CHAPTER ONE

INTRODUCTION

Background to the Study

Stress has become a complex phenomenon that is usually associated with workplace. However, worldwide surveys as noted in Jarvis (2002) revealed widespread concern about the effects of stress on teachers' sense of well-being and productivity in schools. The term stress was first used by medical researcher Selye (1936) to describe body's biological response mechanisms. Thus, Selye defined stress as the non-specific response of the body to any demand. He further stated that stress is a person's adaptive response to a stimulus that places excessive psychological demands on that person. In other words, stress is a state of mind reflecting certain biochemical reactions in the human body and is projected by a sense of anxiety, tension and depression which is caused by such demands of environmental forces or internal forces that cannot be fulfilled by the resources available to the person.

According to Rajasekhar and Sasikala (2013), stress is seen as the sum of physical and mental responses to an unacceptable disparity between real or imagined personal experience and personal expectations. This definition indicates that stress is a response which includes both physical and mental components. The physical responses include a host of physiological changes which largely fall into both acute response and chronic response. Mental responses to stress include adaptive stress, anxiety and depression. Stress generally occur in all areas of work, however, school-

related stress seems to be more frequently demanding, requiring workers to be environmentally involved with students as well as being mentally and physically challenged. This tends to cause stress for the teachers making them feel overwhelmed with so much workloads. This is such that teachers could start seeing others, especially the school administrators as being mean and inconsiderate.

School-related stress according to DeRogatis, (2012), could be seen as a state of psychological pressure influenced by three main sources or domains, including personality mediators (such as putting together of time pressure, driven behaviour, attitude posture, relaxation potential, and role definition); environmental factors (constituting of vocational satisfaction, domestic satisfaction, and health posture); and emotional responses (such as hostility, anxiety, and depression). DeRogatis, explained that these three sources must be studied interactively to develop a comprehensive account of stress occurrence in schools.

School-related stress occurs as a result of the body's response to any undesirable mental, physical, emotional, social or environmental demand among teachers. This magnitude of stress is determined by the environmental forces or an individual’s operational style. Such environmental events, conditions, circumstances or stimuli that induce stress in schools are known as “stressors” and these could be physical or psychological. These situations according to Akinboye and Adeyemo (2002) could be fear, pain, anger, fatigue, emotional arousal, humiliation, frustration, loss of concentration, non-occurrence of an expected event, occurrence of an unexpected event, death/separation of a loved one and unexpected success which

require a change in the operational style. Akinboye and Adeyemo emphasised, that the demands that a stressor places on an individual must be excessive for stress to occur, although, it is acknowledged that what is excessive for one person may be absolutely tolerable for another person. Teachers' school-related stress in the context of this study is seen as problems, challenges, difficulties, and/or mitigating work circumstances that teachers experience on a regular basis that all may lead to work stress. How stressful these experiences are appraised to be by the teacher depends upon all of the components that are present in their environment and how these components interact with each other.

For Kayaba, Kario and Ishikawa (2009) school-related stress occurs when there is discrepancy between the demands of the school and that of the individual. In that regard, Adeniyi, Aremum, and Adeyinka (2010) identified four factors of stress in school as; stress factors due to student's characteristics, stress factors due to the school environment, stress factor due to administrative procedure and stress factors due to the condition of service. These stress factors according to Adeniyi, Aremum, and Adeyinka may arise from the attitude of some students toward the teacher, their studies and/or to other members of the class. The condition of the school environment such as being filthy, bushy among others has also been pinpointed as one of the factors that contribute in making the teaching and learning environment unconducive. The leadership style of those in administrative positions in the school and the conditions of service which sometimes make demands on the teacher beyond his/her capacities could also lead to stress in schools.

Other studies on work-related stress (Akinmayowa and Kadiri, 2014; Ofoegbu & Nwadiani, 2006) have shown that psychosocial hazards can severely damage the working environment in schools and that the main stress factors for teachers are workload/work intensity, role overload; increased class size per teacher and unacceptable pupils' behaviour. These factors can lead to burnout/depression and emotional exhaustion, high absenteeism, sickness, sleeping problems and cardiovascular diseases/symptoms as major illnesses. According to Agbatogun (2010), teachers in Nigeria experiences challenging moments which was termed as "having a stressful recipe" game as a result of changes in government, government frequent demands, change in policy and poor remuneration. Along with these challenges has been an insistence that teachers demonstrate excellence in their teaching so that students produce positive learning outcomes. Currently, this seems to be an unrealistic expectation about what teachers can and should accomplish owing to challenges that teachers are facing in schools today.

One major challenge facing secondary education in Nigeria may not be the shortfalls in the number of teachers in schools as speculated; but the fact that teachers are overwhelmed with work and are possibly overstressed. Akinsolu (2010) and Haastrup and Adenike (2013) captured this, noting that increased access to primary and secondary schooling in Nigeria has placed great demand on teachers. Most teachers work under stress, in overcrowded classrooms and dilapidated buildings without the necessary learning resources, and the burden of having to deal with large classes.

More studies have reported negative organizational consequences of stress in schools across the globe, including lowered productivity (Hassan, 2014; Jacobs, Tytherleigh, Webb, & Cooper, 2007; Malow-Iroff & Johnson, 2006). For instance, in the United Kingdom (U.K.), academics had low levels of organizational commitment and expressed dissatisfaction with their jobs, pay, and benefits (Tytherleigh, Webb, Cooper, & Ricketts, 2005). In addition, Australian academics were dissatisfied with their jobs; and more specifically with hours of work, industrial relations, promotion opportunities, and pay. In Nigeria however, teachers have embarked on industrial strike action a number of times, not necessarily as a result of stress, but as result of poor remuneration or lack of prompt payment of salaries. That however does not rule out the contributions of stress. In fact, some of the teachers who interacted with the researcher confessed that there are teachers who leave the profession because they cannot successfully deal with the stress, also there are those who stay in the profession and learn to cope by facing the stressors using appropriate intervention mechanisms. The mechanisms as noted could possibly include time management, use of social support network both within formal and informal work settings among others.

For teachers in Anambra State more specifically, stress may evolve from various sources, such as the work roles (formal and informal) that the teachers must assume to get their jobs done, their ability to address constantly changing student issues, and the ever-changing task of responding to diverse student learning needs. So, investigation of school-related stress occurrence in this study will make use of an

environmental framework to look at a broad group of factors that impact stress, including the influences of other teachers, school staff, school administrators, parents, and students. The notion of capturing the processes that influence teachers' environment that result in work stress is essential to the investigation. While past research on schools has attempted to capture various aspects of the school environment, it does not typically present an environmental picture of the school, including the experiences of teachers within the school and stress that evolve from their various work domains.

This study thus captured secondary school teacher stress events that evolve from a multitude of their work domains, such as: the nature of the job for teachers; interactions with other school staff, students, and parents; the nature of the school atmosphere; the absence of social support; and even government and systemic influences. The domains were identified in this study, which then served as a basis for developing the school-related teacher stress occurrence measure. The four domains of teacher stress emerging from the process include: instructional delivery; referring to the teachers' personal approach and teaching characteristics; social climate and support refers to the overall social climate of the school, as well as the nature of social interactions between secondary school teachers and other school staff; formal job characteristics refers to the responsibilities explicitly outlined roles of the job, such as teaching classes, managing students and paperwork, while informal job duties which refers to additional duties these teachers take on outside of their teaching activities.

These domains formed the framework for measuring school-related teacher stress and reflect differing levels of environment. Therefore, the various components that are present within the school environment contain rich information about what influences teacher experiences of stress, including potential stressors that may come from other school staff, administrators, and parents. A study such as this highlights the need for an assessment of how each teaching domain impacts the occurrence of stress that secondary school teachers experience, irrespective of gender, experience or work location.

Many reports amongst some school teachers have also suggested that participation in school work has become increasingly stressful and is continuing to have profound effects on both male and female teachers' physical health and mental well-beings. Although school-related stress occurrence seems to cuts across gender, studies (Aftab & Khatoon, 2012; Akomolafe, 2011; & Omoniyi & Ogunsanmi, 2012) have observed gender differences in teachers' experience of stress in schools. Together, these studies represent efforts to describe specific aspects of the work lives of male and female teachers inside the classroom and in the broader school context such as curriculum, perceived marginalization, and relations with other school staff. As such, they provide important contours of work life more so than addressing an overall stress occurrence in each teacher work domain.

Links between demographic variables (such as school location and working experience) and work-related stress experienced by teachers has also been noted. For instance, Jackson et al. (2010) established that there was a significant relationship

between the prevalence of teaching stress and the demographic variables of gender, age and teacher qualifications. Bhadoria and Singh (2010) for instance noted younger and less experienced teachers are said to experience more stress and burnout than older or more experienced teachers. Anitha (2007) concurred with this phenomenon and noted that the older a person gets, the lower the experience of life stress as well as role stress, meaning that younger persons are likely to experience more stress than the older professionals. This current study therefore, in line with these earlier reports also assumes that, school location (rural/urban) and working experience could also play some roles in secondary school teachers' experience of stress in schools. This study thus intends to present a more complete portrait of teacher school-related stress in specific work domains, being that specific work experience of teachers represents a relatively ignored area of research in the larger context of education and teacher stress. Thus, there is need to bridge the existing gap to cover the domains of stress which seems relevant to the experiences of the teachers. This thus forms the basis for this study.

Statement of the Problem

Research evidences have indicated that despite many research efforts, teaching is not yet a stress-free occupation and such knowledge has been expounded in literature. Work-related stress in schools is thus increasingly becoming a source of concern among teachers, not only in Anambra State, but around the globe. School-

related stress does not only negatively influence the productivity and creativity of teachers, but also their overall health, well-being and morale.

Teachers, especially those teaching in secondary schools in Anambra State work so hard to ensure that they discharge their allotted duties and deliver on their job of training the students happily. Students' performance could be high when a teacher had set the direction, had implemented the plan and had delivered the services to the desired standards. Then, goal-directed teaching and learning becomes more effective and satisfying for both the teachers and students. However, due to enormous workload, student-related issues and role conflicts arising from the usual attendant large population of students, teachers' tasks have become enormously challenging which often affect their health and the way they handle issues. The school teachers are not the only victims of this menace. Observation has shown that when teachers' are stressed by workload, it has a significant role in the success or failure of students. Hence, it is obvious that once the teacher's disposition changes for the worse due to stress or any circumstance as such; it will likely exert a serious negative effect on learners as some behaviour exhibited by teachers may ultimately become a hindrance to their learning outcomes. This situation is of concern to many people in the society, including this researcher who is also a concerned teacher.

Since efforts put through to wrestle this menace have not yielded significant result, there is need therefore to take a different approach in investigating the occurrence of stress through assessment of its occurrence in each of their work

domains. This approach thus presents an assessment of the extent of school-related stress occurrence among secondary school teachers in Anambra State.

Purpose of the Study

The main purpose of this study is to analyse the extent of school-related stress occurrence among public secondary school teachers in Anambra State. Specifically, the study sought to determine: the extent of school-related stress associated with:

1. Instructional delivery.
2. Social support/climate.
3. Formal job duties.
4. Informal job duties.
5. Instructional delivery among male and female secondary school teachers in Anambra state.
6. Social support/climate among male and female public secondary school teachers in Anambra state.
7. Formal job duties among male and female public secondary school teachers in Anambra state.
8. Informal job duties among male and female public secondary school teachers in Anambra state.

9. Instructional delivery among public secondary school teachers in urban and rural areas in Anambra State

10. Social support/climate among public secondary school teachers in urban and rural areas in Anambra State

11. Formal job duties among public secondary school teachers in urban and rural areas in Anambra State.

12. Informal job duties among public secondary school teachers in urban and rural areas in Anambra State.

13. Instructional delivery among public secondary school teachers in Anambra State based on their years of experience

14. Social support/climate among public secondary school teachers in Anambra State based on their years of experience.

15. Formal job duties occurring among public secondary school teachers in Anambra State based on their years of experience.

16. Informal job duties occurring among public secondary school teachers in Anambra State based on their years of experience.

Significance of the Study

Findings from this research will be beneficial to the following: school teachers, students, school administrators, health educators, the larger society and future researchers.

Findings from this study will be of benefit to teachers in public secondary schools. Findings on school-related stress among secondary school teachers in Anambra state may improve the understanding of the extent of occurrence of job-stress in specific job domains as a teacher. This will likely help the teacher evaluate those domains to enhance their working life which eventually may as well hold benefits for teachers at all levels of education in Nigeria when this work must have been published and information disseminated.

Findings from the study will equally be beneficial to school administrators, as such information provided in this study will likely help school administrators to have a better and clearer understanding of the extent of occurrence of school-related stress on teachers work domains. This will help them to take necessary steps that will help to close all channels engendering school-related stress among secondary school teachers in Anambra state, which could possibly enhance staff and organizational performance in respective areas of concern.

Findings from this study will be beneficial to the students. The information from this study when utilised would likely lead to stress management programme being initiated by the school to checkmate the possibility of teachers work overload in

various domains. This will likely help improve teacher's performance thereby creating a stress free environment that is conducive to students learning. This will help make teaching and learning beneficial for the students.

Similarly, findings from the study will benefit the career health educators. Having knowledge of the teachers work domains where school-related stress occur more among secondary school teachers in Anambra state can help human resource specialists and health educators forecast possible stress occurrence and as wellbeing well prepared to manage the situation to a minimal level.

Findings from the study will be of benefit to the larger society. The findings will be significant as it will give room for initiation of collaborative effort within the society, working together to stamp out all channels of school-related stress occurrences.

Finally, findings from this study will benefit the future researchers. The findings shall be significant as it shall be a reference material for anyone investigating similar problem or replicating this study.

Scope of the Study

This study was delimited to analysing the extent of school-related stress occurrence among public secondary school teachers in Anambra State. The study determined the extent of school-related stress associated with: Instructional delivery,

social support/climate, formal job duties and informal job duties. Gender, school location and experience served intervening variables.

Research Questions

The following research questions were posed to guide the study:

1. What is the extent of school-related stress occurrence among public secondary school teachers in Anambra State associated with instructional delivery?

2. What is the extent of school-related stress occurrence among public secondary school teachers in Anambra State associated with social support/climate?

3. What is the extent of school-related stress occurrence among public secondary school teachers in Anambra State associated with formal job duties?

4. What is the extent of school-related stress occurrence among public secondary school teachers in Anambra State associated with informal job duties?

5. What is the extent of school-related stress occurrence associated with instructional delivery among public secondary school teachers in Anambra State in relation to their gender?

6. What is the extent of school-related stress occurrence associated with social support/climate among public secondary school teachers in Anambra State in relation to their gender?

7. What is the extent of school-related stress occurrence associated with formal job duties among public secondary school teachers in Anambra State in relation to their gender?

8. What is the extent of school-related stress occurrence associated with informal job duties among public secondary school teachers in Anambra State in relation to their gender?

9. What is the extent of school-related stress occurrence associated with instructional delivery among public secondary school teachers in urban and rural areas in Anambra State?

10. What is the extent of school-related stress occurrence associated with social support/climate among public secondary school teachers in urban and rural areas in Anambra State?

11. What is the extent of school-related stress occurrence associated with formal job duties among public secondary school teachers in urban and rural areas in Anambra State?

12. What is the extent of school-related stress occurrence associated with informal job duties among public secondary school teachers in urban and rural areas in Anambra State?

13. What is the extent of occurrence of school-related stress associated with instructional delivery among public secondary school teachers in Anambra State based on their years of experience?

14. What is the extent of occurrence of school-related stress associated with social support/climate among public secondary school teachers in Anambra State based on their years of experience?

15. What is the extent of occurrence of school-related stress associated with formal job duties among public secondary school teachers in Anambra State based on their years of experience?

16. What is the extent of occurrence of school-related stress associated with informal job duties among public secondary school teachers in Anambra State based on their years of experience?

Hypotheses

The following null hypotheses were formulated to guide the study and were tested at 0.05 level of significance:

1. There is no significant difference on the extent of occurrence of school-related stress associated with instructional delivery among male and female public secondary school teachers in Anambra state.

2. There is no significant difference on the extent of occurrence of school-related stress associated with social support/climate among male and female public secondary school teachers in Anambra state.

3. There is no significant difference on the extent of occurrence of school-related stress associated with formal job duties among male and female public secondary school teachers in Anambra state.

4. There is no significant difference on the extent of occurrence of school-related stress associated with informal job duties among male and female public secondary school teachers in Anambra state.

5. There is no significant difference on the extent of occurrence of school-related stress associated with instructional delivery among public secondary school teachers in urban and rural areas in Anambra State.

6. There is no significant difference on the extent of occurrence of school-related stress associated with social support/climate among public secondary school teachers in urban and rural areas in Anambra State.

7. There is no significant difference on the extent of occurrence of school-related stress associated with formal job duties among public secondary school teachers in urban and rural areas in Anambra State.

8. There is no significant difference on the extent of occurrence of school-related stress occurrence among public secondary school teachers in urban and rural areas in Anambra State associated with informal job duties.

9. There is no significant difference on the extent of occurrence of school-related stress associated with instructional delivery among public secondary school teachers in Anambra State based on their years of experience.

10. There is no significant difference on the extent of occurrence of school-related stress associated with social support/climate among public secondary school teachers in Anambra State based on their years of experience.

11. There is no significant difference on the extent of occurrence of school-related stress associated with formal job duties occurring among public secondary school teachers in Anambra State based on their years of experience.

12. There is no significant difference on the extent of occurrence of school-related stress associated with informal job duties among public secondary school teachers in Anambra State based on their years of experience?

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter reviewed the literatures related to the study. The following sub-headings will serve as a guide;

Conceptual Framework

Stress

School-related stress

Theoretical Framework

Cognitive Appraisal Theory

Theoretical Studies

Stress and its kinds

Causes of stress

Sources of stress

Gender factors in stress

Effects of stress

Work-place stress prevention and management

Stress in education

Domains of stress

Models of stress

Empirical Studies

Studies on school-related stress

Summary of Literature Review

Conceptual Framework

Stress

Stress has taken many different meanings which are often contradictory and confusing. The word ‘stress’ has become a word commonly used in a variety of settings, with different meanings attached to the situation in which it is used. Selye (1994) points out that stress as a concept suffer from the mixed blessings of being too well known and too little understood’. This “hard to pin down” nature of stress is demonstrated by the fact that there are many definition of stress, and it is used in literature in a fundamentally different ways: as an environmental condition, as an appraisal of an environmental condition, as a response to that condition, and as some form of relationship between the environmental demands and the person’s ability to meet those demands.

There are, however, three general perspectives which have been identified. One is that stress is as a result of something outside of the individual, that is, external factors are the cause of stress; the second is that stress is internal. It is what goes on in inside the individual as they interpret or react to what is going on around them (Gold & Roth, 2003); and the third major perspective is the transactional view of such researchers as Folkman and Moskowitz (2004) and O’Driscoll and Cooper (2002)

which focuses on the cognitive processes and emotional reactions of individuals to stress in their environments.

Psychological stress, according to Aftab and Khatoon (2012) cannot be solely confined in the environment itself or just as the result of personality characteristics. Lazarus acknowledges that it is dependent on a particular kind of person-environment relationship and therefore the struggle to adapt to life may be termed stress. Other words that have been used in the past according to Lazarus as a substitute for stress are: conflict, frustration, trauma, anomie, alienation, anxiety, depression, and emotional distress.

According to Olivier and Venter (2003), stress is derived from the Latin word "strictus" that translates into taut, meaning stiffly strong. Oliver and Venter (2003) rely on the definition of Dr. Hans Seyle (1994) who defined stress in physiological terms, as a non-specific or generalized bodily response. This response results when any demand is made on the body, whether it is an environmental condition to survive or a demand that individuals make on themselves in order to accomplish a personal goal.

Stress according to Health and Safety Executive HSE (2006) is the reaction people have to excessive pressures or other types of demands placed upon them. Stress could arise when people worry that they cannot cope. Stress refers to the responses elicited by the physical and psychological events that an individual perceives to be harmful or emotionally threatening. It is a feeling of tension, which is

both physical and emotional and is caused by physiological, psychological and environmental demands. In general, according to HSE (2006), stress is related to both external and internal factors. External factors include physical environment, job, relationship with others, home and all the situations; challenges, difficulties and everyday expectations. Internal factors which influence ability to handle stress include nutritional status, overall fitness levels and emotional well-being.

To avoid confusion of multi-definitions, Jones and Bright (2001) maintain that the term stress "…should be used as an umbrella term that includes a range of potentially demanding environmental stimuli and responses and other variables, such as personality factors, that influence the relationship between the two (p.259)." Hart and Cooper (2001) stated that stress is not caused by any single variable, but results from the complex interactions between large systems of interrelated variables. Strains can be mental, physical or emotional. For purposes of this study, stress will be used as an umbrella or organizing term as proposed by the above scholars in the field. Therefore, the term, stress should not be used to refer only to cause (external stimuli or stressors) or effect (responses or reactions) variables, but rather as a general description of a phenomenon that consists of stressors, appraisals, responses, emotions, personality variables, and the relationship among them.

School-related Stress

Generally stress is being experienced everywhere. Melgosa (2008) posit that very few people escape from it because it is part of daily routine. This implies that

stress is not respecter of gender, level of work experience or any profession. Stress comes from various aspects of life including developmental and social changes, financial and accommodation problems, job demands, and the specific demands of academia (Busari, 2011). So, stress can be the result of any number of situations in the workplace. Henry and Evans (2008) maintained that work-related stress can occur when there is a discrepancy between the demands of the environment/ workplace and an individual's ability to carry out and complete these demands. Often a stressor can lead the body to have a physiological reaction that can strain a person physically as well as mentally.

School-related stress according to Selye (1994) is seen as a condition wherein job related factors interact with workers in school to change their psychological or physiological conditions in such a way that the individual is forced to deviate from the normal functioning. The factors which are affecting the stress are physical and personal, occupational, familial, social, psychological and emotional factors. Myendeki (2008) describes school-related stress as the taxation of person's adaptive resources because of job demands in school. Stress of this nature can therefore be understood as the period of adaptation when an imbalance between job demands and the response ability of the worker occurs.

Teachers' school-related stress has been viewed as an interactive process which occurs between teachers and their teaching environment leading to excessive demands being placed on them, and resulting in physiological and psychological distress (Forlin, Douglas & Hattie, 1996). For the purpose of this research, Seyle's

definition is focused on, as it encompasses the notion that stress is caused by physiological, psychological and environmental demands. Seyle (1994) indicated that when confronted with stressors, the body creates extra energy and it is when all the energy available is not utilised, that stress becomes a consequence. Therefore, in the context of this study, school-related stress is defined as the physiological and psychological distress that teachers tend to experience when presented with work demands and pressures that are not matched to their knowledge and abilities and which challenge their ability to cope.

Theoretical Framework

This section presents the review of theoretical approach that is helpful in understanding teachers' school-related stress in secondary schools.

Cognitive Appraisal Theory

The appraisal theory was propounded by Lazarus and Folkman (1989). According to Lazarus and Folkman, stress is a two-way process; it involves the production of stressors by the environment, and the response of an individual subjected to these stressors. His conception regarding stress led to the Theory of Cognitive Appraisal. Lazarus stated that cognitive appraisal occurs when a person considers two major factors that majorly contribute in his response to stress. These two factors include:

1. The threatening tendency of the stress to the individual, and

2. The assessment of resources required to minimize, tolerate or eradicate the stressor and the stress it produces.

In general, cognitive appraisal is divided into two types or stages: primary and secondary appraisal. In the stage of primary appraisal, an individual tends to ask questions like, “What does this stressor and/ or situation mean?”, and, “How can it influence me? Secondary appraisals on the other hand involve those feelings related to dealing with the stressor or the stress it produces. Uttering statements like, “I can do it if I do my best”, “I will try whether my chances of success are high or not”, and “If this way fails, I can always try another method” indicates positive secondary appraisal.

