

UNIVERSITY OF EDUCATION, WINNEBA

**SCHOOL TEACHERS IN POST-COVID-19 ERA: PERCEIVED STRESS,
SENSE OF SELF EFFICACY AND QUALITY OF LIFE**

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of the requirements for the award of the degree of
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DECLARATION

STUDENT'S DECLARATION

I, FLORENCE FATIMAH ADAMS declare that this thesis, with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole, for another degree elsewhere.

SIGNATURE:

DATE:

SUPERVISORS' DECLARATION

We hereby declare that the preparation and presentation of this work was supervised in accordance with the guidelines for supervision of thesis as laid down by the University of Education, Winneba.

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DEDICATION

I dedicate this work to my dear husband Mawuli Zogbenu, my beloved mum Comfort Mante and lovely children who have been my source of hope and inspiration in all these years.



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First and foremost, I bless the name of the Most high God for His abundant grace and favour that has brought me this far. Father in Heaven, I owe this work and my very little life to you. Further, I wish to express my utmost gratitude to my supervisor Dr. Hannah E. Acquaye, for her meticulous and intellectual guidance and contributions which paved the way throughout the study. I am forever grateful Madam. I am thankful for the support of my secondary supervisor, Mr. Joshua Upoalkpajor, for his support of my work and my progress. I am equally very indebted to Mr. Mawuli Zogbenu for his academic support and guidance. His contributions have been very helpful in putting this work together.

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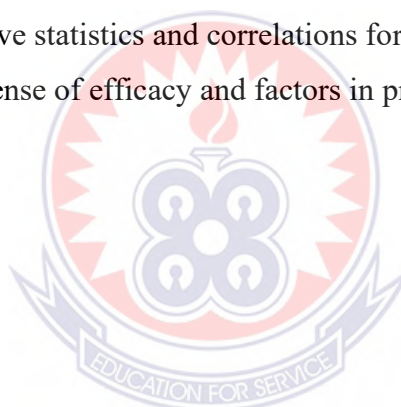
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GLOSSARY / DEFINITION OF TERMS

TERM / ACRONYM	MEANING
Basic School	For the sake of this work, basic school will mean any level in the Ghanaian education system from primary 1 to Junior high 3.
School Teachers	In this work, school teachers will mean those teachers in Ghanaian schools who have been professionally trained either in colleges of education or teaching-focused universities.
Perceived Stress	In this study, perceived stress will mean a teacher's subjective assessment of how stressful they find their life to be, especially during and immediately after the COVID-19 pandemic. This stressful feeling will be related to feeling uncertain and unstable, and will largely depend on the teacher's confidence in their ability to handle life difficulties.
Teacher sense of self efficacy	Teacher sense of self efficacy is a teacher's belief in their ability to successfully cope with tasks, obligations, and challenges related to their professional role (e.g., managing discipline in class, getting students to engage in class activities, etc.). Teacher sense of self efficacy in this study is classified as (a) efficacy in student engagement; (b) efficacy in instructional strategies; and (c) efficacy in classroom management.
Quality of life	Quality of life is an all-encompassing aspect of a teacher's life (e.g., emotional, financial, physical, environmental, spiritual, etc.). For this study, quality of life and professional quality of life will be used interchangeably to mean all the aspects

TERM / ACRONYM

MEANING

that make life complete, but more importantly, the aspect that is mostly connected with their work with students. Professional quality of life will include the compassion that comes with the work of teaching (compassion satisfaction), the exhaustion that comes with the work of teaching (compassion fatigue), and the burnout related to hearing students sad and traumatic challenges (burnout).



ABSTRACT

The purpose of this study was to examine the relationship among basic school teachers' perceived stress, teacher sense of self-efficacy, and professional quality of life. A quantitative research approach using a cross-sectional correlation design was with 113 basic school teachers who had been purposively and conveniently sampled within the Ghana Education Service's Ga South Municipality. Using the Perceived Stress Scale, Teacher Sense of Self Efficacy Scale, and Professional Quality of Life (PROQoL) Scale, results indicated that except compassion satisfaction, a factor within PROQoL, there were no significant gender differences in all other variables. Furthermore, the research findings established a significant relationship among perceived stress, compassion satisfaction, and compassion fatigue. Higher levels of perceived stress were associated with decreased compassion satisfaction and increased burnout. There was a positive relationship between efficacy in student engagement and compassion satisfaction. Based on these findings, recommendations have been made to promote the well-being of basic schoolteachers. It is suggested that stress management programs tailored to teachers' needs be developed and implemented. Fostering positive cognitive appraisals through training and support systems, promoting self-care practices, and providing resources to address burnout and secondary traumatic stress are also recommended.



CHAPTER ONE

INTRODUCTION

1.0 Overview of the Chapter

This chapter sets the stage for the whole research study. The stage is set in this particular chapter as it presents the background of the study, the research problem, the research questions and the research objectives of the study. The chapter also offers the significance of the study as well as the delimitation of the study.

1.1 Background to the Study

Towards the end of 2019, a novel viral infection, the COVID-19, began in China and was declared a public health emergency of grave concern by January 2020 because of its global effect (World Health Organization [WHO], 2020a). More than 118,000 cases had been identified in 114 countries by mid-2020 and at least, 4,291 people had been killed by the virus in Wuhan, China, by December 2019 (WHO, 2020). Ghana recorded her first two COVID-19 cases on Thursday, 13th March 2020. According to Ghana's Ministry of Health and the Health Service, the affected individuals had returned to Ghana from Norway and Turkey. The two were quickly put in isolation and contact tracing was initiated. Even before the formal announcement of the first two cases, Ghanaians were already apprehensive given the awful news on COVID-19 around the globe. Ghana's cases soon spread and affected people in almost all 16 regions of the country, with Greater Accra, Central and Ashanti regions as the hotspots for the virus.

The COVID-19 pandemic brought unprecedented challenges to the education sector worldwide (Kumar et al., 2020). The sudden shift from face-to-face to online learning, social distancing measures and increased workload significantly affected

teachers' well-being and job satisfaction (Alves et al., 2021; Ortan et al., 2021; Sokolova & Gonzalez, 2021). Teacher stress and burnout have been long-standing concerns in the education sector (Maslach & Jackson, 1981), thus the COVID-19 pandemic exacerbated these issues with teachers reporting increased stress levels due to the demands of online teaching, concerns about student learning and fear of infection (Lee, 2020). The COVID-19 pandemic affected teachers worldwide, leading to an increase in stress, decrease in self-efficacy as it concerns their profession, which invariably has led to reduced quality of life (Kumar et al., 2021). A study conducted in the Philippines found that more than half of teachers experienced moderate COVID-19 stress with females experiencing significant higher COVID-19 stress than males (Oducado et al., 2021). Another study in the United States found that teachers experienced high levels of stress and anxiety during the pandemic (Lee, 2020). Similarly, a study in Switzerland also discovered that teachers experienced increased stress and burnout due to the pandemic, including concerns about student learning, safety, and teachers' own emotional wellbeing (Hascher et al., 2021; Hascher & Mori, 2024).

Africa was not left unscathed from the pandemic. In South Africa, a study revealed that teacher stress became worse during the outbreak of the COVID-19 in rural primary schools where there were no devices or even network to use online teaching and learning (Nomtshongwana & Buka, 2023). Moving a little upwards towards the east in Ethiopia, a study on primary school teachers revealed that they experienced more stress during the pandemic, and these stressors were attributed to factors like workload, lack of control and poor working conditions (Tesfaye et al., 2023).

Locally in Ghana, a study in Tamale revealed that the pandemic caused high levels of stress and burnout, affecting teachers' mental health and well-being (Upoalkpajor & Upoalkpajor, 2020). Another study in Ghana also found that the pandemic disrupted teachers' routine, making it challenging to plan and deliver lessons. This was compounded due to the unpreparedness to handle the sudden shift to online teaching and learning, further increasing their stress and anxiety levels (Ayisi-Boateng et al., 2020). What became a new normal in this period was schools closing for several months while teachers faced challenges in adapting to the online mode of teaching and learning (Ministry of Education, 2020), affecting their self-efficacy.

Teacher self-efficacy is a teacher's belief in their ability to effectively teach and manage their classroom, and is a very critical factor in determining teacher well-being and student outcomes (see Bandura, 1997; Huber et al., 2016; Jerrim et al., 2023; Mojavezi & Tamiz, 2012). Studies have shown that teachers with high self-efficacy are better equipped to manage stress and adapt to challenging situations (Tschannen-Moran & Hoy, 2001). While teacher self-efficacy was strong in some aspects (e.g., classroom management and helping students believe they can do well at school), other aspects of teacher self-efficacy such as assisting families and motivating students were lower (Billet et al., 2023). A similar study in the US also indicated that the average teacher self-efficacy scores for both instruction and engagement were lower efficacy in instruction (Pressley et al., 2021). In the Pressley et al study, teachers who were teaching virtually had the lowest efficacy scores compared to those teaching in a hybrid or fully in-person model.

A study in Kumasi found that male and female teachers differed in relation to their instructional strategies. Female teachers on average had better instructional

strategies than male teachers. On the contrary, both male and female teachers did not differ in terms of classroom management and student engagement (Sarfo et al., 2015). Again, a study in Ashanti Mampong revealed that teacher self-efficacy has a strong and positive influence on students' motivation and enhances academic performance (Siaw et al., 2022). These teacher self efficacy indices were no different between novice and experienced teachers (Adiyiah et al., 2021) as another study in the Mampong municipality revealed no statistically significant difference between novice and experienced teachers. How teachers feel about their performance in class has some relation to their overall quality of life.

Quality of life (QOL) refers to an individual's overall satisfaction with their life, including their physical, emotional, and social well-being (WHO, 1997). Teachers' quality of life has been linked to their job satisfaction, stress levels, and self-efficacy (Klusmann et al., 2016). As the world transitions into the post-COVID-19 era, it is essential to assess the lingering effects of pandemic on teachers' wellbeing and quality of life. Research is needed to inform strategies that support teachers' mental health, self-efficacy and quality of life, which in turn will enhance their self-efficacy and boost their ability to provide quality education. Low quality of life scores was observed before the COVID-19 pandemic; these scores decreased significantly during the pandemic, especially among women and individuals under 45 years old (Lizana et al., 2021). A study conducted in Australia revealed that during COVID19, teachers experienced low levels of positive emotions, high levels of negative emotions, high levels of stress, and they reported feeling unsafe at work.

1.2 Problem Statement

The COVID-19 pandemic brought about unimaginable pressure on school teachers, resulting in heightened levels of perceived stress, diminished teacher sense

of efficacy, and compromised quality of life. Despite the vital role teachers play shaping the future of education, the impact of the pandemic on their wellbeing and instructional practices remains understudied, especially at the basic school level. The few studies done in Ghana on teacher stress, sense of efficacy and quality of life during and after COVID-19 focused on secondary school teachers with little or no attention paid to basic school teachers. The basic school teachers contribution to education cannot be overlooked since their roles are the fundamental states of education of every learner. The overall wellbeing of the basic school teacher is therefore crucial and worth investigating if we desire to have positive educational outcomes. The inability of the basic school teacher to influence teaching and learning outcomes will obviously have an effect on learners specifically and education in general.

Again, the few studies done so far mostly use the qualitative approach to explore experiences of school teachers during the COVID pandemic. The qualitative approach, while very important, focuses on just a few people. The quantitative approach that this study uses on the other hand, has the ability to assess the experiences of many more teachers, while looking at the relationships between and among multiple variables. This approach can provide evidence-based blueprints that promote teacher well being, instructional effectiveness, and sustainable education systems.

1.3 Theoretical Framework

It is worth noting that several researchers have laid the foundation for understanding and managing stress and its related effects. It is through the lens of some of the theories propounded by these scholars that stress is studied and managed both theoretically and practically. In this study, the ABC Model of Cognitive

Behavioral Therapy is the foundational theory is used as a lens to understand the variables at play in this work.

The ABC model (Ellis, 1962) is the transdiagnostic (thus, during the application, disorders in question should show significant differences from a designated control group) and the cornerstone model in Cognitive Behavioral Theory (CBT), based on which the main assumption of the theory is used to explain how beliefs are the causes of individuals' reactions (e.g., behaviors, emotions). Being able to make a distinction between the event, seen as clear and unbiased as possible, the thoughts that came to one's mind and the generated emotions and behaviors helps people to better realize that by changing their cognitions they can change the way they feel and react to a certain situation (David & Lorint, 2021). Selva (2018) explains that Albert Ellis's ABC Model is a significant part of the form of therapy that he developed, known as Rational-Emotive Behavior Therapy (REBT).

Modern CBT has its direct roots in Aaron Beck's Cognitive Therapy (CT), which he developed when he decided that contemporary treatments for depression focused too much on past events rather than current beliefs (Beck, 2011). Beck's Cognitive Theory (CT) has its own roots, though, and Albert Ellis's REBT is one of those roots. Specifically, REBT is the original form and one of the main pillars of cognitive-behavioral therapies (CBT) (David et al., 2018).

According to David and Lorint (2021), the A in the ABC model stands for *activating event*. This is an event that prompts the start of the reaction process. It can be a major event, but often it's much simpler like someone speaking to you rudely. The "B" in the ABC model stands for *beliefs*. This links the A and C and it shows how an individual perceives or understands the situation. For instance, because Emelia was rude to you, you may develop the feeling or perception that she hates you. From the

perspective of CBT, beliefs cause emotional and behavioral reactions to a certain activating event (A). While going through negative events, the mind extracts general conclusions from them in order to generate a coping response. Most of the time, these general conclusions are irrational and are hence referred to as irrational beliefs. The “C” in the ABC model stands for *consequences*. The consequences are generated by the beliefs “Bs” and can be affective, behavioral, or physiological. In essence, this is how an individual feels, or what he or she does in response to the antecedent event. Using the example above, if the person believes that the other was rude because she hates him or her, his or her behavior may be to distance himself or herself from the perceived hater. Sarracino et al. (2017) opine that the basic idea behind the ABC model is that external events (A) do not cause emotions (C), but beliefs (B) and, in particular, irrational beliefs (IB) do. In other words, our emotions and behaviors (C: Consequences) are not directly determined by life events (A: Activating Events), but rather by the way these events are cognitively processed and evaluated (B: Beliefs) (Oltean et al., 2017).

More so, David et al (2014) add that when individuals are faced with certain activating events (A), they have certain beliefs (B) about these events, which largely mediate the emotional or behavioral consequences (C) of these events. If their beliefs (B) are rational/functional, then their emotional and behavioral consequences (C) will be adaptive (or functional). However, if their beliefs (B) are irrational/dysfunctional, their emotional and behavioral consequences (C) will be maladaptive (or dysfunctional). David and Szentagotai (2006) proposed that once generated, a *consequence* (C; emotion or behavior) can become an *activating event* (A), about which the individual could hold other *beliefs* (B; meta-beliefs), which in turn are generating secondary emotions (or meta-emotions).

In situating the ABC Model of Cognitive Therapy within the context of this study, the individuals being studied here are basic school teachers. They are the subjects who are at the receiving end of the event. Here, the event (A) is the Covid-19 pandemic which was an unexpected outbreak that hit all and sundry including basic school teachers. The pandemic is therefore the activating event under study. As the Covid-19 pandemic hit the education system including basic school teachers, diverse perceptions may have been developed by these teachers after the outbreak. Such perceptions could be either positive or negative. Such perceptions by the basic school teachers about the pandemic make up their beliefs about the Covid-19 pandemic. According to the ABC Model, the particular beliefs held about the pandemic will determine the consequences of the activating event on the particular basic school teacher in question.

Following the probable diversity of beliefs regarding the Covid-19 pandemic among basic school teachers, the ABC model offers an appropriate theoretical framework for assessing the impact of the pandemic in the area of stress and its accompanying responses. The model offers the researcher the chance to identify the various perceptions that teachers developed about the pandemic. It also offers the chance for the identification of the perceived effects of the pandemic on their professional quality of life. By juxtaposing the consequences (effects of the pandemic) against the beliefs of the teachers, the ABC model will provide the grounds for determining how teachers' beliefs influenced the impact of the Covid-19 pandemic on their professional quality of life.

More so, the ABC Model will form the basis of recommendations for managing and altering teachers' beliefs about the pandemic. The model will also to a very large extent aid in developing a framework for assessing and altering teachers'

negative psychological reception of events such as the Covid-19 pandemic into a positive one.

