UNIVERSITY OF ZULULAND



EFFECTS OF TEACHER STRESS ON LEARNER ACADEMIC PERFORMANCE IN RURAL SECONDARY SCHOOLS IN THE VHEMBE DISTRICT

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DECLARATION

I, Israel Creleanor Mulaudzi, hereby declare that this Thesis on "Effect of teacher stress on learner academic performance in rural secondary schools in Vhembe District", which is submitted to the University of Zululand in fulfilment of the academic requirement for the award of Doctor of Education, is my work, both in conception and in execution. I also declare that the work has not been presented for the award of any degree at any other university. All the sources that I have used or quoted have been indicated and acknowledged both in the text and in the list of references.

Date: 09/04/2018

Signature:

Anuland,

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DEDICATION

I dedicate this study to God Almighty and to my husband, Dr Mulaudzi Ndivhuho Justice, our four sons Ohula Jedidiah, Arilwelaho Jezaniah, Udivhazwothe Jehoshaphat and Endanae Jehizkiah, my girl Zwotea Mbau, my parents, Elisa and Silas Chauke, my parents in law Mulaudzi Paul and Joyce, my only sister, Livhuwani Tshifularo and her husband Shumani. My achievements will always be attributed to the inspiration they put in me.

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ABSTRACT

Teaching is regarded by many as one of the most stressful occupations, as evidenced by reports of academic results consistently poor in rural schools and teachers leaving the profession each day. Stress in general has always been a concern in many schools. The aim of this study was to investigate the effect of teacher stress on learner academic performance in rural secondary schools. This study used both quantitative and qualitative research approaches in which questionnaires and interviews were used for data collection processes. Simple random sampling and purposive sampling procedures were used to select participants from rural secondary schools in Vhembe District with a matric pass rate of less than sixty percent over a period of five years. Quantitative data was analyzed using IBM Statistical package for Social Sciences (SPSS) Version 24 (IBM SPSS statistics), and Atlas.ti Version 6 programme for qualitative data. Results showed that teachers in secondary schools in the rural areas experience high levels of stress which has adverse effects on learner academic performance. These results guided me in developing the Three Pillars Teacher Stress Coping Model to assist teachers in rural areas to alleviate the stress they experience as they promote teaching and learning. The study contributed to the literature on the effect of the experience of stress by teachers on learner academic performance in rural secondary schools.

Keywords: effect of stress, teacher stress, learner academic performance, rural schools, teaching and learning.

ABBREVIATION AND ACRONYMS

SPSS	Statistical package for Social Sciences
et al.	And others
GAS	General Adaptation Syndrome
P-E	Person-Environment
STP	state-trait process (STP)
IQMS	Integration Quality Management System
ACTH	Adrenocorticotrophic Hormone
HIV	Human immunodeficiency virus
AIDS	Acquired Immune Deficiency Syndrome
ILO	International Labour Organization
T1	Teacher
T2	Teacher
T3	Teacher
T4	Teacher
T5	Teacher
L1	Leaner
L2	Learner
L3	Learner
B = f (P-E)	Behaviour is a function of the person and the environment

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CHAPTER 1: ORIENTATION TO THE STUDY

1.1 INTRODUCTION

This chapter introduces issues which are covered in this study. It begins with the general background and leads to the aim and the objectives, research questions, assumptions, used in the study and lastly, the outline of chapters. The chapter also presents the research design and methodology, data collection methods and procedures, instrumentation, data analysis and interpretation, significance of the study, delimitation of the study, ethical consideration, work plan, budget estimation and references.

As a teacher for more than 22 years, I have observed that teacher stress is one of the main contributing factors to poor performance of learners at school particularly in rural schools. Experience of stress has always been a concern in many schools, including schools in rural Vhembe district Kutame, Maluleke, Netshandama & Ramakuela, (2014). School managers do their best to lift the morale of employees to ensure high productivity. Low productivity, as it applies to the "education sector", due to teacher stress, is a concern to the Department of Education. Where high productivity is not met, teachers unfortunately get retrenched, and a new batch of employees is taken and trained. The South African Constitution, the South African Schools Act and various education policy documents state that all South African learners should have access to quality education (Gardiner, 2008). However, the previously disadvantaged and mainly rural schools continue to lack essential resources which include proper classrooms, libraries and laboratories.

Conditions prevailing in these rural schools are stressful for teachers such that they impact negatively on the desired quality of teaching (Kutame et al., 2014), subsequently leading to poor learning outcomes. Some of these rural schools in Vhembe District have even been declared dysfunctional by the Department of Education (Kutame et al., 2014). Lack of resources reportedly adds more stress upon teachers and negatively impacts on their morale (Kokkinos, 2007; Kutame et al. 2014; Pretorius, 2014), although teacher stress can be experienced anywhere, there may be a risk of isolation in rural areas, which could be a significant cause and contributor to

stress. Stress amongst teachers in rural schools is critical in relation to promotion of quality teaching and learning as it can adversely affect learners and their learning environment. The effect of teachers on the learners and education programs, in particular, is much higher than other elements contributing to the quality of teaching and learning. Teaching is not only about having knowledge and skills, but also about affective competencies.

The Constitution: Act 108 of 1996, South African Schools Act (Act 84 of 1996) and various Education Policy documents, as reflected in Gardiner (2008), all South African learners should have access to the same quality of learning and teaching, similar facilities and equal educational opportunities. However, there is no indication as to when and how these factors which impact negatively on the teachers' working conditions and, ultimately, their health will be addressed. The previously disadvantaged and mainly rural schools continue to lack essential resources like libraries and laboratories, which has adverse effects on learner academic performance.

New schools that get built in urban areas are built with such resources, whereas rural schools that have been around for decades do not have such resources, leaving everyone guessing as to when provision of such resources can be expected. These rural schools have, on average, reported poorer academic achievements.

Occupational stress has serious consequences for both teachers and learners at schools and even the school environment. It remains to be proven whether such serious consequences include poor learner academic performance resulting from teacher stress, which impacts negatively on teacher performance.

1.2 PROBLEM STATEMENT

The South African Constitution, the South African Schools Act and various education policy documents state that all South African learners should have access to quality education. However, the previously disadvantaged and mainly rural schools continue to lack essential resources which include proper classrooms, libraries and

laboratories. Available literature shows that conditions prevailing in these rural schools affect the desired quality of teaching. Some of these rural schools in Vhembe District have even been declared dysfunctional by the Department of Education. Experience of stress by teachers has always been a concern in many schools, including the schools in this rural district. Some literature shows that teachers in these rural areas experience some stress but are silent on the level and effects of the stress they experience on learner academic performance. The studies are silent on how teachers in these rural areas, who experience some level of stress, can be assisted to reduce the stress levels. There is dearth of literature on how and whether the stress levels teachers in rural areas experience, has effect on learner academic performance. Stress amongst teachers in rural schools is critical in relation to promotion of quality teaching and learning as it has the potential of adversely affecting learners and their learning environment. The effect of teachers on the learners and education programs, in particular, is much higher than other elements contributing to the quality of teaching and learning.

While it can be confidently expected that the effectiveness of the school might be dependent on the well-being of its teachers in promoting the quality of teaching and learning and thus learner performance, this has, however, not yet been documented about schools in the rural areas of Vhembe District.

This study was guided by the following research questions:

- i. What is the level of stress experienced by teachers in rural secondary schools?
- ii. What are the effects of teacher stress on learner academic performance in rural secondary schools?
- iii. What are some of the coping strategies used by teachers experiencing workrelated stress?
- iv. What model can be used by teachers to cope with work-related stress for them to deliver effective teaching and learning?

1.3 AIM OF THE STUDY

The aim of this study was to investigate the effect of teacher stress on learner academic performance in rural-based secondary schools of Vhembe District in order to develop a model that would promote the quality of teaching and learning.

1.4 OBJECTIVES OF THE STUDY

This study is guided by the following research objectives:

- To investigate the level of stress faced by teachers in rural secondary schools of Vhembe District.
- To determine the effect of teacher stress on learner academic performance in the Vhembe District.
- To determine some of the coping strategies used by teachers experiencing work-related stress in the Vhembe District.

1.5 CONTRIBUTION TO THE BODY OF KNOWLEDGE

This study will significantly contribute new knowledge in the promotion of teaching and learning in marginalised teaching profession

- on how teachers in rural areas, who experience some level of stress, can be assisted to reduce the stress levels.
- on how the stress levels that teachers in rural areas experience, has effect on learner academic performance.
- Regarding the debates on the extent to which stress amongst teachers in rural schools is critical in relation to promotion of quality teaching and learning.

The model developed once piloted may be critical in addressing teachers' stress which has effect on learner academic performance.

1.6 RESEARCH DESIGN AND METHOLOGY

This study used an empirical survey following a pragmatic paradigm using a mixed method approach of both quantitative and qualitative research methods for collecting data through questionnaires (Appendix A) and interview schedule (Appendix B): to quide the face to face interviews.

1.6.1 Population

Fraenkel and Wallen (2000) view population as a group of people the researcher would use to generalize the results of the study. The target population were teachers from rural based secondary schools.

1.6.2 Sampling procedure and sample size

Determining an adequate sample size may be one of the most controversial aspects of sampling. How large a sample should be in order to be representative of the population has no simple answer. Best and Kahn (1993) stated that there is no fixed number or percentage of subjects that determine the size of an adequate sample.

Simple random sampling was followed to select 200 participants who completed questionnaires in rural schools in Mutale area of Vhembe District (Appendix F) with matric pass rate of below sixty percent performance over a period of five years. The participants were teachers from public secondary schools in Mutale area of Vhembe District. Purposive sampling procedures were used to select eight participants who were interviewed as further described in Chapter 3.

1.6.3 Data collection procedure

A self-administered and self-constructed questionnaire was used to collect relevant data from all subjects in the sample. The questionnaire consisted of 38 items. The first

Section of the instrument contained a statement of purpose and directions and was designed to collect demographical or personal data that include gender, age, educational attainment, years of working experience, learner enrolment and teacher learner ratio. The second Section of the questionnaire measured the degree to which situations in the teachers' lives are appraised as stressful Chapter 3 gives a full description of the structure of the questionnaire and how it was constructed.

The questionnaire was self-administered and completed questionnaires were collected after a week from the day they were distributed. Qualitative data was collected through face-to-face interviews. Chapter 3 presents full details on how the interviews were conducted.

1.6.4 Analysis of data

The data collected from the field was given to an expert to capture, edit and analyse. A computer loaded with Statistical Package for Social sciences version 24 (SPSS) was used to analyze quantitative data which showed frequencies and frequency percentages shown by means of tables and figures and the means, cross tabulation to establish the level of significance in the results from data collected.

1.7 ETHICAL AND SAFETY ISSUES

The principle of informed consent arises from the subject's right to freedom and self-determination. Being free is a condition of living in a democracy, and when restrictions and limitations are placed on that freedom, they must be justified and consented to, as in research (Mc Millan & Schumacher, 2001; Cohen, Manion & Morrison, 2007). Consent thus protects and respects the right of self-determination and places some of the responsibility on the participant should anything go wrong in research. As part of the right to self-determination, a prospective participant has the right to refuse to take

part, or to withdraw once the research has begun. To comply with the requirements of this principle, all the participants were asked to sign a consent form, and the following were observed: a description of the participants expected discomfort and risks, a disclosure of appropriate alternative procedures deemed to be advantageous to the participants; an offer to answer any inquiries concerning the procedures; an instruction stating freedom to withdraw consent and to discontinue participation in the project at any time without prejudice.

All the participants were assured that all the information they provided would be given the deserved confidentiality. To ensure confidentiality, the following was done: deletion of identities, crude report categories and micro-aggregation, that is, the construction of average persons from data on individuals and the release of these data, rather than data from individuals (Mc Millan & Schumacher, 2006; Cohen, Manion & Morrison, 2007).