Therefore, at the heart of Lazarus and Folkman theory was what he called appraisal. Before emotion occurs, he argued, people make an automatic, often unconscious; assessment of what is happening and what it may mean for them or those they care about. From that perspective, emotion becomes not just rational but a necessary component of survival.

Cognitive appraisal is a theory of emotion which implicates people’s personal interpretations of an event in determining their emotional reaction. The most important part of this theory is the way an individual interpret the event (for example, was the event a positive or a negative occurrence?) as well as what the individual think caused the situation. In the absence of physiological arousal, one decided what to feel after interpreting or explaining what has just happened. Two things are

important in this: whether the individual interpret the event as good or bad for him or her and what he or she believes is the cause of the event.

According to Richard Lazarus, stress is a two-way process; it involves the production of stressors by the environment, and the response of an individual subjected to these stressors. He purported that a situation is considered threatening or stressful depending on personal perception of the event or conditions by the person who is in that situation. Lazarus stated that cognitive appraisal occurs when a person considers two major factors that majorly contribute in his response to stress. These two factors include:

1. The threatening tendency of the stress to the individual,
2. The assessment of resources required to minimize, tolerate or eradicate the stressor and the stress it produces.

The theory emphasizes the ongoing interaction between the person and the environment and posits that stress is not located in the person or the environment, but in the relationship between the environment, individuals' appraisals of the environment, and on-going attempts to cope with issues that arise.

The theory describes two stages of cognitive appraisal. First, primary appraisal involves appraisal of potential stressors as threatening and posing some kind of threat to the individual. Then, secondary appraisal involves the evaluation of coping resources and alternative responses. If an individual perceives that a situation is threatening, but that he or she has the ability to cope with it, then strain is not experienced. Indeed, the situation may be perceived as challenging.

A distinction is commonly made between problem focused coping, which seeks to solve the demands of a stressor, and emotion focused coping, which helps the individual to feel better about the stressor. Strain arises when an individual appraises the demands of a particular situation as about to exceed available resources and, therefore, to threaten their well-being, necessitating a change in individual functioning to restore the imbalance (Lazarus, 1999).

This theory in relation to this study suggests that the relationship between the environment and person is on-going and reciprocal, as it is the interactions between the two that determine strain. It further indicates that stable individual differences such as personality and individual's internal fluctuations in mood can affect both the appraisal of stressors as threatening and the appraisal of the individual's ability to cope. So, an understanding of the relationship between the person and the immediate environment will help in understanding the school-related stress occurrence among teachers in secondary schools.

Theoretical Studies

This section looks at various opinions and position articles that are related to the study.

Stress and its Kinds

Stress is the single most common reason given for absence from work in most part of the world, and one in six Americans report they are ‘extremely’ stressed (HSE, 2008). However, the general notion of stress at work can be contentious, and the possibility that work causes illness has been received with varying degrees of scepticism, indifference, and alarm across sectors of modern society. Regulators, employers, unions, insurers, and health professionals continue to struggle with the meaning and management of stress in the workplace.

Occupational stress is not a single event or a specific psychological state. Rather, occupational stress describes a general process in which individuals respond to and manage demands to meet multiple goals over time. A basic distinction between stressors (e.g., excessive workloads) as the primary drivers of this process, and strains (e.g., anxiety and depression) as its primary outcomes, has proved useful building a more complete picture of the stress process (Griffin, 2009).

Folkman and Moskowitz, (2004), and Griffin (2009) indicate that teachers’ stress is becoming endemic. For instance, stress is considered to be the main factor contributing towards job dissatisfaction, job-related illness and early retirement in England (Van Dick, Phillips, Marburg & Wagner, 2001). The dominant representation of teaching has become that of a highly stressful occupation (Jarvis, 2002). The increasing recognition received by teachers’ stress over recent years as

observed by Agbatogun (2010) constitutes an indication of the difficulties encountered by teachers.

Paulse (2005) reveals that stress has become widespread amongst teachers, and studies carried out in Victoria, Australia provide insight into the extent of the problem. According to Paulse, it was found that each year 160 teachers, between the ages of 44-45, were superannuated on the grounds of ill-health. One half to two thirds were retired early due to psychological ill-health, whilst a further one –tenth retired due to stress related cardiovascular disorders. Louden (1997) found that in a study of 2138 respondents, 10-20% were experiencing psychological distress, and a further 9% were suffering severe psychological distress.

In both categories, the proportions found were much greater than for the general population. A South African research has highlighted similar issues and the high levels of stress have been reliably associated with a range of casual factors, including those intrinsic to teaching, individual vulnerability and systemic influences (Jarvis, 2002).

The above mentioned research findings do not highlight the difficulties encountered by teachers with regards to some changes that usually take place in the education environment that fundamentally change the roles of teachers. To improve on the service delivery to their constituencies, teachers have had to adapt to changes in the work environment by adapting to new policies and legislation.

There are different kinds of stress; they include acute stress described by Thabo (2010) as the most common form of stress among humans worldwide. Acute stress deals with the pressures of the near future or dealing with the very recent past. This type of stress is often misinterpreted for being a negative connotation. While this is the case in some circumstances, it is also a good thing to have some acute stress in life. Running or any other form of exercise is considered an acute stressor. Some exciting or exhilarating experiences such as riding a roller coaster is an acute stress but is usually very fun. Acute stress is a short term stress and in result, does not have enough time to do the damage that long term stress causes.

Also, chronic stress as described by Bowman, Beck and Luine (2003) saw chronic stress as the exact opposite of acute stress. It has a wearing effect on people that can become a very serious health risk if it continues over a long period of time. Chronic stress can lead to memory loss, damage, special recognition and produce a decreased drive of eating. The severity varies from person to person and also sex difference can be an underlying factor. According to Bowman, Beck and Luine, women are able to take longer durations of stress than men without showing the same maladaptive changes. Men can deal with shorter stress duration better than women but once males hit a certain threshold, the chances of them developing mental issues increases drastically.

Moreover, Linde (2000) states that stress in the workplace is a common occurrence throughout the world in every business. Managing workplace stress becomes vital in order to keep up job performance as well as relationship with co-

workers and employers. For some workers, changing the work environment relieves work stress. Making the environment less competitive between employees decreases some amounts of stress. However, each person is different and some people like the pressure to perform better. Salary can be an important concern for some employees. Salary can affect the way people work because they can aim for promotion and in result, a higher salary and this can lead to chronic stress.

Linde (2000) maintains that cultural differences have also been shown to have some major effects on stress coping problems. Eastern Asian employees may deal with certain work situations differently from how a Western North American employee would. In order to manage stress in the workplace, employers can provide stress managing programmes such as therapy, communication programmes, and a more flexible work schedule.

Types of stress

Stress is classified depending on how long they last and the effects they have on the individual. There are 4 main types of stress: eustress, distress, hyperstress, and hypostress. Eustress is considered the “good stress” as it triggers maximum strength and productivity. It occurs when one needs to be motivated and inspired. An individual experiences this stress when there is need for extra energy for creativity and inspiration. Eustress is the body’s driving force when it reacts to fight-flight response ("The Different types," 2006).

In contrast, distress is negative stress caused by frequent, habitual changes that influences the individual's coping mechanism. It can be prompted by anything from a heavy workload to the death of a loved one. It brings about discomfort and unfamiliarity when the brain longs for a standard routine. Distress can further be categorized into acute stress, episodic acute stress, and chronic stress ("The Different types," 2006) which has been discussed above.

Another type of stress, hyper stress arises when a person is pushed beyond his or her limit. An overworked person can have a strong, exaggerated emotional response to little things. It builds up a lot of aggravation and anxiety in the person, which usually results in emotional outbreaks ("The Different types," 2006). Finally, hypostress surfaces when an individual leads a monotonous, unchallenged life. That is, this person lacks stress. A factory worker assigned to a repetitive task can feel unmotivated and restless ("The Different types," 2006).

Causes of Stress

Job stress according to Archibong, Bassey and Effiom (2010), results from the interaction of the worker and the conditions of work. Views differ on the importance of worker characteristics versus working conditions as the primary cause of job stress. The differing viewpoints suggest different ways to prevent stress at work. Differences in individual characteristics such as personality and coping skills can be very important in predicting whether certain job conditions will result in stress. In other words, what is stressful for one person may not be stressful for someone else. This

viewpoint underlies prevention strategies that focus on workers and ways to help them cope with demanding job conditions.

Colligan, et al. (2006) as cited earlier averred that stress, by definition, is the interaction between an individual and the demands and burdens presented by the external environment. Stress occurs due to a demand that exceeds the individuals coping ability, disrupting their psychological equilibrium. Hence, in the workplace environment stress arises when the employees perceives a situation to be too strenuous to handle, and is threatening to their wellbeing. There are many external stressors that contribute to an employee's ability to adapt to the demands of the environment. For instance, our technologically inclined society can provide a source of workplace stress seeing that some individuals may not have the capacity and the resources to advance their skills.

The European Foundation for the Improvement of Living and Working Conditions (2005) in a report stated that although the importance of individual differences cannot be ignored, scientific evidence suggests that certain working conditions are stressful to most people. Such evidence argues for a greater emphasis on working conditions as the key source of job stress, and for job redesign as a primary prevention strategy. Large surveys of working conditions, including conditions recognized as risk factors for job stress, were conducted in member states of the European Union in 1990, 1995, and 2000. Results showed a time trend suggesting an increase in work intensity. In 1990, according to Akinmayowa (2009) the percentage of workers reporting that they worked at high speeds at least one-

quarter of their working time was 48 per cent, increasing to 54 per cent in 1995 and to 56 per cent in 2000. Similarly, 50 per cent of workers reported they worked against tight deadlines at least one-fourth of their working time in 1990, increasing to 56 per cent in 1995 and 60 per cent in 2000. However, no change was noted in the period 1995-2000 in the percentage of workers reporting sufficient time to complete tasks.

According to Jacobs and Gerson (2004) a substantial percentage of Americans work very long hours. By one estimate, more than 26 per cent of men and more than 11 per cent of women worked 50 hours per week or more in 2000. These figures represent a considerable increase over the previous three decades, especially for women. Jacobs and Gerson writes that according to the United States Department of Labour, there has been an upward trend in hours worked among employed women, an increase in extended work weeks (>40 hours) by men, and a considerable increase in combined working hours among working couples, particularly couples with young children. A person's status in the workplace can also affect levels of stress. While workplace stress has the potential to affect employees of all categories, those who have very little influence on those who make major decisions for the company. However, less powerful employees (that is, those who have less control over their jobs) are more likely to suffer stress than powerful workers. Managers as well as other kinds of workers are vulnerable to work overload (Primm, 2005).

Primm (2005) maintained that economic factors that employees are facing in the 21st century have been linked to increased stress levels. Researchers and social commentators have pointed out that the computer and communications revolutions

have made companies more efficient and productive than ever before. This boom in productivity however, has caused higher expectations and greater competition, putting more stress on the employee. The paper according to Primm (p.23) identifies the following economic factors as may lead to workplace stress:

i. Pressure from investors, who can quickly withdraw their money from company stocks.
ii. The lack of trade and professional unions in the workplace.
iii. Inter-company rivalries caused by the efforts of companies to compete globally.
iv. The willingness of companies to swiftly lay off workers to cope with changing business environments.

Colligan, et al. (2006) maintained that bullying in the workplace can also contribute to stress. This can be broken down into five different categories including threat to professional status, threat to personal status, isolation, excess work, destabilization, that is, lack of credit for work, and meaningless tasks among others. This in effect can create a hostile work environment for the employees that, which in turn, can affect their work ethic and contribution to the organization.

Gyllensten (2005) stated that sexual harassment in the workplace is an important cause to workplace stress. In the workplace, women are more likely to experience sexual harassment compared to men especially for those working in traditionally masculine occupations. In addition, Beru and Kilelo (2015) in another study indicated that sexual harassment negatively affects workers' psychological well-being. Beru and

Kilelo found that level of harassment at workplaces lead to differences in performance of work related tasks. High levels of harassment were related to the worst outcomes, and no harassment was related to least negative outcomes. In other words, women who had experienced a higher level of harassment were more likely to perform poorly at workplaces.

From the foregoing, it has become evident that some factors are more prone to cause stress amongst teachers than others. These vary from country to country, by type and size of school and over age, but provide an overview of the current situation for work-related stress amongst teachers. For instance, the workload and role overload of teachers were found to be among the major stressors (stress factors). This highlights how the amount of work together with the multiplications of areas of responsibility and roles constitute the stress for teachers.

Sources of Stress

Steenkamp (2003) stated that work stressors can only be fully comprehended if the importance of work to the employee is understood; be it for meeting the basic needs of the employees, including maintenance, activity, social needs, self-esteem and self- actualisation. The perceived threat or failure to satisfy these basic needs represents a source of stress in the work place.

Research has highlighted that there are six major sources of work place stress which include: factors intrinsic to the job, the role of the employee, relationships at the workplace, organisational climate and structure, the lack of potential for career

advancement, as well as factors external to the work environment (Cartwright & Cooper, 2007). Stressful situations occur within schools because of the organisation's culture, function, structure, the nature of the management procedures, insufficient training of teachers, time pressure, poor work conditions and poor consultation and communication (Brown & Ralph, 2008).

Olivier and Venter (2003) highlighted the factors that contribute to the increase in stress levels of teachers. They include; lack of discipline in schools, the abolishment of corporal punishment, unmotivated learners, redeployment, retrenchment, and retirement packages for teachers, large teacher-pupil ratios and a new curriculum approach. In addition, the management style of principals, new governing bodies for schools, the high crime rate, coping with current political change and corruption in state departments are also included among the factors contributing to the stress experienced by teachers. (Marais, cited, in Olivier & Venter, 2003).

Research indicates that leadership play a vital role in the care for the personal welfare and emotional support of teachers. Mondal, Shrestha and Bhaila (2011) found that principals that demonstrated excellent human relations skill heightened teachers' loyalty and improved teacher satisfaction, whilst the lack in participatory management, lack of sensitivity to school and teacher-related problems and lack of support was reliably associated with teacher stress and burnout (Jackson, Schwab & Schuler, 2006).

It was further reported that teachers who perceive greater social support from their principals' report less stress than those who do not receive any social support. Setting up shared decision-making processes in schools, such as governing councils, allows teachers to participate in school processes rather than feel they are subordinate to their principals and coerced into participating in school and teacher responsibilities (Nagel & Brown, 2003).

According Devonport, Biscomb and Lane (2008), poor work relations are defined as having low trust, low levels of supportiveness and low interest in problem solving within the organisation. Supervisors, peers and subordinates can dramatically influence employees just by their interactions. Problems of instability may occur in situations where the relationship between a supervisor and subordinate is psychologically unhealthy. Competition amongst colleagues and differences in personality clashes amongst fellow workers can give rise to stress (Cartwright & Cooper, 2007). Jarvis (2002) found that factors such as social support amongst colleagues and leadership style have an impact on levels of occupational stress amongst educators.

Negative interpersonal relations and the absence of support from colleagues or superiors can be significant occupational stressors for employees (Beehr & Glazer, 2005). Conversely, having access to social support from other people in the organisation can reduce psychological strain and alleviate emotional exhaustion (Safaria, Othman & Wahab, 2012). According to Guglielmi and Tatrow (2008), the quality of interpersonal relationships at work is important in that supportive

relationships are less likely to create pressures associated with rivalry, bickering and gossip mongering. In addition, the superior-subordinate relationship can be potentially stressful when the leadership style is authoritarian, lacks understanding that feedback about performance and recognition and praise for effort are beneficial for boss-subordinate relationship.

In explaining work conditions, Sutherland and Cooper (2000) explained that certain level of arousal is needed for optimal performance, but when the arousal exceeds the ability to meet the demand placed on the employee, a feeling of burnout is experienced. In contrast, when employees are not challenged or stimulated by a job, or do not believe that their contribution is valued; feelings of boredom, apathy and poor morale are experienced. Having too much work to do, which is referred to as quantitative overload, often results in employees working extended hours, and this is often associated with an increased cigarette smoking, increased alcohol consumption, and other stress symptoms (French & Caplan, cited in Cartwright & Cooper, 2007).

Understaffing with regards to classroom discipline, according to (Paulse, 2005) is a significant source of stress (Jarvis, 2002), and this situation is exacerbated when teachers are faced with having to deal with pupil- teacher ratios of 60:1. At certain schools there are 15 teachers to 1050 pupils, and this relates to unacceptable working conditions. Various studies such as Brown (2012), Kyriacou (2001) and Hung (2011) have highlighted that time pressure with regards to administrative demands and excessive paper work are major sources of stress for teachers, as there is

inadequate time for preparation; unrealistic deadlines imposed and issues concerning the workload of teachers.

Gender Differences in Stress

Desmarais and Alkanis (2005) stated that men and women are exposed to many of the same stressors. However, women may be more sensitive to interpersonal conflict whereas men might be more sensitive to things that waste time and effort. Furthermore, although men and women might not differ in overall strains, women are more likely to experience psychological distress, whereas men experience more physical strain. Desmarais and Alkanis suggested two explanations for the greater psychological distress of women. First, the genders differ in their awareness of negative feelings, leading women to express and report strains, whereas men deny and inhibit such feelings. Second, the demands to balance work and family results in more overall stressors for women that leads to increased strain.

Schutz and Schutz (2010) stated that combining housework, childcare, shopping and cooking with an outside job and trying to do everything on time is one of the biggest factors of women being more stressed at work, characterized by feelings of guilt and hostility. The Schutz and Schutz maintain that 60 per cent of women who have children under age six years have an outside job and cope with family problems whether single or married most of duties at home fall on shoulders of a woman.

National Institute for Occupational Safety and Health (NIOSH, 2007) in the NIOSH worker health chart book identified that problems at work are more strongly associated with health complaints than are any other life stressor-more so than even financial problems or family problems. NIOSH states that many studies suggest that psychologically-demanding jobs that allow employee little control over the work process increase the risk of cardiovascular disease. On the basis of research by the National Institute for Occupational Safety and Health and many other organizations, it is widely believed that job stress increases the risk for development of back and upper-extremity musculoskeletal disorders. High levels of stress are associated with substantial increases in health service utilization. Workers who report experiencing stress at work also show excessive health care utilization.

Primm (2005) opined that physiological reactions to stress can have consequences for health over time. Researchers (Parker & Maestripieri, 2011; Parker, et al., 2006) have been studying how stress affects the cardiovascular system, as well as how work stress can lead to hypertension and coronary artery disease. These diseases, along with other stress-induced illnesses tend to be quite common in American work-places. Primm (2005, p.13) isolates four main physiological reactions to stress:

i. Blood is shunted to the brain and large muscle groups and away from extremities, skin and organs that are not currently serving the body.

ii. An area near the brain stem, known as the reticular activating system, goes to work, causing a state of keen alertness as well as sharpening of hearing and vision.

iii. Energy-providing compounds of glucose and fatty acids are released into the blood stream.

iv. The immune and digestive systems are temporarily shut down.

Effects of Stress in the Workplace

Teasdale (2006) stated that workplace stress is quite normal however if excessive symptoms of stress are shown then, it interferes with productivity and performance and has impacts on physical and emotional health. Stressful working conditions can lead to three types of strains: Behavioural (e.g., absenteeism or poor performance), physical (e.g., headaches or coronary heart disease), and psychological (e.g., anxiety or depressed mood). Physical symptoms that may occur because of occupational stress include fatigue, headache, stomach upset, muscular aches and pains, chronic mild illness, sleep disturbances and eating disorders. Psychological and behavioural problems that may develop include anxiety, irritability, alcohol and drug use, feeling powerless and low morale. The paper listed the spectrum of effects caused by occupational stress to include absenteeism, poor decision making, and lack of creativity, accidents, organizational breakdown or even sabotage. If exposure to stressors in the workplace is prolonged, then chronic health problems can occur including stroke.

In Teasdale (2006), an examination of physical and psychological effects of workplace stress was conducted with a sample of 552 female blue collar employees of a microelectronics facility. It was found that job-related conflicts were associated with depressive symptoms, severe headaches, fatigue, rashes and other multiple symptoms. A study (Li, & He, 2009) among the Japanese population specifically showed a more than 2-fold increase in the risk of total stroke among men with job strain (combination of high job demand and low job control). Along with the risk of stroke comes high blood pressure and immune system dysfunction. Prolonged occupational stress can lead to occupational burnout. The effects of job stress on chronic diseases are more difficult to ascertain because chronic diseases develop over relatively long periods of time and are influenced by many factors other than stress. Nonetheless, there is some evidence that stress plays a role in the development of several types of chronic health problems-including cardiovascular disease, musculoskeletal disorders, and psychological disorders.

Themes throughout the literature frequently connect stress with burnout. Burnout is not merely a sign of stress rather it is a unique type of work-related response to stress that is specific to the helping professions and people-work environments (Farber, 2000). Although stress and burnout have similar attributes, they are not to be substituted for each other, because stress may lead to burnout; however, burnout does not lead to stress (Lazarus, 1999). Stress alone does not cause burnout; unmitigated stress causes burnout. Unmitigated stress is a stressful situation in which a person feels that there is “no way out”

Burnout thrives in the workplace and is most likely to occur when there has been a mismatch between the nature of the job and the nature of the person doing the job. Different studies that have been conducted reveal that work place stress that consists of job demands and a lack of resources leads to burnout (Schaufeli & Bakker, 2004; Taris, Schaufeli, & Verhoeven, 2005). Sources of stress that lead to burnout may originate within the organisation, although individual characteristics may play a role in an individual's inability to cope with high stress work environments. In terms of individual characteristics, younger workers and women tend to be more vulnerable to burnout than older workers and men (Shirom, 2002).

Initial research on burnout has viewed it as a consequence of workaholism or of overachievement (Strumpfer, 2003). Three key aspects of burnout have been outlined, the first being increased feelings of emotional exhaustion, where the individual's emotional resources are depleted and s/he feels no longer able to give of themselves at a psychological level. Emotional Exhaustion is "characterised by a lack of energy and a feeling that one"s emotional resources are used up. This may coexist with feelings of frustration and tension. Emotional exhaustion can be noted in physical characteristics such as waking up just as tired as when having gone to bed, or lacking the required energy to take on another task or face to face encounter (Thabo, 2010).

Research continues to define teacher burnout as a syndrome characterized by physical, mental, and behavioural fatigue (Gulielmi & Tatrow, 2008; Pines, 2002; Sari, 2004). Teachers are vulnerable to burnout, which is a severe reaction to stress. It

is important to point out that not all teachers who experience stress experience burnout. Teachers who experience burnout are likely high achievers who have desires to go above and beyond and lots of energy, but who feel powerless to achieve their goals, either in helping students or in attaining self-actualization (McKenzie, 2009). Once they are not able to accomplish their goals, their unconscious responses become dangerous to themselves. Ironically, the individual who is unresponsive to his or her job is least likely to burnout.

The process of teacher burnout is on-going and has a snowballing effect. Basically, each individual is predisposed to a set limit of coping energy, that when exhausted, cannot be replenished. The individual, though exhibiting symptoms of burnout, may still be able to perform teacher duties, but has greatly lost his or her dedication and passion for his or her work (McKenzie, 2009). Little commitment is therefore seen as a key factor affecting the quality of educational services.