Specifically, basic schoolteachers experienced the COVID-19 pandemic in their towns like all other citizens. The COVID-19 was an activating event. How did these teachers interpret the effect of COVID-19 on their jobs as teachers for basic school pupils? Did they see it as an inconvenience in terms of their engagement with students? Did they see it as another avenue to engage with students differently? These are the beliefs about the COVID-19. What then was the consequence about their interpretation of COVID-19? How did it affect their professional quality of life? Did their new way of engaging with students cause them satisfaction or fatigue?

1.4 Conceptual Framework

The conceptual framework is built from the theoretical framework – the ABC model of cognitive therapy. While the theoretical framework has arrows that imply a cause-and-effect, the conceptual framework (Figure 1) represents the relationships that exist when the ABC interact. Specifically, the activating event – COVID pandemic interacts with the belief system of the teachers (it is like any sickness and I'll be safe [positive] or it is killing people and I could die [negative]) which in turn interacts with the consequence – stress related to COVID-19 protocols (e.g., wearing of masks, social distancing, not taking books home to mark, etc.); increased or decreased sense of self-efficacy; and increased or decreased quality of life.

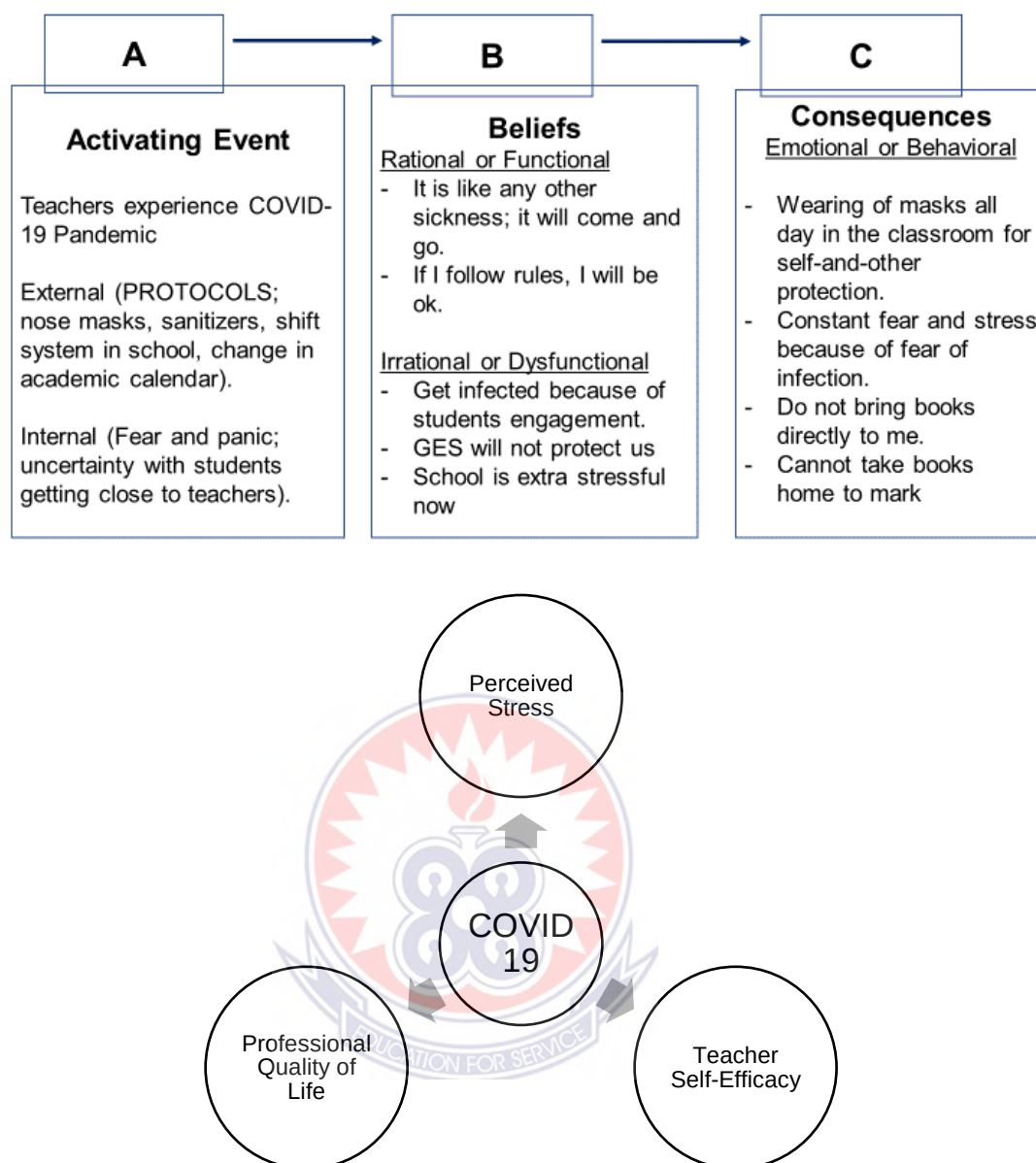


Figure 1: The Conceptual Framework of Theory and Study Variables

The conceptual framework presented above explores the relationship among perceived stress, teacher sense of self-efficacy, and professional quality of life in basic school teachers.

1.5 Purpose of the Study

The purpose of the study is to examine the relationship among basic school teachers' perceived stress, teacher sense of self efficacy, and professional quality of life.

1.6 Objectives of the Study

The objectives of the study focus on the period just after the COVID-19 era, specifically, when teachers had to go back to school after the lockdown ban was lifted in Ghana. Therefore, the objectives are to:

1. Assess perceived stress categories (low, moderate, high) of basic school teachers
 - a) Examine gender differences in perceived stress of basic school teachers.
2. Clusters in teacher sense of self efficacy:
 - a) Assess gender differences in efficacy in student engagement
 - b) Evaluate gender differences in efficacy in instructional strategies
 - c) Investigate gender differences in efficacy in classroom management
3. Factors within professional quality of life :
 - a) Evaluate gender differences in compassion satisfaction
 - b) Assess gender differences in burnout
 - c) Examine gender differences in secondary traumatic stress

1.7 Research Hypotheses

H₀₁: There is no statistically significant relationship among perceived stress, factors in teacher sense of self efficacy, and factors within professional quality of life of basic school teachers post COVID 19.

H_{A1}: There is a statistically significant relationship among perceived stress, factors in teacher sense of self efficacy, and factors within professional quality of life of basic school teachers post COVID 19.

1.8 Significance of the Study

Findings from the study could assist educational policymakers such as the Ministry of Education and the Ghana Education Service as they design programs and policies that focus on developing teacher sense of self-efficacy. Furthermore, policies can be developed that focus on supporting teacher well-being, including stress management and mental health support through conferences and workshops.

Findings from this study can help teachers in making intentional decisions towards their wellbeing by either maintaining the status quo or by taking active steps to reduce stress and increase their sense of self-efficacy. Counsellors can also develop interventions aimed at providing psychoeducation for teachers especially as it helps improve their sense of self-efficacy because this could lead to improved teacher wellbeing and student outcomes. Additionally, counselors can work with teachers to develop coping strategies and stress management skills to mitigate the negative effects of teacher stress and burnout. For instance, practicing self-care and mindfulness-based exercises can help reduce stress symptoms.

Finally, school administrators can provide professional development opportunities, for instance, using information technology in the delivery of instructions. Resources need to be provided to make it possible for the teacher to become conversant with the use of smart devices to allay fears which in turn may reduce teacher stress.

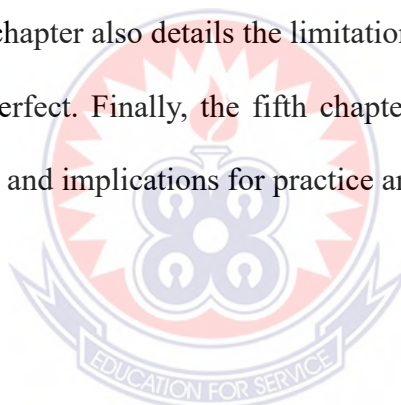
1.9 Delimitations of the Study

The study created the following boundaries: teachers in public basic schools within the Ghana Education Service's Bortianor Circuit of the Ga South municipality in the Greater Accra region. The study is constrained to the views and experiences of only teachers during the outbreak of the COVID-19 pandemic. Moreover, based on

the COVID pandemic and the movement restrictions, I chose to use teachers in my school district (Bortianor circuit of the Ga South municipality) who were familiar with me and were willing to answer the questions in the survey.

1.10 Organization of Chapters

This research study is organized in five (5) chapters. In chapter one, the general background of the study is presented. It also describes the problem statement and objectives and research questions of the study. The chapter also presents the relevance of the study. Chapter two of the study presents the review of relevant literature that grounds this work. Chapter three details the methods and materials of the study. Chapter four displays the results and connects the literature to these results in the form of discussions. This chapter also details the limitations of the study – the reasons the study could not be perfect. Finally, the fifth chapter summarizes the whole work, provides a conclusion and implications for practice and research.



CHAPTER TWO

LITERATURE REVIEW

2.0 Overview of the Chapter

This chapter first discusses the theoretical framework underpinning this study, which is made up of The General Adaptation Syndrome (GAS) Theory and The Transactional Theory of Stress and Coping. Also, a conceptual framework that helps broaden the scope of knowledge on the topic is discussed. The chapter also offers a review of research works related to the subject under study.

2.1 The Concept of Stress

According to Fink (2016), the first and most generic definition of stress is that proposed by Hans Selye: “Stress is the nonspecific response of the body to any demand.” Selye repeatedly emphasized the fact that the continued use of the word stress as a nonspecific response to any demand was most appropriate. Selye (1976) argued that stress is not identical to emotional arousal or nervous tension since stress can occur under or in response to anesthesia in man and animals, and it can also occur in plants and bacteria that have no nervous system.

Subsequent definitions of stress considered it as a “nonspecific response of the body to any demand and these responses may be an acceleration in the heartbeat, dry mouth, tremor, restlessness, excessive fatigue” by Selye (1976) after which subsequent researchers began to attempt the definition of the word ‘stress.’ For instance, according to Girdano, Everly, and Dusek (1993) “stress is the body reacting. It is psychophysiological (mind-body) arousal that can fatigue body systems to the point of malfunction and disease.” Cüceloğlu (2000) also defines stress as “the effort

an individual spends beyond the physical and psychological limits due to the inconvenient conditions in the physical and social environment.

One other definition of stress by Linden (2005) is that it represents both a psychological and a physiological reaction to a real or perceived threat that requires some action or resolution. It is a response that operates on cognitive, behavioral, and biological levels that, when sustained and chronic, results in significant negative health effects. According to landmark brain researcher Bruce McEwen (McEwen, 2002; McEwen & Wingfield, 2010), it is both a stimulus and a response.

More so, the United States National Research Council of National Academies (2008) explains that current scientific knowledge supports the concept that stress is a real or perceived perturbation to an organism's physiological homeostasis or psychological well-being. In its stress response, the body uses behavioral or physiological mechanisms to counter the perturbation. Events that precipitate stress (called stressors) can elicit any of a number of coping mechanisms or adaptive changes, including behavioral reactions, activation of the sympathetic nervous system and adrenal medulla, and secretion of stress hormones (e.g., glucocorticoids and prolactin), and mobilization of the immune system.

In effect, popular and scientific definitions see “stress” as a process in which external and internal stimuli, forces, or systems interact, where triggers activate a response system that may lead to exhaustion and vulnerability (Wheaton, 1996). In other words, any effect of change in the surrounding environment on a living being that results in disruption of homeostasis (internal balance) of that living being is called stress (Shahsavarani et al., 2013). Based on the review of the literature, Shahsavarani et al. (2015) opine that stress could be classified according to the nature of the stressor (physiological, psychological), its influence on individual (positive = eustress;

negative = distress), and the exposure time of stressor (acute or short-term, chronic or long-term).

2.2 Classification of Stress Based on the Nature of Stressor

2.2.1 Physiological Stress

According to Kagias et al. (2012), physiological stress can be defined as any external or internal condition that challenges the homeostasis of a cell or an organism. It can be divided into three different aspects: environmental stress, intrinsic developmental stress, and aging. Throughout life, all living organisms are challenged by changes in the environment. Fluctuations in oxygen levels, temperature, and redox state, for example, trigger molecular events that enable an organism to adapt, survive, and reproduce. In addition to external stressors, organisms experience stress associated with morphogenesis and changes in inner chemistry during normal development. For instance, conditions such as intrinsic hypoxia and oxidative stress, due to an increase in tissue mass, have to be confronted by developing embryos in order to complete their development. Finally, organisms face the challenge of stochastic accumulation of molecular damage during aging that results in decline and eventual death.

2.2.2 Psychological Stress

Psychological stress is defined as “a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being” (Lazarus and Folkman, 1984: p.1). The term has become a popular one denoting processes believed to contribute to the onset and maintenance of a variety of mental and physical conditions (Monroe, 2001).

2.3 About Perceived Stress

Philips (2013) defines perceived stress as feelings or thoughts that an individual has about how much stress they are under at a given point in time or over a given time period. Perceived stress includes feelings about the uncontrollability and unpredictability of one's life, how often one has to deal with irritating hassles, how much change is occurring in one's life, and confidence in one's ability to deal with problems or difficulties. It is not about measuring the types or frequencies of stressful events which have happened to a person, but rather how an individual feels about the general stressfulness of their life and their ability to handle such stress. People may suffer similar negative life events but appraise the impact or rigorousness of these to different extents following factors such as personality, coping resources, and support. Perceived stress, therefore, reflects the interaction between an individual and their environment which they appraise as threatening or overwhelming their resources in a way that will affect their wellbeing (Lazarus & Folkman, 1984). Perceived stress is commonly measured as the frequency of such feelings via a questionnaire such as the Perceived Stress Scale (Cohen, Kamarck & Mermelstein, 1983).

Lazarus and Folkman (1984) further proposed the concepts of cognitive appraisal, thus, primary appraisal and secondary appraisal in order to explain individual differences in coping with stressful life events and its relation to well-being and functioning of individuals (Lee et al., 2016). Primary appraisal is the process in which individuals evaluate situations as threatening, neutral-positive, or not-relevant, whereas secondary appraisal is explained as the process in which individuals assess their coping resources in response to the primary in appraisal evaluation (Folkman & Lazarus, 1985). Depending on how individuals perceive the threat level of the environmental stimuli (i.e., primary appraisal), individuals will determine whether

their coping resources are adequate or inadequate (i.e., secondary appraisal), and this secondary appraisal will consequently affect individuals' well-being. Perceived psychological stress therefore simply refers to the extent to which people perceive or appraise that their demands exceed their ability to cope.

2.3.1 Gender Differences in Perceived Stress

Perceived stress has been a topic of interest in various fields including psychology, education, and healthcare. Research has shown that perceived stress can have significant effects on an individual's physical and mental wellbeing in a seminal work by Lazarus and Folkman (1984). One aspect of perceived stress that has gained attention is how perceived stress is exhibited by different genders. Studies have consistently revealed that females tend to report higher levels of perceived stress than males for both students (Graves et al., 2021; Infortuna et al., 2020) and teachers (Oducado et al., 2021; Teles et al., 2020). Both the Teles et al and Oducado et al studies found that female teachers reported higher COVID-19 related stress more than their male counterparts. These high stressors also affected job satisfaction and burnout, leading to reduced productivity.

There are several explanations for the observed gender differences in perceived stress. One possible explanation is that females are more likely to engage in rumination and emotional expressions which can aggravate stress (Ando' et al., 2020). Even though females report higher rumination, in males, rumination appears to be strongly associated with an overall impaired emotional regulation – they can blow up in anger or totally disengage in interpersonal conflicts. In the context of teaching during the COVID-19 pandemic, research showed that more than half of teachers experienced moderate COVID-related stress with females experiencing significantly higher stress than males (Oducado et al., 2021). Another study by

Santamaria et al (2021) showed that a high percentage of teachers had symptoms of stress, anxiety, and depression. Females showed significantly more symptoms of stress and anxiety than males, and those who had children had more depressive symptoms than those who did not have children. Hidalgo-Andrade (2021) also conducted a study that revealed that female teachers presented higher levels of stress and teachers with home care responsibilities presented higher psychological distress as well as perceived stress. Lagat (2021) also conducted a study, and the results showed that female teachers depicted higher levels of job stress than male teachers in the new normal. The reason is that females tend to be more anxious in times of distress. In conclusion, the COVID-19 pandemic has highlighted existing gender differences in perceived stress, with females reporting higher levels of stress, anxiety, and depressive symptoms than males.