The principle of equal respect demands that we respect the equal worth of all people (Cohen, Manion & Morrison, 2007). This requires us to regard people as free and rational and accept that they are entitled to the same basic rights as others. Privacy: this involves a right to control information about oneself and protects people from unwarranted interference in their affairs. It also protects the confidentiality of evaluation information. The distributed questionnaires gave room for all respondents to remain anonymous by not including names, and all interviews were conducted in privacy (Cohen, Manion & Morrison, 2007).

The essence of anonymity is that information provided by participants should, in no way, reveal their identity (McMillan & Schumacher, 2001, 2006; Cohen, Manion & Morrison, 2007). A participant or subject is, therefore, considered anonymous when the researcher or another person cannot identify the participant or subject from the information provided. To ensure anonymity, I avoided using any expression in data analysis that would give information that would directly or indirectly help identify the participants.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

This chapter focuses on the literature reviewed on the effect of teacher stress on learner academic performance in rural-based secondary schools. The definition of stress is discussed to shed light into how stress is viewed in this study. The literature reviewed the models of stress, which provides the background on which this study is located. The stressors that teachers face in their profession as reflected in literature, as well as their coping strategies and how learners' academic performance gets affected by teachers' stress, are reflected in the chapter.

Despite much discussion concerning the nature of workplace stress, teachers' stress experience seems to be increasing. While stress certainly is not unique to the teaching profession, working in schools does throw up a number of situations that are unique to education while the current climate of uncertainty and criticism further undermines the professionalism and confidence of many hard-working teachers. Changes to pay and conditions and new appraisal systems seem to indicate that teachers are far from feeling that they are in control of their level of stress experience.

2.2 THEORETICAL FRAMEWORK

The theoretical framework provided a lens through which this study was undertaken. The Person-Environment Fit Approach developed focused on how stress can develop in an individual due to confusing and conflicting expectations of an individual in a social role. It furthermore examined an individual's fit in the environment and viewed a good person-environmental fit as occurring when a person's skills and abilities fit a clearly defined consistent set of expectations leading to lack of stress. Long periods of stress

can have negative consequences, which include, among others, strain in the form of depression (Quick, 1994).

General Adaptation Syndrome (GAS) is regarded as the pioneer of stress which warns that being completely free from stress means death (Everley & Rosenfeld, 1991; Olivier & Venter, 2003). General Adaptation Syndrome provides insight into individuals' reactions to stress. Stress is the non-specific reaction of an individual to an external threat or stressor. A key component of this theory is the identification of the long-term negative effect of stress (Milner & Khoza, 2008).

The three stages which are integral to the General Adaptation Syndrome (GAS) are as follows: Alarm Reaction stage which is triggered by the perception of a stimulus as a stressor. Firstly, the body prepares for action which can either be a "fight or flight" reaction. Secondly, the initial shock phase occurs, where the body responds by a dropin blood pressure and muscle tension. Thirdly, a counter shock phase exists, which involves a response to a threat or injury. The alarm stage is triggered by the hypothalamus and regulated by the sympathetic autonomic nervous system and the endocrine system (Milner & khoza, 2008). At this stage, the body may be alerted, and stress levels may be at their highest.

Person-Environment Fit Theory alludes that there are diverse models of work-related stress that have stimulated the construction of a variety of stress measures in order to clarify and interpret research findings on work-related stress. For example, psychological theories (Eagle, Baudouin, Chandler, Giddings, Bullock, & Bushby, 2002), the sociological theories (Berger, 1993), the systemic theories (Edwards, 1992), the demand-control theories (Frone & McFarlin, 1989), the communication theory (Hart & Wearing, 1995); the cybernetics theories (Decker & Borgen, 1993), the stress work model (Borg & Riding, 1991), the state-trait process (STP) model (Spielberg & Reheiser, 1994) and the Person-Environment Fit Model-P-E Fit model (Shipp & Jansen, 2011). The current study is grounded on the P-E Fit model.

The P-E Fit model is widely accepted as a major conceptual framework for research on work-related stress because it is able to give adequate attention to both the everchanging phenomenon of personality and the work environment (Wasala, 2001; Faure & Loxton, 2003; Puente-Diaz & Anshel, 2005). The P-E Fit is not a static model but a very dynamic one (Spokane, Meir & Catalano, 2000; Furnham, 2005). It therefore helps to illustrate how individuals choose environments that create a good fit and how resultant P-E fit, or misfit affects an individual's affective and behavioural outcomes in their careers. The P-E Fit theory is one of the few conceptualizations of a person's relationship to the environment that encompasses such a broad range of relationships.

Lastly, the focus of the P-E Fit model is not only on individual behaviours but also on group or organizational behaviour; therefore, predictions in this model include group or organizational as well as individual outcomes. The Person-Environment Fit theory according to Shipp and Jansen (2011) is based on an interactional psychology widely accepted formula, B = f (P-E), which states that behaviour is a function of the person and the environment. Research on the P-E fit orientation suggests that the congruence between individual characteristics and environmental characteristics predict attitudes and behaviour (Cable & Judge, 1997).

Sekiguchi (2004) points out that whether a good fit today will be a good fit the following day depends on the stability of the variables on which matches are made. Some characteristics may be more changeable. For example, personality and values are often used in conceptualizing P-E Fit. Although both personality and values are considered relatively stable, values are less stable than personality and susceptible to the variety of changes and the influences of new environments (Sekiguchi, 2004). Therefore, while fit in terms of personality similarity may be relatively stable, fit in terms of value congruence may change over time. The P-E Fit theory considers not only the person and environmental influencers but that the fit between the person and the environment influencers behaviour.

Essentially, the P-E Fit model posits that there are characteristics of organizations that have the potential to be congruent with characteristics of individuals, and that the individuals' attitudes and behaviours will be influenced by the degree of congruence or fit between individuals and organizations (Furnham, 2005; Ellis & Tsui 2007). Hence the general assumption underlying P-E Fit model is that positive attitudes and behaviours are a function of the compatibility of individuals to their environments

(Hoffman & Woehr, 2006; Lee & Antonakis, 2007). The application of this theory helped in the explication of occupational stress among secondary school teachers in the Vhembe District.

In the Resistance Stage, the body starts to cope. Endocrine and sympathetic activities decrease somewhat, since the individual is calmer. If the stressor can be dealt with or destroyed, then psychological damage is less likely to occur. However, much is still occurring physically. Corticosteroids worsen the natural inflammatory reaction and the immune system is less responsive. The replacement of cells is repressed (immunosuppression) and the body's resources are exhausted faster than they can be replaced (Milner & khoza, 2008). This stage may be characterized by an adaptation response of the body which involves "fight or flight" responses.

In Exhaustion, Corticosteroids in the blood stream avert further release of ACTH (negative feedback). If the stressor was removed during the resistance phase, blood sugar will steadily return to normal. If the stressor was not dealt with, extended exposure means that higher brain centres will override the negative feedback and maintain the pituitary-adrenal excitation. This results in wear and tear on the tissues, fatigued muscles and damage to the endocrine glands and kidneys. This is referred to as the diseases of adaptation or stress related illness (Milner & khoza, 2008).

Key sources of stress for teachers include, amongst others, dealing with parents, lack of principal support, limited parental support, no fee schools and limited learner motivation, which may lead to a lack of job satisfaction, lack of control, lack of resources, libraries, laboratories, stationery, classrooms, lack of rural allowance for teachers, under payment of the most qualified teachers, an overall negative working environment and job overload in terms of paper work, IQMS, workbooks, classwork, assessment, homework, intervention, working as nurses, waitress, security guards and lack of professional recognition. These could reflect negatively on the teacher and cause stress (Schulze & Steyn, 2007). The stimulus-based model of stress considers the external environment as a source of stress.

The Stimulus-Based Model of Stress developed by Lazarus and Folkman (1984) is derived from physics, particularly engineering, (Steyn & Kamper, 2006). Stress is

considered as "a condition of the environment that is external to the individual and influences him or her in a disruptive way" (Steyn & Kamper, 2006). The model shows that stress occurs when the demands made on an individual exceed the elastic limit of the individual's ability to cope or adapt. Although this model is useful in identifying stressors, it is limited since it does not take individual perceptions into account (Schulze & Steyn, 2007).

The Stimulus-Based Model of Stress includes environmental and stimulus responses (Steyn & Kamper, 2006). A different view of stress called the Response Based Model of stress was also developed by Lazarus and Folkman (1984). It emerged from the field of medicine and is explained from a physiological perspective (Steyn & Kamper, 2006). Furthermore, stressors are considered as agents or demands that elicit a stress response. This model also has the potential to identify stressors that might affect teachers at high risk secondary schools in the Vhembe District. Furthermore, it focuses on the physiological, psychological and behavioural consequences of stress. These symptoms may also be attributed to other medical conditions.

The theory is consistent with P-E Fit theory and indicates that "stress is the individual's response to a threatening or disturbing stimulus (Steyn & Kamper, 2006). In addition to this, teachers can be viewed as passive recipients of stimuli, who experience stress when under pressure (Schulze & Steyn, 2007). It focuses on the physiological, psychological and behavioural responses, high absenteeism, burnout, poor learner academic performance, teachers leaving their professions, depression, blood pressure and ill health which may appear as symptoms and consequences of stress (Steyn & Kamper, 2006). Theorists also developed meditational conceptualizations of stress which focus on the cognitive, evaluative and motivational processes that intervene between the stressor and the reaction to the stressor (Milner & Khoza, 2008).

There appears to be no theoretical framework that explicitly models a multivariate approach to school performance from an organisational behaviour perspective. Rather, a range of individual variables, including teacher stress, school climate, teacher commitment, learner characteristics, communication, learning facilities, proper guidance, family stress and social factors such as socio-economic status have been

assessed, but there appears to be no over-arching theoretical framework which links these variables together as predictors of learner performance.

Teacher stress and school climate were specifically chosen as the variables of interest in the current study, because of the previous research both internationally and in South Africa, which has identified these as important factors influencing teacher attitudes and school performance (Hausman & Goldring, 2001). Socio-economic status was explored and controlled the current study through the choice of schools. Indeed, the anomalous situation, in South Africa, of schools which appear entirely similar in objective criteria such as rural, lack of resources, learner/teacher ratios (approximately 70 learners per class), yet produce vastly differing results, provides a unique opportunity to investigate these variables from a novel and original perspective. Although there is little in the way of theorizing around school performance and the variables currently under investigation, the literature on the individual variables by themselves is theoretically rich.

2.3 DEFINITION OF STRESS

Teacher stress has been defined in different ways. A renowned founder of stress research, Selye (1974), defined stress as the wear and tear on the body due to the demands placed on it. Otto, (1986) perceived work-related stress as resulting from a mismatch or an imbalance between external and internal job demands and external and internal resources. A number of definitions of 'stress' appear in literature, and none of them is far from the one reflected in the study by Betonio, (2015), which portrays stress as the adverse reaction of every individual person who happens to experience so much pressure and other types of demand workload placed on their ability to adapt. When such pressure is experienced in the work place, it is referred to as occupational stress, and the interest in the study is more specifically in the teaching profession. Thus, stress may result if the job demands do not fit the teachers' perceived capacity to meet the demands or their educational values. A teacher may experience unpleasant emotions like tension, frustration, anxiety, anger and depression resulting from aspects of work as a teacher (Kyriacou, 2001). Occupational

stress for teachers was described by early researchers on the subject (Kyriacou & Sutcliffe, 2001).

Definitions of stress in teaching tended to include similar features which are: the subjective nature of a teacher's perception of stress, the variability among teachers to cope successfully with the demands of teaching, and the generally negative reaction when job demands are perceived to exceed the teacher's ability to cope (Kyriacou & Sutcliffe, 1978; O' Connor & Clarke, 1990). A frequently used definition of teacher stress is that of Kyriacou and Sutcliffe (1978) thus: a subjective negative reaction to aspects of the job that threaten a teacher.

Jackson and Rothman (2005) define work related stress as a product of an imbalances between the environment and individual capabilities. Stress is usually used to either describe an internal stimulus or an individual response (Oliver & Venter, 2003). In this study, stress can be defined as tension that continues to build up within an individual as a result of inability to deal with it.

