you are being supervised. Is different from when you are teaching and you are not being supervised. When you are teaching to be supervised you are doing it for marks, so you will be very careful. Especially, when teaching and delivering you are very careful not to commit certain errors or mistakes. But when you are not doing it under any supervision even when you do some of those things you don't care you just move on and just deliver.

Mod Supervision has been raised as an issue creating anxiety because there is someone looking at you with an opening eye trying to look for fault and I think it has been nodded by all the participants and that create that kind of anxiety in them.

Lisa Sir please I think shyness is one. There could be a situation whereby someone has never spoken infront of, let's say not more than 20 people. So when the number increases it brings that tension. Especially when the person is an introvert, a person not sociable, it brings some kind of tension when the person is teaching.

Mod The response given by Lisa seems to connote that extroverts are less anxious in their teaching.

Lisa No, you see when we started with the whole process we were saying that teaching are for those who like talking but not all those who like talking that are teachers. There are some introverts who can teach very well and there are some extrovert who cannot teach very well because they are even scared of public speaking. What am I trying to say is that when the number increases it becomes a hell.

Mod Class size and shyness are causes of anxiety.

Jona What I will say is that sometimes your confidence level is one of the key issue that can influence your anxiety in a class. Some people don't have that confident to stand before people and then talk. So if your confident level is low probably you are going to face that kind of anxiety whenever you happen to teach. Also, fear of being

accepted by the students or supervisor. You see most students have been taught by different teachers, so they have the experience of most of the teachers. So you being a new teacher if you are going to teach, you will fear that these students what am going to teach them am I going to fall within their category? So that is another factor. The last thing I want to talk about is the gender. You see some of us or most people assuming you are a male and you are going to teach in the single sex school like females or mixed schools where male and female are balanced, then you could see that if you are going to teach, like me being a male and going to teach in a female school, sometimes the anxiety level will be higher. Because you see the female have the perception that we have about female is that they talk a lot so the moment you are a male and you are in their mist things changes, and it natural.

Mod So are these things persisting in relation to on-campus teaching practice?

Jona Yeah, it persist.

Mod How?

Jona Yeah sometimes you have some female friends and then when you go to class and meet them before you are going to teach you will be having it in your mind that ah am I going to meet these people in my class? So when you go there, you see the ladies if you are teaching, you are a male and you are teaching and the female is looking at your face in some way you see the females sometimes when you are teaching then they will be talking, laughing small small. So you would be thinking these people are they laughing at me or something like that but when it comes to the stands where you are only males you can do whatever you like and then you don't check.

Mod So you are raising issue in relation to the nature of student as a way of causing anxiety.

Wata Sometimes, you will meet your colleagues who have been through this on-campus teaching and to be frank with you, the remarks they (supervisors) give you, the negative remarks will make you feel like me *charley* (brother) *this thing dieer* (this teaching thing)….So let's say from the onset you are scared. So that one also demolish you and you will be like this thing I can't so is better I go stand there just say what I know and leave. So that is also part of why sometimes our anxiety is also high.

Mod Okay, can you tell us some of the things that they have been saying that demoralises you. So that at least we will know what is really happening.

Wata A colleague told me when she was going for her off-campus, when she got to the class, she started teaching and after she was done, the remarks the supervisor gave her wasn't all that sound to her. So I was like what did your supervisor say? And she was like oh whiles teaching I placed my cardboard which is the teaching material on the board. So after explaining it to the student and they all accepted it the supervisor was like next time instead of using the cardboard bring something more feasible which one can feel or touch. She was talking about 'Money' and she drew the currency denomination which was

50 cedis on the cardboard so while she was done everyone clapped and the supervisor was like next time use money, don't use this, next time do this do that. So the remarks given by the supervisor made her feel like I have failed.

Mod What other remarks demoralises you?