2.4 The Concept of Self-Efficacy

The concept of self-efficacy has been a major subject of research since the it was pioneered by Albert Bandura as part of his Social Learning Theory in the late 1970's (Page et al., 2014). Bandura was of the position that self-efficacy is the ability of a person to make judgments about how they will react to a situation and/or the influence they have on the outcome of a certain situation. According to Bandura, there are four primary sources of self-efficacy: "... mastery experiences, vicarious experiences, social persuasion, and physiological factors" (Putman, 2012, p. 27). In other words, the belief that one wields the ability to perform their job with mastery depends on previous experiences, training, and environment (Page et al., 2014).

With Bandura's notion of self-efficacy in mind, several researchers have examined teachers' sense of self-efficacy. Tschannen-Moran and Woolfolk Hoy developed the Teacher Self Efficacy Scale (TSES) (2009), sometimes known as the

Ohio State Teacher Efficacy Scales. The scale is mainly for measuring the level of teacher self-efficacy beliefs. Page et al. (2014) posit that the scale has been validated by other researchers who have utilized it in their research. Heneman, Kimball, and Milanowski (2006) concluded that their results, coupled with those of Tschannen-Moran and Hoy (2001), suggest that the TSES should be the preferred measure of teachers' sense of efficacy in future research. They added that its replicable psychometric properties, behavioral richness in capturing the teacher role, and predictive capacity for explaining significant variance in teacher classroom performance all lay support for their conclusion.

A lot of the studies conducted on teacher self-efficacy using the instruments designed by Tschannen-Moran and Woolfolk Hoy mainly centered on differences in the years of experience teachers had spent in the field of education and it was discovered that this variable is not related to teacher efficacy (Tschannen-Moran & Woolfolk Hoy, 2001; Putnam, 2012; Tanriseven, 2012). Many studies also focused on comparing pre-service and classroom teachers and they realized that classroom teachers showed a higher level of efficacy regarding to their application of new instructional practices (Wolters and Daugherty, 2007 and Fives and Buehl, 2009).

2.4.1 Teacher Sense of Efficacy and Student Engagement

Teacher Sense of Efficacy (TSE) refers to a teacher's belief in their ability to influence student learning outcomes (Bandura, 1997). Research has shown that TSE is a critical factor in determining educational outcomes such as teachers' persistent enthusiasm, commitment and instructional behaviors (Lauermann & Berger, 2021; Sökmen, 2021). Research has consistently shown that teachers with high levels of sense of efficacy tend to have higher levels of student engagement (Sökmen, 2021; Tschannen-Moran & Hoy, 2001). This is because teachers with high teacher self-

efficacy are more likely to use effective instructional strategies, provide feedback, and create a positive learning environment (Corry & Stella, 2018; Wilson et al., 2020).

Gomez (2020) acknowledges the evolution of education, hence, the teaching profession evolving with it. To an extent, in some schools, teachers are responsible for ensuring students' basic needs are met, in addition to academic and behavioral needs. For instance, students living in areas that have high levels of poverty are at significant risk to fail academically and socially, and therefore require additional care to ensure they perform well in school (Stichter, Stormont, & Lewis, 2009). During and after the Covid-19 pandemic, the needs of students seemed to place greater pressure on teachers, which led to teachers experiencing burnout. More so, a career in teaching provides teachers the opportunity to not only teach academics, but also care for and support students. While teachers can reap a great deal of fulfillment from teaching, they can also experience negative effects. The changing nature of education is leading to higher levels of burnout among teachers, affecting student achievement. Employees experiencing burnout lose the capacity to provide intense contributions that make an impact" (Schaufeli, Leiter & Maslach, 2009).

2.4.2 Teacher Sense of Efficacy and Instructional Strategies

Teacher self-efficacy refers to educators' beliefs in their ability to effectively influence student learning, engagement and behaviour even in challenging situations (Lazarides and Warner, 2020; Bandura, 1997). This belief system is a central component of Bandura's Social Cognitive Theory which emphasizes the role of self-perception in human motivation and behaviour. Teacher self-efficacy is multidimensional, encompassing efficacy in instructional strategies, classroom management, and student engagement (Tschannen-Moran & Hoy, 2001). Among these, instructional efficacy is pivotal as it directly impacts teaching quality and the

ability to address diverse learning needs. High self-efficacy has been linked to greater persistence, adaptability, and willingness to innovate in teaching practices (Klassen et al., 2011). Teachers who believe in their capabilities are more likely to adopt student-centered approaches and create inclusive learning environments. This enhances both student outcomes and teachers' professional satisfaction (Mojavezi & Tamiz, 2012). Conversely, low self-efficacy may lead to reluctance to try new methods and difficulties in overcoming instructional challenges, ultimately impacting educational outcomes negatively (Zee & Koomen, 2016).

Instructional strategies play a critical role in fostering effective teaching and learning. Teachers with high self-efficacy are more confident in designing and delivering lessons that accommodate diverse student needs (Sharma & Nuttal, 2016). Such teachers often employ innovative techniques, adapt to various learning styles and engage students effectively, thereby promoting academic success (Blumenfeld & Paris, 2004). Additionally, they are better equipped to use formative assessments to refine their teaching practices which further enhances their instructional efficacy (Tschannen-Moran & Hoy, 2007). Moreover, self-efficacy influences teachers' openness to integrating technology into their instructional methods (Williams et al., 2023). In today's digital era, educators with high efficacy are more likely to adopt digital tools and online platforms to enrich learning experiences (Richards & Thompson, 2023). This adaptability is essential in ensuring that students are prepared for the demands of the 21st-century knowledge economy. Teachers with low efficacy, however, may struggle to utilize such resources effectively. This shows the importance of continuous professional development to bolster instructional confidence (Shakimova et al., 2024).

While teacher self-efficacy is largely shaped by mastery experiences, vicarious learning, and social persuasion, research has explored the potential influence of gender on efficacy beliefs (Gale, 2021). Findings suggest minimal gender differences in overall self-efficacy levels, particularly in instructional strategies (Sarfo et al., 2015). Both male and female teachers often report comparable confidence in lesson planning, adapting teaching methods, and employing effective techniques (Wolters & Daugherty, 2007). This parity may reflect similar professional experiences and access to institutional support systems. However, some studies indicate contextual variations. For instance, Klassen and Chiu (2010) found that male teachers occasionally reported higher instructional efficacy due to perceived autonomy and leadership opportunities in certain school settings. Contrarily, when professional development opportunities and collaborative practices are equally accessible, gender disparities diminish (Klassen & Tze, 2014). These findings reiterate the role of institutional culture in shaping teacher efficacy, rather than innate gender differences. The absence of significant disparities in this study supports the notion that equitable support systems can foster high efficacy across genders (Schunk & Pajares, 2005).

The COVID-19 pandemic tested teachers' instructional efficacy, as they had to adapt to online and hybrid teaching models with little preparation (Kaden, 2020). This shift portrayed both the resilience and the vulnerabilities of educators. Teachers with high self-efficacy demonstrated greater adaptability, employing innovative methods to ensure continuity in learning despite unprecedented challenges (Davis et al., 2024). Gender dynamics during the pandemic were also noteworthy. Female teachers often reported higher stress levels due to increased caregiving responsibilities at home, yet many also derived greater compassion satisfaction from their relational teaching roles (Lizana et al., 2021). Male teachers, on the other hand, tended to focus

on task-oriented aspects of teaching such as curriculum delivery and classroom management, reflecting societal expectations of gender roles (Shaheen & Mahmood, 2016). These findings suggest that while self-efficacy levels may remain similar across genders, the pathways through which efficacy manifests can differ.

It is obvious that teachers face numerous challenges that can undermine their instructional efficacy. High-stakes testing, limited resources and large class sizes are common barriers that restrict the implementation of innovative strategies (Skaalvik & Skaalvik, 2017). Additionally, the pandemic worsened existing disparities, particularly in under-resourced schools where teachers struggled to access digital tools and training (Nomtshongwana & Buka, 2023). Gendered expectations can also create unique challenges. Female teachers may experience higher emotional labour demands, while male teachers often face societal pressures to assert authority in the classroom (Matud, 2004). These dynamics can impact how teachers perceive their efficacy, particularly in challenging contexts (Jennings & Greenberg, 2009).

Enhancing teacher self-efficacy requires targeted professional development programs, mentorship opportunities, and access to resources. Training should focus on equipping teachers with practical skills in instructional design, classroom management and technology integration (Guskey, 2002). Peer mentoring and collaborative learning environments can further reinforce efficacy beliefs by providing opportunities for shared learning and feedback (Sharma & Nuttal, 2015). Institutional culture also plays a significant role. Schools that prioritize teacher well-being and foster inclusive environments enable educators to thrive professionally. Research suggests that equitable access to resources and professional opportunities can mitigate gender disparities and enhance overall efficacy (Wolters & Daugherty,

2007). By addressing systemic challenges and promoting teacher empowerment, educational stakeholders can create a sustainable framework for instructional success.

2.4.3 Teacher Sense of Efficacy and Classroom Management

Among the key dimensions of self-efficacy, classroom management stands out as a crucial domain having been made up of the ability to establish rules, prevent disruptive behaviours, and foster an atmosphere conducive to learning (Tschannen-Moran & Hoy, 2001). High self-efficacy in classroom management has been linked to proactive disciplinary approaches, stronger teacher-student relationships, and a more positive classroom climate (Zee & Koomen, 2016). Teachers with low efficacy, on the other hand, may struggle to maintain order, leading to a chaotic learning environment and increased stress levels (Jennings & Greenberg, 2009). This reveals the pivotal role of classroom management efficacy in ensuring effective teaching and learning.

Classroom management is a cornerstone of effective teaching as it directly impacts student engagement, academic performance, and overall classroom dynamics (Hoelscher, 2023). Teachers with high efficacy in this domain demonstrate confidence in maintaining discipline, addressing behavioral issues and implementing preventive strategies to minimize disruptions (Wolters & Daugherty, 2007). These teachers are also more likely to foster respectful and supportive relationships with students which are crucial for promoting a positive learning environment (Roorda et al., 2011).

Moreover, self-efficacy in classroom management influences how teachers perceive and handle challenging situations (Shah, 2023). Teachers with high efficacy are better equipped to employ constructive strategies, such as restorative practices and conflict resolution techniques, rather than punitive measures (Jennings & Greenberg, 2009). This not only improves classroom behaviour but also supports students' socio-emotional development. Conversely, teachers with low efficacy may rely on reactive

or authoritarian approaches, which can escalate conflicts and hinder student learning (Skaalvik & Skaalvik, 2017).

Research on gender differences in classroom management self-efficacy reveals diverse findings, often influenced by contextual and cultural factors. Some studies suggest that male teachers report higher efficacy in managing disruptive behaviours due to societal perceptions of male authority and assertiveness (Klassen & Chiu, 2010). Male teachers may also experience greater autonomy in implementing disciplinary strategies, reinforcing their confidence in this domain (Mitchell, 2019). On the contrary, other studies indicate no significant gender differences in classroom management efficacy, particularly in environments where professional support and resources are equitably distributed (Maolosi and Forchheh, 2015; Wolters & Daugherty, 2007). Female teachers are often perceived as more empathetic and relational in their classroom interactions which can enhance their ability to manage student behaviour through positive reinforcement and emotional connection (Jennings & Greenberg, 2009). The absence of significant disparities in many contexts affirm the role of systemic factors, such as institutional support and access to training, in shaping efficacy beliefs rather than inherent gender differences (Schunk & Pajares, 2005).

Teachers, however, face numerous challenges that can undermine their confidence in managing classrooms effectively. Large class sizes, diverse student needs, and limited access to resources are common barriers to establishing and maintaining order (Skaalvik & Skaalvik, 2017). Additionally, external factors such as high-stakes testing and administrative pressures can add to teachers' stress, further eroding their self-efficacy in this domain (Jennings & Greenberg, 2009). The COVID-19 pandemic exacerbated these challenges, as teachers had to navigate virtual and hybrid learning environments (Westphal, 2022). Managing student behaviour in

online settings presented unique difficulties, such as maintaining engagement and addressing distractions in students' home environments (Heng & Chu, 2023). Despite these obstacles, teachers with high efficacy demonstrated greater adaptability, employing creative strategies to foster discipline and engagement in virtual classrooms (Pressley, 2021). This shows the importance of resilience and professional development in enhancing classroom management efficacy, particularly in times of crisis.

Also, external factors such as high-stakes testing and administrative pressures can add to teachers' stress, further eroding their self-efficacy in this domain (Jennings & Greenberg, 2009). The COVID-19 pandemic exacerbated these challenges, as teachers had to navigate virtual and hybrid learning environments. Professional development programs focused on evidence-based strategies, such as restorative practices and trauma-informed care, can significantly boost teachers' confidence in managing student behaviour (Guskey, 2002). These programs should provide opportunities for practice and reflection, enabling teachers to refine their skills and build mastery experiences (Bandura, 1997). Collaborative learning environments also play a crucial role in fostering efficacy beliefs. Peer mentoring and team teaching allow teachers to observe and learn from their colleagues, gaining vicarious experiences that reinforce their confidence (Sharma & Nuttal, 2016). Additionally, institutional support, such as access to resources and clear disciplinary policies, can create a conducive environment for effective classroom management. Schools must prioritize teacher well-being by providing mental health resources and reducing administrative burdens, enabling educators to focus on their instructional and managerial responsibilities (Jennings & Greenberg, 2009).

2.5 Professional Quality of Life and Teachers

El-Shafei et al. (2018) defined professional quality of life (ProQOL) as both positive and negative emotions that an individual comes across in his or her job as a helper (Kim et al. 2015). In other words, professional quality of life refers to how a person in a helping profession feels about their work (Gomez, 2020). ProQOL consists of the positive emotion of compassion satisfaction (CS) and negative emotion compassion fatigue (CF). El-Shafei et al. (2018) explain that Compassion Fatigue is composed of two parts: The first part is concerned with emotions, such as anger, exhaustion, depression, and frustration as a typical reaction of burnout (BO). Secondary traumatic stress (STS) is a negative emotion caused by fear and work-related trauma (Stamm 2010). This triad of CS, BO, and STS shapes the major aspects of ProQOL as it is affected by and affects the professional well-being and performance of workers in service industries that help distressed peoples may be affected by this (Yeela Haber et al. 2013; Kim et al. 2015).

The reason why assessment of school teachers' QoL is very important is because their QoL not only affects them but also influences the students' performance and the way teachers handle responsibilities in the educational setting (Dabiran et al., 2018). In other words, school teachers should have a good quality of life to train good students. Any problem or defect in the quality of life of teachers can affect their occupational performance (Manju, 2014). Unfortunately, teachers have been reported to have a lower quality of life (QOL) and shorter life expectancy as a result of higher occupational stress. Some teachers retire early and some even quit their job, especially in countries such as Iran (Dabiran, et al., 2018). Demographic characteristics have been regarded as important determinants of the teachers' QOL. Demographic factors

(such as teaching experience, marital status, education, and income) may affect the health of the teachers.

2.5.1 Compassion Satisfaction as a Component of Quality of Life

Compassion satisfaction refers to the positive feelings and experiences that helpers derive from their work, particularly when they perceive that they are making a positive difference in the lives of others (Stamm, 2005). Teachers play the role of counsellors sometimes, so they are all categorized as part of the helping profession (Dimitra & Kougioumtzis (2016). In a 2021 study on healthcare and education professionals, Perez-Chacion et al (2021) identified that compassion satisfaction is an adequate management strategy in preventing burnout during covid-19 teaching and learning. Also, a study by Rogowska et al (2022) revealed that emotional intelligence is a significant positive predictor of job satisfaction and compassion satisfaction. To maintain the wellbeing of teachers during a pandemic, schools were encouraged to implement training to improve emotional intelligence and increase job satisfaction by supporting distance e-learning for teachers.

Teachers remain passionate and relentless when they continue to learn and grow and further support their students even in the midst of an unprecedented pandemic. Teachers would remain in the classroom for longer periods of time if they felt supported, heard, and cared for with the intent to make a difference in the lives of children – a paramount reason for their entry into teaching (Scroggs, 2021). Since the role of basic school teachers is multidimensional, Berger and Nott (2024) suggest that professional development programs should include trauma informed knowledge and skills for teachers to enhance their wellbeing when responding to trauma-exposed students.