The negative effect of stress is associated with illness of varying degrees. Stress is a result of interaction of three domains, namely, environmental factors, personality characteristics and emotional responses (Nyambongi, 2013). Environmental factors include student discipline, teacher competence and facilities available in the school among others. Stress severely decreases the psychological resources and coping skills of an individual. Problem-solving and decision-making skills are impaired. Stress further impacts the immune system; a person is more likely to get ill and exhibit prolonged recovery periods, leading to lower productivity and as a result learners' performance becomes poor. A certain degree of stress is unavoidable, however, at an acceptable level, such stress tends to improve the teachers' efficiency (Betonio, 2015).

2.4 MODELS OF STRESS

Researchers have described different models of stress, which are able to make the understanding of stress as a concept clearer. These models expound the phenomenon *stress*, including what brings it about, as well as its resultant negative psychological and physical effects. Models founded in the attribution theory may generally be concerned with individuals' explanations of life events. Greenfield and Blasé (1981) state that the realization that one is experiencing stress could generate further stress. Smilansky (1984) found that satisfaction is associated with internal or personal factors whilst stress is related to external (environmental) factors. McCormick and Solman (1992) argued that organizational structures should be included in a model of teachers' occupational stress. Some of the models adapted for this study are the transactional model and the occupational stress model.

2.4.1 Transactional Model

The Transactional Model is based on the theory that stress ensues due to a perceived imbalance between an individual's environment and the resources available to that individual, culminating in a particular response to them (Miller & McCool, 2003). The relationship between the individual and the environment endangers their well-being (Lazurus, & Folkman, 1984). This model holds that stress is a product of the transactional or interaction between an individual and the environment (Lazarus & Folkman, 1984, Leonova, 2009). It is considered to be a useful and suitable model in assisting an individual to fit into the environment (Leonova, 2009).

The key factor in this model is the individual's cognitive appraisal of events and situation, that is, how the individual assesses the events or situation to be like, and the individual's ability to cope (Jackson & Rothmann, 2006). There are two identifiable steps in the appraisal process, namely, primary appraisal and secondary appraisal (Lazarus, 1993, 2000). In primary appraisal, the individual interprets an event as one

that involves harm, a threat of some future danger or a challenge to be overcome (Santrock, 2003). Lazarus (1993, 2000) posits that perceiving a stressor as a challenge rather than a threat is a good strategy for reducing stress. A stressful environment in a rural school may be perceived as a challenge and a threat to a teacher as they may contribute to poor performance.

In a secondary appraisal, individuals determine how effectively they can put their available resources to good use, in order to deal with stressful events around them. An individual's interpretation of events (primary appraisal) is the most crucial step, because even if resources are available to counteract the effects of the stress, they will never be utilised if the interpretation of the event is that of an unchangeable threat (Santrock, 2003). Secondary appraisal is therefore dependent on how the event was appraised at the primary stage.

2.4.2 General Adaptation Syndrome Model

The General Adaptation Syndrome Model is a model on the physiological response to stress which was described by Selye (1974), a founder of stress research. He focused on the physiological changes that take place when the body prepares itself to handle the experience of stress. This syndrome was described after an observation was made that irrespective of the environmental event or stimulus causing stress, the same stress response characterized by less of appetite, muscular weakness and decreased interest in the world ensues (Santrock, 2003).

The General Adaptation Syndrome Model posits that stress is a result of physiological, psychological and environmental demands on the body (Selye, 1974). Seyle states further that when faced with a stressful situation, the body generates extra energy aimed at fighting off the stressful experience. When all the generated energy gets used up, stress results. Teachers in rural areas are faced with situations which may result in situations that may be deemed stressful.

The General Adaptive Syndrome Model consists of three stages: alarm stage, resistance stage and exhaustion stage. These stages always follow each other in this sequence, with the alarm stage being the first one and the exhaustion stage being the last (Selye, 1974).

Alarm stage

The Alarm stage is the body's first reaction to a stressor, which is a temporary state of shock characterised by very low resistance of the body to illness (Santrock, 2003). Such a drop in the body's resistance to illness is due to the malfunction of the immune system at this stage of the syndrome. Hormones that are produced by the body to counteract the effects of the stress have an adverse effect on the immune system, leading to its malfunction, while some of them are responsible for a number of physiological changes, including an elevated blood pressure, muscular tension and heavy breathing. This is commonly known as the 'fight or flight' response (Santrock, 2003).

Resistance Stage

This is the second stage of the General Adaptation Syndrome (Selye, 1974). In this stage, the body begins to produce various hormones that protect the affected individual in many ways (Santrock, 2003). The body, therefore, starts a process of mobilising different coping mechanisms to respond to the stress (Selye, 1974). During the resistance stage, the body's immune system is capable of fighting off infection with relative ease. It is also during this stage that hormones necessary for the reduction of inflammation due to injury circulate at high levels. Teachers whose immune systems are already affected by other conditions like HIV/AIDS may find it harder to endure this stage, leading to a premature slide to the exhaustion stage.

Exhaustion Stage

The exhaustion stage comes into effect when the stress becomes too intense, or when it lasts too long for the body to handle (Selye, 1974). This is because all the efforts by the body to fight off the stress have failed, leading to a collapse of the individual into a state of exhaustion and vulnerability to fall sick (Selye, 1974). It is at this stage of the General Adaption Syndrome that the body suffers permanent damage, and death may even ensure (Santrock, 2003). A teacher at this stage of the syndrome may not be able to render any meaningful tuition to learners, hence all effort should be directed at ensuring that stressed teachers do not reach this stage either by altering the intensity of the stress or reducing the period in which the stress is experienced.

2.4.3 Learned helplessness Model

Learned helplessness occurs when individuals get exposed to unwanted stimulation like prolonged stress, over which they have no control (Santrock, 2003). Such an inability to have control leads to a sense of helplessness, which leads to depression. When depressive symptoms which include loss of energy, poor concentration and reduced interest have a toll on a teacher, the rendering of tuition may be affected.

When learned helplessness is manifested in a learner, it usually presents as depression, lowered effort and poor learning, thus leading to poor performance (Aronson et al., 1997). In the context of the teachers referred to above, it is inferred that they are likely to experience depression, lowered effort, poor lesson preparation resulting in poor tuition, and ultimately restarting the cycle as depicted below:

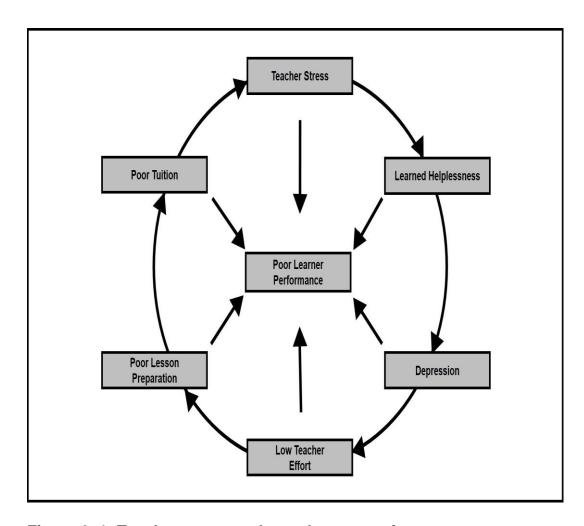


Figure 2. 1: Teacher stress and poor learner performance

2.4.4 Attribution theory of responsibility model

The attribution theory states that individuals are motivated to discover the underlying causes of behaviour in an effort to make sense out of the behaviour (Santrock, 2003). According to Heider (1958), who is frequently referred to as the father of the attribution theory, people are like amateur scientists, trying to understand other people's behaviour by putting pieces of information together until a reasonable explanation or cause is realised. According to this model, either an internal (dispositional) or an external (situational) attribution pertaining to a particular behaviour can be made. Internal attribution means that the perceived cause of the behaviour lies within the person's personality, attitude or character, whereas external attribution means that the

perceived cause of the behaviour lies outside the person, and may be environmental factors, situational factors such as rewards or task difficulty (Heider, 1958).

Putting the implications of this model in perspective relevant to this study: a school principal in a rural school may interpret poor performance of learners in mathematics to be due to the learners' lack of commitment to learn mathematics (internal attribution), or to be due to the incompetence of the mathematics teacher or lack of essential resources to be utilised during mathematics lessons (external attributions). Surely if the Maths teacher learns that the principal thinks that he or she is responsible for the learners' poor performance, at times, to go as far as getting a reprimand from the principal, stress would result for the teacher in question. Such behaviour may have adverse effects on learners' behaviour in relation to their ability to learn.

2.4.5 Occupational stress Model

The occupational stress model focuses on aspects of the job that give rise to stress, thereby triggering a particular behavioural response from the person affected (Leonova, 2009). The work environment is at the centre of this stress model. Occupational stress usually increases when job demands are high, and the individual has little choice in deciding how to meet the demands (Santrock, 2003). This means that failure to acquire such resources can only lead to the build-up of stress in the teacher.

Jobs that are demanding, but low in autonomy were shown to lead to high levels of exhaustion, depression and insomnia, tranquiliser and sleeping pill use, and sick leave (Karacek, 1979). Occupational stress leads to low self-esteem and poor job satisfaction (Quick & Quick, 1994). A teacher in a rural school who most likely already had low self-esteem as a result of being a teacher at a poorly-resourced school with possibly poor school results may experience high levels of job-related stress. Stress levels have been observed to increase when jobs do not meet expectations that the

particular individuals had about them (Rabasca, 1999). It becomes easier to handle stress in the workplace if the work is found to be personally rewarding (Santrock, 2003). Ideally, any teacher would expect to teach in a school that is well-resourced, and where all systems are in place to offer effective teaching. When such expectations are not met, there is bound to be a rise in the stress level for that particular teacher. Work-related stressors may have a variety of negative effects on individuals, and the correlation between job dissatisfaction and untoward behaviour bears witness to the effect of negative stress (Jackson & Rothmann, 2006).

The stress reaction called "Overload" is usually a contributory factor of occupational stress. Such an overload may be of any stimuli that becomes too severe for one to cope with, like persistently high noise levels or high workload (Santrock, 2003). If teachers in well-resourced schools complain about information overload as they work on their computers, this could be frustrating for teachers in rural schools that are not equipped with teaching and learning materials. Stress levels experienced as result of these stressors may negatively impact on the quality of teaching and learning thereby affecting learner performance.

2.5 SOURCES OF TEACHER STRESS WHICH AFFECT LEARNERS' ACADEMIC PERFORMANCE

Teachers in rural schools may find themselves facing different challenges than those faced by other teachers in urban areas which result in stress-related experiences. Rural schools have been marginalized from the time of the apartheid era, and this is still the status quo. Mental health and wellbeing of teachers are factors that prevent learners from reaching their full academic performance (Kutame et al. 2014). These are realities faced by rural school teachers.

2.5.1 Teenage pregnancy and teachers' teaching skills

In a study by Mbulaheni, Kutame, Frances and Maluleke (2014), the provision of child support grants in rural secondary schools in Vhembe District of the Limpopo Province

was found to be promoting teenage pregnancy. Teenage pregnancy is a nightmare for any responsible parent nurturing a teenager towards an anticipated bright future. Most parents see failure in themselves whenever their teenage children fall pregnant, and this becomes a very stressful experience for them. Teachers may take the responsibilities of parents in raising their children, to see to it that their learners perform well.

Economically poor countries have far more teenage pregnancies than economically rich countries Mashao (2008). This is echoed by Kyei, (2012) who indicated that poverty and adverse life circumstances promote teenage pregnancy. This is commonly observed in rural communities. Teachers in such communities, where learners experience teenage pregnancies, find it difficult to teach in such an environment. This would have an impact on learner academic performance.

2.5.2 Poverty in rural areas and teachers' well-being

Another reality that teachers in rural areas have to live with is that of being surrounded by needy learners. The South African Millennium Development Goals Report (2013) indicated that South Africa is producing a social wage package in order to reduce the cost of living of the poor to ensure that there is extra money to buy food (Tshitangano, Tugli, Ramathuba, Khoza, Akinsola, Tshililo & Mashau 2014). When some learners continue to live in dire poverty despite this initiative, it could be stressful to teachers who may find it difficult to teach these learners; such may have an impact on learner academic performance. South Africa may be ranked ninth in the world for highest hunger levels. This clearly show that the attempt by the government to curb hunger is not enough to address the hurdle of hunger in rural schools.