Kaka Sir, sometimes your colleagues or your seniors will tell you, that woman supervising you, oh then you are dead. So with that kind of perception, you have a problem already. And then I realised as my friend (Wata) was talking about it, our time one of our supervisors said you should not before I do my teaching because anything you do she makes sure you feel you haven't done anything at all. A friend of mine said that I have to finish teaching before this woman comes. So some of the supervisors are also making the work so difficult for some of us and then you don't have the kind of feeling for doing anything.

Wata Another critical issue is when you are teaching and to you, you have done everything, everything is on point and one student will just raise up his or hand and be like, Sir, I don't understand what you said so start all over again. So this means you have to use another strategy which I don't think you have enough time to do so. So listening to the remarks given by that colleague of yours, you will be like charley what is my supervisor going to say that have I performed or I did nothing at all. Because to them when you are teaching you have to make sure that everyone understands it and everyone goes in accordance with what you are teaching. So if a student is to raise his or her hand and say to you that sir I don't understand anything at all, it means what you did has no impact on them or maybe you will feel like I have failed.

Mod This seems to confirm what Kaka said. Kaka earlier said that the context in which the on-campus teaching practice is being done is not the best because there are people you already know that are there probably to create some kind of problem for you. Because this is not likely to mimic the real life situation. You also said that students merely come to frustrate you by saying start teaching all over again. This means that the context does not actually approximate the real setting and that seems to create some anxiety.

Jona I can say that your fluency in English or the language used to teach can also influence your anxiety level. If you are somebody that you are not fluent in the speaking of English and you are going to teach using English the basic language, probably when you are going it will affect you.

Mod Fluency in English language also creates anxiety.

Wata In Level 100 we were offering accounting, so our lecturer was teaching us and I think some of the students were joking or fooling around. So our lecturer just turned and the next statement was you don't worry you are coming, it will get to your on-campus you will see. So at once, there was absolute silent in the class and we were looking at each other's faces and was like charley this on-campus how, why, what is going to go on when we are having the on-campus?

Key anxiety issues raised

- Supervision
- Large class size
- Nature of students
- Fluency in English language
- Negative remarks from seniors
- Shyness
- Gender
- Negative remarks from lecturers
- Confidence
- Teaching experience
- Context

Ranked issues that cause anxiety

1. Supervision or evaluation
2. Confidence
3. Shyness
4. Class size
5. Context
6. Fluency in English
7. Teaching experience
8. Negative remarks from lecturers
9. Negative remarks from seniors
10. Nature of students
11. Gender

Mod Supervision anxiety stood again as the hottest issue. What is happening in the supervision that is making us anxious?

Wata I can say most of the supervisors give out negative remarks more than the positive ones. We the students hardly do hear positive remarks throughout. I think it is always negative remarks. You forgot to do this, why didn't you do that, next time wear this, your belt and that stuffs. Mostly, we hear negative remarks instead of positive remarks which could encourage us to do more or even better.

Guru No, they want you to be better that is why they are focusing on the negative than the positive. So you must work on the negative well so that the positive will complement whatever thing you are supposed to do.

Mod Let us vote on those who believe supervisors give negative remarks.

Guru Before we vote I think we must state reasons why it is negative. Is it because they want to intimidate you or they want you to be good? You see they cannot just do anything. So I think maybe they want you to polish well that is why they are focusing on that. May be some too intentionally do that for you to be intimidated.

Mod Guru, so why do they give negative remarks because you indicated they give negative remarks?

Guru Supervisors, the way they sometimes appear and the way they sit down to look at you not necessarily because they want to give you a negative compliment or a negative remarks but their appearance alone. You are teaching and look at somebody like that it will make you anxious (interjected).

Mod So the sort of posture they take?