Compassion satisfaction is a critical construct in the field helping professions, as it can influence job satisfaction, wellbeing and client outcomes. By understanding the factors that influence compassion satisfaction and promoting a culture that supports helpers, organizations can foster a positive and productive work environment. Compassion satisfaction is a vital construct in the teaching profession, particularly among basic school teachers. The literature review highlights the significance of compassion satisfaction in promoting teacher wellbeing, job satisfaction and student outcomes. Basic school teachers who experience compassion satisfaction tend to be more effective in their roles, fostering a positive and supportive teaching and learning environment, ultimately benefiting students and the broader educational community.

2.5.2 Compassion Fatigue as a Component of Quality of Life

Compassion fatigue has two factors: burnout and secondary traumatic stress. Burnout is a psychological syndrome brought on by the effects of overwork, physical exhaustion, and professional frustration and includes emotional exhaustion, depersonalization, and reduced personal accomplishment (El Helou, Nabhani, & Bahous, 2016; Schaufeli, Leiter & Maslach, 2009; Mullen & Gutierrez, 2016; Williams & Dikes, 2015). Secondary traumatic stress, on the other hand, is the emotional, cognitive, and physical distress experienced by individuals who provide care or support to trauma survivors.

2.5.2.1 Burnout

Burnout is a physical, attitudinal, and emotional state observed in staff that work with demanding clients and whose work requirements exceed their own capacity (Shaheen & Mahmood, 2016). Burnout is common among individuals in human services jobs that require continuous interaction with people (El Helou, Nabhani, &

Bahous, 2016). Because teaching is a necessary and respected profession, it is beneficial for schools, districts, and society to seek a remedy for burnout (Shaheen & Mahmood, 2016).

The term "burnout" was first introduced by Herbert Freudenberger in 1974 to describe the consequences of severe stress experienced by professionals working in helping or service-oriented professions (Freudenberger, 1974). In the context of the teaching profession, burnout refers to the specific experience of teachers who face chronic job-related stressors and exhibit symptoms of burnout. Burnout is characterized by emotional exhaustion, depersonalization, and a diminished sense of personal accomplishment (Maslach et al., 2001; Maslach & Leiter, 2016).

Emotional exhaustion refers to feelings of being emotionally drained and depleted, resulting in a lack of energy or motivation to engage in work-related tasks. Individuals experiencing emotional exhaustion may feel overwhelmed, fatigued, and depleted of their emotional resources (Maslach et al., 2001). Teaching is often considered a highly demanding and emotionally taxing profession (Kyriacou, 2001). The combination of heavy workloads, time pressures, classroom management challenges, and high expectations from students, parents, and administrators can contribute to the development of burnout among teachers. As a result, teachers may experience emotional exhaustion, which refers to a feeling of being drained, overwhelmed, and depleted of energy due to the demands of their work (Schaufeli & Bakker, 2004).

Depersonalization, also known as cynicism, involves developing negative or detached attitudes and behaviors toward other people, particularly clients, customers, or colleagues. It manifests as a sense of indifference, callousness, and treating individuals as mere objects rather than individuals with emotions and needs (Maslach

et al., 2001). Within the teaching profession, depersonalization involves developing negative and detached attitudes towards students, colleagues, and the teaching profession itself (Maslach & Jackson, 1981). Teachers experiencing depersonalization may exhibit behaviors such as cynicism, emotional distance, and a reduced ability to connect with their students on an individual level (Demerouti et al., 2001). These negative attitudes and behaviors can impact on the quality of teacher-student relationships and hinder effective classroom instruction.

Diminished personal accomplishment refers to a decline in one's self-perceived competence and productivity in work-related tasks. Individuals experiencing this aspect of burnout may feel a decreased sense of efficacy, accomplishment, and fulfillment in their work (Maslach et al., 2001). Burnout in the teaching profession can result in reduced personal accomplishment, often referred to as a diminished sense of competence and achievement in one's work (Maslach & Jackson, 1981). Teachers experiencing this aspect of burnout may question their effectiveness as educators, perceive a lack of impact or progress in their students' learning, and feel a sense of disillusionment or reduced satisfaction with their professional achievements (Schaufeli & Enzmann, 1998).

Burnout can have detrimental effects on both the individual and the organization. It can lead to decreased job satisfaction, decreased performance, increased absenteeism, and higher turnover rates (Maslach & Leiter, 2016). Burnout can also impact on physical health, mental well-being, and personal relationships. Research has shown that burnout among teachers has numerous negative consequences for both educators and students. Burned-out teachers are more likely to experience higher levels of stress, physical and mental health issues, and lower job satisfaction (Kyriacou, 2001). Moreover, burnout can lead to increased absenteeism,

higher turnover rates, and compromised instructional quality (Ingersoll & Smith, 2003). These factors can have detrimental effects on student engagement, academic achievement, and overall school climate.

Teachers may experience burnout due to job requirements and meeting the needs of all students in the post-Covid-19 era. Secondary traumatic stress may also affect teachers that are exposed to students that have experienced trauma due to exposure to the pandemic or loss of relatives to the virus. Due to the high number of students living in poverty and areas of high economic problems, teachers could be exposed to more student trauma. Teachers suffering from burnout or secondary traumatic stress may be less effective in the classroom or choose to leave the teaching profession, which could negatively affect student achievement (Gomez, 2020).

As opined by Gomez (2020), a teacher may feel burned out when job responsibilities and student needs become overwhelming, there is a negative culture among colleagues, or there is a lack of support for teachers. In some circumstances, teachers may be exposed to the trauma of students and suffer from secondary traumatic stress. When a teacher's professional quality of life is depleted, their own wellbeing and health are in jeopardy as well as the positive learning environment required for students to be successful.

2.5.2.2 Secondary Traumatic Stress

Secondary traumatic stress (STS), also known as vicarious trauma is a psychological phenomenon that occurs as a result of exposure to the traumatic experiences of others. It is characterized by symptoms similar to those of post-traumatic stress disorder (PTSD) and can affect individuals who are indirectly exposed to trauma through their work or close relationships with trauma survivors (Figley, 1995). It is important to note that secondary traumatic stress is distinct from

personal trauma and differs from primary trauma experienced by direct survivors of traumatic events. However, individuals with STS can develop similar symptoms as those with PTSD, including avoidance behaviors, hyperarousal, and re-experiencing of trauma-related memories (Bride, 2007).

According to Bride (2007), secondary traumatic stress refers to the emotional, cognitive, and physical distress experienced by individuals who provide care or support to trauma survivors. This can include professionals in helping professions such as healthcare workers, social workers, counselors, and educators, including teachers. These individuals may witness or hear about traumatic events, listen to personal narratives of trauma, or observe the visible effects of trauma on those they work with or care for (Huggard & Huggard, 2008).

In the context of the teaching profession, secondary traumatic stress can occur when educators work with students who have experienced trauma or come from backgrounds characterized by adversity, abuse, or violence. Teachers who regularly interact with students who have experienced trauma may absorb and internalize their students' traumatic experiences, leading to the development of STS symptoms (Jennings & Greenberg, 2009).

Symptoms of secondary traumatic stress may manifest in various ways. Individuals experiencing STS may display emotional symptoms such as heightened anxiety, irritability, sadness, or emotional numbing (Figley, 1995). They may also experience cognitive symptoms such as intrusive thoughts or images related to the traumatic events they have been exposed to (Bride, 2007). Physically, individuals may report fatigue, sleep disturbances, or physical ailments that are associated with stress (Huggard & Huggard, 2008).

Teachers who experience secondary traumatic stress may find it challenging to effectively support and engage with their students who have experienced trauma. STS can negatively impact teachers' emotional well-being, job satisfaction, and overall mental health (Jennings & Greenberg, 2009). Additionally, it can hinder teachers' ability to create a safe and nurturing classroom environment and may contribute to increased burnout rates within the teaching profession (Wisniewski et al., 2020).

To address and prevent secondary traumatic stress among teachers, it is crucial for schools and educational institutions to provide support systems and resources. This can include implementing trauma-informed practices, offering professional development on trauma awareness and self-care, fostering a supportive and collaborative school culture, and providing access to counseling or support services for teachers (Wisniewski et al., 2020). It is essential to create environments that recognize and address the potential impact of secondary traumatic stress on educators' well-being and job performance, promoting their resilience and ability to provide effective support to students who have experienced trauma.

2.6 COVID-19 pandemic and its Effects on teaching and learning

The deadly and infectious disease Corona Virus, otherwise referred to as Covid-19 brought adverse effects on the global economy (UNICEF, 2020). The pandemic has also shaken up the education sector, causing fear to resonate across the education sector globally. The Covid-19 pandemic outbreak forced many schools and colleges to remain closed temporarily. Several areas have been affected worldwide and whole semesters have even been lost. Various schools, colleges, and universities have had to discontinue in-person teaching. The major part of the world was at a point on quarantine due to the serious outbreak of this global pandemic Covid-19 and

therefore many cities turned into phantom cities and its effects could be seen in schools, colleges, and universities too (Dhawan, 2020).

During the global health crisis, the working style of teachers changed significantly. Before the pandemic, these professions had been extensively researched, and the results indicated a high level of job stress that contributed to burnout (Liu, et al, 2021; MacIntyre, Gregersen, & Mercer, 2020; Poelmann, et al, 2021). According to certain studies, instructors may be stressed out due to dire working circumstances, problems with pupils or families, or organizational issues (Sani, et al, 2021; Sokal, Trudel, & Babb, 2020; Sveinsdóttir, et al, 2021; Taylor, Thomas-Gregory, & Hofmeyer, 2020). Teaching is a full-time job that requires instructors to manage their time and allocate additional hours for caring for children and their guardians, creating lesson plans, and planning, all of which teachers do primarily at home.

As school seclusion and the world become more interconnected, teachers seem to have suffered an increase in worry. The dangerous situations teachers found themselves in included both their personal and professional lives. The risk of COVID-19 exposure to teachers and their families is somewhat outweighed by the additional demands they encounter in transitioning to the new educational environment. Teaching using the new methods in the face of up-to-date resources, technology, and expertise (D'Souza, 2021).

As of 28th March, 2020, UNESCO reported that over 1.7 billion learners were out of school due to schools not in session because of the pandemic. According to UNESCO monitoring, over 100 countries have implemented nationwide closure, impacting nearly 90% of the world's student population. (UNESCO, COVID-19 Educational Disruption and Response, 2020). School closure did not only affect students, teachers, and families, but had far-reaching economic and societal

consequences, (Lindzon, 2020). School closures in response to COVID-19 have shed light on various social and economic issues, including student debt (Jamerson, Josh, & Joshua, 2020), digital learning (Karp & McGowan, 2020), food insecurity (Cecco, 2020) and homelessness (Ngumbi, 2020) as well as access to childcare (Forkuor, 2020), health care (Feuer, 2023), housing (Barrett, 2020), internet (Badell-Grau, 2020) and disability services (Owusu-Fordjour, 2020).

Even when school closure is temporary, it carries high social and economic costs as well as disrupts learning among students. The disruptions they cause affect people across communities, but their impact is more severe for disadvantaged children and their families including interrupted learning, compromised nutrition, childcare problems and consequent economic cost to families who cannot work (UNESCO, 2020). Working parents are more likely to miss work when schools close in order to take care of their children, incurring wage loss in many instances and negatively impacting productivity (UNESCO, 2020). Localised school closures place burdens on schools as parents and officials redirect children to schools that are open (UNESCO, 2020).

The pandemic-induced lockdown forced colleges and schools to shut down their campuses and amid this a new reality; online teaching has emerged as a potent tool to support students' learning remotely. To continue the wheels of learning, institutions, worldwide, switched to online mode of teaching and learning. The practical usage of video conferencing platforms such as WebEx, ZOOM, Google Meet, Say Namaste, as well as learning management systems like Moodle, Blackboard etc. were encouraged to support students' learning in all possible manner during lockdown (Hasan & Khan, 2020).

Nonetheless, online learning environment increases access to material and offers learners flexibility to learn at a pace, place and time suited to them (Chizmar & Walber, 1999; Smith et.al., 2005). E-learning platforms offer students multiple options to access information and communicate with peers and teachers, this flexibility and control makes them self-motivated and self-regulated learners (Smith & Limniou, 2010). Online learning platforms also offer enriched learning experiences and help students become independent and self-directed learners (Singh, O'Donoghue & Worton 2005).

D'Souza (2021) revealed that the COVID-19 pandemic presented a new set of challenges to teachers. The need for online learning and the use of blended materials presented most teachers with some difficulties including the availability of adequate resources for teaching, adequate skills for the implementation of the blended teaching methods, and the stress of managing students during such periods. In effect, teachers have been greatly impacted by the COVID-19 pandemic. While the moderate to high danger of COVID-19 did factor into teachers' quality of life six months after the lockdown, the pandemic seemed to have had some negative influence on their quality of life in regard to mental health.

The Covid-19 pandemic brought unusual disruption to Higher Education (HE) institutions, locally and globally. In New Ghana, for instance, the Coronavirus pandemic struck in full force during March 2020, affecting the day-to-day delivery of teaching in a manner not previously witnessed since World War I and II. The necessity to impose carte blanche restrictions on every individual's access and connection with their educational programmes, at all levels, was uncompromising. Justification for these severe measures, as cited by Ghana's Prime Minister, included limiting travel, advice on mass gatherings, and guidelines for student attendance and deferment.

All measures taken to contain the spread of the virus have their own economic impacts, especially in the education sector. Usually, government funding on education often fluctuates in response to external shocks, as governments reprioritize investments. The slowdown of economic growth associated with the spread of the virus has affected the availability of public funding for education in many countries including Ghana, as tax income declines and emergency funds are funneled into supporting increasing healthcare and welfare costs (OECD, 2020).

The pandemic has affected education budgets more quickly as public revenues declined sharply and governments review the prioritization of education in national budgets (IIEP-UNESCO, 2020). It is not surprising that forecasts predicted that the pandemic would lead to slower growth in government spending in the coming year, and that if the share of government spending devoted to education were to remain unchanged, education spending would continue to grow but at significantly lower rates than before the pandemic (Al-Samarrai, Gangwar & Gala, 2020). Evidently, the printing of textbooks in Ghana has been delayed for over 2 years following the economic crisis brought upon by the pandemic and its adverse effects on education in the country.

While the education sector is put in perspective, it is worth noting that the sector consists of a wide range of stakeholders, levels, and challenges. There are government and private institutions. The challenges faced by rural primary schools at the height of the pandemic were very different from those facing urban universities, the challenges facing urban and rural secondary schools were also very different. More importantly, perhaps the scale of the different sectors is very different (eLearning Africa, 2020).

A report by eLearning Africa (2020), in most countries of Africa, provision of primary education (for at least a few years) is universal. According to the report the greatest numbers of students in education in any country in Africa are likely to be attending primary school, with a considerably smaller number in secondary school, and a minority attending tertiary education. Although Covid-19 has affected all of the education sectors: early childhood, primary, secondary, higher and vocational, and all have suffered because of the pandemic, each sector has suffered in different ways and with different consequences. It would be facile to say that higher education suffered the least, because the students are adults, and they are much more likely to have access to the internet and eLearning than others. A survey by eLearning Africa showed that higher education is far better placed to cope with than any other sector - only 6% of respondents thought it was the most disadvantaged sector. Vocational sectors face added difficulties (as do some university students) of not having access to 'practical' work.

Available literature reveals that although the Covid-19 pandemic seems to have ushered the education sector into a more digitalized phase with obvious benefits, the impact has been quite devastating. The closure of schools, coupled with the huge financial crisis on parents, teachers and guardians deeply had a negative effect on education in Ghana. Whereas the pandemic disrupted activities across all levels of education, evidence seems to suggest that the effects vary across all levels. Although arguable, it is worth saying that the pandemic has caused education more harm than good in Ghana.