2.5.3 Learner violence and teachers' safety

A number of research studies have shown a correlation between poverty and violent behaviour among youth. According to Appleby and Lorinc (2010), poverty can trigger

behavioural problems among youth, thereby increasing the risk for violence in schools. This was echoed by Ncontsa and Shumba (2005) whose research findings showed a correlation between poverty and the escalation of violence in schools which impact negatively on their teaching activities. It needs no mention that learners from poor, rural communities, meet in these rural schools, where they instigate violent acts. Such acts are bound to instill fear and ultimately stress to the teacher because it can be very difficult to implement discipline to violent learners. They may choose to either write or not write classwork or homework, attend or miss class, and that can affect teachers and at the same time has effect on learner academic performance as learners do as they wish. Teachers in rural schools, therefore, find themselves in a place with a prevalence of violence: a fundamental source of stress. These adverse conditions have an impact on teaching and learning process.

Lack of discipline, therefore, affects teaching and learning negatively. Some causes of violence in schools are mentioned by Maree (2000) as: gang activities, the lack of transformation, learners carrying guns and smoking dagga, the lack of counselling services, intolerance of school management towards some groups, and parental apathy; all have negative connotations on the teacher's mental well-being and would instill stress in the affected teacher. Researchers indicate the need for both learners and teachers to be disciplined for effective functioning of schools.

2.5.4 School resources and teachers' well-being

The importance of having essential facilities in any field of service cannot be overemphasized. Teachers do get appropriate training and are ready to offer effective training to their leaners, only to face the drawback of lack of resources, regarded as one of the contributory factors of teacher stress (Kokkinos, 2007). There are challenges barring schools from reaching their full academic potential that affect mental health promotion and wellbeing of teachers (Kutame et al. 2014). These are realities faced by rural school teachers.

One distressing legacy of past policies is that, rural areas are usually presented in negative terms, thereby affecting teachers and causing some level of stress Gardiner (2008). This suggests that communities tend to associate nothing good, successful or progressive with rural communities. According to Gardiner (2008), this is bound to instill some sense of low self-esteem on the teachers. Teachers working in poorly-resourced schools may thus not be expected to function at their full potential, leading to negative consequences on learner academic performance. Learner performance may be significantly correlated with the availability of facilities such as a library, laboratories of computers and others in the institution.

Lack of essential resources in rural schools like a library and a laboratory, for instance, hinders teachers in such schools from rendering effective teaching to learners. This can be expected to contribute to the build-up of stress amongst the teachers teaching in such schools.

2.5.5 Job satisfaction and teachers' well being

A number of factors linked to the school environment have also been shown to relate to teacher job satisfaction. (Klassen & Chiu, 2010). A number of studies reveal that discipline problems are related to teacher burnout (Hakanen, Bakker, & Schaufeli 2006; Kokkinos, 2007). Supportive school environments and positive social relations with all relevant stakeholders, inclusive of colleagues, learners, parents and school leadership are also predictive of teachers' job satisfaction and motivation to stay in the profession whereas time constraints and ill-discipline are predictive of lower levels of job satisfaction (Klassen & Chiu, 2010).

Teachers who are job-satisfied may work hard as they have inner satisfaction and may find it easy to promote teaching and learning. Teachers who are not satisfied get stressed, sit back and relax, and that will have effect on learner academic performance. Teachers who are not job-satisfied get stressed, and their stress has effect on their

performance in rendering tuition to learners, and consequently on learner academic performance. Several studies also reveal that teacher self-efficacy is associated with higher levels of job satisfaction (Johnson & Birkeland, 2003; Klassen & Chiu, 2003).

2.5.6 Learners' indiscipline and teachers' well-being

Students' discipline is ranked as one of the major concerns in the education process expressed by all stakeholders about public schools and the education system in rural schools (Mabeba & Prinsloo, 2000; Van Wyk, 2004). Teachers in schools which experience disciplinary problems may experience high levels of stress; teacher self-efficacy is associated with higher levels of job satisfaction (Johnson & Birkeland, 2003; Klassen & Chiu, 2010).

Wright and Kate (2003) state that learning in schools requires a free atmosphere, purposeful direction from the teacher, and an ample time for pondering over what one is taught or has read on his own. School discipline is thereby important because it sets a congenial atmosphere needed for teaching and learning. Learner misconduct in rural schools may have adverse effect on promotion of teaching and learning; teachers affected by learner misbehaviour may not maximally use their teaching skills. Poor school discipline, which sometimes takes the form of violent behaviour may be triggered by poverty (Ncotsa & Shumba, 2013). Such a lack of school discipline can thus be expected to be prevalent in rural schools, increasing the stress levels of teachers in such schools.

Disciplined learners may carry out some duties such as writing of tests, assignments and homework given to them by their teachers. This would make teaching a wonderful experience for any teacher. Learner indiscipline would thus make teaching an unpleasant experience, as learners would be unlikely to comply with instructions from their teachers, leading to a build-up of stress for such teachers.

Causes of indiscipline in rural schools in Nigeria include: authoritarian methods, bad staff behaviour, harsh school rules, poor communication, results, lack of adequate school facilities, influence of home and society. There appears to be a vicious circle around indiscipline when teachers get stressed by the learners, they put up harsh school rules to be in control of the situation, only to face resistance or defiance of such rules, leading to more stress (Nwankwo, 1991). Nxumalo (2001) indicates the need for both learners and teachers to be disciplined for effective functioning of schools, as it enhances both the teaching and learning process.

In classroom teaching where there is no discipline, teachers are affected and highly stressed by the level of stress since such an environment is not conducive for learning, so they cannot teach effectively in such kind of an environment. Teachers are told not to apply corporal punishment but are doing so. These frustrations add more stress on their teachers. Discipline is vitally important for teaching and learning in class to be effective (Nxumalo, 2001).

Effective teaching and learning can take place where there is proper discipline. Poor learner discipline may contribute to experience of teachers' stress which in turn may affect learner performance. Misbehaviour of learners has a tendency to make teaching an unpleasant experience. For an example, non-compliance to instructions may impact on teachers' well-being that may have effect on learner academic performance. Discipline is critical for teaching and learning to be effective. Lack of discipline among learners would most likely impact on the teacher's emotions in the form of anxiety or stress.

Furthermore, Wright and Kate (2003) indicate that in schools where learner indiscipline is rife, and disruption is frequent, coupled with movement of learners without permission, learners' self-confidence is damaged and others are turned into criminals. Taylor (1998) point out that learners who misbehave tend to perform poorly in school and tend to be absent frequently from school which is a source of stress for teachers. Teachers who are stressed and are teaching such poorly motivated learners can

increase the level of stress for some teachers who will end up under-performing when teaching, consequently affecting learner academic performance in an adverse way.

An orderly and safe learning environment may be necessary, for effective learning to take place. Potgieter, Visser, Van der Bank, Mothata and Squelch (1997) state that if discipline is not taken into consideration, the school environment will be dangerous, and the educational process may be disrupted. Poor discipline may lead to an escalation in the stress levels of teachers, as their fundamental objective of teaching is tempered with. In this regard, Levin and Nalon (1991) state that, in addition to the obvious impact on the teaching and learning environment, disruptive behaviour may also affect the teachers and learners' safety, which adversely affects learner academic performance.

2.6 RURAL SCHOOLS

The definition of 'rural' is ambiguous, with an arbitrary distinction with 'urban', rural schools are the schools in the outskirts of the country characterized by certain social, economic, educational and cultural factors (du Plessis, 2008). Rural schools are also underlined by poverty which impacts on teachers' levels of performance. Living in poverty or striving to cope in a tense job may not fall under major life events, but the tension involved in them may be a significant source of stress for teachers, and, in some cases, may lead to mental or physical illness. Teachers experiencing these levels of stress may have adverse effects on learner performance.

Rural schools are going to be around for a very long time (Adedeji & Olaniyan, 2011). Rural schools, most of which are overwhelmed by poor working conditions, find it difficult to keep their teachers motivated to deliver quality education to learners. Rural schools in general have been observed to perform poorly, compared to their urban counterparts. Mulkeen (2005) found that good teachers are essential for good education. Noting that the rural nature of rural schools will take a long time to be done away with, dealing with teacher stress, if it is found to be a significant contributor to poor

learner academic performance in rural schools, can lead to improved learner academic performance almost immediately, without having to wait for decades of rural development. It therefore awaits to be proven as to whether bad education in rural schools is due to the bad teachers who are a product of a uniquely stressful education system.

Many secondary schools in the Brong Ahafo Region of Ghana are facing challenges of: learners' disrespect for school authorities, cultism, examination malpractices, stealing, and lateness to classrooms and absenteeism (Adesina, 1990; Clarke, 2002; Boakye, 2006;). This affects teachers' stress level, making it difficult for them to render any effective tuition. Teachers, at times, stay away from such a class to avoid a stressful situation. This makes the learners to miss out on precious opportunities to learn. Haller (1992) blames the prevalence of indiscipline in schools on large class sizes. Individual attention to learners by the teacher becomes difficult, if not impossible in such classes, rendering tuition ineffective. Haller continues to argue that misbehaviour of learners occurs in rural schools that are overpopulated, and that makes teachers unhappy as it affects their wellbeing which have effect on learner academic performance.

Improving conditions in a rural setup may not be an overnight activity and may be estimated that for the next two decades, the majority of the population living in developing countries may continue to be rural. It therefore comes as no surprise that more than twenty years after the attainment of a democratic system in South Africa, we still have many rural communities and rural schools. The realities faced by people in rural areas cannot always be addressed by policy made elsewhere and for everyone (Gardiner, 2008).

Rural schools experience teacher shortages in some subjects, which causes occupational stress, which is one of the major cause of teachers drifting away from the teaching profession (International Labour Organization, ILO, 2006).

2.7 LEVEL OF STRESS TEACHERS FACE IN RURAL SECONDARY SCHOOLS

The level of stress teachers experience is linked to the kinds of stressors. Teachers experience different levels of stress depending on the environment and situation they find themselves in. The level of stress teachers experience may affect learner academic performance.

2.7.1 Sources of teachers' stress

Sources of teacher stress outlined below show that stressors may not include the same level of stress for teachers. Sources of stress can be divided into three categories, namely: personality factors, environmental factors and sociocultural factors Santrock, (2003).

2.7.1.1 Personality factors

Considerable personality factors have been identified and these are discussed in these sub-sections:

Personality type patterns

Two California cardiologists (Friedman and Rosenman) coined the concept *Type A behaviour pattern* (Santrock, 2003). The behaviour pattern is associated with being excessively competitive, hard-driven, impatient and hostile. A close link of this behaviour pattern with heart disease was also described by the same cardiologist. Further research revealed that hostility is a Type A behaviour component associated with heart disease (Markovitz, Jonas & Davidson, 2001; Pickering, 2001).

Individuals who fall under this behaviour pattern were observed to have an extensive physiological response to stress and can thus be expected to have the least ability to cope when placed in a stressful environment. When under stress, they have a fast heartbeat, fast breathing and tense muscles (Santrock, 2003). Type B behaviour, on the other hand, is characterized by not having Type A attributes, and is more relaxed and seldom feels the pressure.

Hardiness

Another personality factor that plays a role in the etiology of the stress is the hardiness. Hardiness is defined as a personality style characterized by a sense of commitment, control and a perception of problems as challenges rather than threats (Santrock, 2003). An individual with a hardiness trait is usually in control over situations that those without it would find very stressful.

Personal control

Personal control is another personality factor that also has a role to play and appears to be related to hardiness as stress may depend on how the teacher handles it. People may undergo same situations but handle the situations differently, depending on how they control it personally. An individual in possession of personal control is able to speak words of hope to self, in an apparently hopeless situation.