Over a period of time, job burnout, a response to stress, attacks the educator silently and subtly. Burnout in teachers has been associated with reduced professional commitment and a desire to leave the profession. Common symptoms of job burnout for teachers include dissatisfaction, emotional, physical and mental fatigue, feelings of helplessness and hopelessness; and a lack of enthusiasm about work and/or life in general (Greenberg, 2004).

Burnout, substantiated by emotional exhaustion, depersonalization, and feelings of reduced personal accomplishment often result in absenteeism, illness and

early retirement (Dunham, 2002). Many teachers reported that a majority of their physical ailments and personal dysfunction, including physical exhaustion, marital and family problems and insomnia, increased during the school year, resulting in excessive rates of teacher absenteeism (Thabo, 2010). The effects of burnout are individualized. Wiley (2000) reported that burnout was the result of demands placed on an individual teacher. How a teacher responds to the overwhelming demands placed upon him is an individual matter. Those overwhelming demands often resulted in changes in a teacher's attendance pattern. These attendance patterns were closely related to individual character and belief. Higher levels of absenteeism were also linked to teachers who had received low performance ratings on their evaluations (Pitkoff, 2003).

Prevention of Workplace Stress

NIOSH (2007) reported that a combination of organizational change and stress management is often the most useful approach for preventing stress at work. Both organizations and employees can employ strategies at organizational and individual levels. Generally, organizational level strategies include job procedure modification and Employee Assistance Programmes (EAP). Individual level strategies include taking vacation. Getting a realistic job preview to understand the normal workload and schedules of the job will also help people to identify whether or not the job fit them.

Sauter, Murphy and Hurrell in Armstrong (2006) itemized how to change the organization to prevent job stress as follows:

i. Ensure that the workload is in line with workers' capabilities and resources.
ii. Design jobs to provide meaning, stimulation and opportunities for workers to use their skills.
iii. Clearly define workers' roles and responsibilities.
iv. To reduce workplace stress, managers may monitor the workload given out to the employees. Also while they are being trained they should let employees understand and be notified of stress awareness.
v. Give workers opportunities to participate in decisions and actions affecting their jobs.
vi. Improve communications; reduce uncertainty about career development and future employment prospects.
vii. Provide opportunities for social interaction among workers.
viii. Establish work schedules that are compatible with demands and responsibilities outside the job.
ix. Combat workplace discrimination (based on race, gender, national origin, religion or language
x. Bringing in an objective outsider such as a consultant to suggest a fresh approach to persistent problems.
xi. Introducing a participative leadership style to involve as many subordinates as possible to resolve stress-producing problems.

xii. Encourage work-life balance through family-friendly benefits and policies.

Sauter, Murphy and Hurrell Armstrong (2006) further reports that an insurance company conducted several studies on the effects of stress prevention programmes in hospital settings. Programme activities included: employee and management education on job stress; changes in hospital policies and procedures to reduce organizational sources of stress and the establishment of employee assistance programmes.

According to Gajendran and Harrison (2008), the frequency of medication errors declined by 50 per cent after prevention activities were implemented in a 700 bed hospital. There was a 70 per cent reduction in malpractice claims in 22 hospitals that implemented stress prevention activities. In contrast, there was no reduction in claims in a matched group of 22 hospitals that did not implement stress prevention activities.

Telecommuting is another way organizations can help reduce stress for their workers. Gajendran and Harrison (2008) opined that employees see telecommuting as an alternative work arrangement in which employees perform tasks elsewhere that are normally done in a primary or central workplace, for at least some portion of their work schedule, using electronic media to interact with others inside and outside the organization. One reason that telecommuting gets such high marks is that it allows employees more control over how they do their work. Telecommuters reported more job satisfaction and less desire to find a new job. Employees that worked from home

also had less stress, improved work/life balance and higher performance rating by their managers.

Stress Management

Stress management according to Susie (2013) is said to refer to the wide spectrum of techniques and psychotherapies aimed at controlling a person's levels of stress, especially chronic stress, usually for the purpose of improving everyday functioning. In this context, the term stress refers only to a stress with significant negative consequences or distress. Susie further stated that stress produces numerous symptoms which vary according to persons, situations and severity. These can include physical health decline as well as depression. The process of stress management is named as one of the keys to a happy and successful life in modem society. Although life provides numerous demands that can prove difficult to handle, stress management provides a number of ways to manage anxiety and maintain overall well-being.

Although stress is often thought of as a subjective experience, levels of stress are readily measurable using various physiological tests, Susie (2013) notes that similar to those used in polygraphs. Many practical stress management techniques are available, some for use by health practitioners and others for self-help, which may help an individual to reduce stress, provide positive feelings of being in control of one's life and promote general well-being.

Susie (2013) maintained that the effectiveness of the different stress management techniques can be difficult to assess, as few of them have received

significant attention from researchers. Consequently, the amount and quality of evidence for the various techniques varies widely. Some are accepted as effective treatments for use in psychotherapy, while others with less evidence favouring them are considered alternative therapies. Many professional organizations exist to promote and provide training in conventional or alternative therapies.

Techniques for Managing Stress

There are many techniques to cope with the stresses that life brings. Some of the following ways induce a lower than usual stress level, temporarily, to compensate the biological tissues involved; others face the stressor at a higher level of abstraction as articulated by Lehrer, Barlow, Woolfolk and Sirne (2007) thus: autogenic training, social activity, cognitive therapy, conflict resolution, cranial release technique, getting a hobby, meditation, mindfulness (psychology), deep breathing, yoga nidra, nootropics, reading novels, prayer, relaxation techniques, artistic expression, fractional relaxation, physical exercise, progressive relaxation, and spas. Others include: somatics training, spending time in nature, stress balls, natural medicine, clinically validated alternative treatments, time management, planning and decision making, listening to certain types of relaxing music, and spending quality time with pets.

Techniques of stress management will vary according to the philosophical paradigm. Robertson (2012) stated that although many techniques have traditionally been developed to deal with the consequences of stress considerable research has also

been conducted on the prevention of stress, a subject closely related to psychological resilience-building..

According to Bower and Segerstrom (2004) stress management has physiological and immune benefits. Wolfgang, Lenz and Con (2001) added that positive outcomes are observed using a combination of non-drug interventions such as treatment of anger or hostility, autogenic training, talking therapy (around relationship or existential issues) biofeedback, cognitive therapy for anxiety or clinical depression.

Effects of Stress on Teachers in the School Setting

Education both as a discipline and as a process is not lacking in academic research investigations. On the subject of education and its processes there is a glut of research works and writings. However, here, attention is paid to education in respect of the presence and effects of stress on teachers. Papworth (2003) stated that teaching is an extremely stressful job and while stress can never be completely eliminated it should not be accepted as inevitable. There is much that can be done to remove the unnecessary stress caused by excessive workload, paperwork, and indiscipline.

Luk-Fong (2012) discussed issues related to teachers' identities and life choices when globalization and localization are enmeshed. It examines how competing cultural traditions and contexts acted as resources or/and constraints in framing teachers' identities and their negotiations in the family and the work domains according to their gender positioning, their roles in the family such as husband, wife,

father, mother, brother, sister, son and daughter and roles in the school such as principal, senior teacher or regular teacher. Contrary to an essentialist approach to identity and culture, teachers' stories show that their identities and life choices were hardly free choices; but were often part and parcel of the culture and contexts in which they were embedded. Teachers' identities are found to be fluid, complex, hybrid and multifaceted. Using Hong Kong as a case study, Luk-Fong (2012) provides not only traces of the continuity and changes of Confucian self and cardinal relationships but also a glimpse of how educational reform as neo-capitalist discourses in the workplace interacts with Confucian cultural traditions creating new hybrid practices (problems or possibilities or both) in the school and in the daily lives of teachers.

Carlyle (2003) brought in the practical experiences of teachers on the job. "Eggshell days" is how one teacher in this study describes the experience of stress. Stressed teachers here relate their experiences, perceptions and feelings as they hit rock-bottom. They describe the help and the strategies that enable them to recover and the ways they renegotiate their lives to move forward. Their stories throw light on what has become a crucial - and increasing - personal, family and societal issue that is increasingly prevalent among educators and other public service providers. They also offer hope to others in a similar plight. Carlyle examines the individual psychologies of this group of stressed teachers, their work patterns, roles and relationships and their steps towards recovery. It also highlights the ways the current education system contributes to teacher stress and indicates how dysfunctional school support systems

can be changed so that teachers work in a collegiate and supportive environment. While the author focuses on teachers and the education system, the information and insight provided are easily transferred to anyone who has experienced or witnessed depression and high levels of stress.

Hung (2011) identified the single most cited reason for not choosing teaching as a career is stress, which is also the most common reason for leaving the profession. Hung (2011) looks at the causes of teacher stress, asks why thousands of teachers (after expensive training) are leaving the profession every year due to stress, and suggests ways of coping with and preventing stress. Issues covered include: the perceptions and causes of stress, stressed schools, coping strategies and recovery from stress and health and safety issues. Hung (2011) is based on research of 25 teachers with stress related illness, with case studies of low stress and high stress in primary schools and detailed testimony from primary school heads and teachers.

Duyilemi (2010) examined the sources and correlates of occupational stress among primary school teachers in Nigeria. Duyilemi identified the following as major sources of stress among teachers: poor availability of resources for teaching, delay in promotion, students coming to classes without necessary materials, having to teach large classes, and poor attitude of students to work.

Stress and Teacher Performance: Too much stress can contribute to health problems. Stress can also reduce the ability to perform at the highest levels (Chan, 2003). The negative effects of stress can impact negatively on performance and

quality of life. The effects of stress are unmistakably many. They include increased heart rate, speedy breathing or held breath, tightened muscles as if prepared to fight or to flee, blood being directed to the brain and major muscles (away from digestion, hands/feet, reproductive organs), release of stress hormones like cortisol and adrenaline, slowing or stopping of digestion which causes the brain to be more reactive/less thoughtful. There is also increased perspiration and reduced immune system response (Guglielmi, & Tatrow, 2008). Tension, headaches, neck/back/shoulder pain, tight jaw, sleeping problems, fatigue, loss of concentration, learning problems can increase, irregular or rapid heart rate, migraine headaches, poor circulation, Raynaud Syndrome, high blood pressure, sexual dysfunction (in either sex), digestive problems, upset stomach, ulcers, colitis, hormone imbalances, reduction of immune system function, and over reaction by immune system (allergies). There may also be increased asthma activity, increased aging rate, anxiety, depression, substance abuse, poor habit control, over-eating, low energy, prone to accidents or mistakes, can impair communication, poor performance, among others (Guglielmi, & Tatrow, 2008).

According to Gajendran & Harrison, (2001), the significant challenge facing secondary education today is not the shortfalls in the number of teachers in schools but teachers who have no ability to work with students to improve performance. Increased access to primary and secondary schooling has placed great demand on teachers, most teachers work under stress, in overcrowded classrooms and dilapidated buildings without the necessary learning resources. Even without the burden of

having to deal with large classes and insufficient learning resources, there is need for improvements in teacher recruitment and training.

Domains of Stress

The four domains of teacher stress include: instructional delivery, social climate and support, formal job characteristics, and informal job duties. These domains form the framework for the development of the proposed measure of school-related teacher stress and reflect differing levels of its context. The domains incorporate the stressors that were discussed in the review of literature above.

Instructional delivery includes school policies and teachers practices that contribute to the work stress of teachers in the school. Examples of these types of stressors include testing administration and a lack of necessary supplies and materials for teachers to do their job (Abraham & Chumley, 2000; Hunt, Hirose-Hatae, Doering, Karasoff & Goetz, 2000; Varghese & Jenkins, 2005). For example, secondary school teachers described contradictory messages within the school about the school services that resulted in increased daily stress for the teachers, evolving from regular practices in the school that excluded them (Coetzee, Jansen, Muller, 2009; York-Barr et al., 2007). One study described actual barriers to attempts at the school policy unification at one school over time, including specific financial constraints, lack of time and structure for school and mainstream teachers to communicate and plan together, and divergent visions for the school program at the school and district levels (Hunt et al., 2000).

Moreover, social support and climate refers to the overall social climate of the school, as well as the nature of social interactions between secondary school teachers and other school staff. The organizational culture of the school, as perceived by the school teachers, is one main component of this domain. Negative school climate was indicated by teachers as a stressor throughout much of the published research literature (Abraham & Chumley, 2000; Markham, 1999; York-Barr et al., 2007). Specific interactions and experiences with principal support are also captured in this domain. In previous research, lack of principal support resulted in various teacher stressors, such as a lack of developed protocol to discipline students effectively and an inability by teachers to implement needed changes in their classrooms (Sommerness, 2007). One study found that teachers characterized principals as having little expertise in the schools, which was demonstrated by unequal distribution of school resources and an overall school environment that was insensitive to the needs of both the school teachers and students (Brown, 2012).

Furthermore, discussions of negative school climate revealed that teachers felt that the school services held a negative connotation in their school, often due to physical separation of teachers and students from the rest of the school. Some secondary school teachers at lower grade levels found themselves working in basements, hallways, stairwells, or temporary trailers (Abraham & Chumley, 2000; York-Barr et al., 2007), while others across grade levels are itinerant and move around from classroom-to-classroom or-school-to-school, without a regular space of their own.

According to Trickett et al. (2012), these classroom settings not only contributed to teachers' feelings of being less valued within the school than their mainstream counterparts, but also resulted in physical isolation that limited their daily interactions with other school staff. Thus, school teachers identified stressors regarding social climate and support that emanate from their regular and on-going interactions with all aspects of the school environment, as well as all aspects of the school staff, including: lower-level staff or volunteers, other the school teachers, mainstream teachers, and school administrators or higher-level personnel.

Also, there are both formal and informal work responsibilities performed by school teachers that are viewed as part of their job. Formal job responsibilities include explicitly outlined roles of the job, such as teaching classes, managing students, and paperwork. Some broad factors that have been identified as pertinent to formal job characteristics include teaching and student load, lack of adequate curriculum and materials, and ongoing paperwork and meetings (Abraham & Chumley, 2000). In addition, job duties that school teachers reported specifically as stressors included excessive paperwork; preparing curriculum for multiple grade levels (York-Barr et al., 2007); and disciplinary issues of students (Coetzee, Jansen, Muller, 2009). In the Loh (1995) study, the multiple formal tasks that school teachers were expected to fulfil was the most common reason provided for thoughts about quitting, in addition to "exhaustion," "stress," and being "tired of the job".

Again, the notion of needing to fulfil multiple roles includes informal work responsibilities. Informal aspects of the teacher role include providing emotional

support for students and advocating for students with other school personnel. Additional duties these teachers take on outside of their teaching activities include maintaining relationships with parents (Akhlaq, Amjad, Mehmood, Hassan, Malik (2010), attending to the mental health needs of students, providing students and families with daily living essentials, and home visits (Adiotomre & Adams, 2005).. In one study, school teachers identified the extent of trauma their students had experienced in immigrating to the U.S. as an on-going stressor that they were not prepared for. This was not only an immediate stressor for school teachers, but also a long-term stressor, as it impacted their role in preparing students to eventually enter the mainstream setting. In another study, school teachers described issues of diversity and multiculturalism as arising in their class unexpectedly and her consequential need to address these issues spontaneously as such opportunities arose in the course of classroom interactions (Coetzee, Jansen, Muller, 2009).

Empirical Studies

This section explores various empirical studies on school-related stress whose findings are relevant to the current study. They include:

Studies on School-related Stress Associated with Instructional Delivery

Aralu (2012) carried out a study on the sources of stress and stress management strategies among secondary school teachers in Onitsha Urban. The descriptive survey design was used to carry out the study. Three research questions

and two hypotheses were formulated to guide the study. The target population of the study comprised all married and unmarried secondary school teachers in Onitsha Urban. The population of the study was 1820 teachers. Multistage sampling was used. Out of 65 schools in Onitsha urban, 23 schools were randomly selected for the study. More so, 20 teachers were further randomly selected from 23 sampled secondary schools, thus, the total sample for the study was 460 teachers. A self-developed, validated and reliable questionnaire on sources of Stress and Stress management Questionnaire for Teachers was used for data collection. The data were collated, tallied and coded manually by the researcher and statistician made entries into the Computer. The mean was used in answering research questions. The ANOVA, Z-test and Scheffe's post hoc test were used to test the stated hypotheses.

The result among others showed that generally, the secondary school teachers agreed with all the items that measured their sources of stress and also stress management strategies, however, there were variations based on the variables. Some hypotheses result indicated that teachers of different age groups perceived stressors the same way; also, teachers' sources of stress based on the nature of their school showed that both private and public school teachers perceived stressors the same way. Stress management strategies based on different age groups showed that age did not play any significant role in the way stress was managed among teachers. Teachers stress management strategies due to distance to school showed that distance of teachers home had no influence in teachers' management of stress. This finding from the study is related to the current study. The study having investigated and revealed

relevant sources of teacher stress and management of stress provided a base for the current researcher who seeks to investigate the extent of school-related stress among secondary school teachers.

Agai–Demjaha, Minov, Stoleski and Zafirova (2015) determine the most frequent stress causing factors among teachers in elementary schools and their relationship with demographic and job characteristics. A descriptive-analytical model of a cross-sectional study which involved 300 teachers employed in nine elementary schools was employed in carrying out the study. The questionnaire concerning the impact of stress on teachers' health in elementary schools has been used as an instrument of the study. Statistical Package for the Social Science (SPSS) version 17.0 for Windows was used for data description and analysis. Categorical variables were expressed as absolute and relative number. The Chi-square test was used to test differences in relation to the different demographic and job characteristics. P-value below 0.05 was considered statistically significant while p-value below 0.01 was considered highly significant.

Among six categories of factors that generate work related stress (job demands, control, relationships, role, changes and support) control and support had the highest mean scores. Within the control category the highest levels of perceived teacher's work-related stress were caused by the following factors - changes in terms and conditions without consultation and given responsibility without the authority to take decisions. 141 out of the interviewed teachers (47%) have mentioned changes in terms and conditions without consultation as very stressful, while another 50

(16.67%) have reported it as stressful. 123 out of interviewed teachers (41%) have stated given responsibility without the authority to take decisions as very stressful, with another 105 (35%) have reported it as stressful. In the category support the highest levels of perceived teacher's work-related stress were caused by stress factors - lack of funds/resources to do the job and limited or no access to training. Out of 300 interviewed teachers, 179 (59.67%) have reported lack of funds/resources to do the job as very stressful, while another 50 (16.67%) as stressful. There is no significant relationship between the stress factor limited or no access to training and demographic and job characteristics.

The study concluded that within the control category, the highest levels of perceived teacher's work-related stress were caused by changes in terms and conditions without consultation and given responsibility without the authority to take decisions, while in the category support, the same was true for stress factors lack of funds/resources to do the job and limited or no access to training. This finding is related to the current study because it examined factors that contribute to the occurrence school-related stress among secondary school teachers. However, the study differs because different assessment tools were used and the study was conducted outside Nigeria with a different population.

Adeniyi, Aremum and Adeyinka (2010) examined the perceived causes of job stress among special educators in selected special and integrated schools in the West and North Central parts of Nigeria. The sample for the study consisted of fifty (50) special education teachers from 10 special and integrated schools in two geo-political

zones of the country. The study is a surveys research. Four research questions were generated and tested using descriptive statistics of frequency count, percentage, mean and standard deviation.

The instrument used for data collection was the adapted Job Stress Inventory by Akinboye (1999). The results of the study tested, revealed moderate and extreme stress pattern among special educators. Based on these findings, it was suggested that there should be immediate review of condition of service, provision of adequate instructional facilities, proactive approach to service delivery, and training and retraining of special educators to meet the immediate needs and challenges of the various special needs of children in the Nigerian society. This study is relevant to the present study because the perceived causes of stress among educators of any sort is important in understanding occupational stress among secondary school teachers.

Sichambo, Maragia and Simiyu (2012) investigated the causes of stress among secondary schools teachers in Bimgoma North District of Bungorna County, Kenya. The study population comprised of 37 secondary schools having 544 teachers. Eighteen schools were sampled which included five provincial schools and thirteen district schools. In the provincial schools category, two were boys' schools, two mixed and one girls' school and that is the only Provincial Girls' School in the district. District Schools comprised of three boys' schools, three girls' schools and seven mixed schools. The sample size was 180 teachers and 18 Principals. This sample was obtained by selecting 10 teachers from each sampled school using stratified random sampling and 1 principal from each of the sampled schools using purposive sampling.

Data was collected using questionnaires, document analysis, task performance schedule and interview schedule. Analysis was done using descriptive statistics and was presented on tables, pie charts and graphs.

The study revealed that apart from the normal classroom teaching, teachers had a number of remedial lessons to attend to; larger classes to handle, a lot of paper work and some had to stay in their work stations other than their normal school timings in order to complete various tasks. All these factors were contributing to stress among teachers which were badly impacting their performance. The study recommended that the weekend remedial lessons should be discontinued, regular transfers on request should be in practice and some relaxation time should be given to teachers. The findings of the study are related to this current study as it gave insight to school administrators, the Ministry of Education and individual teachers on the existence of stress among teachers. The study provided data on existence of stress and the forms in which it exists, provided a platform to determining the extent to which stress occurs among secondary school teachers in Anambra State.

Studies on School-related Stress Associated with Formal and Informal Job Duties

Weinstein (2006) conducted a study of English Language Learner (ELL) teacher stress that highlights multiple aspects of ELL teachers' work settings that impact their work stress. Ninety-eight ELL teachers, representing a national U.S. sample, took part in the study. Teachers completed an online questionnaire, which included the current measure in development, as well as a demographic survey, the

Teacher Stress Inventory, and the Maslach Burnout Inventory. The development of the final 40-item measure is described in detail. Findings revealed that the current measure captures stress events unique to ELL teachers, and has both discriminant and predictive validity. The measure developed for the study, the ELL Teacher Stress Measure (ETSM), addresses a significant gap in the field; a limited understanding of ELL teacher stresses and presents a tool that is useful in a variety of school settings.

Findings of the study revealed that the ETSM Formal Job Characteristics domain was positively correlated with level of education, indicating that those with higher-level degrees rated formal job characteristic items as more stressful. More so, the ETSM Informal Job Characteristics domain was positively correlated with working in a charter school, indicating that informal job characteristics were rated as more stressful by those working in charter schools. Finally, the ETSM Social Support/Climate domain was positively correlated with grade level, indicating that stressors around social support/climate increased with grade level.

The whole-measure ETSM did not correlate with any demographics, with one exception. The whole-measure ETSM frequency was correlated with grade, indicating that those in higher grades endorsed more events. No significant differences emerged within any of the groups of job title, categorical grade level groupings, degree, licensure, geographical location (state), and setting (urban, suburban, and rural. However, the largest difference in means was noted between suburban teachers, who reported the highest level of stress and rural teachers, who reported the lowest level of stress.

Findings of this study are related to this study. The study like the current study investigated teachers stress in various Job Characteristics domain covered in the present study. Similarly, the study equally investigated moderator variables as gender, age and setting (urban, suburban, and rural). However, the study equally differed from the current study is the following ways: First, the study was conducted outside Nigeria. Secondly, the study was conducted among English teachers only. More so, a multiple hierarchical regression analyses were used to test prediction of burnout.