2.7 Gap within Literature

There seems to be a wide array of literature on the overall effects of the Covid-19 pandemic on livelihood and the world at large. There also seems to be a considerable amount of research on the impact of the pandemic on education as well. However, most of these studies seem to center on how the pandemic has affected traditional teaching and learning methods. Others also focus particularly on the effects of the pandemic on students' academic performance following the advent of e-learning and its accompanying technological challenges. Evidently, there seems to be no study in Ghana covering the stress-related effects of the Covid-19 pandemic on teachers. Studies covering the effects of the pandemic on the professional quality of life of teachers seem to be existent in other western and/or European countries with little or no research conducted on the topic in Ghana, leaving a gap in literature about the merits and demerits of the pandemic on teachers is concerned. In view of this, this study sets out to examine the nature of teaching, particularly, the perceived stress of basic school teachers and its influence on their professional quality of life during the covid-19 era.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction to the Chapter

The methodology is the systematic, theoretical analysis of the methods applied to a field of study (Patten & Newhart, 2018). It comprises the theoretical analysis of the body of methods and principles associated with a branch of knowledge (Igwenagu, 2016). The chapter presents the philosophical foundation of the study as well as the research design and provides justification for the choice of the research design of the study, the sample and sampling techniques, data collection instruments, the population of the study, as well as the ethical principles used in the work.

3.1 Research Philosophy

The term research philosophy refers to a system of beliefs and assumptions about the development of knowledge (Patten & Newhart, 2018). In other words, research philosophy is a belief about the way in which data about a phenomenon should be gathered, analyzed, and used (Bajpai, 2011). In research, paradigms are very important because they offer beliefs and dictates, which, for scholars in a particular discipline, influence what should be studied, how it should be studied, and how the results of the study should be interpreted (Kivunja & Kuyini, 2017).

3.1.1 Ontology

My ontology for this study, specifically, how I view the world, is realist ontological perspective. Ontology is a branch of philosophy that is concerned how researchers explore truth claims about reality (Moon & Blackman, 2014). Ontology is a belief system that reflects the way a person interprets what denotes a fact. In other words, it regards the central question of whether social entities need to be seen as

objective or subjective. This study examined perceived stress, teacher sense of self-efficacy, and professional quality of life among basic school teachers. I approached this work with the belief that I could use appropriate methods to identify the truth without producing my own direct biases into the work – hence the realist ontological perspective. This ontological stance can also be referred to as objectivism or realism and all of them describe an independent world out there that can be objectively discovered using logical reasoning (Moon & Blackman, 2015; Patten & Newhart, 2018; Trivedi, 2020).

3.1.2 Epistemology

My epistemology for this study is objectivism (Bryman, 2015). What this means is that I believe perceived stress, teacher self-efficacy, and professional quality of life can be objectively observed without my influence and biases (Bryman, 2015; Patten & Newhart, 2018).

Epistemology is the philosophical foundation that describes how researchers believe the world should be understood (Bryman, 2015). There are two broad schools of thought when it comes to epistemology. One group believes that knowledge should be interpreted to identify the underlying meaning. The other group believes that meaning can exist objectively and independent of the subject. The first group are classified as “subjectivist” and the second group classified as “objectivists.” Thus, I believe that perceived stress, teacher sense of self-efficacy and professional quality of life are observable and can be objectively examined with my manipulation or influence.

Taking both ontological and epistemological positions gives direction to the methodology, particularly the research design and research approach. According to Burrell and Morgan (Saunders et al., 2019), whether the researcher is consciously

aware of them or not, at every stage in research, the researcher will make a number of types of assumptions. These include assumptions about human knowledge (epistemological assumptions) and assumptions about the realities the researcher encounters in the research (ontological assumptions). These assumptions inevitably shape how the researcher understands his or her research questions, the methods used, and how findings are interpreted. The philosophical assumptions also guide the research approach and design of any study (Patten & Newhart, 2018).

3.2 Research Approach

I used the quantitative research approach for this study (Field, 2018; Hahs-Vaughn & Lomax, 2020; Patten & Newhart, 2018). According to Apuke (2017), quantitative research approach deals with quantifying and analyzing variables in order to get results. It involves the utilization and analysis of numerical data using specific statistical techniques to answer questions like who, how much, what, where, when, how many, and how (Patten & Newhart, 2018). For this study, I focused on collecting data that required the use of numbers and statistical computations to answer the research questions and hypotheses from a large number of people. Thus, in getting information about perceived stress, teacher self-engagement, and professional quality, I used numbers to describe the relationships among all these variables. This approach is in line with the realist ontology and objectivism epistemology as they speak to an objective way of understanding truth and studying events without the researcher infusing their own agenda or manipulation.

3.3 Research Design

The cross-sectional correlational design was used for this study (Patten & Newhart, 2018). The study was a cross-sectional one because it collected data from one time frame and did not collect data from the same group of people over multiple

time periods. Additionally, the study was correlational because the focus was to establish relationships or associations and not to infer any cause-and-effect relationship or to provide any prediction or mediation or moderation (Patten & Newhart, 2018).

Correlations analyze the direction, degree, magnitude, and strength of the relationships or associations (Field, 2018; Hahs-Vaughn & Lomax, 2018). In this study, not only does the researcher set out to describe the level of perceived stress, teacher self-efficacy and professional quality of life among basic school teachers in post-COVID-19 era, she also examined the relationships or associations among these variables. More so, the correlation coefficient employed in this design offered a simple and objective way to describe the strength of a relationship between the variables. Expressing it as a precise number made it clear and easy to understand (Field, 2018).

3.4 Population

The population for this study is all basic school teachers in Ghana. In Ghana, there are 42301 public basic schools (Education Management Information System [EMIS], 2023). Of this number, 2519 basic schools are found in the Greater Accra region (EMIS, 2023). There are 17847 teachers who serve these basic schools in the Greater Accra region (EMIS, 2023).

Any study's target population is the world of units from which the sample size is selected for the research (Majid, 2018). Since the focus of the study is on the perceived quality of life of basic schoolteachers, the target population constituted all basic schoolteachers in Ghana. However, since the researcher would find it somewhat impossible to include the entire population in the study, the need to identify an accessible population arises (Asiamah et al., 2017). The accessible population is the part of a target population that a researcher can reasonably access and include in their

study. Experts indicate that accessible population may be limited to a specific region, city, or institution (Patten & Newhart, 2018).

The accessible population for this study was the Bortiano area of the Greater Region of Ghana. As a young constituency in the Greater Accra region, the area is known to be a political swing seat, but also struggles a lot with youth unemployment with some reportedly involved in land guardism (<https://www.graphic.com.gh/news/politics/bortianor-ngleshie-amanfro-cry-for-roads-other-developments.html>). Data was collected in the wake of the COVID-19 pandemic when schools had a ‘new normal’ with multiple health-related restrictions. Based on my available mobility, combined with already established trust and relationships already developed with the Bortianor circuit of the Ghana Education Service, I felt it was wise to collect data from this area. The total number of teachers in the Bortianor Circuit of the Ga South Municipality is unfortunately unknown (verbal communication with the Ga South Municipality Basic School Coordinator, Mr. Nkansah).

3.5 Sample size

The G*Power a-priori calculator (figure 3; Faul, Erdfelder, Lang, & Buchner, 2007) was used to calculate the sample size. With an alpha set at .05 and effect size determined to be at least moderate for a correlational study, the analysis indicated that a sample size of 134 was adequate (Field, 2018; Hahs-Vaughn & Lomax, 2020; Patten & Newhart, 2018).

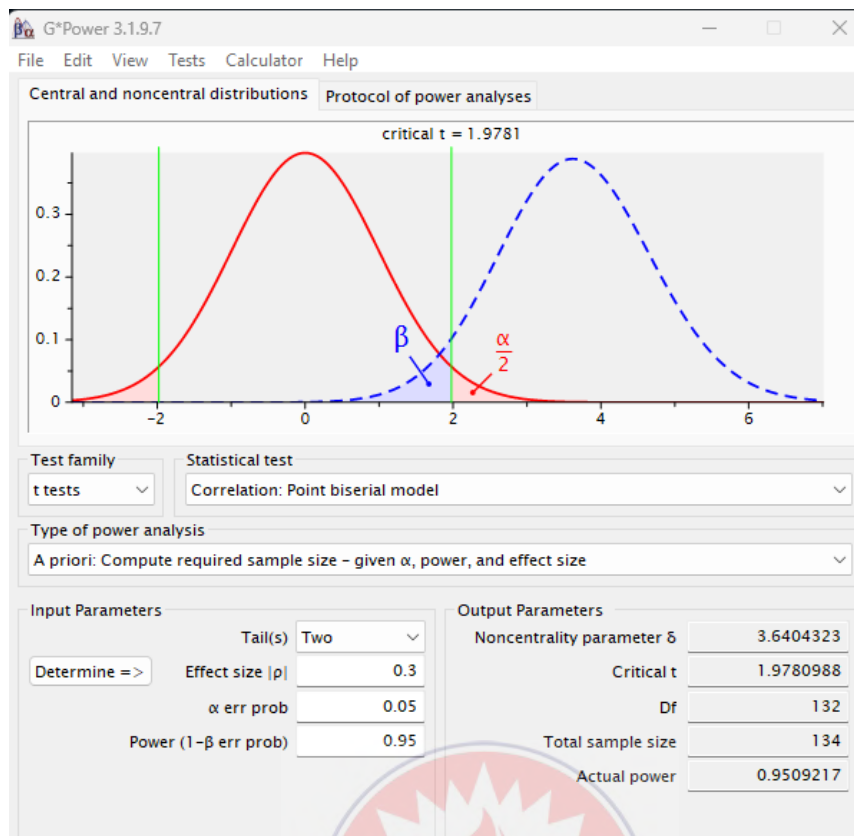


Figure 2: G*Power Analysis of A priori Test

Power analysis is recommended for quantitative researchers (Hahs-Vaughn & Lomax, 2020). However, it is often intentionally or unintentionally ignored due to several statistical concepts which may not always be straightforward to understand. Moreover, the power analysis formula is very model specific; thus, how power analysis is calculated for an exact test will be different for how one is calculated for a regression analysis. The G*Power appears to be the answer to this dilemma. The G*Power is a software that is used to calculate statistical power for diverse statistical tests – t-tests, F-tests, z-tests, and some exact tests (Faul et al., 2009; Faul et al., 2007). When researchers use statistical power analyses, it helps determine the smallest sample that is suitable to detect the effect of a given tests at the desired significance level. While many researchers use multiple sample size tables and calculators, the

G*Power has the ability to detect effect size before data is collected (Faul et al., 2007, 2009; Kang, 2021) especially for studies in education and health professions.

G*Power has been consistently evaluated based on its content, ease of use, and cost (Hahs-Vaughn & Lomax, 2020; Serdar et al., 2020), and been recommended as one of the best tools to calculate sample and effect size (Andrade, 2020; Serdar et al., 2020). For example, Serdar et al (2020) state that “the sample size / power of the study is directly related to the effect size (ES) of the study... The ES provides important information on how well the independent variable(s) predict the dependent variable.” This means that when ES is low, the independent variables lose their ability to effectively predict the dependent variable(s). Serdar et al further posit that for comprehensive presentation and interpretation of studies, both effect size and statistical significance should be provided and considered. Multiple high quality journals emphasize that statistical significance on its own is not sufficient and therefore require evaluation of results in terms of effect size and clinical effect (Serdar et al., 2020).

3.6 Sampling Procedure

Two sampling methods were used – the purposive and convenience sampling methods (Patten & Newhart, 2018). Purposive sampling refers to a batch of non-probability sampling techniques in which units are selected because they have characteristics needed in a sample (Patten & Newhart, 2018). Specifically, not every Ghanaian could be sampled but basic school teachers because they had the characteristics needed to address the research problem under study.

It would have been appropriate to use a probability sampling method (Patten & Newhart, 2018). Probability sampling occurs when every individual gets an equal chance of being included. When sampling is random, it reduces bias as much as

possible. Unfortunately, because of the nature of this study, it was not feasible to use probability sampling. Non-probability sampling (e.g., snowball sampling, convenient sampling, referred sampling, volunteer sampling, purposive sample) has inherent bias as it excludes groups of being from being included in the sample (Patten & Newhart, 2018).

3.7 Research Instruments

To assess the relationship between and among variables, four main instruments were used. The instruments were the Perceived Stress Scale (PSS; Cohen et al., 1994), the Teachers' Sense of Efficacy Scale (short form; Tschannen-Moran & Woolfolk Hoy, 2001), the Professional Quality of Life Scale (PRoQOL; Stamm, 2005), and a demographic questionnaire.

3.7.1 Perceived Stress Scale (PSS; Cohen et al., 1994)

The PSS, a 10-item instrument scored on a Likert-type scale ranging from never (0) to very often (4), was adopted for this work. It is a tool used in assessing how people believe their level of stress is affecting their daily functioning. Some sample questions in the scale include “in the last month, how often have you felt confident about your ability to handle your personal problems?” and “in the last month, how often have you felt difficulties were piling up so high that you could not overcome them?”

The PSS is the most widely used psychological instrument to measure a person's perception of stress. It assesses the degree to which a person sees their situation as stressful. The instrument assesses how overwhelmed people feel about their lives, as well as how unpredictable or uncontrollable, overloaded, and unpredictable respondents find their lives. Further, the scale includes a few queries about present levels of expressed stress.

The PSS was originally normed on community samples with at least a junior high school education ($n = 2,387$) in the United States of America (Cohen & Williamson, 1991). The scale has demonstrated acceptable coefficient alphas in three university samples ($\alpha = .84$ to $.85$; Cohen et al., 1983; Chao, 2012). The PSS has also demonstrated positive correlation with life-event scores, social anxiety, and maladaptive health-related behaviours (Cohen et al., 1986) and associated with individuals' propensity towards depression related to stressful life events (Kuiper, Olmeyer, & Lyons, 1986). To provide evidence for validity, high PSS scores were demonstrated to be associated with failure to quit smoking, greater vulnerability to stressful life-event-elicited depressive symptoms, and more colds (Cohen & Williamson, 1988). The reliability of the PSS in this sample was low to acceptable ($\alpha = .675$; Cohen, 1992; 2016).

3.7.2 The Teachers' Sense of Efficacy Scale (TSES; Tschannen-Moran & Woolfolk Hoy, 2001).

In 2001, Tschannen-Moran and Woolfolk Hoy made attempts to develop a more reliable and valid instrument to measure teachers' efficacy. This instrument was aimed at addressing inadequate perceptions about the construct of teachers' sense of efficacy (Klassen et al., 2009). The one used for the study was the 12-item brief version. Sample questions include "how much can you help your students value learning?" and "to what extent can you provide an alternative explanation or example when students are confused?"

Alrefaei (2015) explains that the TSES was developed to measure three facets of teachers' sense of efficacy. The first factor is teacher efficacy for student engagement. This factor measures teachers' beliefs regarding their abilities to offer motivation to students. The second factor that is measured teacher efficacy in

instructional strategies. This factor examines teachers' beliefs about their ability to make use of different instructional methods in their teaching practice. The third factor is teacher efficacy in classroom management. This factor measures teachers' beliefs concerning their ability to manage their classrooms.

Several researchers have tested the TSES scale (Fives & Buehl, 2016; Fives & Buehl, 2010; Muenchhausen et al., 2021) and have confirmed the validity for the use in different countries and different teaching contexts. The instrument is reported to have yielded acceptable to high reliability levels (from 0.78 to 0.82). The reliability of TSES in this sample was acceptable ($\alpha = .714$; Cohen, 1992; 2016).

3.7.3 Professional Quality of Life Scale (PRoQOL; Stamm, 2005)

The PRoQOL is an instrument that assesses the quality a person feels in relation to their work as someone who helps (e.g., nurse, teacher, counsellor, pastor). As the most commonly used measure of negative and positive affect, the instrument recognizes that both the positive and negative aspects of doing a person's work affect the way that work influences their professional quality of life. The measure has been in use since 1995.

ProQOL includes the positive emotion of compassion satisfaction (CS) and negative emotion of compassion fatigue (CF). Compassion Fatigue is composed of two parts. The first part concerns emotions like anger, depression, and exhaustion. These are all typical reactions of burnout. Moreover, negative emotions caused by fear and work-related trauma are clustered under secondary traumatic stress (Stamm, 2010).

The PRoQoL is composed of three discrete scales which do not yield a composite score. Each scale is psychometrically unique and cannot be combined with the other scores. Compassion Satisfaction and Compassion Fatigue encompass the

positive and the negative parts of helping others who have experienced suffering, respectively. According to Stamm (2010), both burnout and secondary traumatic stress have a shared variance because they both reflect distress associated with helping others. However, despite this shared variance, these two assess different constructs both of which are associated with negative affect. The burnout scale does not address fear, but the secondary traumatic stress incorporates fear with the negative affect.