Having a general sense of control is instrumental in the reduction of stress and can pave a way for the development of problem–solving strategies to cope with stress (Santrock, 2003). A number of studies have linked good personal control with emotional well-being, successful coping with stress and behaviour change conducive to promotion of good health for the individual (Thompson & Spacapan, 1991; Taylor,

1998; Decruyenaere Evers-Kiebooms, Welkenhuysen, Denayer, & Claes, 2000; Pickering, 2001).

Such an individual, therefore, has a sense of control due to the manner of perception of the situation faced (Thompson, 2001; Wallston, 2001; Taylor, 2003). A teacher with good personal control would thus be able to withstand challenges that would otherwise interfere with effective teaching in class, inclusive of limited resources and indiscipline.

Bodenmann, Meuwly, Bradbury, Gmelch, and Ledermann (2010) found that the individuals under stress experience more anger, which contributes to verbally aggressive behaviour. Stressed teachers are more likely to throw bouts of aggression to the learners, tarnishing the effectiveness of the lesson in the process. Teachers' emotions have an indirect effect on learners' learning through the effect they have on (the teachers') memory and motivation (Sutton & Wheatly, 2003). According to Trigwell, (2012), teacher emotions influence the teaching methodology adopted by the teacher. Positive emotions are important elements of intrinsic motivation, whereas negative emotions reduce the intrinsic motivational level of the teacher.

Teachers with negative emotions (e. g, anger) were observed to adopt predominantly a teacher-centered approach, whereas those with positive emotions (e. g pride) were observed to be more into a learner focused approach. Engaging the learners actively in their learning is bound to yield better learner academic achievement than the teacher-centered approach adopted mainly by teachers with negative emotions.

2.7.1.2 Environmental factors

Environmental factors include students discipline, teachers' competence and facilities available in the school, amongst others. Rural schools usually have insufficient essential facilities necessary to render effective teaching to learners, for instance, a library or laboratory are normally not available in rural schools. This can thus be

expected to contribute to the build-up of stress amongst the teachers teaching in such schools.

Life events and daily hassles

Some psychologist are convinced that significant life events, inclusive of tragic occurrences like automobile accidents, death of a loved one, a fire, volcanoes and earthquakes are major environmental sources of stress, yet others feel that challenges that are experienced in life daily build up into a very stressful life (DaCosta, Larouche, Drista, & Brender, 2000; Crowther, Sanftner, Bonifazi, & Shepherd, 2001). Teachers working in school environments live in fear and are expected to perform at their best under stressful situations. A teacher who gets frustrated for failing to maintain discipline in the class may end up with a double dose of stress: firstly, stress from having a class of ill-disciplined learners and secondly from failure to maintain discipline (Chang, 2009).

Conflict

In the teaching profession, another environmental factor posited as a source of stress is conflict as described by Miller (2003). I identified two major types of conflict that are relevant to this study which are: Avoidance-avoidance conflict and Approach-avoidance conflict and Avoidance-avoidance conflict.

Approach avoidance conflict

This refers to conflict involving a single stimulus or circumstance that has both positive and negative characteristics. Continuing to teach in a rural school may sound good for a teacher who desires to make a difference in the lives of children who appear to be neglected in many areas of their development; but won't such a decision put a burden

on the same teacher when opportunities for self-development in the profession become scarce in that part of the world? This can be a very stressful situation, which according to Miller (2003) can lead to repeated change of mind before the decision is taken.

Avoidance-avoidance conflict

This refers to intrapersonal conflict in which the individual must choose between two unattractive stimuli or circumstances. Obviously, none of the conditions is appealing to the teacher. People were observed by Miller (2003) to delay the decision in this type of conflict until the last possible moment. It means that a teacher may live with the stress generated by this conflict for years in the career until the decision to rather be jobless is made, usually at the stage of burnout, as it is usually at this stage where teachers decide to leave the teaching profession (Hakanen, Baker & Schanfeli; 2006, Leung & Lee, 2006; Schaufeli & Salanova; 2007, Skaalvik & Skaalvik, 2009, 2010, 2011)

Nyambongi (2013), ineffectiveness of teachers is amplified by lack of resources to meet educational requirements of their students, especially those from poor backgrounds for them to do well academically.

Excessive workload which is one of the possible environmental factors experienced by teachers, has been found to contribute to emotional exhaustion, motivation to leave the teaching profession and actual teacher attrition (Skaalvik & Skaalvik, 2011; Smithers & Robinson, 2008) whereas supportive school environments are positively related to the promotion of teachers' well-being (Kutame et al., 2014) and ultimately become a good motivation to stay in the teaching profession (Skaalvik & Skaalvik, 2011). As teachers in rural schools are expected to experience stress uniquely found in rural schools, in addition to the usual stresses experienced by teachers elsewhere, it stands to reason that stress experienced by such teachers is bound to reduce their efficiency rather than enhance it. Intrinsic factors (pay scale, job status, domestic

problems, economic problems and job security) and extrinsic factors (physical resources, working conditions, students' behaviour, administrative pressures and relationship with colleagues) have a strong effect on academic performance of teachers, with intrinsic factors having greater influence on academic performance as compared to extrinsic factors. Tahir (2011).

Work related stress

Teachers' stress in the workplace is associated with several contributory factors such as time pressure, discipline problems, lack of resources, lack of professional recognition, lack of support and the diversity of tasks required (Kokkinos, 2007). Stress may be experienced by people as a result of their response to events and circumstances. The way teachers in rural schools respond to their stressful work environment can go a long way in addressing learning outcomes in such schools. According to Ferreira (1994), organisational stress affects the teacher's psychological, physical and behavioural responses. Ineffectiveness of teachers is amplified by considerable number of factors which include lack of resources which affects them in trying to meet educational requirements of their students, especially those from poor backgrounds (Nyambongi, 2013).

2.7.1.3 Socio-cultural factors

Acculturative stress

Moving to a new environment is stressful on its own, but when a person from one culture moves into a different culture, it is more stressful (Santrock, 2003). This is referred to as acculturative stress. The insufficient number of teaching posts all over South Africa leads prospective teachers to apply for employment anywhere in the Republic, without considering the culture of the community where they are applying.

Once appointed, they find themselves faced with the inevitable need to adapt to their new environment and its foreign culture.

Poverty

Poverty is another sociocultural factor capable of causing remarkable stress for individuals (Landrine & Klonoff, 2001; Mcloyd, 2000). As posited by Adler (2001), chronic conditions such as inadequate housing, dangerous neighborhood, burdensome responsibilities and economic uncertainties are all significant sources of stress for the poor. Teachers in rural schools usually have their fair share of these stressors, if they do not actually experience all of them. At times, they experience them, indirectly when they see poverty written all over the young faces of their learners.

Having a general sense of control is instrumental in the reduction of stress and can pave a way for the development of problem—solving strategies to cope with stress (Santrock, 2003). A number of studies have linked good personal control with emotional well – being, successful coping with stress and behaviour change conducive to promotion of good health (Thompson & Spacapan, 1991; Decruyenaere et al., 2000, Pickering, 2001; Taylor, 2003). It is the personality factors that are able to give a logical explanation why some teachers are able to cope better than others under the same or similar circumstances.

Assimilation

This happens when individuals give up their native cultural identity and adopt a new identity that helps them to fit into that larger society. At times, assimilation may take the form of different cultural groups coming together to form a new society.

Integration

Individuals get 'integrated' into a larger culture but retain aspects of their cultural identity. A number of ethnic groups, therefore, come together cooperatively inside one social system.

Separation

This refers to the withdrawal from a larger culture by choice. Alternatively, when separation takes place as a result of the action of the larger society, it is called segregation.

Marginalization

Non – dominant groups lose essential components of their native culture, but do not acquire those of the larger society. This is associated with a feeling of alienation and a loss of identity and results in confusion and anxiety.

Separation and marginalization can be very stressful compared to assimilation and integration, even though assimilation is usually more stressful than integration, as it involves losing some aspects of one's native culture.

2.8 STRESS REDUCTION IN THE WORKPLACE

Organizational structures should be included in a model of teachers' occupational stress. This argument is in line with the view that organisations can be dysfunctional for individuals. A teacher's ability to cope with occupational stress may be determined by the interaction between the characteristics of the teacher in question and the source of stress in the workplace. Stress in the workplace usually increases when job demands are high, and the individual has little choice in deciding how to meet the demands (Santrock, 2003).

2.9 TEACHERS' WELL-BEING AND RESILIENCE

Teachers' well-being is often referred to in literature with the focus being on what happens when it is lacking; when it usually leads to burnout and challenges with

teacher retention, amongst other effects, rather than the good that it brings to the learning environment (Roffey, 2012). Teachers'-wellbeing is not only of critical importance and relevance for the professional impact made by teachers in their classrooms, but also for the well-being of learners, through creation and maintenance of a stable, safe and supportive learning environment (Olsen, 2017).

Resilience, which may be viewed as the measure of a teachers' ability to maintain positive qualities, professional commitment and growth, while faced with a variety of challenges, pressure and demands that form part of teachers' everyday work, may play a crucial role in the teacher's ability to cope with stressful. Teachers in possession of characteristics of resilience find it easier to adjust in new and unfamiliar environments and are less likely to leave the teaching profession (Roffey, 2012). Such teachers show high levels of commitment in the profession. Their learners are likely to perform better academically than their peers whose teachers do not have the resilience and the accompanying commitment (Roffey, 2012).

The legacy of apartheid in South Africa has added to the stress in the education system, as it left many schools poorly-resourced and not well-placed to deal with policies of transformation of the education system (Olsen, 2011). It is in situations like that where a teachers' resilience can become wings with which he or she may soar through the stressful moments. Building teachers' coping strategies is essential for the promotion of teachers' resilience and well-being and consequently of the quality of education rendered (Olsen, 2011). Teachers' well-being is often referred to in literature with the focus being on what happens when it is lacking.

2.10 TEACHERS' DISSATISFACTION AND PERFORMANCE

Teachers with high efficacy tend to give room to new ideas and show an interest in the use of new methods (Berman et al., 1977; Stein & Wang, 1988). Such flexibility by such teachers is logically to the benefit of the students concerned.

Job dissatisfaction is an unpleasant experience in the workplace which most of the people would do all they can to reduce or do away with (Okeke & Dlamini, 2013; Afshar & Doosti, 2016). Job satisfaction for teachers, especially at secondary school level, is vital (Okeke & Mtyuda, 2017). Job satisfaction for teachers which is the gateway to tertiary centres of learning after school level, is vital. This is mainly because better performance of teachers can only be anticipated in cases where they are satisfied with their jobs (Okeke & Mtyuda, 2017. Research shows that workers whose value in the workplace is undermined, and who are not appreciated for the work they do, may consider leaving their jobs for available alternatives (Calitz, Roux, & Strydom, 2014). This is understandably due to the fact that teachers' performance declines in the midst of dissatisfaction, leading them to fail in their attempt to harvest any fruit for their labour, in the form of good learner performance academically. Replacement of such teachers, who are usually experienced in the job, is unfortunately with inexperienced teachers who are unlikely to lift levels of academic performance by the learners.

Considerable studies show a causal link between work stress, dissatisfaction and low self-esteem (Gu, 1999; Ho & Au, 2006; Okeke et al., 2014). It therefore comes as no surprise that the same causes identified as causes of stress like overcrowded classes, lack of discipline among learners and lack of resources were also identified by Okeke and Mtyuda (2017) as causes of teacher dissatisfaction. Two pathways can thus be identified through which stress impacts negatively on the performance of teachers: firstly, chronic stress leads to burnout (Cunningham, 1983). This is characterized by a feeling of emotional exhaustion, among others (Maslach et al., 1996) and a decline in performance. Secondly, stress leads to teacher dissatisfaction as alluded to above, also leading to poor performance.

Research has shown that employees respond to job dissatisfaction in one of four ways: exit, voice, loyalty and neglect. Firstly, dissatisfied teachers may exit (quit) the profession; secondly they may remain in the profession to try and improve conditions, advocate for change and come up with new ways of doing things; thirdly they may remain in the organization, with a passive response to their job dissatisfaction, and not giving any input on possible ways of improving the situation; lastly, they remain in the

organization but portray behaviour characterized by exerting less effort in their job as well as passive withdrawal.