Guru	Yeah
Kaka	Sir, we are doing education over here and we have different ways of evaluating students. So if lecturers (supervisors) what they know is to use negative remarks, it is intimidating and it is not even motivating (voice high). To say that they are correcting us, we have ways of correcting the negative aspect but the way they do it is so frustrating. I don't want to be personal in this issue per the on-campus that I had. So you do everything possible and what you are doing- so they say is that all you can do? It is so intimidating (voice very high). Supervisors remarks, the way they do it that is the problem. They will not teach you the right one and is so annoying.
Lisa	Sir the mere fact that we have it at the back of our mind that they are going to score us alone create anxiety. If you are there I will teach I will be okay but the fact that you are there to mark me is the problem.
Mod	So because they are there to give scores and you don't know probably the scores that they are likely to give.
Lisa	Smile nodding yes with other participants in agreement.
Jona	I will say that because of the previous comments that we here about some of the supervisors. Sir why supervision ranked highest is that before we started the on-campus, most of our senior we asked about what are some of the characters of the supervisors and they also tell us that this person if he comes to supervise you, then you are dead. The kind of comment he will be giving, so the moment we see that particular supervisor in our class, we know that oh it is not well.
Pinto	No room for positive comment. Not in my class though but that is what I heard from another class. Immediately you finish teaching then this lecturer will say negative comments, negative comments will flow. There is no room for positive comments to flow even if you really did well in some parts of the teaching.
Josi	I think the supervisors are also not helping. A times you teach something according to what is in the text book or the syllabus and the supervisor will come and say now they no more using that kind of system, now WAEC is no more using it so you should do it like this whiles the textbook is also saying another thing. So all these things also frustrate you the student because you don't know which one is which.
Mod	So if knowledge has changed do you think we should still remain on the knowledge that is not workable?
Josi	Then it should be put in the curriculum or the syllabus because that is what we are following. But if we are following what is in the syllabus and later on someone comes again that we are no more using it - I think then it should be revised.
Mod	Will you still want to pin that to the supervisors?
Josi	Yes because they should have done better because if the thing is in the syllabus that is like this, is 'A' they should follow that pattern rather than trying to bring their own kind of suggestion or what they know (emotional).
Mona	Personally, when I was teaching in the middle of the lesson, I saw that the two supervisors they were talking to each other so my confidence level just came down because they were talking to each

other so I thought they have already seen something negative that is what affected me. They should jot the thing (comment) down after they discuss but while am teaching and they are discussing I can look at them and it affects me.

Mod Mona agreed with me that supervisors create a class within a class.

Wata My supervisor made a remark that when you are teaching we should make the class lively. It shouldn't be you doing the talking alone. We should involve the students to make the class a happy one. So on my first day of teaching, I did exactly just that. I will teach a little and we will laugh a little then we will be continuing and that stuff. So I thought that's it. I have done everything. Well, when I was done what my supervisor told me was that what I did wasn't teaching but rather I was doing comedy. So imagine this kind of statement, I just felt bad. So my next teaching I just made it just authoritative. I did the talking alone, no joke, no laughter, nothing and when I was done, they were like nah this isn't how teaching should be done. We should involve the students, we should do this and I was like so how should I do it now?

Kaka Sir, we the students we are also of the view that our supervisors are our god over there so there is no way we should challenge them. It came to a time that one of my supervisors was so contradictory. Because previously she said something when one of my colleagues was teaching. But I did the same thing (what she earlier said) and she was saying it shouldn't be done that way. So I was arguing with her, it was a friend of mine who signalled me that I should stop because we ae fighting for mark here so I shouldn't challenge. So she said something the previous day, so I heard it and am complying with what she said the other day and she was saying what I was doing that particular time wasn't how it has to be done. So I said I could remember that - and that was the time when my friend signalled me. They themselves they are so contradictory.

Mod Two of the participants were made to role play on how supervisors comment on student-teachers mistakes during the teaching practicum. The mistake was a student-teacher' failure to bring money as a resource to the classroom. One acted as a supervisor giving harsh comment and the other acted as the student-teacher receiving the comment and later communicating how he felt. The student-teacher was then ask to take the role of the supervisor and provide an appropriate way of commenting on students' mistakes.

Josi You are teaching on money, is that not it? (roleplay)

Kaka Yes (roleplay)

Josi Why didn't you bring money? Everywhere you go you have money on you and you can use it in your lesson. Why didn't you just bring that money rather than using the placard? Can't you just be creative enough as a student? Should they be teaching you everything? (Voice very high) (roleplay)

Mod Kaka, how are you feeling at the moment?