Chan, Chong, Chong and Tang (2015) examined the influence of job stress, burnout and job satisfaction among primary school teachers in Ipoh, Malaysia. The study is a correlational study, guided by four null and alternative hypotheses. The research was conducted by drawing sample from primary schools in Ipoh, Perak. Copies of the questionnaires were distributed to those primary schools which are randomly selected. A total 300 sets of questionnaire was distributed to primary school teachers in Ipoh and total number of 240 sets had been collected. Pearson Correlation Matrix and Multiple Regression Analysis are chosen to determine the relationship among job stress, burnout and job satisfaction. Based on the findings, all independent variable (job stress and burnout) had significant relationship with dependent variable (job satisfaction). Based on MRA results, there is negative relationship between job stress, burnout and job satisfaction.

Bharathi (2013) investigated the association between job stress and demographic factors and coping strategies adopted by primary school teachers of missionary and government schools in India. An Interview schedule has been used to

explore association between job stress and demographic factors and coping strategies adopted by primary school teachers of missionary and government schools. The total sample for the study comprised 100 primary school women teachers selected randomly from Missionary and Government primary schools of twin cities of Hyderabad. The data thus obtained was analysed by using Frequencies, Percentages and Correlation analysis. The results indicated that the association between age, income, educational qualifications, teaching experience and job stress did not indicate any definite trends. But a significant association was noticed between training received and job stress. In majority of cases the most effective coping strategies were adopted by teachers of Missionary and Government schools included actively involvement in their work, working together for a common goal, time management, watching T.V, getting proper sleep, reading books, taking good balanced diet, preplanning and taking counselling in order to cope up with their job stress

Studies on School-related Stress Associated with Social Support/Climate

Akomolafe (2011) study investigated the influence of emotional intelligence and gender on occupational stress among secondary school teachers in Ondo state. Four hypotheses were postulated and tested. An ex-post facto design was used to gather 392 usable copies of the questionnaires from secondary school teachers working in the state. Stratified random sampling technique was used to choose the sample. Two instruments, Emotional intelligence and Occupational stress scales were used to collect data for the study. The t-test analysis at 0.05 level of significance indicated that there was a significant difference between the occupational stress of

secondary school teachers with low and those with high emotional intelligence. There was no significant difference between the occupational stress experienced by male and female secondary school teachers. The findings of this study also revealed the significant influences of emotional intelligence on occupational stress among teachers in secondary schools irrespective of their gender. The findings from this study in relation to the current study have strengthened provided facts concerning emotional intelligence as a factor influencing occupational stress.

The relationship that exist between emotional intelligence and occupational stress could be understood from the perspective that teachers with high emotional intelligence are able to monitor their own and others' feelings, discriminate among them and use this information to guide their thinking and actions. They also have the ability to harness emotions to facilitate cognitive activities such as thinking and problem solving. The study concluded that if emotional intelligence skills (empathy, impulse and control) are increased in teachers, they would be more effective in handling their feelings and hence directly reduce the level of stress in them. This could indirectly protect their health and psychological wellbeing. Thus, job performance would be enhanced.

The study by Paulse (2005) identified the sources of stress for teachers involved with inclusive education as well as whether there is a statistically significant difference in stress experienced by teachers based on their biographical details. A stratified random sample of 115 teachers was selected from a population of 300 teachers, teaching at the various schools, located in the Cape Town area of the

Western Cape. The measuring instrument used was the Teacher Stress Questionnaire- a reliable and valid stress questionnaire that has been standardised for South African conditions.

The results from this study highlight that since its inception; inclusive education has made additional demands on teachers. The three most stress areas identified from this study related to the behaviours of pupils, the classroom and support. Apart from the systemic factors that are a significant source of stress for teachers, lack of adequate knowledge or skills to address diversity amongst learners was also highlighted. The study perhaps is significant to the present study as it has pointed out an important factor in the development of school-related stress among teachers in schools. However, the study was carried out outside the shores of Nigeria and did not address the issues of school-related stress occurrence.

Ekundayo and Kolawole (2013) in a study examined the various sources of stress among teachers of secondary schools in Ekiti State. It also examined the coping strategies of these teachers with stress. The descriptive research design of the survey type was used for the study. The population consisted of all the teachers in public secondary schools in the State. The sample was however made up of 180 teachers from 20 secondary schools across the three senatorial districts of the State. Stratified and simple random sampling techniques were used to select the sample. A self-designed instrument tagged 'Stress among Teachers' Questionnaire (SATQ) which was validated by research experts in Tests and Measurement was used to collect data for the study. A test-retest method of reliability was used and a reliability coefficient

of 0.79 was got using the Pearson product moment correlation. The data collected were analysed using percentage score and Pearson Product Moment Correlation. The study revealed that poor working conditions, poor relations with subordinates and late payment of teachers' salaries were major sources of stress among teachers in the state. The study also revealed that organizing one's time effectively is the main strategy of coping with stress among the teachers. The study further revealed a significant relationship between sources of stress and the teaching effectiveness of the teachers. Based on the findings of the study, it was recommended that government should improve the working conditions of the teachers through better pay and some other social facilities. It was also recommended that teachers should make good use of their time as well as relate cordially with their super-ordinates and colleagues.

Rintaugu (2013) investigated the causes of job stress of sports personnel in Kenyan Universities. The design of the study was descriptive survey research design. The target population are 49 sports officers who volunteered to take part in the study. Questionnaires on job stress which had two major sections were used to collect data. Data was collected through questionnaires from (n=40) sports personnel working in Kenya universities. Data was analyzed through t-test and one way ANOVA. Results revealed that causes of stress among sports personnel were decreased job mobility, large number of university students who did not take part in sports, lack of relationship between successful sports performance and promotion, and inadequate personnel. The least causes of stress were poor relationship with fellow sports administrators', working under pressure, pressure of university administrators to

produce results, supervision of sport programs is low and lack of career development while administering sports. Socio-demographic factors of age and highest academic qualification elicited significant differences on the causes of job stress. The study recommends that universities need to address some of the institutional sources' of stress among the sport personnel and future studies may unearth coping strategies used by sports personnel to mitigate stress. The study is related to the current study since it focused on stress among working population. However, the study established the causes of job stress of sports personnel in Kenyan Universities and not among secondary school teachers in Anambra state, Nigeria.

Hanif, Tariq and Nadeem (2011) conducted a study to find out role of personal and job related variables in teacher stress and job performance of school teachers. Teacher Stress Inventory (TSI-Urdu), Teachers Job Performance Scale and personal and job related Information sheet. Two independent samples were selected from Government and Private Schools of Islamabad (Pakistan). Sample I was comprised of 400 teachers (men and women) from Primary and secondary schools. For the evaluation of teachers' job performance another sample of 1200 students from the classes of teachers of sample I was selected. Three students were randomly selected from each teacher's class. Means and standard deviations were used to analyse the study. The mean scores depict that teachers show highest level of stress at work related stressors.The findings further revealed that negative significant relationship exists between teachers stress and job performance. The step-wise regression analysis revealed school system, gender, job experience, number of family members, and

number of students as significant predictors of teacher stress and gender, school system, family members, job experience and age as significant predictors of teachers' job performance. Findings from this study are related to the current study having touched on teachers stress, gender and years of experience. However, the study though carried out outside Nigeria also failed to provide details on the extent of stress occurrence among secondary school teachers in Anambra State.

Agai–Demjaha, Minov, Stoleski and Zafirova(2015) determined the most frequent stress causing factors among teachers in elementary schools and their relationship with demographic and job characteristics in Skopje, Republic of Macedonia. the study is a descriptive-analytical model of a cross-sectional study which involved 300 teachers employed in nine elementary schools. The questionnaire concerning the impact of stress on teachers' health in elementary schools has been used as an instrument of the study. Evaluation of examined subjects included completion of a specially designed questionnaire. Statistical Package for the Social Science (SPSS) version 17.0 for Windows was used for data description and analysis.

Findings from the study revealed that among six categories of factors that generate work related stress (job demands, control, relationships, role, changes and support) control and support had the highest mean scores. Within the control category the highest levels of perceived teacher's work-related stress were caused by the following factors - changes in terms and conditions without consultation and given responsibility without the authority to take decisions. In the category support the highest levels of perceived teacher's work-related stress were caused by stress factors

- lack of funds/resources to do the job and limited or no access to training. Out of 300 interviewed teachers, 179 (59.67%) have reported lack of funds/resources to do the job as very stressful, while another 50 (16.67%) as stressful. There is no significant relationship between the stress factor limited or no access to training and demographic and job characteristics.

Ogoegbulem (1995) study had investigated and identified stressors in the work environment of secondary school teachers and principals in Anambra and Enugu States and the strategies they adopt in the management of stress on the job. Specifically, answers to the three research questions posed were sought. The design of the study was a survey. The study population consisted of 14,191 teachers and all the principals in 457 secondary schools in all the education zones in the two states. Fifty per cent of all the schools in each state were drawn by simple random sampling technique. Thirty per cent of the teachers in the selected schools were taken by the proportionate random sampling. A stress and stress management inventory (SSMI) questionnaire arranged under four major groups or clusters of related stressors and three clusters of related stress management activities was developed, validated and pilot-tested to establish reliability before being administered to the subjects.

Based on the research questions and the variables of gender, qualification and experience, nine hypotheses were formulated to compare the perceptions of male/female, more qualified/less qualified, more experienced/less experienced teachers on clusters of itemized stress factors and stress management strategies, using the mean ratings. The means, the t-test and analysis of variance were used in

statistical analysis of the data at 0.05 level of significance. The following findings were made: Secondary school teachers and principals in Anambra and Enugu States experienced considerable stress on the job. Irrespective of their gender, qualification and teaching experience they were dissatisfied with their conditions of service, inadequate salary, delayed payment of salary, poor promotion opportunities, delayed promotions; involuntary transfers were among the poor working conditions considered highly or extremely stressful. These factors are more stressful to female teachers. Differences in qualification and experience do not seem to influence teacher's perceptions of poor working condition as sources of major stress. Low status of teaching profession is causing more stress to male teachers. Noisy and disruptive students, poor work attitude of students and difficult-to-manage classes are perceived by teachers as moderately or highly stressful. Less qualified and less experienced teachers find events dealing with time pressure more stressful.

Teachers and principals, regardless of their gender, qualification and experience, prefer cognitive/ psychological to physiological strategies in coping with stress on the job. Negative physiological activities like smoking, alcohol, drugs, over-eating were not accepted as strategies for managing teacher stress. It could be said therefore, that teachers and principals in the two states work under stress as a number of stressors have been identified in their work environment. They however manage stress using identified management strategies. On the basis of the results of the study, appropriate recommendations and suggestions were presented for teachers, school

administrators and policy makers towards reducing stress in the work environment of secondary school teachers.

Okhakhume, Aroniyiaso and Odetunde (2017) examined demographic variable and job stress as predictors of depression among primary school teachers in Lagos state of Nigeria. The study was guided by four research questions. The study adopted cross sectional research design and Questionnaires were used to gather data from the primary school teachers. Purposive sampling technique was used to select two hundred primary school teachers who participated in the study. Data collected was analysed using version 20.0 of statistical package for social sciences. Descriptive statistics such as mean, standard deviation, frequency and percentage were used to analyse the socio-demographic characteristics of the participants. Inferential statistics were used to test hypotheses stated in the study. T-test for independent samples was used to test the first, third hypothesis and multiple regressions were used to test the second and fourth hypothesis.

The findings of this study revealed that that there is no significant difference in the depression of female teachers compare to male teachers among primary school teachers in kosofe Local Government Area of Lagos state, Nigeria. It was also discovered that that out of the socio-demographic variable, only monthly income made significant independent contribution to depression among primary school teachers, and also showed that job stress made significant independent contribution to depression. The study concluded that there is significant influence of job stress and monthly income on depression among primary school teachers in kosofe Local

Government Area of Lagos state, Nigeria and recommend that government, stakeholders and investors in the field of education should review the job roles of primary school teacher as this study discovered that many of their roles constituted stress and result to depression.

Findings of the study are related to the current study being that the study showed the independent influence of job stress and working experience among primary school teachers. The study however is a correlational study conducted outside Anambra State; hence it differed from the current study.

Summary of Reviewed Literature

This chapter reviewed the existing literatures related to the study on the extent of school-related stress occurrence among public secondary school teachers. This review of related literature focused on the conceptual frame work, theoretical frame work, theoretical studies and the empirical studies.

The conceptual frame work looked into the concepts relevant to the study and explained their meanings in relation to the study. The key concept of the study is the school-related stress, and this was clearly and concisely defined in the review. School-related stress is defined in the context of this study as the extent of occurrence of unpleasant negative emotions, frustrations, anxiety, depression and nervousness as result of work demands and pressures that do not matched the teachers' knowledge and abilities and which challenge their ability to cope.

The reviewed literature also examined and explored the theoretical premise of the study. Theory that gives meaning to the study was reviewed under the theoretical frame work. The theory includes the Cognitive Appraisal theory by Lazarus and Folkman (1984). The study is anchored on the theory based on its relevance to the study.

Moreover, the theoretical studies were reviewed showing the opinions and positions of many authors on the issues of school-related stress occurrence among teachers. School-related stress was seen as not a single event or a specific psychological state; rather, it was stated and agreed by some authors that stress describes a general process in which individuals respond to and manage demands to meet multiple goals over time. A good number of these authors have also agreed with the fact that the dominant representation of teaching has become that of a highly stressful occupation.

The empirical studies were also reviewed, highlighting relevant findings related to the study. While some researchers have examined the relationships of a set of independent variables (gender, qualification, teaching experience, salary, subjects taught and marital status) with occupational stress among secondary school teachers, some others have explored, causes of stress, prevalence of stress and the relationship between stress and mental health.

Various internal and external stressors have been noted to have impact on teachers. From the literature reviewed, it is clear that the study of school-related stress

occurrence is of importance to teachers and students alike, as the impact of stress affects the effectiveness of teachers within their classroom. However, none of these researches to the knowledge of the researcher has been able to address the problem of the extent of school-related stress occurrence with view to examining teachers work domains such as instructional delivery, social support, and formal and informal job duties among public secondary school teachers in Anambra State. This suggests that there is an existing gap and a need for a research on this subject matter to fill this gap. Hence, the need for this study to analyse the extent of school-related stress occurrence among public secondary school teachers in Anambra State.

CHAPTER THREE

METHOD

In this chapter, the researcher presents the procedure and method used in carrying out the study. The chapter is divided into the following sub-headings: research design, area of the study, population of the study, sample and sampling technique, instrument for data collection, validation of instrument, reliability of the instrument, method of data collection, and method of data analysis.

Research Design

The descriptive survey research design was adopted for this study. Nwankwo (2013) noted that a descriptive survey is a research in which data are collected from a sample of a population with a view to finding out the relative opinion, belief, attitude and status of that population about a phenomenon. The descriptive survey research design is appropriate for this study because the researcher collected data from the respondents in order to find out the opinion of the respondents by comparatively analysing the extent of school-related stress occurrence among public secondary school teachers in Anambra State.

Area of the Study

This study was conducted in Anambra State, Nigeria. The state is located in the South East Geo-Political Zone of Nigeria. The state capital for Anambra State is Awka and its major commercial cities are Onitsha and Nnewi. The state is bounded in

the East by Enugu State, in the West by Delta State, in the north by Kogi State, and in the South by Abia and Imo State. The state has six education zones, Aguata zone, Awka zone, Ogidi zone, Otuocha zone, Onitsha and Nnewi zone. Secondary school enrolment in the state is large and has remained one of the highest in the country. Due to the large population of student enrolment, the classes tend to be densely over populated. The state is also a business oriented area, as a result, majority of teachers get involve in different businesses while holding unto their teaching jobs. Consequently, this portends great challenge to teachers, especially those in the secondary schools and perhaps likely to contribute to their possible experience of high stress. In view of its characteristics, the researcher thus considers Anambra State appropriate for the study of this nature.

Population of the Study

The population of this study was 5,634 teachers. This comprised all the public secondary school teachers in Anambra State, comprising both male and female teachers (Anambra State Post Primary School Commission, Awka, 2014). This includes all the secondary school teachers in 271 public secondary schools in the Anambra State (See Appendix C, p.143).

Sample and Sampling Technique

The sample size for the study comprised of 1,584 teachers. The sample was selected through a multi-stage sampling procedure. The process followed in selecting the sample size is as follows: Firstly, simple random sampling technique was used to

select four education zones (Onitsha, Awka, Ogidi and Aguata) from the existing six education zones in the State. This was done using balloting with replacement method. Secondly, disproportionately stratified random sampling technique was used to select 22 schools (11 schools from urban and 11 from rural) from each of the four educational zones already selected. Then disproportionate stratified random sampling technique was further used to choose 18 teachers (males and females) from each of the 88 already selected schools. The stratification was based on school location (11 urban and 11 rural schools). The selection process took place during a meeting of the teachers and was guided by use of random selection of teachers based on their seating arrangement. This yielded a total of 1,584 teachers (males and females) who were given copies of the questionnaire to respond to, and whose responded copies of questionnaires were successfully retrieved. These comprised of 548 males and 1,036 female teachers. A total of 1,060 teachers were from urban schools while a total of 524 were from rural schools. Teachers in most of the schools in rural areas were not up to the proposed number to be chosen; so, all the teachers present in those areas were all chosen and included in the study. Similarly, beyond the 18 teachers already chosen and considering the limited number of teachers in rural areas, more teachers in urban schools were given copies of questionnaires to respond to and responses included in the study.

Instrument for Data Collection

The instrument used for this study was termed "School-related Stress Occurrence Inventory for Teachers (SRSOIT)" developed and validated by the researcher. The instrument was structured with items derived from Stress Inventory for Teachers originally developed by Sheeja (1999) and from related literatures reviewed. It is a 30 items questionnaire structured within four domains such as instructional delivery, social support/climate, formal job duties, informal job duties, and with a 4 point rating scale. For each statement a score of 4, 3, 2 and 1 were assigned to response options of Very high, High, Low and Very low respectively (See Appendix B, p.140).

Validation of the Instrument

The questionnaire was validated on face by three experts, one from the department of Human Kinetics and Health Education, one from Guidance and Counselling and one expert in measurement and evaluation. All the validators were from Nnamdi Azikiwe University, Awka. The topic, purpose of the study, research Questions and hypotheses were presented to the validators as a guide. These validators ascertained the clarity and relevance of items to the research work. The validators also made some helpful suggestions and recommended that certain corrections be made. For instance, suggestions were made that some variables that were initially included but not relevant to the study should be removed. It was also suggested that items be arranged in clusters to reflect different teachers work

domains. Also, some spellings and wrong use of terms were also corrected. The researcher duly affected the changes before coming out with the final instrument.

Reliability of the Instrument

The reliability of the instrument was established through internal consistency estimate. Twenty school teachers in Delta State secondary schools were used in a pilot test to establish the reliability of the instrument. Twenty copies of questionnaires were distributed to the teachers of the schools using purposive sampling technique. These schools in Delta State have been chosen because Delta State shares similar characteristics with the area of study. After the teachers had responded to the instruments, the completed copies were collected and analysed using Cronbach alpha statistics. Coefficient alpha of 0.60, 0.80, 0.74 and 0.74 was obtained for each cluster of the School-related Stress Occurrence Inventory for Teachers. The results indicated a positive and high reliability. Hence the instrument was considered reliable and acceptable for this study (see appendix F, p.164).

Method of Data Collection

The researcher sought the assistance of 16 research assistants. Some of the teachers were currently teachers in the schools at the time of the study while others were undergraduate students on teaching practice in some of the schools. All the research assistants were briefed on how they will administer the instrument. They were acquainted with the study objectives and were also giving guidelines on how the

instruments will be administered and retrieved. The researcher and the research assistants thus went round the secondary schools and distributed the 1584 copies of the questionnaires to the sampled respondents. The respondents were given 30 minutes to respond to the items. However, some of the teachers responded in less than 30 minutes while some took between 1 to 2 days before the questionnaires were retrieved. The researcher and the research assistants retrieved the filled questionnaires from the respondents. However, after 1,584 copies of questionnaires were distributed to the teachers, only 1,566 copies of questionnaires were retrieved which were used for analysis in the study. Thus, the data collection yielded a return rate of 98.9% which was considered adequate for the study.

Method of Data Analysis

The copies of the questionnaire were scored based on the assigned numerical rated scale (1 – 4) for response options to obtain the teachers stress scores. The scores were then subjected to SPSS statistical analysis. Research questions 1-4 were analysed using range of scores and percentages, while research questions 5-16 were analysed using statistical Mean. The null hypotheses 1 – 8 were analysed using z-test, and hypotheses 9 – 12 were analysed with ANOVA.

In measuring the teachers' responses, the Very high extent, High extent, Low extent and Very low extent responses were scaled in 4, 3, 2 and 1 scores respectively. The scaling was used in dividing the aggregated scores into equivalent range of scores for the school-related stress occurrence measures as follows:

1.00 – 1.43 ≡ 7–10 ≡ Very Low extent

1.57 – 2.43 ≡ 11 – 17 ≡ Low extent

2.57 – 3.43 ≡ 18 – 24 ≡ High extent

3.57 – 4.00 ≡ 25 –28 ≡ Very high extent

For research questions 5-16, the norm of 17.5 guided the decision rule. Mean scores below 17 was regarded as low extent while mean scores above 17.5 was considered as high extent.

The null hypotheses were measured at 0.05 level of significance. The null hypothesis with p-value greater than 0.05 was not rejected while the null hypothesis lower than 0.05 was rejected. Also, the z-test statistic was obtained and used for the determining the hypothesis to reject or uphold. It was decided that any z-value calculated, less than 1.96 would indicate non-rejection of the null hypothesis otherwise, the hypothesis would be rejected.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

In this chapter, summary of analysis of data collected from the field for this study are presented in tables to highlight the findings.

Research Question 1

What is the extent of school-related stress occurrence among public secondary school teachers in Anambra State associated with instructional delivery?

Table 1: Range of Scores on the Extent of School-related Stress Occurrence Associated With Instructional Delivery Experienced among Secondary School Teachers (n = 1566).

Range of scores	n	%	Remarks
7 – 10	20	1.3	Very low extent
11 – 17	398	25.4	Low extent
18 – 24	1096	70.0	High extent
25 – 28	52	3.3	Very high extent

Table 1 shows that with the scores ranging from 25 to 28, 52(3.3%) of the secondary school teachers indicated that they experienced school-related stress associated with instructional delivery to very high extent, while 1096(70.0%) of those who scored between 18 and 24 believed that they experienced them to high extent. Again, as 398(25.4%) of the teachers who scored between 11 and 17 believed that they experienced school-related stress associated with instructional delivery to low extent while 20(1.3%) of the teachers who scored between 7 and 10 indicated that they experienced stress to very low extent.

Research Question 2

What is the extent of school-related stress occurrence among public secondary school teachers in Anambra State associated with social support/climate?

Table 2: Range of Scores on the Extent of School-related Stress Occurrence Associated With Social Support/Climate Experienced by the Public Secondary School Teachers

Range of scores	n	%	Remarks
7 – 10 .	24	1.5	Very low extent
11 – 17	436	27.9	Low extent
18 – 24	1,024	65.4	High extent
25 – 28	82	5.2	Very high extent

Table 2 reveals that with the scores ranging from 25 to 28, 82(5.2%) of the secondary school teachers indicated that they experienced school-related stress associated with social support/climate to very high extent, while 1024(65.4%) of those who scored between 18 and 24 believe that they experienced them to a high extent. Again, as 436(27.9%) of the teachers who scored between 11 and 17 believed that they experienced school-related stress associated with social support/climate to low extent while 24(1.5%) of the teachers who scored between 7 and 10 indicated that they experience them to very low extent.