It is evident from the four responses by dissatisfied teachers that only one of them (voice) can be expected to bring positive outcomes for learners, as the teacher concerned goes all out to ensure that there is improvement in the dissatisfying situation. One can only use the imagination to guess the negative impact that a teacher who is passively withdrawing, and exerting less effort, as indicated in the last way of responding to job dissatisfaction above, would have. Such a response by dissatisfied teachers is in line with the finding by Okeke and Mtyuda (2017) that showed that some dissatisfied teachers respond by disengagement, with a resultant lack of focus on professional activities, and a sense of negativity about the profession.

A positive work environment may be crucial for the worker's physical, mental and emotional health (Afshar & Doosti, 2016). This is in line with findings by Khan (2006) which revealed that favourable working conditions would boost a teacher's job satisfaction.

Job satisfaction, which may be the result of employees' perception of how well their job affords them the things they consider to be important may have effect on teachers' enthusiasm and teachers' relations to students. These two factors, which are influenced by job satisfaction may reasonably be viewed as factors that may influence a teacher's decision to leave the teaching profession. Job satisfaction, from this context, can thus be seen as a buffer that neutralizes the negative effect of chronic stress. This is because chronic stress has been shown by research to lead to burnout, which is a predictor of a teacher's intention to leave the profession (Leung & Lee, 2006).

Another concept which fits perfectly in a tug of war between job satisfaction, burnout, and intention to leave the teaching profession is teachers' efficacy. While job

satisfaction and teacher efficacy encourage teachers to stay in the profession, burnout encourages teacher to leave the profession. Teachers' efficacy may be defined as teachers' beliefs about their capacity to influence student outcomes or their beliefs in their ability to have a positive effect on student learning.

Teachers' efficacy affects their natural attitude towards their educational process and their specific instructional activities, Bandura (1997). Teachers with low efficacy tend to impose strict regulations and negative sanctions upon their students in order to get them to study, and they generally have a negative outlook pertaining to the student's ability to improve. They may, for instance, command learners to leave their class due to indiscipline. Such a learner obviously ends up lagging behind the rest of the class and is more likely to perform badly compared to the rest of the class.

2.11 TEACHER STRESS AND LEARNER ACADEMIC PERFORMANCE

Learner performance may be affected by the teaching process. This may only mean that a teachers' frame of mind may affect performance in teaching, either positively or negatively. The quality of teaching may be received by the learners as worse among those teachers who demonstrate negative emotions and dissatisfaction in teaching as compared to those teachers who demonstrate more positive emotions.

2.11.1 Effect of burnout on learner academic performance

Jackson and Rothman (2005) define burnout as a persistent, negative, work-related state of mind which develops over time, characterized by physical, emotional and physical exhaustion. The concept of 'burnout' is best described by the Maslach Burnout Model (Maslach & Jackson, 1981). In this model 'burnout' is a syndrome which comprises emotional exhaustion, depersonalization and reduced personal accomplishment.

Burnout is considered to be a result of long-term occupational stress (Jennet, Harris, & Meisbov, 2003). It is a syndrome which comprises an emotional exhaustion, depersonalization and reduced personal accomplishment (Maslach & Jackson, 1981). Burnout may result from an interaction between environmental factors and intrapersonal characteristics. Many environmental factors are associated with teachers' occupational stress and ultimately to burnout appear in the literature and include: lack of professional recognition, learner and teacher discipline problems in the classroom, diversity of tasks required, bureaucracy, lack of support, workload, interpersonal demands, time pressure, the amount of paperwork required, and lack of resources provided (Pithers, 1995; Chan, 1998).

Burnout is a feeling of physical and emotional exhaustion, due to stress from working with people under difficult or demanding conditions. Burnout, which therefore signals high level of stress, is followed by signs such as chronic fatigue, quickness to anger and suspicion, and susceptibility to colds, headaches and fevers. A teacher with a burnout syndrome is clearly unfit to offer effective teaching for learners and expecting good learners', performance from their class appears to be a far-fetched wish (Nyambongi, 2013). Physical manifestation of stress or physical ailments caused by stress include increased heart rate, fast breathing, tight muscles, slow digestion, increased perspiration, reduced immunity, tension headaches, neck/ back / shoulder pain, tight jaw, high blood pressure, sexual dysfunction (in either sex) ulcers, increased aging rate. Teachers who are burnt out may find it difficult to promote the quality of teaching and learning.

Burnout develops over some time and is described as the end stage of a chain of reactions (Peeters & Rutte, 2005). Its development usually starts with a feeling of emotional exhaustion, which is regarded as the main aspect of the syndrome. Both measures of burnout and emotional exhaustion have been shown to be associated with teachers' self-efficacy, motivation, job satisfaction, well-being, and intentions to leave the teaching profession with low self-efficacy, poor motivation, job dissatisfaction and poor teacher well-being contributing toward burnout (Tang, Au, Schwarzer, &

Schmitz, 2001; Hakanen, Bakker, & Schaufeli, 2006; Leung & Lee, 2006; Schaufeli & Salanova, 2007; Skaalvik & Skaalvik, 2009, 2010, 2011).

Some studies show that teaching is viewed as rewarding by most teachers, but that many teachers, however, also report a high degree of stress and symptoms of burnout (Neves de Jesus & Lens, 2005; Stoeber & Rennert, 2008). Moreover, research also reveals that teachers leaving their profession and teacher attrition have become a problem (Chang, 2009; Hong, 2010). For instance, excessive workload has been found to predict emotional exhaustion, motivation to leave the teaching profession, and actual teacher attrition, whereas supportive school environments are positively related to motivation to stay in the teaching profession because the attrition rate follows a U-shaped curve, with the highest attrition rates observed early and late in teachers' careers (Rinke, 2007; Borman & Dowling, 2008). Excessive workload stipulated above have an effect on learner academic performance because instead of teaching, teachers are busy with other activities. When teachers leave the profession, learners are left alone with no one to teach them for a long period.

Teachers who are demotivated produce bad results. They base their argument on the fact that teachers are never on call like doctors, engineers or soldiers. Other researchers (Johnson & Birkeland 2003; Neves de Jesus & Lens, 2005; Stoeber & Rennert, 2008), however, indicate that many teachers report a high degree of stress and symptoms of burnout, which causes poor learner academic performance because a stressed teacher cannot deliver the lesson the way he does when not stressed.

Teaching is viewed as rewarding by most teachers; however, many teachers report high degrees of stress and symptoms of burnout (Neves de Jesus & Lens, 2013) Stoeber & Rennert, 2013). There are teachers who are reportedly leaving their profession: teacher attrition has become a problem (Chang, 2009; Hong, 2010). Job satisfaction is conceptualized as the positive or negative evaluative judgments that people make about their jobs (Weiss, 1999). According to Tahir (2011), intrinsic factors (pay scale, job status, domestic problems, problems and job security) and extrinsic

factors (physical resources, working conditions, learners' behaviour, administrative pressures and relationship with colleagues) have a strong impact on teachers, and would consequently have a negative effect on learner academic performance, with intrinsic factors having greater influence on academic performance as compared to extrinsic factors. A certain degree of stress may, however, be unavoidable, but at an acceptable level, stress improves the teachers' efficiency. It is only when stress reaches levels that are too high for the teachers to handle that it starts to have undesired effects (Betonio, 2015). Stress at significantly high levels has been found to lead to burnout, physical ailments, compromised mental health and teacher attrition. These conditions may have adverse effects on learner academic performance.

Stress at significantly high levels has been found to lead to burnout, physical ailments, compromised mental health and teacher attrition. Extreme stress can drastically alter a person's behaviour, health and performance, though for many, the impact can be significantly minimized through the right attitude and approach to dealing with stress. Stress may be viewed as a concept that is difficult to understand, which can be confusing. Maslach et al. (1996) opted for a less confusing term instead, namely burnout. They define burnout as a prolonged response to chronic emotional and interpersonal stressors in the job.

2.12 STRESS EFFECT ON TEACHER COMPETENCE

A teachers' overall effectiveness and worth may improve when confidence is acquired, Kutame and colleagues further argue that a competent and confident teacher is one of the most important contributors towards effective learning. Teachers' competence is directly linked to the training that groomed them, but confidence, on the other hand, has more to do with other factors that have a bearing on teachers' ability to render effective teaching.

Teacher stress is a response syndrome mediated by an appraisal of threat to the teachers' self- esteem or wellbeing (Tahir, 2011). This suggests that teachers, who are key in the learning process, are likely to lose their belief in their ability to facilitate

an effective learning process for learners or may even be too unwell to offer remarkable lessons. The quality of teaching in the classroom is the most important school related factor in ensuring learners' achievement (Adedeji & Olaniyan, 2011; (Betonio, 2015).

2.13 TEACHER STRESS EXPERIENCE AND TUITION

Anything that affects tuition (the teaching process) is may affect learner performance. indicated that teacher anxiety plays an important role in the reduction of learner performance, however, teacher exhaustion may make more effective instruction and produce better learner results. A teacher's frame of mind may affect performance in teaching, either positively or negatively. The quality of teaching received by the learners may be worse among those teachers who demonstrate negative emotions and dissatisfaction in teaching as compared to those teachers who demonstrate more positive emotions.

2.14 COPING STRATEGIES USED BY TEACHERS

The ability of an individual to cope with a stressful situation or event is important as it renders the said situation less stressful (Santrock, 2003). This may lead to a reduction of the effects of stress that have negative implications on the individual as alluded to earlier. Coping involves managing taxing circumstances, exerting efforts to solve life's problems, and seeking to overcome or reduce stress (Santrock, 2003). Coping strategies are discussed in the subsections that follow:

2.14.1 Problem-focused coping

Problem focused coping is a term by Lazarus (1993) for the cognitive strategy of facing one's troubles or challenges head-on and trying to solve them. In essence, the cause

of the stress is targeted or dealt with (Odirile, Mpofu & Montsi, 2009). This type of coping strategy is mainly used in situations where there are prospects of bringing the stressor under control (Thoits, 1986). Those who resort to problem-focused coping may have a greater chance of showing positive adaptation. Moreover, the strategy may have been observed to be associated with a decrease in job-related tendency to leave a particular work environment and enhanced job satisfaction among professionals.

2.14.2 Emotion-focused coping

Emotion-focused coping is a term that Lazarus (1993) used to describe the manner of responding to stress in an emotional manner, mainly through use of defensive mechanisms. Contrary to the program-focused coping strategy, this strategy is mainly used when there is a feeling of non-existent prospects of changing the stressful situation around (Cattan, 2009). Tactics that are used in this coping strategy include: denying that there is a problem, laughing off or joking about the problem with friends and praying for improvement of the situation (Santrock, 2003).

Denial as a tactic of the emotion-focused coping strategy was found to be a very useful tool in dealing with a flood of negative feelings that one goes through in a stressful event (Santrock, 2003). During the first few days of employment at a rural school, a teacher may realize that the learners are unruly, there are no necessary resources for tuition, the principal is not supportive, and the teachers have no voice at the school. Such a flood of negativity can best be dealt with through denial at first. This means that the teacher denies that such things are happening. Santrock (2003) posits that denial in a situation like that helps with the postponement of the time when the stress has to be dealt with, thereby avoiding the devastating impact of shock. Emotion-focused coping is basically useful in the short-term, unlike problem-focused coping which has a long-term effect (Heppner & Lee, 2001).

2.14.3 Avoidant coping

Avoidant coping may do with putting together certain behaviour patterns, emanating from a desire to get rid of or escape from a problem. Avoidant coping strategies were observed to work to the detriment of the people who use them, rather than to their advantage (Zeidner & Saflokse, 1996). Some of the behaviour patterns associated with avoidant coping may be abuse of alcohol and other substances, or the use of withdrawal as a coping strategy that excuses the people concerned from engaging directly with stressful events in an attempt to solve them.