Kaka Sir, I feel so intimidated. The way he spoke to me is bad, I believe it shouldn't be that way. We were taught within methods that we can bring realia to the classroom not necessary bringing the original or

	real teaching and learning materials to the classroom. Bringing money or not bringing money to the classroom is not an issue because I believe the students have money in their pocket. So if we come to the classroom I can ask the students to bring out their money, then we use it as TLM.
Mod	Kaka, assuming you are the supervisor, what would have been your comment to the student-teacher who failed to use actual money during the teaching?
Kaka	You have done well in your lesson delivery. But I will advise you anytime you come to the classroom you bring the real money to the classroom or if possible ask students to bring money to the classroom so that you use it as your teaching and learning material (low voice). (roleplay)
Mod	What did you gather from the remarks given by Kaka as a supervisor in the role play?
Jona	For me I can say that when the supervisor gives such a remark it wouldn't hurt you and it will make you feel he is giving you an advice.
Mod	So are you saying that it promotes positive emotions?
Jona	Yes
Mona	It makes you to feel good although it is a negative something but you will feel good and relax. That oh you have done well but I think you should have brought money. You would have done better. So if you go out and they (friends) ask you how was it? Oh Madam said I did well ooo but if I should have brought money it would have been best.
Mod	So you mean remarks given by Kaka as a supervisor is so relaxing, it relax the student teacher and not making him or her feel so hyper or tensed.
Mona	Yes
Mod	Why is professional preparation anxiety high after the on-campus teaching practice?
Kaka	Early on I said that most at times we solely depend on the lesson plan but you go to the classroom and the classroom will tell you what you should do. And when we are talking about corporation between the student teacher I believe if you have any problem with the lesson note preparation then some of your colleagues will try and help you do that. So by involving the colleague students in your lesson note preparation can help you have a better content knowledge about what you are going to teaching. The lesson plan should not be the only thing we depend on but the classroom should be the dictator.
Mod	If I can clearly understand, the lesson plan should not be so rigid that we cannot move away from the lesson plan and because of that students are anxious when following the lesson plan.
Kaka	Yes
Lisa	Sir, initially I raised two concerns about the lesson plan and the TLM. You see some of the topics in the management syllabus are very difficult for you to get resource materials to use in your delivery, ie the TLM. So with this at times you go to class because you don't have any tangible thing, for instance you know that you can get money, cheque book, pay-in slips and other stuffs as a practical TLM

	when you are teaching banking and money has a topic. But when it comes to the other aspects of teaching management, let me use the first chapter of management 'nature of management' or let's say 'planning', how are you going to use or what are the TLM that you are going to use to teach? If you try to do something on the cardboard and take it to your class to go and teach, the supervisors are going to tell you that but this thing you could have just written it on the board. Meanwhile, you (supervisors) also want us to bring something visible to the classroom.
Mod	If I get you right, at all cost supervisors are asking you regardless of the topic that you are teaching, you are supposed to get a teaching learning resource?
Lisa	Yes (highly stressed).
Mod	It was observed that all participants were in agreement as they shouted yes.
Josi	Concerning the teaching learning materials at times you will get placard or whatever, a nice one but when you bring it to class then the supervisor will say the writings are too small, he cannot see the writings and all sort of things. So making what you brought meaningless or useless. I don't know the size of writings they want us to ensure before they will know that this thing is visible to the class (spoke aggressively).
Wata	Sir I will say that our supervisors also compare us to other programmes who offer education. An example is when we were having our on campus, one of our supervisors was like you B.Ed. Management students you don't do well at all when you go to B.Ed. Votech, one lady was teaching about sewing machine, and she brought all the sewing machine to class and that stuff. So we were down. So what we are doing are we doing it in vain or what. Comparing us to other education student make us feel so bad.
Mod	What about professional anxiety in relation to your colleagues?
Josi	I think when we are teaching here we are supposed to teach SHS. But our colleagues, the questions that they ask, is above the questions that SHS students will ask. So at times you will see that when they ask certain questions you the teacher if you are not very careful you would be found wanting because this is not the type of questions that SHS students can ask. So it is also one challenging thing with our colleagues, how to cooperate with them.
Jona	At times too after you have taught the supervisor will ask the class to give their comment. So maybe you saw some negative thing and you talked about it, but your colleague will see that the comment you gave was like a counter attack or something like that. So he will also plan that during your time, he will do something to make you uncomfortable.
Lisa	Sir with colleague behaviour if you complain about it the supervisors will tell you that yes he or she is behaving exactly how students are going to behave in SHS. The same guy he was talking about will intentional do something while you are teaching and as you try to correct him, he will still be misbehaving like trying to exactly behave like SHS student, meanwhile not all SHS student will do that. But