Research Question 3

What is the extent of school-related stress occurrence among public secondary school teachers in Anambra State associated with formal job duties?

Table 3: Range of Scores on the Extent of School-related Stress Occurrence Associated with Formal Job Duties Experienced by the public Secondary School Teachers

Range of scores	n	%	Remarks
8 – 11	0	0.0	Very low extent
12 – 19	334	21.3	Low extent
20 – 27	1164	74.4	High extent
28 – 32	68	4.3	Very high extent

In table 3 it was observed that with the scores ranging from 28 to 32, 68(4.3%) of the secondary school teachers indicated that they experienced school-related stress associated with formal job duties to very high extent, while 1164(74.4%) of the teachers who scored between 20 and 27 believe that they experienced them to high extent. Again, as 334(21.3%) of the teachers who scored between 12 and 19 believed that they experienced school-related stress associated with formal job duties to low a extent.

Research Question 4

What is the extent of school-related stress occurrence among public secondary school teachers in Anambra State associated with informal job duties?

Table 4: Range Of Scores on the Extent of School-related Stress Occurrence Associated With Informal Job Duties Experienced by the Public Secondary School Teachers

Range of scores	n	%	Remarks
8 – 11.	0	0.0	Very low extent
12 – 19	534	34.1	Low extent
20 – 27	1058	66.9	High extent
28 – 32	32	2.0	Very high extent

In table 4 it was observed that with the scores ranging from 28 to 32, 32(2.0%) of the secondary school teachers indicated that they experienced school-related stress associated with informal job duties to a very high extent, while 1058(66.9%) of those who scored between 20 and 27 believed that they experienced them to high extent. Again, as 534(34.1%) of the teachers who scored between 12 and 19 believed that they experienced school-related stress associated with informal job duties to a low extent.

Research Question 5

What is the extent of school-related stress occurrence associated with instructional delivery among public secondary school teachers in Anambra State in relation to their gender?

Table 5: Mean Scores on the Extent of School-related Stress Occurrence Associated With Instructional Delivery Experienced By Male and Female Public Secondary School Teachers

Source of variation	n	$\bar{X}$	Remarks
Male	542	19.62	High extent
Female	1024	18.94	High extent

Table 5 shows that with mean score 19.62, the male secondary school teachers indicated that they experienced school-related stress associated with instructional delivery to a high extent, while the female teachers having the mean score of 18.94 believed that they experienced them to high extent.

Research Question 6

What is the extent of school-related stress occurrence associated with social support/climate among public secondary school teachers in Anambra State in relation to their gender?

Table 6: Mean Scores on the Extent of School-related Stress Occurrence Associated With Social Support/Climate Experienced By Male and Female Public Secondary School Teachers

Source of variation	n	$\bar{X}$	Remarks
Male	542	19.30	High extent
Female	1024	19.31	High extent

Table 6 indicates that with mean scores 19.30, the male secondary school teachers indicated that they experienced school-related stress associated with social support/climate to a high extent, while the female teachers that have the mean score of 19.31 believed that they experienced them to high extent.

Research Question 7

What is the extent of school-related stress occurrence associated with formal job duties among public secondary school teachers in Anambra State in relation to their gender?

Table 7: Mean Scores on the Extent of School-related Stress Occurrence Associated With Formal Job Duties Experienced By Male and Female Public Secondary School Teachers

Source of variation	n	$\bar{X}$	Remarks
Male	542	21.56	High extent
Female	1024	21.52	High extent

Table 7 reveals that with mean scores 21.56, the male secondary school teachers indicated that they experienced school-related stress associated with formal job duties to high extent, while the female teachers that have the mean score of 21.52 believed that they experienced them to high extent. Both of them have mean scores within the range of scores 20 and 27.

Research Question 8

What is the extent of school-related stress occurrence associated with informal job duties among public secondary school teachers in Anambra State in relation to their gender?

Table 8: Mean Scores on the Extent of School-related Stress Occurrence Associated With Informal Job Duties Experienced By Male and Female Public Secondary School Teachers

Source of variation	n	$\bar{X}$	Remarks
Male	542	21.72	High extent
Female	1024	20.29	High extent

Table 8 shows that with mean score 21.72, the male secondary school teachers

indicated that they experienced school-related stress associated with formal job duties to high extent, while the female teachers that have the mean score of 20.29 believed that they experienced them to high extent.

Research Question 9

What is the extent of school-related stress occurrence associated with instructional delivery among public secondary school teachers in urban and rural areas in Anambra State?

Table 9: Mean Scores On The Extent of School-related Stress Occurrence Associated With Instructional Delivery Experienced by Urban And Rural Public Secondary School Teachers

Source of variation	n	$\bar{X}$	Remarks
Urban	1048	19.50	High extent
Rural	518	18.53	High extent

Table 9 indicates that with mean scores 19.50, the urban secondary school teachers indicated that they experienced school-related stress associated with instructional delivery to a high extent, while the rural teachers that have the mean score of 18.53 believed that they experienced them to high extent.

Research Question 10

What is the extent of school-related stress occurrence associated with social support/climate among public secondary school teachers in urban and rural areas in Anambra State.

Table 10: Mean Scores on the Extent of School-related Stress Occurrence Associated With Social Support/Climate Experienced By Urban and Rural Public Secondary School Teachers

Source of variation	n	$\bar{X}$	Remarks
Urban	1048	19.40	High extent
Rural	518	19.12	High extent

Table 10 shows that with mean score 19.40, the urban secondary school teachers indicated that they experienced school-related stress associated with social support/climate to a high extent, while the rural teachers that have the mean score of 19.12 believed that they experienced them to high extent.

Research Question 11

What is the extent of school-related stress occurrence associated with formal job duties among public secondary school teachers in urban and rural areas in Anambra State?

Table 11: Mean Scores on the Extent of School-related Stress Occurrence Associated With Formal Job Duties Experienced By Urban and Rural Public Secondary School Teachers

Source of variation	n	$\bar{X}$	Remarks
Urban	1048	21.77	High extent
Rural	518	21.06	High extent

Table 11 reveals that with mean scores 21.77, the urban secondary school teachers indicated that they experienced school-related stress associated with formal job duties to a high extent, while the rural teachers that have the mean score of 21.06 believed that they experienced them to high extent.

Research Question 12

What is the extent of school-related stress occurrence associated with informal job duties among public secondary school teachers in urban and rural areas in Anambra State?

Table 12: Mean Scores on the Extent of School-related Stress Occurrence Associated With Informal Job Duties Experienced By Urban And Rural Public Secondary School Teachers

Source of variation	n	$\bar{X}$	Remarks
Urban	1048	21.30	High extent
Rural	518	19.75	Low extent

Table 12 shows that with mean scores 21.30, the urban secondary school teachers indicated that they experienced school-related stress associated with informal job duties to a high extent, while the rural teachers have the mean score of 19.75 believed that they experienced them to high extent.

Research Question 13

What is the extent of occurrence of school-related stress associated with instructional delivery among public secondary school teachers in Anambra State based on their years of experience?

Table 13: Mean Scores on the Extent of School-related Stress Occurrence Associated With Instructional Delivery Experienced By Public Secondary School Teachers Based On Years Of Experience

Source of variation	n	$\bar{X}$	Remarks
1 to 10 years	390	20.21	High extent
11 to 20 years	742	18.74	High extent
21 years and above	434	19.00	High extent

Table 13 indicates that with mean score 20.21, the 1 to 10 years experienced secondary school teachers indicated that they experienced school-related stress associated with instructional delivery to a high extent, 11 to 20 years experienced secondary school teachers who have mean score of 18.74 believed that they experienced them to high extent, while the 21 years and above experienced teachers who have the mean score of 19.0 believed that they experienced school-related stress associated with instructional delivery to high extent.

Research Question 14

What is the extent of occurrence of school-related stress associated with social support/climate among public secondary school teachers in Anambra State based on their years of experience?

Table 14: Mean Scores On The Extent of School-related Stress Occurrence Associated With Social Support/Climate Experienced By Public Secondary School Teachers Based On Their Years Of Experience

Source of variation	n	$\bar{X}$	Remarks
1 to 10 years	390	19.72	High extent
11 to 20 years	742	19.13	High extent
21 years and above	434	19.24	High extent

Table 14 indicates that with mean score 19.72, the 1 to 10 years experienced secondary school teachers indicated that they experienced school-related stress associated with social support/climate to a high extent, 11 to 20 years experienced secondary school teachers who have mean score of 19.13 believed that they experienced them to a high

extent, while the 21 years and above experienced teachers who have the mean score of 19.24 believed that they experienced school-related stress associated with social support/climate to high extent.

Research Question 15

What is the extent of occurrence of school-related stress associated with formal job duties among public secondary school teachers in Anambra State based on their years of experience?

Table 15: Mean Scores on the Extent of School-related Stress Occurrence Associated With Formal Job Duties Experienced By Public Secondary School Teachers Based on Their Years Of Experience

Source of variation	n	$\bar{X}$	Remarks
1 to 10 years	390	21.23	High extent
11 to 20 years	742	21.89	High extent
21 years and above	434	21.19	High extent

Table 15 reveals that with mean score 21.23, the 1 to 10 years experienced secondary school teachers indicated that they experienced school-related stress associated with formal job duties to a high extent, 11 to 20 years experienced secondary school teachers who have mean score of 21.89 believed that they experienced them to a high extent, while the 21 years and above experienced teachers who have the mean score of 21.19 believed that they experienced school-related stress associated with formal job duties to high extent.

Research Question 16

What is the extent of occurrence of school-related stress associated with informal job duties among public secondary school teachers in Anambra State based on their years of experience?

Table 16: Mean Scores on the Extent of School-related Stress Occurrence Associated With Informal Job Duties Experienced By Public Secondary School Teachers Based on Their Years Of Experience

Source of variation	n	$\bar{X}$	Remarks
1 to 10 years	390	21.93	High extent
11 to 20 years	742	20.54	High extent
21 years and above	434	20.17	High extent

Table 16 shows that with mean score 21.93, the 1 to 10 years experienced secondary school teachers indicated that they experienced school-related stress associated with informal job duties to a high extent, while 11 to 20years and 21 years and above experienced secondary school teachers who have mean scores of 20.54 and 20.17 respectively believed that they experienced them also to high extent.

Testing the Null Hypotheses

Null Hypothesis 1

There is no significant difference on the extent of occurrence of school-related stress associated with instructional delivery among male and female public secondary school teachers in Anambra state.

Table 17: z-test analysis of the Mean Scores of Male and Female Teachers on the Extent They Experienced School-related Stress Associated With Instructional Delivery

Source of variation	n	$\bar{X}$	sd	df	Cal.z	Crit.z	p.value	Decision
Male	542	19.62	3.76					
				1564	2.74	1.96	0.006	S
Female	1024	18.94	3.08					

P<0.05

Table 17 shows that at 0.05 level of significance and 1564df the calculated z of 2.74 is greater than the critical z of 1.96. The first null hypothesis was therefore rejected. Then, there is significant difference in the mean scores of male and female public secondary school teachers on the extent to which they experienced school-related stress associated with instructional delivery.

Null Hypothesis 2

There is no significant difference in the extent of occurrence of school-related stress associated with social support/climate among male and female public secondary school teachers in Anambra state.

Table 18: z-test analysis of the Mean Scores of Male and Female Teachers on the Extent They Experienced School-related Stress Associated with Social Support/Climate

Source of variation	n	$\bar{X}$	sd	df	Cal.z	Crit.z	p.value	Decision
Male	542	19.30	3.20					
				1564	0.04	1.96	0.969	NS
Female	1024	19.31	3.42					

P>0.05

Table 18 indicates that at 0.05 level of significance and 1564df the calculated z of 0.04 is less than the critical z of 1.96. The second null hypothesis is therefore accepted. Then, there was no significant difference in the mean scores of male and

female public secondary school teachers on the extent to which they experienced school-related stress associated with social support/climate.

Null Hypothesis 3

There is no significant difference on the extent of occurrence of school-related stress associated with formal job duties among male and female public secondary school teachers in Anambra state.

Table 19: z-test analysis of the Mean Scores of Male and Female Teachers on the Extent To Which They Experienced School-related Stress Associated With Formal Job Duties.

Source of variation	n	$\bar{X}$	sd	df	Cal.z	Crit.z	p.value	Decision
Male	542	21.56	3.56					
				1564	0.16	1.96	0.873	NS
Female	1024	21.52	2.87					

P>0.05

In table 19, it was observed that at 0.05 level of significance and 1564df the calculated z of 0.16 is less than the critical z of 1.96. The third null hypothesis was therefore accepted. Then, there is no significant difference in the mean scores of male and female public secondary school teachers on the extent to which they experienced school-related stress associated with formal job duties.

Null Hypothesis 4

There is no significant difference on the extent of occurrence of school-related stress associated with informal job duties among male and female public secondary school teachers in Anambra state.

Table 20: z-test analysis of the Mean Scores of Male and Female Teachers on the Extent They Experienced School-related Stress Associated with Informal Job Duties.

Source of variation	n	$\bar{X}$	sd	df	Cal.z	Crit.z	p.value	Decision
Male	542	21.72	4.82					
				1564	5.08	1.96	0.000	S
Female	1024	20.29	3.00					

P<0.05

Table 20 shows that at 0.05 level of significance and 1564df the calculated z of 5.08 is greater than the critical z of 1.96. The fourth null hypothesis was therefore rejected. Then, there is significant difference in the mean scores of male and female public secondary school teachers on the extent to which they experienced school-related stress associated with informal job duties.

Null Hypothesis 5

There is no significant difference on the extent of occurrence of school-related stress associated with instructional delivery among public secondary school teachers in urban and rural areas in Anambra State.

Table 21: z-test analysis the Mean Scores of Urban and Rural Teachers on the Extent They Experienced School-related Stress Associated with Instructional Delivery

Source of variation	n	$\bar{X}$	sd	df	Cal.z	Crit.z	p.value	Decision
Urban	1048	19.50	3.37					
				1564	3.86	1.96	0.000	S
Rural	518	18.53	3.19					

P<0.05

In table 21, it was observed that at 0.05 level of significance and 1564df the calculated z of 3.86 is greater than the critical z of 1.96. The fifth null hypothesis was therefore rejected. Then, there is significant difference in the mean scores of urban and rural public secondary school teachers on the extent they experienced school-related stress associated with instructional delivery.

Null Hypothesis 6

There is no significant difference on the extent of occurrence of school-related stress associated with social support/climate among public secondary school teachers in urban and rural areas in Anambra State.

Table 22: z-test analysis of the Mean Scores of Urban and Rural Teachers on the Extent They Experienced School-related Stress Associated with Social Support/Climate

Source of variation	n	$\bar{X}$	sd	df	Cal.z	Crit.z	p.value	Decision
Urban	104	819.40	3.47					
				1564	1.09	1.96	0.275	NS
Rural	518	19.12	3.07					

P>0.05

Table 22 reveals that at 0.05 level of significance and 1564df the calculated z of 1.09 was less than the critical z of 1.96. The sixth null hypothesis is therefore

accepted. Then, there was no significant difference in the mean scores of urban and rural public secondary school teachers on the extent to which they experienced school-related stress associated with social support/climate.

Null Hypothesis 7

There is no significant difference on the extent of occurrence of school-related stress associated with formal job duties among public secondary school teachers in urban and rural areas in Anambra State.

Table 23: z-test analysis of the Mean Scores of Urban and Rural Teachers on the Extent They Experienced School-related Stress Associated with Formal Job Duties

Source of variation	n	$\bar{X}$	sd	df	Cal.Z	Crit.Z	p.value	Decision
Urban	1048	21.77	3.18	1564	2.98	1.96	0.003	S
Rural	518	21.06	2.96					

P<0.05

Table 23 indicates that at 0.05 level of significance and 1564df the calculated z of 2.98 was greater than the critical z of 1.96. the seventh null hypothesis is therefore rejected. Then, there was significant difference in the mean scores of urban and rural public secondary school teachers on the extent to which they experienced school-related stress associated with formal job duties.

Null Hypothesis 8

There is no significant difference on the extent of occurrence of school-related stress occurrence among public secondary school teachers in urban and rural areas in Anambra State associated with informal job duties.

Table 24: z-test analysis of the Mean Scores of Urban and Rural Teachers on the Extent They Experienced School-related Stress Associated with Informal Job Duties

Source of variation	n	$\bar{X}$	sd	df	Cal.Z	Crit.Z	p.value	Decision
Urban	1048	21.30	3.85	1564	5.49	1.96	0.000	S
Rural	518	19.75	3.45					

P<0.05

In table 24, it was observed that at 0.05 level of significance and 1564df the calculated z of 5.49 was greater than the critical z of 1.96. The eighth null hypothesis is therefore rejected. Then, there was significant difference in the mean scores of urban and rural public secondary school teachers on the extent to which they experienced school-related stress associated with informal job duties.

Null Hypothesis 9

There is no significant difference on the extent of occurrence of school-related stress associated with instructional delivery among public secondary school teachers in Anambra State based on their years of experience.

Table 25: ANOVA of the mean scores of teachers on the extent school related stress associated with instructional delivery occur to them based on years of experience

Source of variation	SS	df	MS	Cal.F	Crit.F	p.value	Decision
Between Groups	284.600	2	142.300				
Within Groups	8450.429	1563	10.834	13.14	3.00	0.000	S
Total	8735.029	1565					

P<0.05

Table 25 shows that at 0.05 level of significance 2df numerator and 1563df denominator, the calculated F13.14 was greater than the critical F 3.00 the ninth null hypothesis is therefore rejected. Then there was significant difference in the mean scores of public secondary school teachers on the extent to which they experienced school-related stress associated with instructional delivery based on their years of experience.

Null Hypothesis 10

There is no significant difference on the extent of occurrence of school-related stress associated with social support/climate among public secondary school teachers in Anambra State based on their years of experience.

Table 26: ANOVA of the mean scores of teachers on the extent they experienced school-related stress associated with social support/climate based on years of experience

Source of variation	SS	df	MS	Cal.F	Crit.F	P.value	Decision
Between Groups	45.135	2	22.567				
Within Groups	8690.071	1563	11.141	2.03	3.00	0.133	NS
Total	8735.206	1565					

P>0.05

Table 26 indicates that at 0.05 level of significance 2df numerators and 1563df denominator, the calculated F2.03 was less than the critical F3.00 the tenth null hypothesis is therefore accepted. Then there was no significant difference in the mean scores of public secondary school teachers on the extent to which they experienced school-related stress associated with social support/climate based on their years of experience.

Null Hypothesis 11

There is no significant difference on the extent of occurrence of school-related stress associated with formal job duties occurring among public secondary school teachers in Anambra State based on their years of experience.

Table 27: ANOVA of the Mean Scores of Teachers on the Extent They Experienced School-related Stress Associated with Formal Job Duties Based On Years of Experience

Source of variation	SS	df	MS	Cal.F	Crit.F	p.value	Decision
Between Groups	89.964	2	44.982				
Within Groups	7532.955	1563	9.658	4.66	3.00	0.010	S
Total	7622.920	1565					

Table 27 shows that at 0.05 level of significance 2df numerator and 1563df denominator, the calculated F4.66 was greater than the critical F 3.00 the eleventh null hypothesis is therefore rejected. Then there was significant difference in the mean scores of public secondary school teachers on the extent to which they experienced school-related stress associated with formal job duties based on their years of experience.

Null Hypothesis 12

There is no significant difference on the extent of occurrence of school-related stress associated with informal job duties among public secondary school teachers in Anambra State based on their years of experience?

Table 28: ANOVA of the Mean Scores of Teachers on the Extent They Experienced School-related Stress Associated with Informal Job Duties Based On Years of Experience

Source of variation	SS	df	MS	Cal.F	Crit.F	p.value	Decision
Between Groups	365.051	2	182.526				
Within Groups	10881.472	1563	13.951	13.08	3.00	0.000	S
Total	11246.524	1565					

P<0.05

In table 28, it was observed that at 0.05 level of significance 2df numerator and 1563df denominator, the calculated F13.08 was greater than the critical F 3.00 the twelfth null hypothesis is therefore rejected. Then there was significant difference in the mean scores of public secondary school teachers on the extent to which they experienced school-related stress associated with informal job duties based on their years of experience.

Summary of the Findings

From the analysis the following findings were made:

1. Most of the public secondary school teachers 574(73.30%) indicated that they experienced school-related stress associated with instructional delivery to high extent.

2. Most of the public secondary school teachers 553(70.6%) indicated that they experienced school-related stress associated with social support/climate to high extent.

3. Most of the public secondary school teachers 616(78.7%) indicated that they experienced school-related stress associated with formal job duties to high extent.

4. Some of the public secondary school teachers 540(68.9%) indicated that they experienced school-related stress associated with informal job duties to high extent.

5. Both male and female public secondary school teachers indicated that they experienced school-related stress associated with instructional delivery to high extent.

6. Both male and female public secondary school teachers indicated that they experienced school-related stress associated with social support/climate to high extent.

7. Both male and female public secondary school teachers indicated that they experienced school-related stress associated with formal job duties to high extent.

8. Both male and female public secondary school teachers indicated that they experienced school-related stress associated with informal job duties to high extent.

9. Both urban and rural public secondary school teachers indicated that they experienced school-related stress associated with instructional delivery to high extent.

10. Both urban and rural public secondary school teachers indicated that they experienced school-related stress associated with social support/climate to high extent.

11. Both urban and rural public secondary school teachers indicated that they experienced school-related stress associated with formal job duties to high extent.

12. Both urban and rural public secondary school teachers indicated that they experienced school-related stress associated with informal job duties to high extent.

13. All public secondary school teachers irrespective of their years of experience indicated that they experienced school-related stress associated with instructional delivery to high extent.

14. All public secondary school teachers irrespective of their years of experience indicated that they experienced school-related stress associated with social support/climate to high extent.

15. All public secondary school teachers irrespective of their years of experience indicated that they experienced school-related stress associated with formal job duties to high extent.

16. All public secondary school teachers irrespective of their years of experience indicated that they experienced school-related stress associated with informal job duties to high extent.

17. There was significant difference in the extent of occurrence of school-related stress associated with instructional delivery duties among public secondary school teachers based on gender.

18. There was no significant difference in the extent of occurrence of school-related stress associated with social support/climate among public secondary school teachers based on gender.

19. There was no significant difference in the extent of occurrence of school-related stress associated with formal job duties occur among public secondary school teachers based on gender.

20. There was significant difference in the extent of occurrence of school-related stress associated with informal job duties occur among public secondary school teachers based on gender.

21. There was significant difference in the extent of occurrence of school-related stress associated with instructional delivery duties occur among public secondary school teachers based on location.

22. There was no significant difference in the extent of occurrence of school-related stress associated with social support/climate occur among public secondary school teachers based on location.

23. There was significant difference in the extent of occurrence of school-related stress associated with formal job duties occur among public secondary school teachers based on location.

24. There was significant difference in the extent of occurrence of school-related stress associated with informal job duties occur among public secondary school teachers based on location.

25. There was significant difference in the extent of occurrence of school-related stress associated with instructional delivery duties occur among public secondary school teachers based on their years of experience.

26. There was no significant difference in the extent of occurrence of school-related stress associated with social support/climate occur among public secondary school teachers based on their years of experience.

27. There was significant difference in the extent of occurrence of school-related stress associated with formal job duties occur among public secondary school teachers based on their years of experience.