2.14.4 Assistant coping strategies

Extreme stress can drastically alter a person's behaviour, health and performance, though for many, the impact can be significantly minimized, through the right attitude and approach to dealing with stress. This is, however, becoming such a prominent problem in the workplace that many employers need to find ways to assist their employees in managing stress in order to keep their schools operating effectively.

2.14.5 Frank disclosure

Frank disclosure is the act of opening up or confiding in someone, giving away information honestly and exposing all stress-generating areas (Aronson, Wilson & Akert, 1997). However, sharing about stressful experiences, though upsetting in the short run, may lead to long-term benefits. Frank disclosure to stressful experiences may result in remarkable health improvement (Pennebaker, Colder, & Sharp, 1990). It can be inferred that teachers who are healthy are unlikely to be absent from work due to ill-health and can thus have relatively more time to render tuition to learners.

When somebody who is stressed tries hard not to think about the stressful experience, it drains him or her of a lot of mental and physical energy, making it very stressful by itself (Pennebaker, Colder, & Sharp, 1990). Such an attempt to suppress negative thoughts leads one to be obsessed with such thoughts, resulting in one thinking about them even more (Wegner, 1994). Disclosure of a stressful experience helps one to understand the experience better, thereby gaining the ability to put it behind him or her. It also affords one an opportunity to gain social support, which is an important element of the coping process (Aronson, Wilson & Akert, 1997).

2.14.6 Social support

Social support is the perception that others are responsive and receptive to one's needs (Hobfoll & Vaux, 1993). It has also been defined as the feedback that one gets from others, that gives assurance that one is loved and cared for, esteemed and valued, and included in a network of communication and natural obligation (Santrock, 2003). Social support, as a coping strategy, may reduce the level of perceived stress.

Taylor (2003) describes three types of benefits that social support provides to a stressed person, which are: tangible assistance, information and emotional support. Tangible assistance refers to actual goods and services that can be provided by family, friends, colleagues or any interested party. A donation of essential tuition resources by a Good Samaritan to a rural school is an example of such tangible assistance. Such a donation would remarkably help to reduce the stress level of the teacher who was negatively affected by lack of such resources.

Information as a benefit refers to recommendations and suggestions given to a stressed person, meant to give guidance on specific actions or plans that could be pursued in order to cope more effectively with stress. Such information would enable a stressed teacher to view his or her stressful work environment differently, or even discover the way out of the stressful experience. Emotional support takes the form of

reassurance of love and care of the stressed person, mainly by family and friends. This is instrumental in curbing stress, and possibly in preventing development of depression, anxiety or a low self-esteem (Santrock, 2003).

People do not require the same amount of support all the time, as they can manage on their own when life events go smoothly but would need other people when times are tough (Cohen & Wills, 1985). As situations are inherently tough in a rural school, teachers in such schools will be in need of social support from their fellow teachers, the school principal, the school management team, the school governing body and all those with administrative authority over them, and of course, from their families and friends.

A number of factors around the school environment have also been shown to relate to teacher job satisfaction. Teacher autonomy may result in higher levels of job satisfaction. Supportive school environments and positive social relations with all relevant stakeholders, inclusive of colleagues, learners, parents and school leadership are also predictive of teachers' job satisfaction and motivation to stay in the profession whereas time constraints and ill-discipline are predictive of lower levels of job satisfaction. Several studies also reveal that teacher self-efficacy is associated with higher levels of job satisfaction (Johnson & Birkeland, 2003; Klassen & Chiu, 2010).

2.14.7 Religion

Various dimensions of religion are instrumental in enabling some people to cope more effectively with stressful experiences in their lives (Bergin & Richards, 2000; Koenig & Cohen, 2007). Moreover, commitment to religion is associated with good physical health (Paloutzian, 2000). Promotion of physical health experienced by those committed to religion is ascribed to healthier lifestyles and health-related services held in such religions (Santrock, 2003).

Social connections which are at the centre of some religions, are associated with fewer health problems (Hill & Butter, 1995). Such social connections propagated by religions have been observed to prevent anxiety and depression, as well as isolation and loneliness (Koenig & Larsen, 1998). It has also been posited that prayer is associated with positive health-related changes such as decreased sense of pain and reduced muscle tension that usually accompany a stressful experience (Santrock, 2003). Whether religion as a coping strategy will be effective or not may depend on whether the stressed person has rational or irrational beliefs about himself or herself. It is apparent that the extent of commitment by the teacher in question to a particular religion determines the extent of the ability to cope with a stressful situation by the said teacher.

2.14.8 Optimism and positive thinking

Avoiding negative thoughts and focusing on thinking positively is considered to be a good coping strategy in an effort to deal with stress in a more effective way (Seligman (1990; Santrock, 2003) views optimism as a matter of how an individual interprets causes of bad events.

Optimism is often associated with positive functioning and adjustments. This means that an optimistic teacher, placed at a poorly-resourced rural school, is more likely to make a home for himself or herself at that school, meaning to pull through all the difficulties faced. Optimism has also been defined as the expectancy that good things are more likely, and bad things less likely to occur in the future (Carver & Scheier, 2001. Optimism is therefore associated with a positive outlook in life. An optimistic attitude, unlike a pessimistic one, gives one a sense of being in control (Santrock, 2003).

Cognitive therapists encourage their clients to talk back to their negative thoughts in an optimistic fashion that limits self-blame and negative generalizations (Seligman, 1990). Such a process of cognitive restructuring, that modifies the thoughts, ideas and beliefs that keep an individual's problems alive is instrumental in getting people with negative thoughts to think positively and optimistically (Santrock, 2003).

Such cognitive restructuring is achieved through self-talk or self-statements, which are basically soundless, mental speech that one may use in planning something or in solving problems (Santrock, 2003). Positive self-talk is a very helpful means of building up the confidence that is necessary for one to use his or her talents to the fullest (Seligman, 1989).

A teacher who may have a negative thought like: "Nothing good will ever come out of a school like this", may have a positive self-talk like: "I will bring back hope for this hopeless learners". This will boost the teacher's confidence to perform at his or her best, to ensure success of the learners.

Closely linked to optimism and positive thinking is positive self-illusion. This refers to having a falsely high opinion of oneself, coupled with exaggerated beliefs about one's ability to control the world around him or her (Taylor, 1998). Developing positive self-illusions has been shown to be linked with an impressive effect on performance (Loehr, 1989). Illusions, irrespective of whether they are positive or negative, impact directly on one's sense of self-esteem (Santrock, 2003). Having either of the extremes of self-illusion has negative consequences (Baumeister, 1989). This means that having highly inflated illusions, or alternatively excessively negative illusions will not bring about the best from the teacher concerned. It is rather, either mildly inflated illusions or reality orientation that can bring positive result.

Having a negative outlook is associated with an increased chance of getting angry, feeling guilty and exaggerating mistakes (Santrock, 2003). No effective performance can thus be expected from a teacher who is overshadowed by negative self-illusions. What is of note and relevant to teachers offering tuition in rural schools is the strategy

of defensive pessimism. This refers to an imagination of negative outcomes, which is likely to lead people to prepare for stressful circumstances (Norem & Cantor, 1986). A teacher who anticipates poor learner performance due to limited tuition resources is more likely going to exert more effort in tuition to ensure that learners perform well.

Yet another closely-related concept is self-efficacy. This is the belief that one can master a situation and produce positive outcomes (Santrock, 2003). Self-efficacy is associated with how people behave in particular setups, ranging from solving problems, becoming more sociable, initiating a diet or exercise program and maintaining it and quitting smoking (Bandura, 1997, 2001). Self-efficacy determines how much effort one expends in coping with stress, how long one is able to persevere in the face of challenges, and how much stress one experiences (Clark & Dodge, 1999). Self-efficacy is also associated with optimum job performance (Judge & Bono, 2001).

People in unsatisfactory situations get encouraged by self-efficacy to believe that they can succeed (Santrock, 2003). A teacher in a poorly resourced school without the necessary support from those in authority can thus be able to believe in success due to self-efficacy. Watson and Tharp (2003) give a few strategies that can help one to increase one's self-efficacy:

- Something in which success rather than failure at accomplishing is expected, should be selected. On developing self-efficacy, more challenging projects should be undertaken. A teacher overshadowed by many challenges should tackle one challenge at a time, focusing on the less challenging ones first, to build self-efficacy;
- Past failures should not be carried over to current projects. Teachers who might have had learners' performance in the previous year should consider this year

to be a different one and should approach it with a new sense of confidence and accomplishment;

- Close attention should be paid to success rather than to failures. A teacher
 who focuses in cases of success, gets assurance from such cases, that it can
 be done irrespective of challenges;
- A record of such success should be kept. This is bound to keep the teacher
 who experienced a failure after a string of successes going because the record
 would be showing that success in such a situation is really possible; and
- A list of different kinds of situations should be made. Such a list should place
 the different kinds of situations according to the level of difficulty. The easier
 task should be the ones at the beginning of the list, while the more challenging
 or difficulty tasks should come last.

2.14.9 Assertive Behaviour

In social relationships, the approach used in dealing with conflict can affect the ability to cope with stress (Santrock, 2003). Four main ways in which conflict can be dealt with have been identified, namely, aggressively, manipulatively, passively and assertively (Santrock, 2003). Of these four ways, the assertive way of acting builds equal relationships (Alberti & Emmons, 1995) and is actually the ideal way of communication (Santrock, 2003). Assertive individuals express their feelings, ask for what they want, refuse to accept what they do not want, act in their only best interest, and stand up for their legitimate rights (Santrock, 2003). An assertive teacher would thus express feelings about the below par conditions at the school and point out the rights that are enshrined in the Constitution or the School's Act, for instance.

Bourne (1995) describes a few strategies that may be used in order for one to become more assertive:

- Time should be set for discussing issues that need discussion. An appointment
 usually adds value to the issues to be discussed. A mutually convenient time
 should thus be set for a meeting between the teacher concerned and any
 stakeholders like principal, school management team or fellow teachers, for
 instance;
- The problem should be explicitly stated, also touching on its consequences. The teacher would thus objectively show how lack of some resources at the school affects the rendering of effective tuition, without focusing on putting the blame for the lack on the principal, for instance. An assertive statement like: "I am finding it very difficult to teach chemistry effectively without even having a test tube to show the learners", for instance, is very different from an aggressive one like: "How do you expect me to teach chemistry, when you, as the principal are doing nothing to ensure that we have a laboratory here at the school?"
- Feelings should be expressed. It is vital that one should openly and amicably show how important the issue is to him or her. Suppressing one's feelings only leads to the problem dragging for a long time; and
- Making of one's request. This is the key aspect of being assertive and involves
 asking what one wants in a straight forward and direct manner. A teacher may
 for instance, ask for all the necessary support from the school principal in his
 or endeavour to seek assistance from higher authorities.

2.15 STRESS MANAGEMENT PROGRAMMES

Stress management programmes are a variety of techniques developed by psychologists to aid stressed individuals to be able to manage stress on their own (Auerbach & Gromling, 1998). Individuals get taught how to assess stressful events,

how to develop skills for coping with stress, and how to practically use such skills on a daily basis (Santrock, 2003). Stress management training has been shown to be associated with a significant reduction in blood pressure, linked to an enhanced ability to cope with anger and a reported lowering of stress levels experienced (Linden, Lenz & Con, 2001).

Meditation is one of the popular stress management programmes that helps one to achieve both physical and mental control and well-being (Gillani & Smith, 2001). Transcendental meditation, which involves repeating a phrase mentally or aloud to focus attention, is the most popular form of meditation used (Santrock, 2003). Meditation was found to be useful in slowing the heart rate, increasing blood flow in the arms and forehead, and in reducing body arousal and anxiety (Wallace & Benson, 1972; Eppley, Abrams, & Shear, 1989).

Biofeedback is another technique that has been used to influence physiological activities such as blood pressure, muscle tension and pulse rate, bringing them under control (Miller, 2003). It involves monitoring an individual's muscular or internal activities using an instrument, the result of which are relayed to the individual, giving him or her an opportunity to voluntarily control the relayed results (Santrock, 2003). The feedback may be given through an audible tone, which gets louder when the activity like the pulse rate gets out of control, but softer, when the individual manages to bring it under control (Miller, 2003).