The PROQoL in its general sense has been used in projects for more than 30 countries around the world. These studies have established that the scale is highly reliable and valid. The reliability indices of the scale were as follows: compassion satisfaction = 0.88; burnout = .075; and Secondary Traumatic Stress = 0.81. The PROQoL is available in English, French, German, Greek, and Hebrew. The reliability of the PROQoL in this sample was very high ($\alpha = .960$; Cohen, 1992; 2016).

3.8 Ethical Considerations

There is a need for researchers to protect their research participants, develop trust with them and promote the integrity of research as well as in counselling (Remley & Herlihy, 2016). They are also expected to guard against misconduct and impropriety that might reflect on their organizations or institutions and cope with new, challenging problems. There is hence the need for measures to be adopted to ensure that ethical standards are upheld.

In this study, the researcher ensured that participants were not put at risk in any way. The Department of Counselling Psychology of the University of Education, Winneba, provided clearance to start data collection. Ethical principles, while focusing on the Nuremberg code, also used the informed consent protocol that highlighted confidentiality and anonymity of participants.

3.9 Data Analysis Procedures

Raw data were entered into SPSS (v25). Frequencies and percentages were used to understand the demographic information. Reliability analyses were performed to ensure that the instruments used in this sample were reliable. The Cronbach's alpha was the index used to measure reliability, and Cohen's (1988) index was used as a measure of classification (i.e., acceptable; strong; very strong). Normality tests were performed to ensure that all assumptions underpinning the conduct of these parametric analyses had been met (Field, 2018). The table 1 below specifies the statistical tests used for each objective and hypothesis.

Table 1: Data Analytic Procedural Table

Objective / Hypothesis	Analysis	What to Report
Perceived stress categories	Descriptive statistics	Frequencies and percentages
Gender differences in perceived stress	Independent Sample t-test	t-statistic; p-value; confidence level and effect size or power.
Describe categories in teacher sense of self-efficacy	Descriptive statistics	Frequencies and percentages
Assess gender differences in student engagement	Independent Sample t-test	t-statistic; p-value; confidence level and effect size or power.
Assess gender differences in instructional strategies	Independent Sample t-test	t-statistic; p-value; confidence level and effect size or power.
Assess gender differences in classroom management	Independent Sample t-test	t-statistic; p-value; confidence level and effect size or power.

Objective / Hypothesis	Analysis	What to Report
Assess gender differences in compassion satisfaction	Independent Sample t-test	t-statistic; p-value; confidence level and effect size or power.
Assess gender differences in burnout	Independent Sample t-test	t-statistic; p-value; confidence level and effect size or power.
Assess gender differences in secondary traumatic stress	Independent Sample t-test	t-statistic; p-value; confidence level and effect size or power.
Hyp: Relationship among perceived stress and factors in teacher self efficacy and professional quality of life	Pearson's Product Moment Correlation	r-value; p-value, indicate the strength and direction of the relationship

In summary, this chapter outlined the methods used in collecting the data for this study. The chapter described the philosophical foundation, then explored the research approach and design, explained the population and sampling, described the instruments used in collecting data, and finally addressed the ethics that guided this work as well as the procedures used in addressing the objectives.

CHAPTER FOUR

DATA ANALYSIS, RESULTS, AND DISCUSSION OF FINDINGS

4.0 Overview of the chapter

This chapter addresses the limitations that occurred to render the study less than perfect. The chapter also presents the results of the data collected. Finally, the results are compared to the literature reviewed in a discussion of the findings.

4.1 Limitations

While this study aimed to examine the relationship among basic school teachers' perceived stress, efficacy in student engagement, and professional quality of life in the post-COVID-19 era, several limitations should be acknowledged. Firstly, a limitation of this study was that data collection occurred during a period when individuals had already become accustomed to wearing nose masks. As a result, the study could not capture the initial stress and adaptation challenges associated with implementing mask-wearing protocols among teachers. The absence of data from the early stages of mask adoption may have limited the comprehensive understanding of the teachers' experiences throughout the entire pandemic period.

Unfortunately, because this study's sample size was smaller than the one recommended by G*Power, it could have led to inadequate results. Readers are therefore advised to use these results cautiously as the lack of adequate sample size. Thus, I could have made a Type II error because of the small sample size combined with the moderately low or low effect size (Sedar et al., 2020). A Type II error incorrectly rejects an alternate hypothesis and wrongly accepts a null hypothesis. Thus, for hypotheses where I accepted a null hypothesis, the small sample size could have been responsible for wrongly accepting the null hypothesis.

Secondly, the recruitment of participants proved to be challenging. Despite efforts to engage a diverse range of teachers, there were difficulties in obtaining a representative sample. Some teachers may have chosen not to participate due to time constraints or a lack of interest in the research topic. As a result, the findings may not fully reflect the experiences of all teachers within the Ga South Municipality.

Thirdly, accessing certain confidential documents relevant to the study was problematic. The municipality deemed certain documents highly confidential, making their retrieval for research purposes difficult. This limitation may have restricted the depth of analysis and the ability to contextualize the findings within the broader educational landscape in the Ga South Municipality.

Furthermore, this study focused exclusively on the Ga South Municipality in Ghana, limiting the generalizability of the findings to other regions or countries. The unique characteristics, resources, and support systems present in this particular municipality may have influenced the stress and burnout levels experienced by teachers differently than in other contexts.

Lastly, the study relied on self-report measures, which may be subject to response biases and inaccuracies. Participants' perceptions of stress and burnout levels could be influenced by various factors such as individual differences, recall bias, or social desirability bias, which might affect the validity and reliability of the collected data.

It is important to consider these limitations when interpreting the findings of this study, as they may impact the comprehensiveness and generalizability of the results. Future research should strive to overcome these limitations by conducting longitudinal studies that include a broader range of participants and encompass multiple geographical locations.

4.2 Results of Data – Demographic Information

4.2.1 Demographic Information

Demographic information of participants comprised gender, age, intimacy status, family composition, length of time working in the Ga South municipality and rank in the teaching service.

4.2.1.1 Gender

Majority of the participants were female ($n = 73$; figure 2).

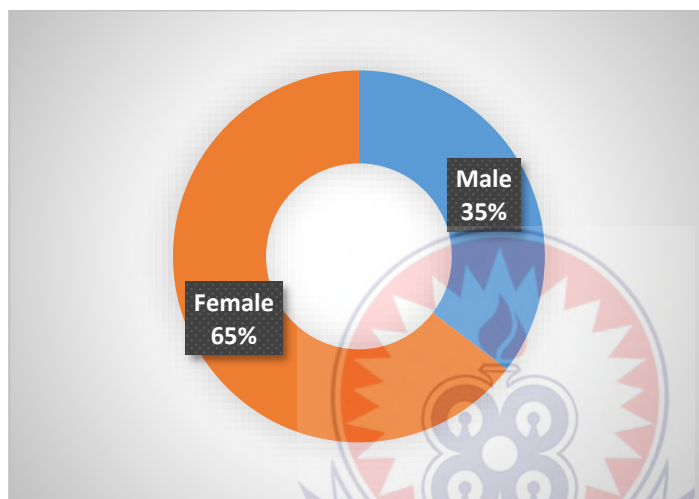


Figure 3: Pie chart of gender

4.2.1.2 Age

The average mean age of participants was 38.04 years old ($SD = 8.15$). The median age of participants was 37 years and modal age was 30 years old. The youngest participant was 25 years old while the oldest was 59 years old.

4.2.1.3 Intimate Relationship Status

Majority of the participants were in some form of intimate relationship (e.g., in a relationship; engaged; married; $n = 85$). A few ($n = 2$) were either widowed or divorced (figure 3).

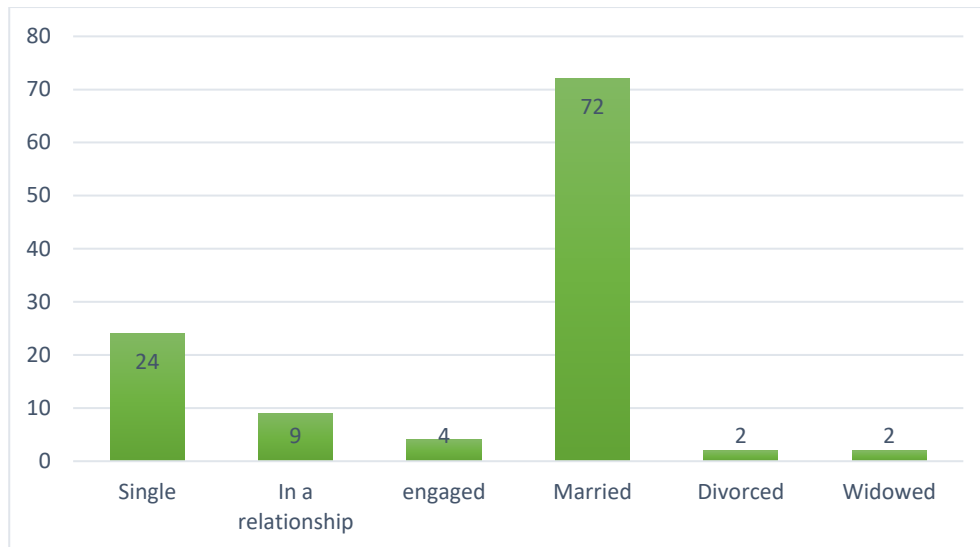


Figure 4: Bar Graph of Intimate Relationship Status

4.2.1.4 Family composition

Majority of the participants indicated they had no biological and/or adopted children living with them ($n = 98$; 87%).

4.2.1.5 Rank in Teaching

Majority of the participants were at the rank of Principal Superintendent.

Table 2. Teaching Rank

Rank	Frequency	Percent
Principal Superintendent	56	49.6
Assistant Director II	24	21.2
Assistant Director I	17	15.0
Deputy Director	5	4.4
Director II	1	0.9
Director I	1	0.9
Missing Data	9	8.6
Total	113	100

4.2.1.6 Religious Beliefs

Majority of the participants indicated they were Christians. This number appears to be consistent with Ghana's national data on religion ($n = 96$). One person indicated they were "Spiritual".

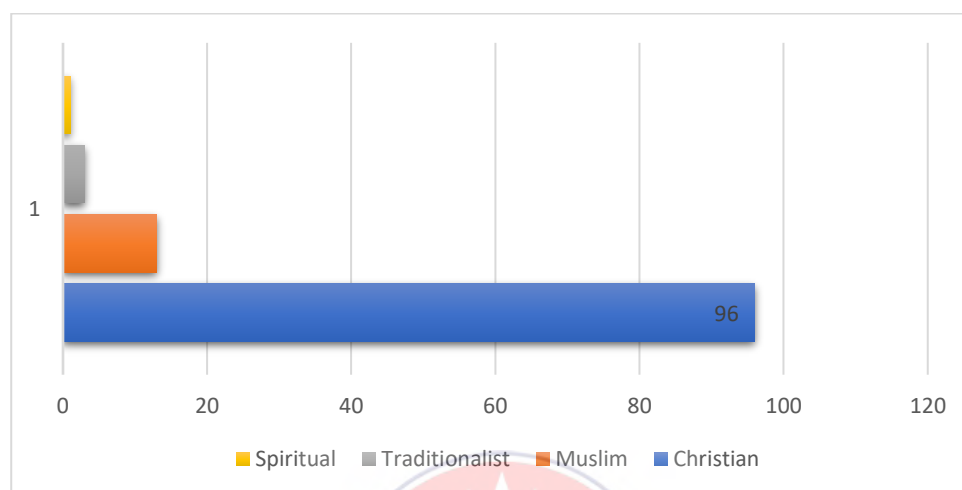


Figure 5. Bar graph of participants' religious affiliation.

4.2.1.7 Years Worked in Municipality

On average, participants had worked in the Ga South municipality for 6.3 years. Some of the participants had worked there for less than a year, but the one with the highest number of working years had worked there as a teacher for 22 years ($Md = 5$ years; $M = 6.31$ years; $SD = 4.05$).

4.3 Results of Data - Assessing the Consistency of the Instruments

A Cronbach's alpha was performed in SPSS to assess if the items within the instruments were reliable. Using Cohen's standard for assessing internal reliability, all the instruments were assessed to be between acceptable to very strong (Cohen, 1988, 1992). The PROQoL, assessing compassion satisfaction and burnout was good ($\alpha = .714$). Perceived stress was judged acceptable ($\alpha = .675$). The Teacher Self-Efficacy Scale was very strong ($\alpha = .960$). These numbers all indicate that the items

within these western-based instruments measure the same construct in a non-western setting in Ghana (Table 3).

Table 3. Internal Consistency Scores of Instruments Used

Instrument (and number of items)	Cronbach's alpha in this study's sample	Interpretation (Cohen, 1992, 2016)
Perceived Stress Scale (10 items)	0.68	Acceptable
Professional Quality of Life Scale (30 items)		
- Compassion Satisfaction (10 items)	0.83	Strong
- Burnout (10 items)	0.51	Caution
- Secondary Traumatic Stress (10 items)	0.66	Acceptable
Teacher Self-Efficacy Scale (12 items)	0.96	Very Strong

4.4 Results of Data - Addressing Research Objectives

There were multiple objectives that had to be addressed. Each one will be addressed

4.4.1 Categories in Perceived stress levels among basic schoolteachers

While the Perceived Stress Scale is not used as a diagnostic tool, the instrument developers have categories to represent “low”, “moderate”, and “high” levels of stress. Scores ranging from 0 – 13 are considered “low perceived stress”. Scores ranging from 14 – 26 are considered “moderate perceived stress”. Scores ranging from 27 – 40 are considered “high perceived stress”.

Descriptive statistics were undertaken to understand how many of the respondents fell within each of the categories. The results are presented as frequencies and percentages (see Table 4).

Table 4. Descriptive Statistics of Stress Categories

Stress Category	Frequency	Percentage
Low Perceived Stress	1	0.9
Moderate Perceived Stress	109	96.5
High Perceived Stress	2	1.8
Missing system	1	0.9
Total	113	100.0

Majority of the basic school teachers (96.5%) fell in the “moderate perceived stress” category. Thus, in this sample, a minority had both low stress and high stress.

4.4.2 Gender Differences in Perceived Stress

An independent sample t-test was used to understand this objective. An independent sample t-test is a statistical test that compares the means of two groups that are independent of each other to determine if they are different. This test is used when the data is numeric, the observations are independent.

The results indicated that there was no statistically significant mean difference in Perceived Stress [$t(110) = .046$; $p > .05$] based on gender ($M_{\text{male}} = 20.27$; $SD = 3.08$; $n = 40$. $M_{\text{female}} = 20.25$; $SD = 2.57$; $n = 72$). Effect size measured by *Cohen's d* demonstrated a small effect (Cohen's $d = .009$; Cohen, 1988; 2016).

Table 5. Gender differences in Perceived Stress

	M	SD	t(110)	Sig	Effect Size
Perceived Stress			.046	.482	.009
Male ($n = 40$)	20.27	3.08			
Female ($n = 72$)	20.25	2.57			

Females and males perceived their stress similarly.

4.4.3 Categories in Teacher Sense of Self Efficacy

The instrument developers require specific items to cluster under the following categories: (a) efficacy in student engagement; (b) efficacy in instructional strategies; and (c) efficacy in classroom management. To understand the gender differences in each of these clusters, an independent sample t-test was used to assess each cluster.

4.4.3.1 Gender Differences in Efficacy in Student Engagement

An independent sample t-test was used to understand this objective. The results indicated that there was no statistically significant mean difference in efficacy in student engagement [$t(111) = -.576; p > .05$] based on gender. Effect size measured by *Cohen's d* demonstrated a minimal effect (Cohen's $d = -.113$; Cohen, 1988; 2016).

Table 6. Gender differences in Efficacy in Student Engagement

	M	SD	t(111)	Sig	Effect Size
Efficacy in student engagement			-.576	.283	-.113
Male ($n = 40$)	23.57	6.69			
Female ($n = 73$)	24.37	7.19			

Females and males experienced efficacy in student engagement similarly.

4.4.3.2 Gender Differences in Efficacy in Instructional Strategies

An independent sample t-test was used to understand this objective. The results indicated that there was no statistically significant mean difference in efficacy in instructional strategies [$t(111) = -.505; p > .05$] based on gender. Effect size

measured by *Cohen's d* demonstrated a minimal effect (Cohen's $d = -.099$; Cohen, 1988; 2016).