even if they will do that they will regard you as a teacher but here am your colleague and am trying to behave like an SHS student. He will do it, you the student teacher correcting him, he will still be doing and after everything the comment coming here and there. Supervisor commenting about the behaviour of that particular student though, you the student teacher you corrected him, the supervisor will tell you that you will go and meet worst things over there so just be cooperative. But sir on a real note ah am a teacher oh, you are SHS student like that kind of respect is there. But because you are in university, being a colleague student you try to do excess and is bad. (Interviewee was emotional).

Mod Is it possible for a student-teacher to be highly efficacious and highly anxious?

Wata Yes
Kaka Yes
Josi Yes
Lisa Yes
Jona Yes
Mona Yes
Guru Yes
Pinto Yes

Mod All interviewees agree that 'YES' it is possible to be highly anxious and efficacious.

Mod What critical reasons can explain why a preservice teacher will be highly efficacious and highly anxious?

Kaka When the teacher is new, there is a possibility that teacher will feel anxious. Sir the anxiety comes in when you have supervisor sitting over there marking you. At that particular moment those lecturers over there are so new to you. Is not about your colleagues there because these people I know them very well I can go there and teach them without any problem. But you knowing very well that you are going to be marked and awarded a mark that is when the anxiety comes in.

Mod So even though you can teach the presence of the supervisors create anxiety.

Pinto I think I agree with what Kaka said. I quite remember when we were in SHS, this economics teacher came to tell us that a supervisor will be coming in and the following day the supervisor came and he started teaching us. There you could clearly see that everything has changed. The way he was teaching, talking, and responding to what the students were saying, everything has completely changed.

Jona I will say that previous comment made by the supervisors to those who taught initially can bring you down. Maybe you are highly efficacious but when you go and stand there because of the previous comment that the supervisors have given to your colleague will keep you down.

Mona Sir you can have the ability to teach but because you are shy and then your supervisors, their remarks bring you down, I don't think the next time you will not be very anxious even though you have taught twice The next time you will be very anxious no matter how efficacious