28. There was significant difference in the extent of occurrence of school-related stress associated with informal job duties occur among public secondary school teachers based on their years of experience.

CHAPTER FIVE

DISCUSSION OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS

This chapter discusses the major findings of the study and their implications. It also highlights the conclusions, recommendations and areas for further studies.

Discussion of the Findings

The discussion on the findings of the study is organized under the following sub-headings:

- Extent of school-related stress associated with instructional delivery.
- Extent of school-related stress associated with social support/climate.
- Extent of school-related stress associated with formal job duties.
- Extent of school-related stress associated with informal job duties.

Extent of School-related Stress Associated With Instructional Delivery

Findings from the study revealed that most of the public secondary school teachers indicated that school-related stress associated with instructional delivery occurred to them to a high extent. What this means is that public secondary school teachers of this study, experienced more stress associated with instructional delivery which included classroom management practices, lesson planning, delivery of instruction among others. This finding was not too surprising; the reason for this may be because instructional delivery tends to combine the complexities of teaching with instructional expectation and students demand for quality instruction. The finding is

in line with Weinstein (2006) whose study highlighted multiple aspects of teachers' work settings that impact their work stress. The findings observed stress occurrence in structural delivery domain which occurred on high scale. This finding equally agrees with some earlier research findings such as Aralu (2012) and Agai–Demjaha, Minov, Stoleski and Zafirova (2015). The findings of the study by Agai–Demjaha, Minov, Stoleski and Zafirova revealed that among six categories of factors that generate work related stress (job demands, control, relationships, role, changes and support) control and support had the highest mean scores. It was thus observed that factors related to teachers instructional delivery contributed more to occurrence of stress among teachers.

Findings from the study further revealed that both male and female public secondary school teachers experienced school-related stress associated with instructional delivery to a high extent. It further indicated that there is a significant difference in the extent of occurrence of school-related stress among male and female public secondary school teachers. The reason for this perhaps could be because male and female react to concerns in different ways. This finding is in line with Akomolafe (2011) and Desmarais and Alkanis (2005) whose finding acknowledged that men and women though exposed to many of the same stressors tend to react differently to it. Although men and women might not differ in overall strains, as Desmarais and Alkanis (2005) noted, women are more likely to experience psychological distress, whereas men experience more physical strain. So it could be summed up that both

male and female secondary school teachers of this study experienced different dimensions of stress associated with various duties they perform in schools.

More so, both urban and rural public secondary school teachers indicated that they experienced school-related stress associated with instructional delivery to a high extent. The reason for this is not farfetched; as it has been pointed out that those in the teaching profession experiences stress more frequently than in any other profession (Froeschle and Crews 2010). Also, teachers multiple roles in delivering instruction coupled with increased paperwork demands attached to this position are frequently cited as stressful.

Findings from the study shows further that there was no significant difference in the extent of occurrence of school-related stress associated with instructional delivery among the urban and rural public secondary school teachers. This implies that stress experienced among the public secondary school teachers do not differ much irrespective of the schools location or settings. This finding was not in consonant with the researcher's expectation that stress would likely be more prone to be experienced among public secondary school teachers in urban schools than in rural schools. The reason for this assertion is based on the knowledge that schools in urban areas tend to have larger student enrolment ratio, which is a factor likely to bring stress among teachers. Nevertheless, this finding was contrary to the researchers' notion but agreed with Adeniyi, Aremum and Adeyinka (2010) whose study findings highlighted that since its inception; inclusive education is what has made additional demands on teachers and not the school location. Adeniyi, Aremum and Adeyinka's

study therefore identified three most stressful areas related to instructional delivery, they include; the behaviours of pupils, the classroom and support.

Likewise, findings of the study revealed that public secondary school teachers irrespective of years of experience indicated that they experienced school-related stress associated with instructional delivery to a high extent. The reason for this may be because as Adeniyi, Aremum and Adeyinka observed, stress is a common phenomenon among today's teachers. So, teachers irrespective of years of experience would likely experience. Findings from the study further revealed that there was no significant difference in the extent of occurrence of school-related stress associated with instructional delivery among the public secondary school teachers based on their years of experience. What this implies is that stress occurrence among public secondary school teachers of this study based on instructional delivery was not dependent on their years of service, since those teachers with many years of experience in service seems to experience the same amount of stress as those with modest years of experience in service. This was also contrary to the researchers' earlier assumption that teachers with more years of experience would be able to manage workload and experience less stress. This finding nonetheless has proven that school-related stress is not as a result of individuals' lack of experience, but instead is an individual reaction to organizational or interpersonal problems at work. The finding is thus in agreement with Sichambo, Maragia and Simiyu (2012) that Secondary school teachers in Anambra and Enugu States experienced considerable stress on the job, irrespective of their gender, qualification and teaching experience.

The study revealed that apart from the normal classroom teaching, teachers had a number of remedial lessons to attend to; larger classes to handle, a lot of paper work and some had to stay in their work stations other than their normal school timings in order to complete various tasks. All these factors were observed to have contributed to stress among teachers which were badly impacting their performance. More so, noisy and disruptive students, poor work attitude of students and difficult-to-manage classes as observed by Ogoegbulem are perceived by teachers as moderately or highly stressful.

Extent of School-related Stress Associated with Social Support/Climate

Findings from the study revealed that most public secondary school teachers of this study indicated that they experienced school-related stress associated with social support/climate to a high extent. What this means is that the extent of stress occurrence among teachers associated with overall social climate of the school, as well as the nature of social interactions between public secondary school teachers and other school staff was high. This finding may not be too surprising because negative school climate was indicated by teachers as a stressor throughout much of the published research literature. For instance, in previous research, such as York-Barr, Ghere and Sommerness (2007), lack of principal support resulted in various teacher stressors, such as a lack of developed protocol to discipline students effectively and an inability by teachers to implement needed changes in their classrooms.

Additionally, findings from the study revealed that both male and female secondary school teachers indicated that they experienced school-related stress

associated with social support/climate occur to a high extent. What this implies is that stress occurrence among male and female secondary school teachers is same when other conditions are kept constant. This may be surprising through, giving that stress could be both physiological and psychological, and both male and female have different psychological and physiological make-up. The findings nevertheless agreed with Bharathi (2013), Hanif, Tariqand and Nadeem (2011) whose studies reported that there was no significant difference in the level of stress experienced by male and female school teachers.

Moreover, findings from the study equally revealed that both urban and rural secondary school teachers of this study indicated that they experienced school-related stress associated with social support/climate to a high extent. This finding may be as a result of stressors regarding social climate and support that emanate from the teachers regular and ongoing interactions with all aspects of the school environment irrespective of location. The finding agreed with Agai–Demjaha, Minov, Stoleski, Paulse (2005) and Zafirova (2015) who observed a significant difference on demographic and job characteristics of stress causing factors among teachers in elementary schools. The findings from the study further revealed that all the public secondary school teachers irrespective of their years of experience indicated that they experienced school-related stress associated with social support/climate to a high extent. It further noted that there was no significant difference in the extent of occurrence of school-related stress associated with social support/climate among secondary school teachers based on years of experience. Usually, one would have

expected that the more experienced one is on a job, the more they would be able to considerably manage stress. However, this was not the case with occurrence of stress among public secondary school teachers in Anambra state as teachers indicated high extent of stress occurrence irrespective of years of experience. The reason for this may be based on the nature of the school climate which could be a source of stress for the teacher without giving room to the impact of experience. This finding agreed with Bharathi (2013). Bharathi's findings contrary to expectation showed that occurrence of stress associated with social support/climate among the secondary school teachers of this study did not differ significantly according to their years of experience. However, as Zafirova (2015) noted, negative interpersonal relations and the absence of support from colleagues or superiors could be significant occupational stressors for employees. Conversely, having access to social support from other people in the organisation could reduce psychological strain and alleviate emotional exhaustion.

Extent of School-related Stress Associated with Formal Job Duties

Findings from the study revealed that most public secondary school teachers of this study indicated that they experienced school-related stress associated with formal job duties to a high extent. What this implies is that stress occurrence among teachers could be due to explicitly outlined roles of the job, such as teaching classes, managing students, and paperwork. The reason for this could be that teachers are likely to experience much stress based on the multiple formal roles (such as teaching and marking test scripts) within the classroom that these teachers assume. This is in

line with York-Barr et al. (2007) identification of certain factors as being pertinent to stress occurrence due to formal job characteristics. The factors as observed by York-Bar et al. included teaching and student load, lack of adequate curriculum and materials, and ongoing paperwork, meetings and disciplinary issues of students. The finding also agreed with other researchers such as Aralu (2012) and Yambo, Odhiambo and Odera (2014). Their studies reported a series of in-class stressors for secondary school teachers, including time spent preparing students to perform well in different subjects and helping them adjust to the school culture. In all, what is clear from the findings of this study is that a good number of teachers of this study experienced high stress occurrence due to formal job duties.

Additionally, findings from the study also revealed that both male and female public secondary school teachers indicated that they experienced school-related stress associated with formal job duties to a high extent. It further revealed that there was no significant difference in the extent of occurrence of school-related stress associated with formal job duties among the public secondary school teachers. What is clear from the finding of this study was that work stress events were unique for all the public secondary school teachers irrespective of gender. The reason for this finding may be because according to Okeke and Dlamini (2013), and Dlamini et al. (2014), stress is seen as a combination of physiological and psychological reactions that negatively affect individuals as a result of the conditions in their environment, not necessarily as result of gender. This finding agreed with previous research finding such as Aralu (2012). Aralu's study indicated high extent of stress occurrence among

secondary school teachers cut across gender, and that the observed difference in the extent of stress occurrence among male and female secondary school teachers in Anambra state was minimal and insignificant.

Findings from the study also revealed that both urban and rural secondary school teachers indicated that they experienced school-related stress associated with formal job duties to a high extent. It further revealed that there was a significant difference in the extent of occurrence of school-related stress associated with formal job duties among the secondary school teachers based on location. This finding perhaps could be explained given that all teachers irrespective of the schools location are faced with stress prone formal activities such as excessive paperwork, preparing curriculum for different classes and facing disciplinary issues of students. The finding is in line with findings of Demjaha, Minov, Stoleski and Zafirova (2015), that the difference between the causes of stress among urban and rural school teachers is not significant. The study highlighted the factors that contribute to the increase in stress occurrence among school teachers.

Similarly, finding from the study revealed that all the secondary school teachers of this study irrespective of their years of experience indicated that they experienced school-related stress associated with formal job duties to a high extent. The findings further revealed that there was a significant difference in the extent of occurrence of school-related stress associated with formal job duties among the secondary school teachers of this study based on their years of experience. What this implies is that although there is occurrence of stress associated with formal job duties

to a high extent among the secondary school teachers, the extent of occurrence differed significantly based on the teachers' years of working experience. The reason for this could be therefore, that the more years of working experience a teacher acquires, the more he or she is able to manage workload and its attendant stress occurrence. Although there is not much literature to support this finding, it however was in line with Hanif, Tariqand Nadeem (2011) who observed significant difference on teacher experience of stress based on years of experience. Stress occurs due to a demand that exceeds the individuals coping ability, disrupting their psychological equilibrium. Hence, in the workplace like the school environment stress could arise when the employees perceive a situation to be too strenuous to handle, and is threatening their wellbeing. That is perhaps the reason why teachers with more years of teaching experience could handle work pressures associated with formal job duties better than those with less years of working experience.

Extent of School-related Stress Associated with Informal Job Duties

Findings from the study revealed that some of the public secondary school teachers indicated that they experienced school-related stress associated with informal job duties to a high extent. This implies that not much of the teachers actually experience school-related stress associated with informal work responsibilities to a high extent. These informal aspects of the teacher role include providing emotional support for students and helping student maintain good relationship with other school personnel. Some of the additional duties these teachers take on outside of their teaching activities include maintaining relationships with parent, providing students

and families with daily living essentials, and home visits. The reason for this may be because these roles are not the core duties of the teachers; it is hence understandable why not many experience occurrence of school-related stress to a high extent. The finding from the study agreed with Archibong, Bassey and Effiom (2010) who noted that job stress results from the interaction of the worker and the conditions of work.

More so, the study revealed that both male and female secondary school teachers indicated that school-related stress associated with informal job duties occur to them to a high extent. Findings from the study further revealed that there was no significant difference in the extent of occurrence of school-related stress associated with informal job duties among secondary school teachers. What this implies is that though school-related stress associated with informal job duties occur to both male and female secondary school teachers on high extent, the difference in the extent of stress occurrence is minimal and insignificant. This finding from the study is in agreement with Akomolafe (2011), Desmarais and Alkanis (2005) who stated that men and women are exposed to many of the same stressors. A study by Mondal et al. (2011) found that there was significant difference between male and female teachers in terms of their psychological and physical stress. The finding nevertheless did not agree with Schutz and Schutz (2010). Schutz and Schutz stated that combining housework, childcare, shopping and cooking with an outside job and trying to do everything on time was one of the biggest factors of women being more stressed at work.

Findings from the study also revealed that both urban and rural secondary school teachers of this study indicated that they experienced school-related stress associated with informal job duties to a high extent. It further revealed that there was significant difference in the extent of occurrence of school-related stress associated with informal job duties among public secondary school teachers based on location. The reason for this may be due to the additional duties which these teachers take on outside of their teaching activities including maintaining relationships with parents and attending to other needs of students. These may have been burdensome to the teachers and hence create stressful situations which may not have anything to do with where the school is located. The finding is in line with findings of Bashir et al. (2013), and Demjaha, Minov, Stoleski and Zafirova (2015). Bashir et al. in their study found that the teaching environment was the stress provoking factor that caused stress in teachers who took part in their study. This revelation may, thus, imply that location may also be a source for stress. Location of school determines the type of facilities in the classrooms, multimedia, class sizes, classroom space, economic status of the children and interruptions such as noise from outside.

In the like manner, findings from the study revealed that all the secondary school teachers, irrespective of their years of experience indicated that they experienced school-related stress associated with informal job duties to a high extent. The reason for this could be attributable to the notion that stress is no respecter of person, so, the years of teaching experience of a teacher may not really alter the physiological and psychological reaction to certain work-demands which give rise to

stress. The findings further revealed that there was significant difference in the extent of occurrence of school-related stress associated with informal job duties among secondary school teachers based on their years of experience. The finding from the study is in agreement with the findings of previous studies such as Aftab and Khatoon (2012), Darmordy and Smyth (2010) and Holeyannavar and Itagi (2012). Findings from the studies indicated that teachers' years of experience had a relationship with teacher work related stress. Darmordy and Smyth found that teachers in their forties had higher stress occurrence than younger age groups. However, the study by Holeyannavar and Itagi found out that the older teachers showed less stress than the younger ones. The reason proffered for this assertion in Aftab and Khatoon was that the older teachers are more experienced and adaptable to the environment and more ready to cope with stress.

Summarily, in this study, comparative analysis of different stress domains revealed that the Social Support/Climate domain had the highest level of stress occurrence when compared to the other three domains. Thus, while social support may be identified as a problem area for serious intervention, other domain areas may also be identified for a less rigorous intervention. For example, "Doing administrative paperwork, "not having adequate materials for my students' success" and "having to spend time differentiating instruction for a class of students who have a diverse range of learning abilities, language proficiencies, and needs" are duties that were mostly endorsed as being stressful in this current study. These were from the Formal Job Characteristics domain.

In fact, items on the Formal job duties domain, as discussed above, are the ones that are most similar to items on other teacher duties stress measures. Thus, the domain structure of the school-related stress is important, because items represented in the other three domains specifically (instructional delivery, Social Support/Climate, and Informal Job Duties) are unique in comparison to items on other existing items measures of teachers school-related stress occurrence.

Analysis of the school-related stress occurrence provided additional information. The ranking of the percentage on the extent of occurrence by domain is as follows: (1) Social support/climate, (2) Instructional delivery, (3) Formal job duties, and (4) Informal Job Duties. However, the extent of occurrence for the first three domains was not far apart from each other. This finding suggests that the first three domains contain events that are appraised similarly for stress by secondary school teachers. In contrast, the percentage for Informal job duties for high extent and very high extent was a bit lower than the others, indicating that secondary school teachers are not as much stressed by these duties as they are by others. The reason for this finding conceivably could be that these teachers are already "resigned" to the extra duties they need to take on in their job role.

Conclusions

This study analysed the extent of stress occurrence among secondary school teachers in Anambra State, such as those that evolve at the instructional delivery, social support /climate and formal job duties as well as those that represent more

informal job duties such as spending time outside of the school day to set up other necessities, and developing supports for parents. Thus, the study captures a much broader range of realistic and detailed description of school-related teacher stress occurrences.

Findings from the study revealed among others that most secondary school teachers indicated that they experienced school-related stress associated with instructional delivery, social support/climate, and formal job duties to a high extent. Finding also revealed that some of the secondary school teachers indicated that they experienced school-related stress associated with informal job duties to a high extent.

This study captured a broad description of school-related stress occurrence among public secondary school teachers and brought into focus the domains or components of school-related stress occurrence. School-related teachers stress occurrence was more at the formal job duties and social support/climate domain which includes school teachers' classroom practices that contribute to the work stress of teachers in the school. Stress events at this level have been shown in this study to be at highest among secondary school teachers in Anambra State.

Implications of the Study

The findings of this study provided information regarding the extent of occurrence of school-related stress among public secondary school teachers in Anambra State. A number of the results of the present study are important for the potential they have in terms of public health and policy implications, especially because some easy to implement measures to change conditions or behaviour at work

could help improve the conditions of teachers. Also, better information for teachers could improve teacher behaviour, which could have an impact on the occurrence of problems that could exacerbate stress among teachers. Evaluation of some areas, such as adopting new stress management strategies and levels of extra-curricular involvement, could provide a better regulatory framework within which secondary school teachers would be able to find solutions to some of their problems. Other interventions, such as stress management, can be carried out to reduce stress in the schools.

Another implication of this study is that if school management finds that the most frequent or severe stressors for their teachers occur within a specific domain, this allows for the management to focus intervention at a targeted area. For example, in this study, the highest levels of stress occurred in the Formal job duties and Social Support/Climate domains. More teachers indicated that they experienced school-related stress at these domains from high to very high extent. Intervention efforts would therefore be channeled at building social support for the secondary school teachers.

The high extent of occurrence of stress experienced by the secondary school teachers is capable of increasing risks of health problems, lead to reduced productivity and impact significantly on the teachers and the school, its staff, students and the state as a whole. However, stress management programmes could be initiated in secondary schools to assist teachers manage their stress. This is because

management of stress is an aspect of health promotion in the worksite, especially the school.

Findings from the study also provided reliable and useful statistics to support national teacher unions in their national Social Dialogue structures when they deal with Health and Safety issues in schools. The data also helps the unions to establish concrete and sustainable Health and Safety strategies in schools.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. Teachers should be trained to stress management/coping techniques. This can be done through seminars or workshop. Though stress is inevitable, too much and prolonged stress can lead to psychological or mental disorder. Counselling sessions should be organized for teachers with a high compulsive striving to achieve much in less time and those with a high competitive tendency.
2. The school management should focus intervention at a targeted area. For example, in this study, the highest school-related stress occurred in the Formal job duties and Social support/Climate domains. Intervention efforts should therefore be channeled at helping secondary school teachers' deal with the job demand in the domains which often leads to stress.
3. This finding should be used by training institutions as a training tool for teachers, as it is an indicator of what the teachers needs to know at the teacher

training level and how they could apply the knowledge manage it stress in school.

4. There is a need to provide proper conducive environment and support to teachers to reduce the stress that occurrence at their workplace in schools, especially stress resulting from social support/climate.

Limitations to the Study

This study was carried out among public secondary school teachers in Anambra State, so findings from the study may not be applicable to the private secondary school teachers.

Suggestions for Further Studies

Based on the findings of the study, the following research topics are suggested for further studies:

1. Analysis of the extent of school-related stress occurrence among private and public secondary school teachers.
2. Comparative analysis of the extent of school-related stress occurrence and coping strategies among private and public secondary school teachers.
3. Analysis of the extent of school-related stress occurrence among public and private primary school teachers.

REFERENCES

Abraham, P. & Chumley, J. (2000). Portrait of the ESL teacher: Survey data from elementary schools in Massachusetts. *Teacher Educator, 36*(2), 87-101.

Adeniyi, S. O.; Aremum, F.O. & Adeyinka, T. (2010). Perceived causes of job stress among special educators in selected special and integrated schools in Nigeria. *New Horizons in Education, 58*(2), 73 – 82.

Aftab, M. Khatoon, T. (2012). Demographic differences and occupational stress of secondary school teachers. *European Scientific Journal, 8*(5), 159-175.

Agai–Demjaha, T, Minov, J., Stoleski, S. & Zafirova, B. (2015). Stress Causing Factors Among Teachers in Elementary Schools and Their Relationship with Demographic and Job Characteristics. *Macedonia Journal of Medical Science, 3*(3), 493–499. doi: 10.3889/oamjms.2015.077

Ahmad, K. Z. (2010). Person-Environment Fit: A critical review of the previous studies and a proposal for future research. *International Journal of Psychological Studies, 2*(1), 71-78.

Akomolafe M. J. (2011). Emotional intelligence, gender and occupational stress among secondary school teachers in Ondo state, Nigeria. *Pakistan Journal of Social Sciences, 8*(4), 159-165. DOI: 10.3923/pjssci.2011.159.165

Akinboye, J. O., Akinboye, D. O. & Adeyemo, D. A. (2002). *Coping with stress in life and workplace.* Nigeria: Sterling-Harden Publishers.

Akinmayowa, J.T. (2009). Time and stress management. *Nigerian Journal of Business Administration, 10*(1), 25-42.

Akinmayowa, J.T. and Kadiri, P.A. (2014). Stress among academic staff in a nigerian university. *Covenant Journal of Business and Social Sciences (CJBSS), 65*(1) 73-91.

Akinsolu, A. O. (2010). Teachers and students' academic performance in Nigerian secondary schools: Implications for planning. *Florida Journal of Educational Administration and Policy, 3*(2), 86-103.

Aralu, G. N. (2012). *Sources of stress and stress management strategies among secondary school teachers in Onitsha Urban*. Retrieved from https://naudigitallibrary.wordpress.com/2012/12/

Armstrong, M. (2006). *A handbook of human resource management Practice (*10th ed.). London and Philadelphia: Kogan page.

Archibong, J.A., Bassey, A.O., & Effiom, D.O. (2010). Occupational stress sources among university academic staff. *European Journal of Educational Studies 2*(3), 217-225.

Beehr, T. A., & Glazer, S. (2005). Organizational role stress. In J. Barling, E. K. Kelloway, & M. R. Frone (Eds.), *Handbook of Work Stress* (pp. 7-33). Thousand Oaks, CA: Sage

Beers, J.C. (2012). *Teacher stress and coping: does the process differ according to years of teaching experience?* (Dissertation Theses, Portland State University). Retrieved from https://pdxscholar.library.pdx.edu/

Beru, M. K. and Kilelo, H. (2015). Occupational stress and conflict management in organizations: understanding the Organizational behaviour *International Journal of Economics, Commerce and Management* United Kingdom, *3*(7), 938-954.

Bharathi, T.A. (2013).Association between Job Stress and Demographic Factors and Coping Strategies Adopted by Primary School Teachers. *International Journal of Science and Research (IJSR*), *6*(14), 756-759.

Bower, J. E. & Segerstrom, S.C. (2004). Stress management, finding, benefit and immune function: positive mechanisms for intervention effects on physiology. *Journal of Psychosomatic Research 56*(1), 9-11.