Table 7. Gender differences in Efficacy in Instructional Strategies

	M	SD	t(111)	Sig	Effect Size
Efficacy in instructional strategies			-.505	.307	-.099
Male ($n = 40$)	24.15	7.09			
Female ($n = 73$)	24.93	8.26			

Females and males experienced efficacy in efficacy in instructional strategies similarly.

4.4.3.3 Gender Differences in Efficacy in Classroom Management

An independent sample t-test was used to understand this objective. The results indicated that there was no statistically significant mean difference in efficacy in classroom management [$t(111) = .504$; $p > .05$] based on gender. Effect size measured by *Cohen's d* demonstrated a minimal effect (Cohen's $d = .099$; Cohen, 1988; 2016).

Females and males experienced efficacy in classroom management similarly.

Table 8. Gender differences in Efficacy in Classroom Management

	M	SD	t(111)	Sig	Effect Size
Efficacy in classroom management			.504	.308	.099
Male ($n = 40$)	24.12	7.25			
Female ($n = 73$)	23.37	7.80			

4.4.4 Categories in Professional Quality of Life

The instrument developers require specific items to cluster under the following categories: (a) compassion satisfaction; (b) burnout; and (c) secondary traumatic stress. To understand the gender differences in each of these clusters, an independent sample t-test was used to assess each cluster.

4.4.4.1 Gender Differences in Compassion Satisfaction

An independent sample t-test was used to understand this objective. The results indicated that there was a statistically significant mean difference in compassion satisfaction [$t(111) = -2.01$; $p = .023$] based on gender. Females ($M = 36.53$; $SD = 7.35$) had higher compassion satisfaction than males ($M = 33.62$; $SD = 7.37$). Effect size measured by *Cohen's d* demonstrated a moderate (medium) effect ($Cohen's d = -.395$; Cohen, 1988; 2016).

Table 9. Gender differences in Compassion Satisfaction

	M	SD	t(111)	Sig	Effect Size
Compassion Satisfaction					
Male ($n = 40$)	33.62	7.37			
Female ($n = 73$)	36.53	7.35	-2.01	.023	-.395

Females demonstrated more compassion satisfaction than males.

4.4.4.2 Gender Differences in Burnout

An independent sample t-test was used to understand this objective. The results indicated that there was no statistically significant mean difference in burnout [$t(111) = 1.52$; $p > .05$] based on gender. Effect size measured by *Cohen's d* demonstrated a minimal effect ($Cohen's d = .299$; Cohen, 1988; 2016).

Table 10. Gender differences in Burnout

	M	SD	t(111)	Sig	Effect Size
Burnout			1.52	.066	.299
Male ($n = 40$)	25.30	4.44			
Female ($n = 73$)	23.82	5.19			

Males and females experienced burnout similarly.

4.4.4.3 Gender Differences in Secondary Traumatic Stress

An independent sample t-test was used to understand this objective. The results indicated that there was no statistically significant mean difference in secondary traumatic stress [$t(111) = -.782$; $p > .05$] based on gender. Effect size measured by *Cohen's d* demonstrated a small effect (Cohen's $d = -.154$; Cohen, 1988; 2016).

Table 11. Gender differences in Secondary Traumatic Stress

	M	SD	t(111)	Sig	Effect Size
Secondary Traumatic Stress			-.782	.218	-.154
Male ($n = 40$)	24.27	6.39			
Female ($n = 73$)	25.31	6.96			

Males and females experienced secondary traumatic stress similarly.

4.5 Addressing the Research Hypothesis

The research hypothesis was stated in both the null and the alternate. The null was “there is no statistically significant relationship among perceived stress, factors in teacher self-efficacy and factors in professional quality of life. The hypothesis was

answered using the Pearson's Product Moment Correlation (Pearson's correlation; Field, 2018; Patten & Newhart, 2018).

There was a statistically significant correlation among the variables. Perceived stress was not statistically significantly related to compassion satisfaction and burnout. However, perceived stress had a minimal positive relationship with secondary traumatic stress ($r = .223$; $p = .018$; $n = 112$), efficacy in student engagement ($r = .283$; $p = .002$; $n = 112$), efficacy in instructional strategies ($r = .321$; $p = .001$; $n = 112$), and efficacy in classroom management ($r = .201$; $p = .034$; $n = 112$).

Compassion satisfaction had a strong inverse relationship with burnout ($r = -.539$; $p \leq .001$; $n = 113$). Compassion satisfaction had a minimal positive relationship with efficacy in student engagement ($r = .291$; $p = .002$; $n = 113$), efficacy in instructional strategies ($r = .376$; $p \leq .001$; $n = 113$), and efficacy in classroom management ($r = .286$; $p = .002$; $n = 113$).

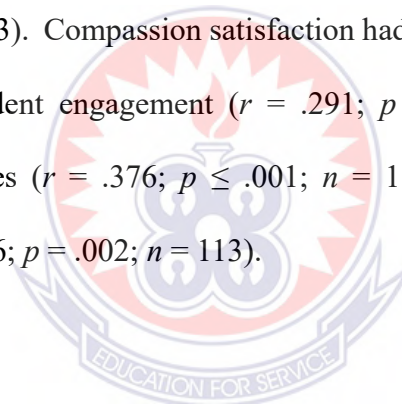


Table 12. Descriptive Statistics and Correlations for Perceived Stress, Factors in Teacher Sense of Self Efficacy and Factors in Professional Quality of Life

Variable	n	M	SD	1	2	3	4	5	6	7
1 Perceived Stress	112	20.26	2.75	1	.115	.043	.223*	.283**	.321**	.201*
2 Compassion Satisfaction	113	35.50	7.46	.115	1	-.539**	-.154	.291**	.376**	.286**
3 Burnout	113	24.35	4.97	.043	-.538**	1	.431**	-.170	-.235*	-.239*
4 Secondary Traumatic Stress	113	24.95	6.75	.223*	-.154	.431**	1	.091	.027	.027
5 Efficacy in Student Engagement	113	24.09	6.99	.283**	.291**	-.170	.091	1	.838**	.874**
6 Efficacy in Instructional Strategies	113	24.65	7.84	.321**	.376**	-.235*	.027	.838**	1	.889**
7 Efficacy in Classroom Management	113	23.64	7.59	.201*	.286**	-.239*	.027	.874**	.889**	1

* $p < .05$

** $p < .001$

Burnout had a minimal inverse relationship with efficacy in instructional strategies ($r = -.235$; $p = .012$; $n = 113$), and efficacy in classroom management ($r = -.239$; $p = .002$; $n = 113$). Burnout had a moderate positive relationship with secondary traumatic stress ($r = .431$; $p \leq .001$; $n = 113$); but no relationship with stress and efficacy in student engagement.

Secondary traumatic stress had a minimal positive relationship with perceived stress ($r = .223$; $p = .018$; $n = 113$) and moderate relationship with burnout ($r = .431$; $p \leq .001$; $n = 113$). Secondary traumatic stress had no relationship with compassion satisfaction, efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management.

The factors within the Teacher Self Efficacy were highly correlated among themselves. Efficacy in student engagement was highly statistically significantly related with efficacy in instructional strategies ($r = .838$; $p \leq .001$; $n = 113$) and efficacy in classroom management ($r = .874$; $p \leq .001$; $n = 113$). Efficacy in instructional strategies was also highly statistically significantly related to efficacy in classroom management ($r = .889$; $p \leq .001$; $n = 113$).

4.6 Discussion of Findings

4.6.1 Discussing of the Demographic Characteristics of Respondents

The findings reveal that out of 113 respondents, 73 of the respondents (65%) were females with the remainder being males. It is worth acknowledging that these figures are consistent with the national demographic data available on teachers in Ghana. Data on teachers in Ghana reveal that there are 187,914 teachers in total. Of this figure, there are 1,121 teachers in the Ga South Municipality where 643 are females and 478 are males. More so, when considering the data on principal

superintendents who constitute the majority of the participants of the study, per the municipal records, 328 (53%) are males whereas 295 (47%) are females. This indicates that even away from the sample, there are more female principal superintendents than males. Such consistency in the population and sample size offers the research findings some form of validity as the gendered classifications of teachers according to the sample seem to fairly represent the total population. In essence, the results obtained is a fair representation of the total population of teachers in Ghana.

4.6.2 Discussing Research Objective 1: What is the level of perceived stress among basic schoolteachers post-COVID-19?

One of the theories that underpin this study is the Transactional Theory of Stress and Coping. This theory emphasizes the dynamic nature of stress and the individual's cognitive appraisal process. According to this theory, stress is a result of the transaction between individuals and their environment, where the individual's perception and evaluation of the situation play a crucial role. In the research findings, it was observed that both male and female teachers experienced high levels of perceived stress, which aligns with the notion that stress is a subjective experience influenced by an individual's appraisal of a particular situation.

The study categorized stress levels as "low," "moderate," and "high," indicating that the teachers' appraisals of stress varied. The realization that the majority of teachers experienced moderate stress is consistent with the findings of Oducado et al. (2021) whose study results showed that more than half of teachers experienced moderate COVID-19 stress. The current study findings, however, are inconsistent with the study of Rubiler and Oros (2021). In that study, more than 60% of the educators reported high and moderately high levels of stress. The predominant stressors were uncertainty about the consequences of the pandemic, work overload

and inadequate working environment. The more stress they perceived, the higher the manifestation of unwanted psychophysical symptoms. Even though the teachers in this study are similar to the that of Oducado et al., their stress levels were higher than the sample in this current study.

4.6.3 Discussing Research Objective 2: Gender differences in Clusters of Teacher Sense of self-efficacy

The findings from the data analysis revealed no significant gender differences in teachers' sense of self-efficacy in terms of student engagement, instructional strategies, and classroom management. This is consistent with Wolters and Daugherty (2007) who found no significant gender differences in self-efficacy, suggesting that contextual variables such as institutional support may play a more critical role than gender alone. This perspective highlights the potential influence of external systemic factors in shaping teachers' sense of efficacy and underscoring the complexity of the issue.

Other studies have however found significant gender differences in sense of self-efficacy. This disparity offers adequate understanding of the influence of gender-specific factors on teachers' confidence in managing classroom interactions and fostering active student participation in the post-pandemic educational environment. According to Bandura's theory, self-efficacy is shaped by mastery experiences, vicarious learning, social persuasion, and physiological states.

The current study is inconsistent with other studies that discovered that male teachers' had higher efficacy levels in engaging students during the challenges of post-COVID teaching (Honicke, 2023). The Honicke study, while not consistent with this current study, is however confirmed by other earlier studies that reported that males had higher levels of self-efficacy in managing student engagement compared to

female teachers (Hidalgo-Andrade et al., 2021; Klassen & Chiu, 2010; Tschannen-Moran & Hoy, 2007). Stress and burnout are well-documented factors that can undermine self-efficacy by eroding teachers' confidence in their ability to manage classroom challenges (Jennings & Greenberg, 2009; Klassen & Tze, 2014).

The pandemic's disruption of traditional teaching methods magnified the importance of teacher self-efficacy in maintaining student engagement (Davis et al., 2024). Teachers with higher self-efficacy adapted more readily to online teaching modalities. This ensured continued student learning and engagement during periods of school closures (Heng & Chu, 2023). The heightened adaptability and resourcefulness of these teachers exemplify the transformative potential of self-efficacy during educational crises (Pressley, 2021). Addressing gender disparities in teacher self-efficacy requires systemic interventions that promote equitable support and resources. Professional development programs focused on innovative engagement strategies, stress management and peer mentoring may help bridge the efficacy gap between male and female teachers (Schunk & Pajares, 2005). Klassen and Tze (2014) reveal the detrimental impact of stress on teachers' instructional confidence, suggesting that the dual burden of professional and domestic roles may have contributed to reduced efficacy among female teachers. However, contrasting studies such as Wolters and Daugherty (2007) found no significant gender differences in instructional efficacy indicating that contextual factors such as institutional support and training opportunities may play a critical role.

It is also worth noting that the COVID-19 pandemic magnified the challenges associated with instructional strategies, particularly as teachers were required to adapt quickly to online teaching modalities (Richards & Thompson, 2023). Teachers with higher self-efficacy demonstrated greater adaptability in leveraging digital tools and

instructional methods to maintain student engagement during periods of remote learning (Pressley, 2021). The differing levels of efficacy between male and female teachers may reflect varying levels of access to technological training and support, further exacerbating gender disparities (Davis et al., 2024).

4.6.4 Discussing Research Question 3: Gender differences in Clusters of Professional Quality of Life

The study findings revealed gender differences in compassion satisfaction; female teachers' reported of higher levels compared to their male counterparts. The findings find a good footing in the Transactional Theory of Stress and Coping (Lazarus and Folkman's, 1984), which posits that individuals' appraisal of their work environment and ability to manage stress influences their emotional responses. Female teachers' higher levels of compassion satisfaction may reflect a greater intrinsic motivation and perceived ability to find fulfilment in nurturing student growth despite external stressors. This supports research that suggests that women often report stronger emotional connections to caregiving roles, potentially contributing to higher levels of compassion satisfaction (Matud, 2004).

Additionally, the Social Cognitive Theory (Bandura, 1997) indicates the role of self-efficacy in fostering positive professional experiences. Female teachers may experience higher self-efficacy in creating supportive learning environments and this enhances their compassion satisfaction (Tschannen-Moran & Hoy, 2007). Their perceived success in fostering positive student outcomes reinforces their sense of professional fulfilment and creates a form of regular feedback that boosts their compassion satisfaction. The findings agree with research by Hidalgo-Andrade et al. (2021) which noted that female teachers reported higher levels of compassion satisfaction compared to males due to their stronger emotional involvement in student

relationships and caregiving roles. Similarly, Klassen and Tze (2014) found that female educators often derive greater satisfaction from relational aspects of teaching, such as mentoring and student development.

It is however interesting that male teachers may report lower compassion satisfaction due to a greater focus on task-oriented aspects of teaching, such as curriculum delivery and classroom management, rather than relational elements (Klassen & Chiu, 2010). Societal expectations around gender roles may also contribute to these differences, with men traditionally expected to maintain a more authoritative and less emotionally expressive teaching style (Tschannen-Moran & Hoy, 2007). Nonetheless, some studies challenge these findings. For instance, Wolters and Daugherty (2007) reported no significant gender differences in compassion satisfaction when controlling for factors such as school culture and support systems.

Like other variables, the COVID-19 pandemic intensified teachers' need for compassion and empathy in addressing student anxieties and behavioural challenges (Klusmann, 2023). Female teachers' higher compassion satisfaction levels may reflect their ability to navigate these emotional demands while maintaining supportive relationships with students as noted by Pressley (2021). The shift to online learning and subsequent reintegration into classroom settings further highlighted the relational strengths often attributed to female educators (Davis et al., 2024). This study revealed no gender differences in burnout and secondary traumatic stress. The findings are not corroborated by multiple studies. For example, the research conducted by Klassen and Tze (2014) reported that female teachers experienced higher burnout levels due to emotional labour and caregiving demands. Similarly, Matud (2004) found that women in caregiving roles frequently report higher emotional exhaustion compared to men. However, male teachers often report burnout in the form of depersonalisation, a form

of emotional distancing from students to cope with stress (Klassen & Chiu, 2010). This contrasts with the relational coping mechanisms observed in female teachers who may experience burnout more acutely as emotional exhaustion rather than disengagement (Jennings & Greenberg, 2009).

Teachers with lower perceived efficacy in managing trauma-related student issues may experience heightened vulnerability to STS. The observed gender differences may be linked to disparities in self-efficacy, as female teachers often report greater emotional involvement in student welfare (Hidalgo-Andrade et al., 2021). These findings are consistent with research by Nolen-Hoeksema (2001) and Matud (2004), who observed that women are more likely than men to experience psychological distress due to their emotional processing tendencies. Hidalgo-Andrade et al. (2021) similarly found that female teachers in high-stress environments reported higher levels of STS, partly due to their deeper emotional engagement with students' issues.

However, research by Wolters and Daugherty (2007) suggest that STS levels may not differ significantly by gender when institutional support systems are robust. This shows the importance of contextual factors. The provision of trauma-informed care training and peer support networks can mitigate gender disparities in STS levels by equipping teachers with the skills to manage emotional stress effectively (Jennings & Greenberg, 2009).