	you are.
Guru	We all know Asamoah Gyan to be a striker and can really score goals. But at a point in his time when we were having the world cup, because of the degree of expectation on him, the penalty he missed it. So you see he is very skilful but because of the tension placed on him; everybody was expecting him to win. Because of that he missed the penalty. So you can be both efficacious and anxious.
Mod	What created the tension for him to miss the goal?
Guru	Probably because of the weight of expectation.
Mod	All that Guru is saying is that when the supervisors expectations are too high for the student teacher then there is the likelihood that even though they see themselves to be efficacious, that anxiety will also be there.
Jona	I will ones again say that fluency is also part. Because you are going to teach a subject like management full of English and if you are not abreast with the English language, you will go there and you may think ah this people am going to teach they are University students so any error that I will make they can identify it. So I think the fluency in the English language is also another key factor.
Wata	I might have my way of teaching which I can do teaching that way very well. So when I get to class and I have to follow laid down procedures in teaching I might find it very difficult or may be it might worry me that whiles using this style I don't feel like using it. But if I were to be using this type of teaching, I think I would have done the teaching in a very perfect or reasonable manner. But me coming to learn new ways of doing it, the level of anxiety will just rise and keep on rising till I get used to that type of procedure.
Mod	How do you see your level of efficacy before and after the on-campus teaching practice?
Jona	Before we started the on-campus, I was having high efficacy and I went in to teach. When I had my first teaching the comment and the shouting that were coming at a point in time my efficacy reduced but when I decided to gather vim and then go into my next teaching, after that I saw that I can do it and as at now I see myself as highly efficacious.
Lisa	Before I was highly efficacious but then after I realised that my efficacy has come down.
Josi	Before we started the efficacy was very high but after the first teaching it came down but when we continued like the confidence level started picking up.
Pinto	I think my efficacy has increased because after the first teaching my supervisor said you did well so I think it has increased.
Guru	I began with a moderate efficacy because am not a professional teacher but after the first teaching it was almost dying because I was scared. It wasn't easy but the second one it boost up. Now I see myself as efficacious.
Kaka	Sir, personally from the beginning to the end there was no change. I saw myself efficacious throughout the teaching practice.
Mona	Before I was highly efficacious and I was anxious as well. But after that I can see that it is still high because the comment coming as she

	said that am shy but when I went surprisingly they said I was confident now. I was able to talk, my class control was okay. So with that I see that I will be able to teach.
Wata	Sir I saw teaching to be simple thing to do. It is very easy until I went for the on-campus teaching programme and currently am confused I don' know whether I can teach or not due to the comment and other remarks. So currently am confused whether am efficacious or not.
Mod	When the supervisors' expectations are too high for the student teacher there is likelihood that even though they see themselves to be efficacious that anxiety will also be there.
Mod	So listening to the interviewees it is clear that reduction in efficacy is as a result of negative comments and feedbacks that was given during the on-campus teaching practice.
Mod	Kindly submit your concluding remarks.
Kaka	Mine is lecturers' assessment; personally I don't think it is working. The reason is that ah!- the lecturers must be called upon and talked to that some of the comments they have been making is intimidating students and are not encouraging. So from there I believe there will be that kind of encouragement on this on-campus teaching and even if there will be any other way not using the colleagues students, it should be used. Using Level 100 students will be better because they just came from the SHS. Because colleagues in Level 300, some are there to drag your feet, that is what they do.
Pinto	The supervisors should go for workshop because this supervisor will say this and the other supervisor will say that. I quite remember our supervisor said that we should write 'by the end of the lesson' bra bra and a friend of mine met me and said he did write 'by the end of the lesson' and the supervisor was saying it shouldn't be that case. It should be 'at the end of the lesson'. But here is the case we will go for off-campus you don't know the kind of supervisor you are going to meet and you will be thinking that you have done the right thing by writing what one of the supervisors has told you. Let's say by writing 'by the end of the lesson', but another supervisor will come in and say 'at the end of the lesson'.
Lisa	Sir with the 'by the end of the lesson' issue, in the methods of teaching class they asked us to write it as part of our introduction, that after you introduce you should write that 'by the end of the lesson you should or be able to' but when you go to the field, that is the on-campus, the supervisors will tell you don't bring it but just say it. Don't write it in your lesson note but just say it.
Josi	I think after the on-campus teaching it takes too long for the feedback, the grade to come out, for you to know that this is my performance so that you can improved upon it when going for off-campus teaching practice. It comes late so they should let it come before so we can prepare for the off-campus.
Wata	Sir I think ermm we should be allowed to teach in a way which we can do it better for them to know that oh we can do it this way rather than that way and I think ermm it will help us a lot.
Jona	My comment is that methods of teaching management, the content itself it must be looked at because some of the lecturers will teach

	you as my colleagues were saying that this is how you write this and other person too will tell you that we don't write it this way. If not our time, we are not going to do it again, but those behind us. It should be looked at so that every lecturer who teaches methods will teach the same thing and supervisors should fit in.
Mona	I will like supervisors to be encouraged to meet students for the first time on the practice. We our supervisors met us for the first time and encouraged us that we can do it. So after that we were like eh our supervisors are good and we can teach oh but first we were scared paa (really scared).
Mod	Thank you all for coming and for your insight.