Brannon & Feist, (2010). *Health Psychology: An Introduction to Behavior and Health* New York: John Updegraff: Books

Brown, M., & Ralph, S. (2008).The identification of stress in teachers.In J. Dunham & V. Varma (Eds.), *Stress in Teachers.* London: Wurr Publishers.

Busari, A. O. (2011). Validation of student academic stress scale. *European Journal of Social Sciences*. 21(1), 94—105.

Bowman, R., Beck, K. D., & Luine, V. N. (2003). Chronic stress effects on memory: sex differences in performance. *Hormones and behaviour* 43(1), 48-59.

Carlyle, D. (2003). *The emotions of teacher stress* New York: Trenthain Books.

Cartwright, S., & Cooper, C. L. (2007). *Managing Workplace Stress*. Washington, DC: Sage Publications, Inc.

Chan, D.W. (2003). Hardiness and its role in the stress-burnout relationship among prospective Chinese teachers in Hong Kong. *Teaching and Teacher Education, 19*(4), 381-395.

Chan, C. M., Chong S.M., Chong Y. S. & Tang C.U. (2015). The Influence of Job Stress, Burnout and Job Satisfaction among Primary School Teachers in Ipoh. *A published research project, UniversitiTunku Abdul Rahman.*

Coetzee, M., Jansen, C., Muller, H. (2009). Stress, coping resources and personality types: An exploratory study of teachers, *Acta Academia, 41*(3), 168-200.

Colligan, T. W., Colligan, M. S. W., & Higgins M. (2009). Workplace stress - etiology and consequences. *Journal of workplace behavioural health,* 21(2), 89-91.

Copeland-Linder, N. (2006). Stress among Black women in a South African township: The protective role of religion. *Journal of Community Psychology*, *34*(5), 577-599.

Darmordy, M. Smyth, E. (2010). *Job Satisfaction and Occupational Stress among Primary School Teachers and School Principals in Ireland.* Ireland: The Teaching Council.

DeRogatis, L. (2012). *Derogatis Stress Profile* New York: Clinical Psychometric Research Inc.

Desrnarais, S. & Alksnis, C. (2005). Gender issues In Barling, Kelloway, J. E. K., & Frone, M. R. (eds). *Handbook of work stress.* Thousand Oaks, Sage.

Dunham, J. (1992). *Stress in teaching* (2nd ed.). London: Routledge.

Duyilemi, B. O. (2013). *Source and social correlates of occupational stress Among Nigerian primary school teachers.* Retrieved from *https://www.unilorin.edu.ng/journals*

Ekundayo, H. T. & Kolawole, A. O. (2013). Stress among secondary school teachers in Ekiti State, Nigeria. *Journal of educational and social research, 3*(2), 311-315.

Farber, B.A. (2000). Treatment strategies for different types of teacher burnout. *Journal of Clinical Psychology*, *56*(5), 675-689.

Forlin, C., Douglas, G., & Hattie, J. (1996). Inclusive practices: How accepting are teachers? *International Journal of Disability, Development and Education***,** *43*(2), 119-133.

Folkman, S. & Moskowitz, J. T. (2004). Stress, coping, and hope. Retrieved from *www.ncbi.nlm.nih.gov/.*

Gajendran, U., & Harrison, J. (2008). Telecommuting win-win for employees and employers. *Journal of Applied Psychology,* 92(6), 5-5.

Gold. Y. & Roth, R.A. (2003). Teachers managing stress and preventing burnout.The professional health solution. London: Falmer press.

Greenberg, S. F., (2004). *Stress and the teaching profession.* Baltimore: Paul H. Brooks

Guglielmi, R. S., & Tatrow, K. (2008). Occupational stress, burnout and health inteachers: A methodological and theoretical analysis. *Review of Educational Research, 68*(1), 61-99.

Gyllensten, K., & Palmer, S. (2005). The role of gender in work stress: A critical literature review. *Health Education Journal, 64(3),* 271-288.

Haastrup, T. E. & Kolawole, A.O. (2013). Stress among secondary school teachers in Ekiti State, Nigeria. *International Journal of Applied Psychology, 4*(6), 214-222.

Hackman, J. R., & Oldham, G. R. (1980). Work redesign. Massachusetts: Addison-Wesley.

Hanif, R., Tariq, S. &Nadeem, M. (2011).Personal and Job Related Predictors of Teacher Stress and Job Performance among School Teachers. *Pakistan Journal of Commerce and Social Science, 5*(2), 319-329.

Health and Safety Executive (HSE, 2006). Definition of stress.Retrieved from http://www.hse/gov/uk/stress/index.htm.

Henry, O. & Evans, A. J. (2008). Occupational stress in organizations. *Journal of Management Research, 8*(3), 123-135.

Holeyannavar, P.G, Itagi, S.K. (2012). Stress and emotional competence of primary school teachers. *Journal of Psychology, 3*(1), 29-38.

Hung, C. (2011). Coping strategies of primary school teachers in Taiwan experiencing stress because of teacher surplus. *Social Behaviour and Personality,* 39(9), 1161-1174.

Hussain, H. (2010). A study of teacher stress: Exploring practitioner research and teacher collaboration as a way forward (PhD Thesis, Bournemouth University, UK).

Jacobs, P. A.; Tytherleigh, M. Y.; Webb, C.; Cooper, C. L. (2007). Predictors of work performance among higher education employees: An examination using ASSET model of stress. *International Journal of Stress Management, 14*(2), 199-210.

Jackson, L., Rothmann, S., Van de Vijver, Fons (2005).A model of work-related well-Being for Educators in South Africa.*Stress & Health: Journal of the International Society for the Investigation of Stress, 22*(4), 263-274.

Jackson, S. E., Schwab, R. C., & Schuler, R. S. (2010).Towards an understanding of the burnout phenomenon.*Journal of Applied Psychology, 71*(4), 630-640.

Jacobs, J. A., & Gerson, K. (2004). *The time divide: work, family, and gender inequality*. Cambridge: Harvard University Press.

Jarvis, M. (2002). Teacher stress: a critical review of recent findings and suggestions for future research directions. *Teacher Support Network, 14*(1). Retrieved July. 13, 2016, from http//www.google.com/

Jonas, M. N. 2001. Relationship between perceived social support, stress levels and general health of black teachers: A descriptive study. Magister Artium in Clinical Psychology thesis. University of Port Elizabet

Jones, R., & Kagee, A. (2005). Predictors of post traumatic stress symptoms among South African police personnel. *South African Journal of Psychology, 35*(2), 209 – 224.

Jones, F. & Bright J. (2001). *Stress: Myth, theory and research.* London: Pearson Education Limited.

Kaur S 2011. Comparative study of occupational stress among teachers of private and government schools in relation to their age, gender and teaching experience. *International Journal of Educational Planning and Administration*, 1(2), 151-160.

Khurshid, F., Butt, Z. H., & Malik, S. K. (2011). Occupational role stress of the public and private sector universities teachers. Language In India: *Strength for today and Bright Hope for Tomorrow, 11*(2), 18-31.

Kompier, M. (2003). Job Design and Well-being. In M. Schabracq, J. Winnubst & C.L. Cooper, (Eds.), *Handbook of Work and Health Psychology*, 429-454.

Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review*, 53, 27-35.

Lazuras, L. (2006). Occupational stress, negative affectivity and physical health in special and general education teachers in Greece. *British Journal of Special Education*, *33*(4), 204-209.

Lazarus, R. S. (1999). *Stress and emotion: A new synthesis*. New York: Springer Publishing Company, Inc.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping*. New York: Springer Publishing Company, Inc.

Lehrer, P. M., David, H., Barlow, F. R., Robert, L. & Woolfolk, W. E. (2007). *Principles and Practice of Stress Management,* (3rd ed.). New York: Prentice Hall.

Lewin, K. (1997). *Resolving Social Conflicts and Field Theory in Social Science* New York: American Psychological Association (APA)

Li, G., & He, H. (2009). Hormesis, allostatic buffering capacity and physiological mechanism of physical activity: a new theoretic framework. *Medical Hypotheses, 72*, 527-532.

Loh, T. W. C. (1995). Are ESL/EFL teachers under high stress? A study of secondary level school teachers in Hong Kong. *Perspectives, 7*(1), 23-47.

Luk-Fong, P. (2012). *Teachers' identities and life choices: issues of globalization and localization* New York: Springer.

Markham, P. L. (1999). Stressors and coping strategies of ESL teachers. *Journal of Instructional Psychology, 26*(4), 268-279.

Melgosa, J. (2006). Less Stress. Editorial Safeliz Melgosa, J. (2008). Developing a healthy mind: A practical guide for any situation. Madrid: Veteran Publication

Mondal, J., Shrestha, S., & Bhaila, A. (2011). School teachers: Job stress and job satisfaction. *International Journal of Occupational Safety and Health, 1,* 27–33.

Nagel, L., & Brown, S. (2003). The ABCs of Managing Teacher Stress. *The Clearing House, 76*, 255-258.

Ngidi, D. P. and Sibaya, P.T. (2002). Black teachers' personality dimensions and work-related stress factors. *South African Journal of Psychology 32*(3), 7-15

NIOSH (2010). *Stress at work*. U.S. National Institute for Occupational Safety and Health, DHHS (NIOSH).

NIOSH (2007). *NIOSH worker health chart book*. National Institute for Occupational Safety and Health, DHHS (NIOSH).

Nwankwo, I.N. (2013). *Research report and article-writing in educational management and social sciences*. Awka: Love-Isaac Consultancy Services.

O'Driscoll, M. P., & Cooper, C. L. (2002). Job related stress and burnout. In P. Warr (Ed.), *Psychology at work*, (5th ed.). London: Clays Ltd.

Ofoegbu F., & Nwadiani, M. (2006). Level of stress among lecturers in Nigerian universities. *Journal of Industrial Psychology, 33*(1), 66-75.

Okeke, C. I. O., Adu, E. O., Drake, M. L. & Duku, N. S. (2014). Correlating Demographic Variables with Occupational Stress and Coping Strategies of Pre-School Educators. *Journal of Psychology, 5*(2), 143-154.

Olivier, M.A. & Venter, D.J. (2003).The extent and causes of stress in the George region. *South African Journal of Education, 23(3), 186 – 192.*

Omoniyi, M.B.I., & Ogunsanmi, J.O. (2012). Stress among academic staff in south-west Nigeria. *The African Symposium, 12*(1), 126-132.

Paulse, J. (2005). *Sources of occupational stress for teachers, with specific reference to the inclusive education model in the Western Cape* (Published Master's thesis). University of the Western Cape.

Papworth, M. (2003). *Stress busting (classmates).* New York: Continuum.

Parker, K.J. and D. Maestripieri (2011). Identifyingkey features of early stressful experiences thatproduce stress vulnerability and resilience in primates. *Neurosci. Biobehav. Rev*., 35, 1466-1483

Parker, K.J., Buckmaster, C.L. Sundlass, K. Schatzberg, A.F. & Lyons, D.M. (2006). Maternalmediation, stress inoculation and the development of neuroendocrine stress resistance in primates. *Proceedings of the National Academy of Sciences USA, 103*(45), 3000-3005.

Pines, A. (2002). Bunout. New York: Routhledge. Retrieved from http://www.sagepub.com/

Pitkoff, E. (2003). School district practices that encourage teacher absenteeism. *School Administrator, 60*(6), 34-39.

Primm, D. (2005). What workplace stress research is telling technical communication? *Technical communication,* 52, 449-455.

Rajasekhar, D. and Sasikala, B. (2013) An Impact of Stress Management on Employed Women. *Language in India*, 13(4), 208-220.

Rintaugu, E.G. (2013).Socio-Demographic Factors and Causes of Job Stress of Sports Personnel in Kenyan Universities.Human Resource Management Research 2013, 3(4), 166-172 DOI: 10.5923/j.hrmr.20130304.05. Retrieved from http://www.ku.ac.ke/schools/

Robertson, D. (2012). *Build your resilience.* London: Hodder.

Safaria, T., Othman, A., & Wahab, M.N.A. (2012). Gender, academic rank, employment status, university type and job stress among university academic staff: A comparison between Malaysia and Indonesia context. *International Journal of Humanities and Social Science, 1*(18), 250-261. Griffin, M.A. (2009). *Stress*, sex differences, and coping strategies among college students. Retrieved from jme.sagepub.com/

Sari, H. (2004).An analysis of burnout and job dissatisfaction among Turkish special school headteachers, and teachers and the factors effecting their burnout and job dissatisfaction.*Educational Studies, 30*(3), 291-361.

Sarmah B, Baruah, M. (2012). An empirical study on job stress among secondary teachers. *Indian Streams Research Journal*, *2*(8), 1-7

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior, 25*(3), 293-315.

Schultz, N., & Schultz, D. (2010). *Psychology and work today.* New York: Prentice Hall.

Selye, H. (1994). *Stress without distress,* New York: NAL Penguin Inc.p. 92-105.

Selye, H. (1987). *Stress without Distress* New York: Corgi Publishers. The Different types of stress. (2006). Retrieved from http://www.thehealthcenter.info/adult-stress/types-of-stress.htm

Somaz, W. H., & Tulgan, B. (2003). *Performance under Pressure: Managing Stress in the Workplace*. Canada: HRD Press Inc.

Sonnentag, S. & Frese, M. (2003). Stress in Organisations. In W.C. Borman, D.R. Ilgen & R.J. Klimoski (Eds.), Comprehensive handbook of psychology. Hoboken, NJ: Wiley.

Sprenger, J. (2011). *Stress and Coping Behaviours among Primary School Teachers*. Masters Dissertation. Carolina, USA: East Carolina University.

Steenkamp, C. (2003). *Stress in a medium and awaiting trial correctional environment.* Unpublished Master's Dissertation, University of the Western Cape.

Strumpfer, D. J. W. (2003). Resilience and burnout: A stitch that could save nine. *South African Journal of Psychology, 33*(2), 69 - 79.

Sutherland, V. J., & Cooper, C. L. (2000).*Strategic Stress Management*. London: Palgrave Publishers, Ltd.

Susie, P. M. A. (2013). Stress Management: What can you do? St. Louis *Psychologists and Counseling Information and Referral.* Retrieved February 5, 2013.

Taris, T. W., Schaufeli, W. B., &Verhoeven, L. C. (2005). Workaholism in the Netherlands: Measurement and implications for job strain and work-nonwork conflict. *Applied Psychology: An International Review, 54*(1), 37-60.

Teasdale, E. L. (2006). Workplace stress. *Psychiatry* 5 (7): 251-254.

Thabo, F.T. (2010). Occupational stress among university employees in Botswana. *European Journal of Social Sciences. 15*(3), 313-326. McKenzie, K.E. (2009). *Teacher burnout*: A laughing matter. Doctoral Dessertation.Capella University.

Trickett, E. J., Rukhotskiy, E.L., Jeong, A., Genkova, A., Oberoi, A.K., Weinstein, T.L., et al. (2012). "The kids are terrific: It's the job that's tough": The ELL teacher role in an urban context. *Teaching and Teacher Education, 28*, 283-292

Tytherleigh, M.Y., Webb, C., Cooper, C.L. & Ricketts, C. (2005). Occupational stress in UK higher education institutions: a comparative study of all staff categories. *HigherEducation Research & Development*, *24*(1), 41-61.

Varghese, M, & Jenkins, S. (2005). Challenges for ESL teacher professionalization in the US: A case study. *Intercultural Education*, *16*(1), 85-95.

Weinstein, T. (2013). *The development of an instrument to measure ell teacher work stress* (Published Dissertation, Graduate College of the University of Illinois at Chicago). Retrieved from https://indigo.uic.edu/bitstream/handle/

Wiley, C. (2000).A synthesis of research on the causes, effects, and reduction strategies of teacher stress.*Journal of Instructional Psychology.*Retrieved March 8, 2013. From http://www.findarticles.com/

Wolfgang, L., Lenz, J. W. & Con, A. H. (2001). Individualized stress management for primary hypertension: a randomized trial. *Achieves of internal medicine*, 161(8), 1071-1080.

Yambo, J.M.O., Odhiambo, R.A & Odera, F. (2014). An Assessment of the Extent at which High School Principals are Stressed in relation to their job Experience in Schools in Southern Nyanza region, Kenya.*International Journal of Humanities and Social Science Invention, 3(5),* 2319 – 7722. Retrieved from www.ijhssi.org/

York-Barr, J., Ghere, G., & Sommerness, J. (2007). Collaborative teaching to increase ELL student learning: A three-year urban elementary case study. *Journal of Education for Students Placed at Risk, 12*(3), 301-335.

LIST OF APPENDICES

Appendix A

Letter of Transmittal

Dept of Human Kinetics and Health Education
Nnamdi Azikiwe University
Awka
May 2015

Dear Respondent,

I am a doctorate student of the above named institution interested in analysing the extent of school-related stress among secondary school teachers in Anambra State. The following are statements about feelings that many teachers have about their jobs in different work domains. Please read each statement carefully and indicate your level of agreement or disagreement in the options provided. This is not a test, so there is no right or wrong answers. Please give sincere responses to all the items in the questionnaire. All your responses are purely for research purposes and therefore will not be linked to you. Your name and school are not needed in order to ensure anticipated co-operation.

Thank you for your cooperation.

Chukwura, M. N.
Investigator.

Appendix B

Research Instrument

Personal Information Schedule

Please tick (√) in the box of the option that represents you.

Gender: Male ☐ Female ☐

Location: Urban ☐ Rural ☐

Experience: 1-10 years ☐ 10-20 yeas ☐ 20 and above ☐

School-related Stress Inventory for Teachers (SRSIT)

Instructions

Read the statements given below. Please mark your responses under any one of the four categories given against each statement by a tick (√) to indicate the extent to which it is attributable to you. Give frank and honest answers. I assure you that data collection will be for research purpose only.

Very High Extent – 4

High Extent – 3

Low Extent 2

Very Low Extent – 1

S/N	Items on Stress Components	Very High Extent	High Extent	Low Extent	Very Low Extent
	Instructional Delivery				
1	I feel tense preparing students for examinations.				
2	I feel burden in doing the same teaching year after year.				
3	I feel unaccountably tired or exhausted after each lesson period.				
4	I experience strain in teaching overcrowded class.				
5	The challenge of meeting the instructional objectives make me disappointed.				
6	I feel disappointed when I fail to use teaching time effectively.				
7	I struggle due to lack of time for preparing topics.				
	Social Support/Climate				
8	Failing to maintain relaxed atmosphere in classroom causes strain to me				
9	I am irritated in discrimination among teachers based on grade, subject				
10	I have to suffer unnecessary blames for students' failure				
11	I am worried about lack of respect and love shown by students				
12	I feel fatigue due to lack of sufficient leisure time and recreational facilities				
13	I feel disappointed when students or colleagues insult me				
14	Absence of emotional support from my colleagues creates a feeling of helplessness in me				
	Formal Job Characteristics				
15	I experience difficulty due to the uneven distribution of work among teachers.				
16	Anxiety in maintaining a good pass percentage creates mental tension in me				
17	I feel disappointed getting less salary compared to my educational qualifications				
18	The unsuitability of school time table				

	creates difficulty to me				
19	I feel disappointed when I fail to motivate and maintain students' interests.				
20	Inability to diagnose classroom problems causes difficulty to me.				
21	I don't find it easy dealing with inappropriate placement of students in my classes.				
22	The job of tracking down a student who was absent is daunting.				
	Informal Job Duties				
23	Arranging for services to facilitate communication with parents and/or family members is stressing				
24	I have no proper sleep because of my work and this creates a lot of stress on me				
25	The conflict between my personal beliefs and those of organization create difficulty to me				
26	I get irritated towards head of school for not showing consideration in welfare of teachers				
27	I get tired many a time in explaining to students the classroom expectations of them.				
28	Teaching students after school gets me stressed up				
29	Attending to activities outside of the classroom can be exhausting.				
30	I orienting new students to the school policies and practices can be exhausting				

Appendix C

TEACHERS ENROLMENT IN THE SIX EDUCATIONAL ZONES IN ANAMBRA STATE

S/N	Education Zone	Male	%	Female	%	Total	Total Percentage
1	Aguata	162	23%	529	77%	691	12.3%
2	Awka	300	19%	1291	81%	1591	28.2%
3	Nnewi	177	21%	672	79%	849	15.1%
4	Ogidi	157	20%	640	80%	797	14.1%
5	Onitsha	153	11%	1187	89%	1340	23.8%
6	Otuocha	164	45%	202	55%	366	6.5%
	Total:	**1113**	**20%**	**4521**	**80%**	**5634**	**100%**

Appendix D

List of Public Secondary Schools

EDUCATION ZONE	S/N	LIST SCHOOLS
AWKA	1	Girls High School, Agulu
	2	Flora A.M.C.S.S. Neni
	3	Loretto Sec. Sch. Adazi
	4	Comm. Sec. Sch. Obeledu
	5	Comm. Sec. Sch. Ichida
	6	Comm. High Sch. Aguluzigbo
	7	BubendorffMem. Gram. Sch. AdaziNnukwu
	8	Comm. Sec. Sch. Agulu
	9	OjiakoMem. Gram Sch. AdaziAni
	10	Union Sec. Sch. Agulu
	11	Comm. High Sch. Adazi
	12	Comm. High Sch. Akwaeze
	13	Agulu Grammar Sch. Agulu
	14	Lake City Sec. Sch. Nri
	15	Girls Sec. Sch. A/Nnukwu
	16	Regal Sec. Sch. Nri
	17	Comm. Sec. Sch. Amansea
	18	Comm. Sec. Sch. Isuanaocha
	19	Comm. Sec. Sch. Ebenebe
	20	Comm. Sec. Sch. Mgbakwu

	21	Comm. Sec. Sch. Achalla
	22	Comm. Sec. Sch. Amanuke
	23	Comm. Sec. Sch. Urum
	24	St. John Of God Sec. Sch. Awka
	25	Gwebuike Grammar Sch. Awka
	26	Girls Sec. Sch. Awka
	27	Comm. Sec. Sch. Umuokpu
	28	Capital City Ss Awka
	29	Kenneth Dike Mem. Sec. Sch. Awka
	30	Ezi-Awka Comm. Sec. Sch. Awka
	31	Com. Sec. Sch. Okpuno
NNEWI		Comm. Sec. School, Ichi
	32	Union Sec. School, Ichi (Gss)
	33	Comm. Sec. Sch., Ihembosi
	34	Boys' Sec. School, Oraifite
	35	Girls' Sec School Oraifite
	36	Comm. Sec. Sch. Ozubulu
	37	Girls Sec. School, Ozubulu
	38	Zixton Sec. Sch., Ozubulu
	39	Comm. High Sch., Amorka
	40	Comm. Sec. Sch. Azia
	41	St. Anthony's Sec. Sch. Azia
	42	Abbot Girls' Sec. Sch., Ihiala
	43	Abbot Boys' Sec. Sch., Ihiala
	44	Govt. Tech Coll. Ihiala