The only variable in this study that had significant gender differences was compassion satisfaction with females reporting higher trait than males. The other variables did not demonstrate any gender differences in perceived stress, efficacy in student engagement, instructional strategy and classroom management, and burnout with secondary traumatic stress. It is possible that the small sample size did not

produce statistical significance between genders. It is also possible that in this sample, both male and female school teachers experienced these variables similarly.

4.6.5 Discussing Research Hypothesis – relationships among all variables

Perceived stress was not statistically significantly related to compassion satisfaction and burnout. However, perceived stress had a minimal positive relationship with secondary traumatic stress, efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management. These results are consistent with that of Klassen et.al, (2013) those results indicated that teacher self-efficacy had a positive effect on teacher stress. Nonetheless, these results are also inconsistent with the findings of Ringer (2017) whose study indicated that there were no statistically significant relationships between the stress factors and perceived self-efficacy for general education teachers.

However, while the majority of studies in the literature support the findings of the current study regarding the negative impact of perceived stress on compassion satisfaction and the positive correlation between efficacy in student engagement and compassion satisfaction, it is important to acknowledge that there are some studies that present contrasting or nuanced results. These studies highlight the complexity and contextual nature of the relationships between perceived stress, efficacy in student engagement, compassion satisfaction, and burnout among teachers. While the current study's findings are generally consistent with existing literature, it is essential to consider the potential moderating factors and contextual influences that may impact these relationships. For example, a study by Johnson et al. (2018) found that while perceived stress was indeed associated with increased burnout among teachers, it did not have a significant direct effect on compassion satisfaction. Instead, they found that

other factors such as social support and self-care practices played a more significant role in predicting compassion satisfaction. This suggests that the relationship between perceived stress and compassion satisfaction may be influenced by additional variables and contextual factors.

Compassion satisfaction had a strong inverse relationship with burnout. Compassion satisfaction had a minimal positive relationship with efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management. The results of this study were corroborated by Buonomo et al. (2021) who found out in a study on the role of compassion satisfaction, as a job resource, on teacher work engagement that teachers' compassion satisfaction is positively related to their engagement at school, confirming that teachers' care toward their students is an important resource supporting their engagement.

The negative correlation between compassion satisfaction and burnout in this study suggests that higher levels of compassion satisfaction may act as a protective factor against reaching the exhaustion stage. These findings are in line with previous studies that have identified compassion satisfaction as a potential buffer against burnout (Figley, 2002; Klimecki et al., 2019). The results also support the Exhaustion stage of the General Adaptation Syndrome (GAS) theory proposed by Selye (1976). According to GAS theory, individuals exposed to chronic stressors are more likely to experience exhaustion, which is characterized by burnout.

Additionally, a study by Brown and Jones (2020) reported mixed findings regarding the relationship between efficacy in student engagement and compassion satisfaction. They found that while higher levels of efficacy were associated with increased compassion satisfaction, this relationship was moderated by factors such as workload and job demands. In high-demand contexts, the positive association

between efficacy and compassion satisfaction was weaker, indicating that external factors can influence the relationship between efficacy and well-being outcomes.

Burnout had a minimal inverse relationship with efficacy in instructional strategies, and efficacy in classroom management. Burnout had a moderate positive relationship with secondary traumatic stress; but no relationship with stress and efficacy in student engagement. These results are consistent with Savas et al. (2014) whose study focused on examining the relationship between teacher self-efficacy and burnout. The results of the data analysis put forward that there was significant, medium and negative correlation between teacher self-efficacy and burnout levels of the participants. Similarly, Smetackova (2017), whose study focused on examining the relationship between teacher self-efficacy and various levels of burnout found out that a negative correlation existed between burnout and self-efficacy.

Secondary traumatic stress had a minimal positive relationship with perceived stress and moderate relationship with burnout. Secondary traumatic stress had no relationship with compassion satisfaction, efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management. These results are consistent with that of Kwong (2018) whose findings showed that higher perceived stress was associated with higher secondary trauma, burnout, job-related health problems, and lower compassion satisfaction. Similarly, Kanyanta et al. (2023) also found out that Secondary Traumatic Stress was negatively correlated with both Burnout and Compassion satisfaction.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the general conclusion of the study. This chapter provides an overview of the major findings, and their implications, and conclude with recommendations for promoting teachers' well-being in the face of pandemics similar to the COVID-19 pandemic.

5.1 Summary of Findings

The study explored the relationship among basic school teaching's perceived stress, teacher sense of efficacy and quality of life. The first research objective was to assess stress categories of school teachers. The findings revealed that there was no statistically significance gender difference in basic school- teachers. Both male and female teachers experienced moderate to high stress similarly. The second research objective sought to identify gender differences in the cluster of teacher sense of self-efficacy: Student engagement, instructional strategies and classroom management. The findings revealed no significant gender differences in these variables. The third research sought to find out gender difference in clusters of professional quality of life (i.e., compassion satisfaction, burnout and secondary traumatic stress). The findings revealed gender differences in compassion satisfaction with female teachers experiencing higher compassion satisfaction than their male counterparts. There were no gender differences, however in burnout and secondary traumatic stress.

5.2 Conclusion

This study used the descriptive quantitative methodology with basic school teachers in the Ga South Municipality of the Greater Accra Region of Ghana. The cross-sectional correlational design was used with a sample of 113 basic school teachers who had been non-randomly sampled (i.e., purposive and convenience sampling).

Study findings revealed that there was no statistically significant gender differences in perceived stress, secondary traumatic stress, burnout, and the clusters within the teacher self-efficacy scale. There were statistically significant gender differences, however, compassion satisfaction.

The study contributes to the existing literature on teacher's stress, self-efficacy and quality of life by highlighting the correlations between these constructs in the post COVID era. The findings and recommendations of this study can inform educational policymakers, school administrators and counselors to develop targeted interventions that promotes teachers wellbeing, efficacy and quality of life.

5.3 Recommendations

Based on the research findings, the following recommendations have been made to promote the well-being of basic school teachers in the face of the COVID-19 pandemic as well as for future research endeavours.

1. Develop and implement stress management programs: Schools and education authorities should design and implement stress management programs tailored to the unique needs of teachers. These programs can provide strategies and resources to help teachers cope with stress, such as mindfulness techniques, and self-care.

2. There is a need to foster positive cognitive appraisals through training and support systems, promote self-care practices, and provide resources to address burnout and secondary traumatic stress.

5.4 Implications for Future Research

Based on the findings of this study, it is suggested herein that future researchers should incorporate qualitative methods or adopt a mixed methods approach in future research to gain a more comprehensive understanding of the experiences, contextual factors, and unforeseen aspects of stress, satisfaction, and burnout among teachers during and after the COVID-19 pandemic. While the quantitative approach provided valuable numerical data and statistical analysis, qualitative methods, such as interviews or focus groups, can delve deeper into participants' perspectives, uncover unexpected findings, and provide a contextual understanding of the challenges faced by teachers. Integrating quantitative and qualitative data through a mixed methods approach would offer a more robust and holistic understanding of the complexities involved. This comprehensive understanding would help inform the development of targeted interventions and support strategies to enhance the well-being of teachers. Therefore, future research should consider incorporating qualitative methods or adopting a mixed methods approach to further explore and address the multifaceted nature of stress, satisfaction, and burnout among teachers in the context of the COVID-19 pandemic and beyond.

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APPENDICES

Appendix	Description
Appendix 1	Request for Introductory Letter
Appendix 2	Letter of Introduction from Department
Appendix 3	Informed consent and research package in English



Appendix I

Request for Introductory Letter

Florence Fatimah Adams
Post Office Box WJ 104,
Weija-Accra.
17th October, 2022.

The Head of Department
Department of Counselling Psychology
Faculty of Educational Studies
University of Education, Winneba

Dear Sir,

Application for Introductory Letter for Data Collection

Student Index: 202122867

I wish to apply for an introductory letter to start data collection. My Principal Supervisor is Dr. Hannah Acquaye, and my Secondary Supervisor is Mr. Joshua Upoalkpajor. My Principal Supervisor has approved and agreed that I write to request permission to start data collection.

The purpose of my study is to examine the relationship among professional Basic School Teachers perceived stress, efficacy in student engagement and professional quality of life. Data will be collected from professional Basic School Teachers in the Bortianor Circuit in the Ga South Municipality in the Greater Accra Region of Ghana.

I have been trained in Ethics in Human Subject Research and my informed consent is a reflection of this training. It is expected that data will be collected from November to December, 2022.

Please find attached the instruments for data collection and my informed consent document.

Thank you.

Yours Sincerely,



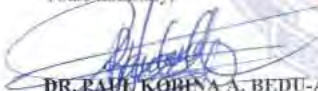
ADAMS FLORENCE FATIMAH

202122867

Cc: Hannah E. Acquaye (PhD)
Mr. Joshua Upoalkpajor

Appendix II

Introductory Letter from the Department of Counselling Psychology

	UNIVERSITY OF EDUCATION, WINNEBA FACULTY OF EDUCATIONAL STUDIES DEPARTMENT OF COUNSELLING PSYCHOLOGY
P.O. Box 25, Winneba, Ghana psychology@uew.edu.gh 030 298 0904	
18 th October, 2022.	
TO WHOM IT MAY CONCERN	
Dear Sir/Madam,	
LETTER OF INTRODUCTION	
I write to introduce to you, ADAMS FLORENCE FATIMAH, the bearer of this letter who is a student in the Department of Counselling Psychology of the University of Education, Winneba. She is reading Master of Philosophy in Counselling Psychology with index number 202122867.	
She is conducting a research on the topic: ASSESSING THE RELATIONSHIP AMONG PROFESSIONAL QUALITY OF LIFE, PERCEIVED STRESS AND TEACHER SELF-EFFICACY . This is in partial fulfillment of the requirements for the award of the above mentioned degree.	
She is required to administer questionnaire to help her gather data for the said research and she has chosen to do so in your outfit.	
I will be grateful if she is given permission to carry out this exercise.	
Thank you.	
Yours faithfully,	
 DR. PAUL KOBINA A. BEDU-ADDO AG. HEAD OF DEPARTMENT	
 www.uew.edu.gh	

Appendix III

Data Collection Packet

University of Education, Winneba
Faculty of Educational Studies
Department of Counselling Psychology

Assessing the Relationship Among Professional Quality of Life, Perceived Stress,
and Teacher Self Efficacy

Informed Consent

Principal Investigator: Florence Fatima Adams

Faculty Supervisor: Hannah E. Acquaye, PhD

You are being invited to participate in a research study. The study is *voluntary* so you can choose to take part or not.

Purpose of the study: The purpose of this study is to assess the relationship among professional quality of life, perceived stress, and teacher self-efficacy among basic school teachers in the Ga South Municipality of the Greater Accra region.

What you will be asked to do in the study: When you take part in this study, you will be asked to complete 3 sets of questionnaires. Please note that the information obtained in this research may be used in future research. You will be asked to complete a set of demographic questions and multiple questionnaires that assess your perceived self-efficacy and stress, especially after this COVID-19 season. There should be no discomforts with any of these questions.

You will not be given any incentive in taking part of this study.

Time required: We expect that you will do the questionnaire in no more than 30 minutes.

Age requirement: You must be a teacher in the Ga South municipality to take part in this study.

Study contacts for questions about the study or to report a problem: If you have questions, concerns, or complaints, or think the research has impacted you negatively in any way, communicate with: Ms. Florence F. Adams or her supervisor, Dr. Acquaye at heacquaye@uew.edu.gh.

Demographic Questionnaire

Gender:

- a. Male ☐
- b. Female ☐

How old are you as of today? _____

Relationship Status:

- a. Single ☐
- b. In a relationship ☐
- c. Engaged ☐
- d. Married ☐
- e. Divorced ☐
- f. Widowed ☐
- g. Other, please explain _____

Family life. What does family look like?

- a. I have no kids ☐
- b. I have biological /adopted kids ☐
- c. Other, please explain _____

How long have you been teaching in the Ga South municipality? _____

What is your Teaching rank?

- a. Principal Superintendent ☐
- b. Assistant Director II ☐
- c. Assistant Director I ☐
- d. Deputy Director ☐
- e. Director II ☐
- f. Director I ☐

What is your religious affiliation?

- a. Muslim ☐
- b. Christian ☐
- c. Traditionalist ☐
- d. Other (please explain) _____

When you teach people, you have direct contact with their lives. As you may have found, your compassion for those you teach can affect you in positive and negative ways. Below are some questions about your experiences, both positive and negative as a teacher. Consider each of the following questions about you and your current work situation. Select the number that honestly reflects how frequently you experienced these things in the last 30 days.

1 = Never	2 = Rarely	3=Sometimes	4=Often	5=Very Often
_____	1.	I am happy		
_____	2.	I am preoccupied with more than one person I teach		
_____	3.	I get satisfaction from being able to teach people		
_____	4.	I feel connected to others		
_____	5.	I jump or am startled by unexpected sounds		
_____	6.	I feel invigorated after working with those I teach		
_____	7.	I find it difficult to separate my personal life from my life as a teacher		
_____	8.	I am not as productive at work because I am losing sleep over traumatic experiences of a person I teach		
_____	9.	I think that I might have been affected by the traumatic stress of those I teach		
_____	10.	I feel trapped by my job as a teacher		
_____	11.	Because of my teaching, I have felt “on edge” about various things		
_____	12.	I like my work as a teacher		
_____	13.	I feel depressed because of the traumatic experiences of the people I teach		
_____	14.	I feel as though I am experiencing the trauma of someone I have taught		
_____	15.	I have beliefs that sustain me		
_____	16.	I am pleased with how I am able to keep up with teaching techniques and protocols		
_____	17.	I am the person I always wanted to be		
_____	18.	My work makes me feel satisfied		
_____	19.	I feel worn out because of my work as a teacher		
_____	20.	I have happy thoughts and feelings about those I help and how I could teach them		
_____	21.	I feel overwhelmed because my case workload seems endless		
_____	22.	I believe I can make a difference through my work		
_____	23.	I avoid certain activities or situations because they remind me of frightening experiences of the people I teach		

-
24. I am proud of what I can do to teach people
-
25. As a result of my teaching, I have intrusive, frightening thoughts.
-
26. I feel “bogged down” by the system (set back / stalled / hampered by the system)
-
27. I have thoughts that I am a “success” as a teacher
-
28. I can’t recall important parts of my work with trauma victims
-
29. I am a caring person
-
30. I am happy that I chose to do this work
-

The questions in this scale ask you about your feelings and thoughts **during the last month**. In each case, you will be asked to indicate by circling *how often* you felt or thought a certain way.

0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often

1. In the last month, how often have you been upset because of something that happened unexpectedly?	0	1	2	3	4
2. In the last month, how often have you felt that you were unable to control the important things in your life?	0	1	2	3	4
3. In the last month, how often have you felt nervous and “stressed”?	0	1	2	3	4
4. In the last month, how often have you felt confident about your ability to handle your personal problems?	0	1	2	3	4
5. In the last month, how often have you felt that things were going your way?	0	1	2	3	4
6. In the last month, how often have you found that you could not cope with all the things that you had to do?	0	1	2	3	4
7. In the last month, how often have you been able to control irritations in your life?	0	1	2	3	4
8. In the last month, how often have you felt that you were on top of things?	0	1	2	3	4
9. In the last month, how often have you been angered because of things that were outside of your control?	0	1	2	3	4
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	0	1	2	3	4

Teachers' Sense of Efficacy Scale¹ (short form)

Teacher Beliefs		How much can you do?								
Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.		Nothing	Very Little	Some Influence	Quite A Bit	A Great Deal				
1.	How much can you do to control disruptive behavior in the classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2.	How much can you do to motivate students who show low interest in school work?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
3.	How much can you do to get students to believe they can do well in school work?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
4.	How much can you do to help your students value learning?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
5.	To what extent can you craft good questions for your students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
6.	How much can you do to get children to follow classroom rules?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
7.	How much can you do to calm a student who is disruptive or noisy?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
8.	How well can you establish a classroom management system with each group of students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
9.	How much can you use a variety of assessment strategies?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
10.	To what extent can you provide an alternative explanation or example when students are confused?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
11.	How much can you assist families in helping their children do well in school?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
12.	How well can you implement alternative strategies in your classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

Endorsed by:

Hannah E. Acquaye, PhD
Principal Research Supervisor
October 16, 2022