APPENDIX G

Detailed Self-Efficacy Results (Before and After ONCTP)

Before ONCTP

Items	*M*	*SD*
I can use a variety of assessment strategies.	3.67	0.88
I can provide an alternative explanation or example when students are confused.	3.92	0.90
I can craft good questions for my students.	3.81	0.86
I can implement alternative strategies in my classroom.	3.86	0.76
I can respond to difficult questions from my students.	3.63	0.81
I can adjust my lessons to the proper level for each individual student.	3.80	0.79
I can gauge student comprehension of what I have taught.	3.69	0.82
I can provide appropriate challenges for very capable students.	3.54	0.83
I can control disruptive behaviour in the classroom.	3.81	0.86
I can do much to get my students to follow classroom rules.	3.96	0.77
I can do much to calm my student who is disruptive or noisy.	3.92	0.87
I can establish a classroom management system with each group of students.	3.82	0.78
I can keep a few problem students from ruining an entire lesson.	3.66	0.86
I can respond to disobedient students.	3.77	0.94
I can make my expectation clear about student behaviour to a large extent.	3.82	0.85
I can establish routines to keep activities running smoothly.	3.92	0.83
I can get my students to believe that they can do well in schoolwork.	4.34	0.75
I can help my students to value learning.	4.39	0.76
I can motivate my students who show low interest in schoolwork.	4.13	0.93
I can assist families in helping their children do well in school.	3.91	0.88
I can improve the understanding of my student who is failing.	4.01	0.80
I can help my students think critically.	4.02	0.82
I can foster student creativity.	4.06	0.85
I can get through to the most difficult students.	3.84	0.88
Mean of Means/Average Standard Deviation	3.89	0.84

After ONCTP

Items	*M*	*SD*
I can use a variety of assessment strategies.	4.05	0.81
I can provide an alternative explanation or example when students are confused.	4.11	0.87
I can craft good questions for my students.	4.13	0.76
I can implement alternative strategies in my classroom.	4.13	0.77
I can respond to difficult questions from my students.	3.92	0.81
I can adjust my lessons to the proper level for each individual student.	4.06	0.74
I can gauge student comprehension of what I have taught.	3.97	0.74
I can provide appropriate challenges for very capable students.	3.82	0.81
I can control disruptive behaviour in the classroom.	4.08	0.80
I can do much to get my students to follow classroom rules.	4.23	0.71
I can do much to calm my student who is disruptive or noisy.	4.17	0.71
I can establish a classroom management system with each group of students.	4.11	0.75
I can keep a few problem students from ruining an entire lesson.	3.97	0.81
I can respond to disobedient students.	4.19	0.73
I can make my expectation clear about student behaviour to a large extent.	4.18	0.67
I can establish routines to keep activities running smoothly.	4.15	0.76
I can get my students to believe that they can do well in schoolwork.	4.46	0.70
I can help my students to value learning.	4.50	0.74
I can motivate my students who show low interest in schoolwork.	4.34	0.84
I can assist families in helping their children do well in school.	4.04	0.81
I can improve the understanding of my student who is failing.	4.19	0.78
I can help my students think critically.	4.11	0.76
I can foster student creativity.	4.13	0.80
I can get through to the most difficult students.	4.02	0.77
Mean of Means/Average Standard Deviation	4.13	0.77

APPENDIX H

Detailed Anxiety Results (Before and After ONCTP)