	45	St. Jude's Sec. Sch., Ihiala
	46	Comm. Sec. Sch., Isseke
	47	Comm. Sec. Sch., Lilu
	48	Comm. Sec. Sch., Mbosi
	49	Union Sec. Sch., Okija
	50	Okija Gram Sch. Okija
	51	Comm. Sec. Sch. Orsumoghu
	52	Girls' Sec. Sch., Uli
	53	Uli High School, Uli
	54	Comm. High Sch., Umuoma-Uli
	55	
OGIDI		Otre Dame High School, Abatete
	56	Abanna Sec. School Abatete
	57	Community Sec. School, Eziowelle
	58	Community Sec. School, Ideani
	59	Government Techn. College Nkpor
	60	Urban SecodndarySchoo, Nkpor
	61	Community Secondary School, Obosi
	62	Unity Secondary School, Obosi
	63	Boys' Secondary School, Ogidi
	64	Anglican Girls' Secondary School, Ogidi
	65	Community Sec. School, Oraukwu
	66	Oraukwu Grammar School, Oraukwu
	67	Community Secondary School, Uke
	68	Mater Amabili Sec. School, Umuoji
	69	Community Sec. School, Umuoji

	70	Awada Secondary School, Awada
	71	Girls' Secondary School, Oba
	72	Merchant Of Light Sec. School, Oba
	73	Progre Sec. Sch. Umunya
	74	Comm. Sec. Sch. Umunya
	75	
ONITSHA		
	76	Dennis Mem. Gram School
	77	Girls' Sec. School Onitsha
	78	Queen Of Rosary School
	79	Ado Girls' Sec. School
	80	St. Charles Sec. School
	81	Eastern Academy
	82	New Era Girls' Sec. School
	83	Inland Girls' Sec. School
	84	Washington Mem. Sec. Sch.
	85	Patterson Memo. Sec. School Onitsha
	86	Prince Mem. Sec. Onitsha
	87	Army Day Sec. School
	88	Metropolitan College
	89	Govt. Tech. College
	90	Onitsha High School Onitsha
	91	Our Lady's High School, Onitsha
	92	Christ The King College
	93	ModebeMem. Sec. School
	94	MetuMem. Sec. School

	95	Urban Girls Sec. School
	96	Urban Boys Sec. Sch.
	97	Ogbaru High Sch. Ogbakuba
	98	Ideke Gramm. Sec. Sch. Ideke
	99	Unity Comp. Girls High Sch. Okpoko
	100	Comm. Boys' Sec. Sch. Okpoko
	101	Comm. Girls' Sec. Sch. Okpoko
	102	Comm. Sec. Sch. Atani
	103	Govt. Tech. College Osomala
	104	Comm. Sec. Sch. Odekpe
	105	Josephine Odua Memo. Sec. Sch. Akili-Ozizor

Appendix E

Data Analysis Output

Frequencies

Statistics

		IDSCORE	SSSCORE	FJCSCORE	IJDSCORE
N	Valid	1566	1566	1566	1566
	Missing	0	0	0	0

Frequency Table

IDSCORE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	9.00	2	.1	.1	.1
	10.00	18	1.1	1.1	1.3
	11.00	8	.5	.5	1.8
	13.00	66	4.2	4.2	6.0
	14.00	74	4.7	4.7	10.7
	15.00	54	3.4	3.4	14.2
	16.00	62	4.0	4.0	18.1
	17.00	134	8.6	8.6	26.7
	18.00	194	12.4	12.4	39.1
	19.00	328	20.9	20.9	60.0
	20.00	42	2.7	2.7	62.7
	21.00	170	10.9	10.9	73.6
	22.00	134	8.6	8.6	82.1
	23.00	128	8.2	8.2	90.3
	24.00	100	6.4	6.4	96.7
	25.00	36	2.3	2.3	99.0
	26.00	2	.1	.1	99.1
	27.00	2	.1	.1	99.2
	28.00	12	.8	.8	100.0
	Total	1566	100.0	100.0	

SSSCORE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7.00	24	1.5	1.5	1.5
	11.00	2	.1	.1	1.7
	13.00	16	1.0	1.0	2.7
	14.00	30	1.9	1.9	4.6
	15.00	42	2.7	2.7	7.3
	16.00	136	8.7	8.7	16.0
	17.00	210	13.4	13.4	29.4
	18.00	192	12.3	12.3	41.6
	19.00	172	11.0	11.0	52.6
	20.00	244	15.6	15.6	68.2
	21.00	120	7.7	7.7	75.9
	22.00	130	8.3	8.3	84.2
	23.00	74	4.7	4.7	88.9
	24.00	92	5.9	5.9	94.8
	25.00	40	2.6	2.6	97.3
	26.00	2	.1	.1	97.4
	27.00	22	1.4	1.4	98.9
	28.00	18	1.1	1.1	100.0
	Total	1566	100.0	100.0	

FJCSCORE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	12.00	10	.6	.6	.6
	14.00	2	.1	.1	.8
	15.00	46	2.9	2.9	3.7
	16.00	38	2.4	2.4	6.1
	17.00	20	1.3	1.3	7.4
	18.00	126	8.0	8.0	15.5

	19.00	92	5.9	5.9	21.3
	20.00	260	16.6	16.6	37.9
	21.00	244	15.6	15.6	53.5
	22.00	164	10.5	10.5	64.0
	23.00	202	12.9	12.9	76.9
	24.00	74	4.7	4.7	81.6
	25.00	114	7.3	7.3	88.9
	26.00	66	4.2	4.2	93.1
	27.00	40	2.6	2.6	95.7
	28.00	54	3.4	3.4	99.1
	29.00	14	.9	.9	100.0
	Total	1566	100.0	100.0	

IJDSCORE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	13.00	22	1.4	1.4	1.4
	14.00	68	4.3	4.3	5.7
	15.00	36	2.3	2.3	8.0
	16.00	46	2.9	2.9	11.0
	17.00	94	6.0	6.0	17.0
	18.00	96	6.1	6.1	23.1
	19.00	172	11.0	11.0	34.1
	20.00	200	12.8	12.8	46.9
	21.00	142	9.1	9.1	55.9
	22.00	238	15.2	15.2	71.1
	23.00	144	9.2	9.2	80.3
	24.00	98	6.3	6.3	86.6
	25.00	154	9.8	9.8	96.4
	26.00	8	.5	.5	96.9
	27.00	16	1.0	1.0	98.0
	28.00	12	.8	.8	98.7
	29.00	12	.8	.8	99.5
	48.00	8	.5	.5	100.0

	Total	1566	100.0	100.0

Crosstabs

IDSCORE * GENDER Crosstabulation

Count

		GENDER		Total
		MALE	FEMALE	
IDSCORE	9.00	0	2	2
	10.00	18	0	18
	11.00	8	0	8
	13.00	0	66	66
	14.00	30	44	74
	15.00	18	36	54
	16.00	18	44	62
	17.00	48	86	134
	18.00	52	142	194
	19.00	64	264	328
	20.00	30	12	42
	21.00	74	96	170
	22.00	66	68	134
	23.00	56	72	128
	24.00	10	90	100
	25.00	36	0	36
	26.00	2	0	2
	27.00	0	2	2
	28.00	12	0	12
Total		542	1024	1566

IDSCORE * LOCATION Crosstabulation

Count

		LOCATION		Total
		URBAN	RURAL	
IDSCORE	9.00	0	2	2
	10.00	0	18	18

	11.00	0	8	8
	13.00	66	0	66
	14.00	62	12	74
	15.00	24	30	54
	16.00	48	14	62
	17.00	48	86	134
	18.00	82	112	194
	19.00	256	72	328
	20.00	30	12	42
	21.00	102	68	170
	22.00	122	12	134
	23.00	90	38	128
	24.00	66	34	100
	25.00	36	0	36
	26.00	2	0	2
	27.00	2	0	2
	28.00	12	0	12
Total		1048	518	1566

IDSCORE * EXPERIENCE Crosstabulation

Count

		EXPERIENCE			Total
		1 TO 10 YEARS	11 TO 20 YEARS	21 YEARS AND ABOVE	
IDSCORE	9.00	0	2	0	2
	10.00	0	18	0	18
	11.00	0	8	0	8
	13.00	0	44	22	66
	14.00	8	32	34	74
	15.00	12	12	30	54
	16.00	0	48	14	62
	17.00	42	44	48	134
	18.00	48	122	24	194
	19.00	62	166	100	328
	20.00	16	24	2	42
	21.00	86	38	46	170

	22.00	38	52	44	134
	23.00	46	46	36	128
	24.00	0	78	22	100
	25.00	28	8	0	36
	26.00	0	0	2	2
	27.00	0	0	2	2
	28.00	4	0	8	12
Total		390	742	434	1566

SSSCORE * GENDER Crosstabulation

Count

		GENDER		Total
		MALE	FEMALE	
SSSCORE	7.00	0	24	24
	11.00	2	0	2
	13.00	16	0	16
	14.00	30	0	30
	15.00	18	24	42
	16.00	22	114	136
	17.00	74	136	210
	18.00	64	128	192
	19.00	84	88	172
	20.00	38	206	244
	21.00	38	82	120
	22.00	50	80	130
	23.00	48	26	74
	24.00	48	44	92
	25.00	2	38	40
	26.00	2	0	2
	27.00	0	22	22
	28.00	6	12	18
Total		542	1024	1566

SSSCORE * LOCATION Crosstabulation

Count

	LOCATION	Total

		URBAN	RURAL	
SSSCORE	7.00	22	2	24
	11.00	0	2	2
	13.00	16	0	16
	14.00	20	10	30
	15.00	12	30	42
	16.00	106	30	136
	17.00	114	96	210
	18.00	120	72	192
	19.00	92	80	172
	20.00	186	58	244
	21.00	88	32	120
	22.00	90	40	130
	23.00	60	14	74
	24.00	68	24	92
	25.00	26	14	40
	26.00	2	0	2
	27.00	22	0	22
	28.00	4	14	18
Total		1048	518	1566

SSSCORE * EXPERIENCE Crosstabulation

Count

		EXPERIENCE			Total
		1 TO 10 YEARS	11 TO 20 YEARS	21 YEARS AND ABOVE	
SSSCORE	7.00	0	24	0	24
	11.00	0	2	0	2
	13.00	8	0	8	16
	14.00	10	10	10	30
	15.00	12	22	8	42
	16.00	14	76	46	136
	17.00	48	88	74	210
	18.00	44	76	72	192
	19.00	24	148	0	172
	20.00	74	92	78	244

	21.00	52	24	44	120
	22.00	42	66	22	130
	23.00	22	24	28	74
	24.00	36	34	22	92
	25.00	0	22	18	40
	26.00	0	0	2	2
	27.00	0	22	0	22
	28.00	4	12	2	18
Total		390	742	434	1566

FJCSCORE * GENDER Crosstabulation

Count

		GENDER		Total
		MALE	FEMALE	
FJCSCORE	12.00	10	0	10
	14.00	2	0	2
	15.00	12	34	46
	16.00	18	22	38
	17.00	20	0	20
	18.00	44	82	126
	19.00	24	68	92
	20.00	102	158	260
	21.00	60	184	244
	22.00	22	142	164
	23.00	82	120	202
	24.00	24	50	74
	25.00	58	62	114
	26.00	22	44	66
	27.00	18	22	40
	28.00	20	34	54
	29.00	12	2	14
Total		542	1024	1566

FJCSCORE * LOCATION Crosstabulation

Count

	LOCATION	Total

		URBAN	RURAL	
FJCSCORE	12.00	10	0	10
	14.00	0	2	2
	15.00	32	14	46
	16.00	22	16	38
	17.00	8	12	20
	18.00	52	74	126
	19.00	62	30	92
	20.00	208	52	260
	21.00	140	104	244
	22.00	108	56	164
	23.00	110	92	202
	24.00	62	12	74
	25.00	100	14	114
	26.00	56	10	66
	27.00	40	0	40
	28.00	24	30	54
	29.00	14	0	14
Total		1048	518	1566

FJCSCORE * EXPERIENCE Crosstabulation

Count

		EXPERIENCE			Total
		1 TO 10 YEARS	11 TO 20 YEARS	21 YEARS AND ABOVE	
FJCSCORE	12.00	0	0	10	10
	14.00	0	0	2	2
	15.00	22	0	24	46
	16.00	6	10	22	38
	17.00	8	12	0	20
	18.00	56	36	34	126
	19.00	20	66	6	92
	20.00	54	138	68	260
	21.00	54	244	46	244
	22.00	26	60	78	164
	23.00	66	84	52	202

	24.00	8	22	44	74
	25.00	40	74	0	114
	26.00	8	58	0	66
	27.00	0	10	30	40
	28.00	12	28	14	54
	29.00	10	0	4	24
Total		390	742	434	1566

IJDSCORE * GENDER Crosstabulation

Count

		GENDER		Total
		MALE	FEMALE	
IJDSCORE	13.00	0	22	22
	14.00	10	58	68
	15.00	24	12	36
	16.00	20	26	46
	17.00	34	60	94
	18.00	60	36	96
	19.00	34	138	172
	20.00	46	154	200
	21.00	17	128	142
	22.00	70	168	238
	23.00	52	92	144
	24.00	50	48	98
	25.00	76	78	154
	26.00	8	0	8
	27.00	14	2	16
	28.00	12	0	12
	29.00	10	2	12
	48.00	8	0	8
Total		542	1024	1566

IJDSCORE * LOCATION Crosstabulation

Count

	LOCATION	Total

		URBAN	RURAL	
IJDSCORE	13.00	22	0	22
	14.00	32	36	68
	15.00	4	32	36
	16.00	10	36	46
	17.00	54	40	94
	18.00	52	44	96
	19.00	112	60	172
	20.00	112	88	200
	21.00	130	12	142
	22.00	192	46	238
	23.00	104	40	144
	24.00	64	34	98
	25.00	124	30	154
	26.00	8	0	8
	27.00	2	14	16
	28.00	6	6	12
	29.00	12	0	12
	48.00	8	0	8
Total		1048	518	1566

IJDSCORE * EXPERIENCE Crosstabulation

Count

		EXPERIENCE			Total
		1 TO 10 YEARS	11 TO 20 YEARS	21 YEARS AND ABOVE	
IJDSCORE	13.00	0	0	22	22
	14.00	0	58	10	68
	15.00	16	2	18	36
	16.00	0	40	6	46
	17.00	0	30	64	94
	18.00	42	38	16	96
	19.00	66	60	46	172
	20.00	52	112	36	200
	21.00	6	124	12	142

	22.00	68	74	96	238
	23.00	14	84	46	144
	24.00	52	46	0	98
	25.00	48	50	56	154
	26.00	0	8	0	8
	27.00	14	0	2	16
	28.00	4	6	2	12
	29.00	0	10	2	12
	48.00	8	0	0	8
Total		390	742	434	1566

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
IDSCORE	1566	9.00	28.00	19.1750	3.34217
SSSCORE	1566	7.00	28.00	19.3091	3.34221
FJCSCORE	1566	12.00	29.00	21.5326	3.12218
IJDSCORE	1566	13.00	48.00	20.7842	3.79233
Valid N (listwise)	1566				

Means

Report

EXPERIENCE		IDSCORE	SSSCORE	FJCSCORE	IJDSCORE
	Mean	20.2051	19.7179	21.2308	21.9385
1 TO 10 YEARS	N	390	390	390	390
	Std. Deviation	2.69191	2.83888	3.25752	4.76741
	Mean	18.7385	19.1321	21.8895	20.5391
11 TO 20 YEARS	N	542	542	542	542
	Std. Deviation	3.49580	3.76202	2.73638	3.22330
	Mean	18.9954	19.2442	21.1935	20.1659
21 YEARS AND ABOVE	N	434	434	434	434
	Std. Deviation	3.41768	2.95808	3.53807	3.48809
	Mean	19.1750	19.3091	21.5326	20.7842
Total	N	1566	1566	1566	1566
	Std. Deviation	3.34217	3.34221	3.12218	3.79233

T-Test

Group Statistics

	GENDER	N	Mean	Std. Deviation
IDSCORE	MALE	542	19.6236	3.76023
	FEMALE	1024	18.9375	3.07569
SSSCORE	MALE	542	19.3026	3.19559
	FEMALE	1024	19.3125	3.42033
FJCSCORE	MALE	542	21.5572	3.55635
	FEMALE	1024	21.5195	2.86957
IJDSCORE	MALE	542	21.7159	4.82091
	FEMALE	1024	20.2910	3.00412

Independent Samples Test

		t-test for Equality of Means			
		T	Df	Sig. (2-tailed)	Mean Difference
IDSCORE	Equal variances assumed	2.744	1564	.006	.68612
SSSCORE	Equal variances assumed	-.039	1564	.969	-.00992
FJCSCORE	Equal variances assumed	.160	1564	.873	.03766
IJDSCORE	Equal variances assumed	5.080	1564	.000	1.42485

T-Test

Group Statistics

	LOCATION	N	Mean	Std. Deviation
IDSCORE	URBAN	1048	19.4962	3.36981
	RURAL	518	18.5251	3.19434
SSSCORE	URBAN	1048	19.4008	3.46682
	RURAL	518	19.1236	3.07279
FJCSCORE	URBAN	1048	21.7653	3.17860
	RURAL	518	21.0618	2.95510
IJDSCORE	URBAN	1048	21.2977	3.84985
	RURAL	518	19.7452	3.45356

Independent Samples Test

		t-test for Equality of Means			
		T	Df	Sig. (2-tailed)	Mean Difference
IDSCORE	Equal variances assumed	3.859	1564	.000	.97109

SSSCORE	Equal variances assumed	1.092	1564	.275	.27721
FJCSCORE	Equal variances assumed	2.981	1564	.003	.70349
IJDSCORE	Equal variances assumed	5.489	1564	.000	1.55254

Oneway

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
IDSCORE	Between Groups	284.600	2	142.300	13.135	.000
	Within Groups	8450.429	1563	10.834		
	Total	8735.029	1565			
SSSCORE	Between Groups	45.135	2	22.567	2.026	.133
	Within Groups	8690.071	1563	11.141		
	Total	8735.206	1565			
FJCSCORE	Between Groups	89.964	2	44.982	4.658	.010
	Within Groups	7532.955	1563	9.658		
	Total	7622.920	1565			
IJDSCORE	Between Groups	365.051	2	182.526	13.084	.000
	Within Groups	10881.472	1563	13.951		
	Total	11246.1048	1565			

Appendix F

Reliability Data Output

```
RELIABILITY
  /VARIABLES=VAR00001 VAR00002 VAR00003 VAR00004 VAR00005 VAR00006
VAR00007
  /SCALE('INSTRUCTIONAL DELIVERY') ALL
  /MODEL=ALPHA
  /STATISTICS=DESCRIPTIVE SCALE
  /SUMMARY=TOTAL.
```

Reliability

[DataSet0]

Scale: INSTRUCTIONAL DELIVERY

Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded[a]	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.554	7

Item Statistics

	Mean	Std. Deviation	N
VAR00001	3.1000	.85224	20
VAR00002	2.3500	.81273	20
VAR00003	2.2500	.96655	20
VAR00004	2.4500	1.09904	20
VAR00005	1.8500	1.03999	20
VAR00006	2.3500	1.08942	20
VAR00007	2.3000	.97872	20

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
VAR00001	13.5500	12.892	-.122	.639
VAR00002	14.3000	12.432	-.039	.612
VAR00003	14.4000	8.779	.551	.404
VAR00004	14.2000	9.011	.402	.461
VAR00005	14.8000	8.905	.465	.435
VAR00006	14.3000	8.958	.418	.454
VAR00007	14.3500	10.134	.285	.514

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
16.6500	12.871	3.58762	7

```
NEW FILE.
DATASET NAME DataSet1 WINDOW=FRONT.
DATASET ACTIVATE DataSet1.
DATASET CLOSE DataSet0.
RELIABILITY
  /VARIABLES=VAR00001 VAR00002 VAR00003 VAR00004 VAR00005 VAR00006
VAR00007
  /SCALE('SOCIAL SUPPORT/CLIMATE') ALL
  /MODEL=ALPHA
  /STATISTICS=DESCRIPTIVE SCALE
  /SUMMARY=TOTAL.
```

Reliability

Scale: SOCIAL SUPPORT/CLIMATE

Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded[a]	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.802	7

Item Statistics

	Mean	Std. Deviation	N
VAR00001	1.8000	.89443	20
VAR00002	2.0000	1.02598	20
VAR00003	2.3000	1.03110	20
VAR00004	1.3500	.67082	20
VAR00005	1.5000	.68825	20
VAR00006	1.7500	.96655	20
VAR00007	2.3500	1.34849	20

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
VAR00001	11.2500	15.987	.603	.765
VAR00002	11.0500	15.839	.516	.1563
VAR00003	10.7500	16.513	.421	.798
VAR00004	11.7000	16.958	.669	.765
VAR00005	11.5500	17.945	.460	.791
VAR00006	11.3000	16.853	.418	.797
VAR00007	10.7000	12.011	.778	.723

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
13.0500	21.103	4.59376	7

```
NEW FILE.
DATASET NAME DataSet2 WINDOW=FRONT.
DATASET ACTIVATE DataSet2.
DATASET CLOSE DataSet1.
RELIABILITY
  /VARIABLES=VAR00001 VAR00002 VAR00003 VAR00004 VAR00005 VAR00006
VAR00007 VAR00008
  /SCALE('FORMAL JOB CHARACTERISTICS') ALL
  /MODEL=ALPHA
  /STATISTICS=DESCRIPTIVE SCALE
  /SUMMARY=TOTAL.
```

Reliability

Scale: FORMAL JOB CHARACTERISTICS

Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded[a]	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.740	8

Item Statistics

	Mean	Std. Deviation	N
VAR00001	2.5000	1.05131	20
VAR00002	2.6000	1.18766	20
VAR00003	2.6500	1.08942	20
VAR00004	2.7000	1.12858	20
VAR00005	2.7000	1.30182	20
VAR00006	2.6000	.94032	20
VAR00007	2.5000	1.19208	20
VAR00008	2.3000	.97872	20

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
VAR00001	18.0500	23.839	.313	.735
VAR00002	17.9500	22.050	.421	.716
VAR00003	17.9000	19.253	.807	.637
VAR00004	17.8500	20.029	.678	.662
VAR00005	17.8500	24.239	.173	.770
VAR00006	17.9500	23.945	.361	.726
VAR00007	18.0500	23.629	.268	.746
VAR00008	18.2500	21.882	.581	.688

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
20.5500	28.155	5.30615	8

```
NEW FILE.
DATASET NAME DataSet3 WINDOW=FRONT.
DATASET ACTIVATE DataSet3.
DATASET CLOSE DataSet2.
RELIABILITY
  /VARIABLES=VAR00001 VAR00002 VAR00003 VAR00004 VAR00005 VAR00006
VAR00007 VAR00008
  /SCALE('INFROMAL JOB DUTIES') ALL
  /MODEL=ALPHA
  /STATISTICS=DESCRIPTIVE SCALE
  /SUMMARY=TOTAL.
```

Reliability

Scale: INFROMAL JOB DUTIES

Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded[a]	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.738	8

Item Statistics

	Mean	Std. Deviation	N
VAR00001	2.9000	.85224	20
VAR00002	2.5000	.94591	20
VAR00003	2.4000	1.14248	20
VAR00004	2.7000	1.12858	20
VAR00005	2.4500	1.19097	20
VAR00006	2.8500	1.03999	20
VAR00007	2.2500	1.20852	20
VAR00008	2.5000	1.00000	20

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
VAR00001	17.6500	20.345	.620	.683
VAR00002	18.0500	19.945	.592	.683
VAR00003	18.1500	20.134	.429	.711
VAR00004	17.8500	23.187	.127	.770
VAR00005	18.1000	18.937	.529	.690
VAR00006	17.7000	21.800	.305	.734
VAR00007	18.3000	20.642	.340	.731
VAR00008	18.0500	19.208	.642	.671

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
20.5500	25.839	5.08325	8