Before ONCTP

Items	*M*	*SD*
I am anxious about how helpful colleagues in my practice group will be.	2.46	1.12
I am anxious about assessment by the supervisor.	1.92	1.05
I am anxious about what lesson the supervisor would come in to see.	2.22	1.08
I am anxious about being observed by my supervisor while teaching.	2.16	1.09
I am anxious about how the practice teaching will go in my supervisor's eyes.	1.93	1.01
I am anxious about getting all the paperwork done in time	2.37	1.12
I am anxious about what my supervisor will expect.	2.04	1.02
I am anxious about maintaining a good enough standard of preparation.	2.19	1.17
I am anxious about class control.	2.40	1.14
I am anxious about setting work at the right level for the learners.	2.33	1.17
I am anxious about how to give each learner the attention he/she needs without neglecting others.	2.34	1.24
I am anxious about whether or not my performance will be satisfactory from the point of view of my colleagues.	2.24	1.06
I am anxious about maintaining a ‘robust’ approach.	2.55	1.09
I am anxious about completing lesson plans in the required form.	2.46	1.35
I am anxious about whether my lesson plans will be adequate.	2.53	1.28
I am anxious about how to handle disobedience from a learner.	2.45	1.18
I am anxious about controlling the noise level during the teaching practice.	2.60	1.20
I am anxious about co-operation with my colleagues during the teaching practice.	2.66	1.21
I am anxious about getting on with my colleagues during the teaching practice.	2.72	1.21
I am anxious about selecting suitable lesson content.	2.57	1.33
I am anxious about whether the supervisor will be happy with my teaching.	2.04	1.12

I am anxious about how the supervisor will react to one or more unsuccessful lessons if they should occur during the teaching practice.	2.04	1.05
I am anxious about incidents of misbehaviour in class during the teaching practice.	2.42	1.11
I am anxious about how my colleagues will react to one or more unsuccessful lessons if they should occur during the teaching practice.	2.34	1.04
I am anxious about possible problems in the class with individual disruptive learners during the teaching practice.	2.59	1.08
I am anxious about whether I will cover the material adequately.	2.32	1.16
Mean of Means/Average Standard Deviation	2.34	1.14

After ONCTP

Items	*M*	*SD*
I am anxious about how helpful colleagues in my practice group will be.	2.62	1.24
I am anxious about assessment by the supervisor.	2.16	1.20
I am anxious about what lesson the supervisor would come in to see.	2.45	1.19
I am anxious about being observed by my supervisor while teaching.	2.61	1.16
I am anxious about how the practice teaching will go in my supervisor's eyes.	2.29	1.14
I am anxious about getting all the paperwork done in time.	2.59	1.24
I am anxious about what my supervisor will expect.	2.14	1.07
I am anxious about maintaining a good enough standard of preparation.	2.35	1.19
I am anxious about class control.	2.60	1.24
I am anxious about setting work at the right level for the learners.	2.55	1.27
I am anxious about how to give each learner the attention he/she needs without neglecting others.	2.50	1.29
I am anxious about whether or not my performance will be satisfactory from the point of view of my colleagues.	2.50	1.16
I am anxious about maintaining a â€˜robustâ€™ approach.	2.75	1.07
I am anxious about completing lesson plans in the required form.	2.72	1.33
I am anxious about whether my lesson plans will be adequate.	2.68	1.34

I am anxious about how to handle disobedience from a learner.	2.74	1.20
I am anxious about controlling the noise level during the teaching practice.	2.85	1.36
I am anxious about co-operation with my colleagues during the teaching practice.	2.74	1.21
I am anxious about getting on with my colleagues during the teaching practice.	2.82	1.25
I am anxious about selecting suitable lesson content.	2.62	1.26
I am anxious about whether the supervisor will be happy with my teaching.	2.20	1.12
I am anxious about how the supervisor will react to one or more unsuccessful lessons if they should occur during the teaching practice.	2.24	1.12
I am anxious about incidents of misbehaviour in class during the teaching practice.	2.54	1.10
I am anxious about how my colleagues will react to one or more unsuccessful lessons if they should occur during the teaching practice.	2.72	1.07
I am anxious about possible problems in the class with individual disruptive learners during the teaching practice.	2.65	1.07
I am anxious about whether I will cover the material adequately.	2.53	1.11
Mean of Means/Average Standard Deviation	2.54	1.19