2.16 HEALTHY LIVING

Adhering to healthy habits and avoiding behaviours that interfere with good health may be crucial in an attempt to avoid the damaging effects of stress. Regular exercises and not smoking are among the essential ingredients of a healthier lifestyle (Santrock, 2003).

Regular exercise

The benefits of exercise may not be limited to physical health but may also extend to mental health. Such an improvement in mental health is seen in the reduction of anxiety and depression, as well as in the improvement of self-concept (Santrock, 2003). Exercise at both moderate and intense levels may have significant physical and psychological benefits.

Smoking abstinence

Nicotine, an active ingredient in cigarettes, may be stimulant that is capable of reducing stress, while enhancing ones' alertness and energy levels; this may, however, be only a short-term benefit of smoking.

Smoking is associated with increased incidence of cancer, heart disease and chronic lung disease (Millis, 1998). Such conditions are obviously potential causes of more stress than that which one may try to alleviate through smoking. The risk of such fatal conditions mentioned above may be drastically reduced on quitting to smoke. Abstinence from smoking may be associated with a good general sense of well-being.

2.17 WORKPLACE STRESS MANAGEMENT

A number of strategies may be considered to be crucial in stress reduction in the workplace. Such strategies may encompass organizational actions that are likely to lower stress levels of employees.

Preventative Management

In preventative management, managers may take the initiative to identify areas with potential for breeding stress for the employee(s) and may devise the necessary means

to curb or eliminate them in advance. Preventative management, therefore, demands the principal and the entire school management team to be proactive in dealing with the challenges faced by the teachers in their school. An Agricultural Science teacher would feel more relaxed and at ease when his or her principal utters a statement like: 'I have noticed the shortage of gardening equipment and I am making plans to acquire some for you'. On the other hand, when the teacher pesters the principal about such a shortage of gardening equipment, he or she will only be adding more stress on himself or herself.

Maintaining a productive culture

It is a good start for an organization to have a mission statement that shows commitment by management to a positive and productive culture (Grobler et al., 2002). Further than that, policies that may be fairly flexible should be put in place, in line with the type of organization. A positive culture created in this fashion may be associated with keeping tension and anxiety at acceptable levels. A mission statement like: 'Rendering excellent tuition against all odds' may be inspirational to an extent of creating a productive culture in a rural school for instance.

Managing by using goals and objectives

When clear goals and objectives are set for the organization as a whole and for each individual, no room may be given to any uncertainties between the management and employees, which may have the potential to give rise to conflict and stress. When the principal and those in management focus on set targets pertaining to learner performance with the teachers concerned, no one is left guessing as to what is expected and what needs to be done.

Controlling the physical environment

Management should, at all costs, create a physical environment that is conducive for employees to render an efficient service to work in a safe environment devoid of things like broken chairs or tables, falling ceiling or tall grass, to name a few, which may threaten the safety of the working environment for the teachers. The teachers concerned can be expected to be more relaxed than those whose physical environment appears threatening.

• Employee fitness facilities

The management of the organization should provide fitness facilities for the employees. This is because exercise may be regarded as one of the best ways to reduce stress and improve emotional well-being. This comes about as there has been an observed release of stress by the body reducing their stress levels in the workplace.

Training and development

Training and development may focus on the initiative of management to get individual employees trained to work as effective team members; and to have an understanding of how their teams fit into the rest of the organization. Such training and development may also be a vehicle of promotion in the organizational hierarchy, which is a prestigious achievement that helps reduce stress. Training and development in the form of continuous professional development provides the necessary additional skills for managers, which are necessary to organize and integrate work by subordinates better (Love, Haynes & Irani, 2001). Exposing teachers in rural schools to training and development would thus help reduce stress for ordinary teachers and those in management positions, thereby enhancing their performance.

Employee participation in decision-making

When employees participate in decision making on issues that affect them, they may feel valuable and important as part of the organization, and are may be convinced that they know about the affairs of the organization. When teachers are given an opportunity to take part in decision-making, they become 'shareholders' of the challenges at the school as well as the solutions thereof. This is bound to enhance their self-esteem and reduce their stress levels.

Affording employees, a fair reward

When employees get afforded a fair reward for their labour, it may be a result in job satisfaction and less stress may go further to include recognition and appreciation by the manager(s) of the organization. Teachers in rural schools should be considered for a rural allowance as they have sacrificed to render tuition to learners away from any form of a comfort zone. When the principal, head of department or anyone in a supervising position gives a pat on the back of a teacher even for modest achievement, the teachers' self-esteem can only go up, while the stress level goes down.

2.18 TEACHER STRESS AND CLASSROOM CLIMATE

Teachers may play a central role in creating a classroom climate conducive for student learning and socio-emotional well-being. These researchers further posited that teaching does become stressful, making the management of classroom dynamics demanding. It would surely be a far-fetched expectation that a stressed teacher, who is failing to maintain his or her own emotional well-being, could be able to foster the emotional well-being of his or her students, and also to foster effective student learning.

The nature of the teacher-student relationships determines the nature of the students' academic self-perceptions, school engagement, motivation, learning and performance Poor relationships in the classrooms do not only make things difficult for the students, but are also a source of stress for teachers (Chang, 2009). Such poor relationships may lead students to respond with hostility and disinterest towards the teacher, which the teacher may interpret as a personal insult, due to the fact that the students do not like him or her, consequently, imparting negatively on how the said teacher relates to his or her students. Alternatively, the teacher may interpret students' hostility to mean that he or she is not competent in teaching.

Non-functional teacher-student relationships are characterized by mutual drifting away from the goals of teaching and learning, resulting in the impairment of mutual trust, discouragement, frustration, and sustained stress, where a lot of effort is consumed in disciplinary measures or simply goes to waste. This clearly indicates the fact that stress levels that build up as a result of the poor teacher-student relationships give rise to an unfriendly classroom climate that is not conducive for effective learning to take place. Poor learner performance can logically be expected from such an encounter. As student engagement is a predictor of student learning and achievement (Fredricks, Blumenfeld, & Paris, 2004), failure to have quality student engagements as a result of poor teacher-student relationships could lead to poor student learning and achievement.

High quality relationships are at the centre of ongoing development of healthy self-perceptions, motivational resilience and increased ownership of the learning Students' social-emotional health has been shown to be an integral contributor towards students' overall academic success (Roeser, Eccles, & Sameroff, 1998). Social-emotional health includes both psychological and behavioural indicators (Roeser at al. 1998).

2.19 TEACHERS' PROFESSIONAL COMPETENCE AND STRESS

Teachers' professional competence is one of the available determinants or routes to understanding teacher success that I deemed relevant for this study. Competence has

been defined as the skills, knowledge, attitudes, and motivational variables that form the basis for mastery of specific situations (Epstein & Hundert, 2002; Klieme, Hartig & Rouch, 2008). All these attributes that contribute towards a teacher's competence are not inborn, but learnable and teachable (Kunter Klusmann, Baumert, Richter, Voss, & Hachfeld 2013). As stress, in its chronic form, usually leads to burnout, which is also characterized by exhaustion (Maslach & Jackson, 1981), teacher stress can be considered to have a potential to lower the motivational levels of teachers, thereby interfering with the teacher's level of competence.

There is ample evidence that aspects other than knowledge may contribute positively towards teacher success (Kunter 2013). These researchers identified aspects like teacher's beliefs, work-related motivation and ability for professional self-regulation.

Teachers' beliefs may take the form of implicit or explicit views about the school and the learning environment (Pajares, 1992; Richardson, 1996). Inference can thus be made that if such beliefs are negative, they are bound to affect the teacher's professional competence negatively, and vice versa. A teacher who believes that the school environment he or she finds himself or herself in, at a rural school, is not conducive for proper teaching or learning to take place, such a teacher's competence stands to suffer a setback in an effort to render effective tuition to learners.

2.20 TEACHER'S SELF-EFFICACY AND STRESS COPING

Bandura (1997) defined self-efficacy as a person's belief that he or she is capable of dealing with complex tasks, making it a valuable factor influencing human action. In the context of the teaching profession, teachers' self-efficacy was defined as teachers' beliefs about their capability to teach their subject matter even to difficult students (Holzberger, Philipp & Kunter, 2013). Such beliefs should presumably be expected to have an effect on the rendering of tuition by the teachers and on many other related outcomes (Tschannen-Moran & Woolfolk Hoy, 1998).

Teachers whose efficacy beliefs are high are considered to be hard-workers and are actively involved in informal learning activities, persistent and less stressed (Bandura, 1997; Lohman, 2006). Such teachers can be expected to make a positive impact on student learning. This is in line with research findings which showed effective classroom management by such teachers (Woolfolk, Rosoff, & Hoy, 1990). Further studies indicated that teachers with self-efficacy put to good use more effective and innovative teaching methods (Ghaith & Yaghi, 1997; Guskey, 1988), set high learning goals for their students (Ross, 1998; Wolters & Daugherty, 2007) and also encourage student autonomy (Woolfolk at al. 1990). All the studies referred to above portray teachers' self-efficacy as a valuable attribute, not only for the teachers' well-being and impact, but also for students' learning.

Teachers' self-efficacy should not solely be considered a determinant of variables like a teacher's well-being, student performance and teacher behaviour, but should also be considered as an outcome of educational processes (Caprara et al. 2006). This means that self-efficacy of teachers, as a valuable factor in the activities carried out by teachers, may be a product of the teachers' well-being, student achievement and teachers' behaviour (Holzberger, Philipp & Kunter, 2013).

Findings of a study by Holzberger, Philipp and Kunter (2013) confirmed the positive correlation between teachers' self-efficacy beliefs and their instructional quality. Instructional quality in this study was measured through three dimensions: cognitive activation, classroom management, and individual learning support. Rendering the three dimensions in an effective way by the teachers as a result of their high self-efficacy beliefs is tantamount to effective teaching, which, logically, can be expected to lead to positive learner academic performance.

2.21 Conclusion

The teaching profession is, acceptably, a stressful one according to a number of studies. The environment of rural secondary schools appears to add salt to the wound, through amplified challenges faced by teachers in such schools, leading to

exaggerated levels of stress for such teachers. Some of these challenges include overcrowded classrooms, lack of essential resources, lack of support from the principal, and learner indiscipline. When teachers face stressful situations in their work environment, they fail to perform to the best of their abilities as teacher-learner interactions are negatively affected.

Poor performance by teachers result in poor academic performance by the learners, resulting in even more stress on the teachers concerned. A number of strategies are used to try and cope with stressors experienced in the teaching profession, inclusive of: problem-focused coping, emotional-focused coping, religion, social support and exercise. More has to be done to move most of the rural secondary schools from a dysfunctional state (which can partly be attributed to their stressed teachers) to a functional one. This study sought to come up with a model of stress-coping that such teachers can use.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

Chapter 2 focused on the literature review which included the theoretical framework of the study. This chapter presents the research design and the methodology used for data collection which includes instrumentation, sampling strategy, ethical measures and data analysis which are central to this study. The primary aim of this study was to find out the effects of teacher stress on learner academic performance. The following were the objectives of this study:

- To investigate the level of stress faced by teachers in rural secondary schools;
- To determine the effect of teacher stress on learner academic performance;
- To determine some of the coping strategies used by teachers experiencing work-related stress;
- To develop stress-coping model that can be used by teachers to cope with work-related stress, for them to deliver effective teaching and learning.

3.2 RESEARCH DESIGN

Research design is the overall approach used to investigate a problem of interest to answer a question of interest or test intended hypothesis (Gay, 1996). According to, Babbie and Mouton (2001) and Bipath (2005), a research design is a plan or blue print of how one intends conducting research. Research design is a procedure for research that spans the decision from broad assumption to detailed methods of data collection and analysis (Creswell, 2006). The purpose of a research design is to specify a plan for generating empirical evidence that will be used to answer the research questions (McMillan & Schumacher, 2006). The question of interest in this study was the effect of teacher stress on learner academic performance in rural based secondary schools of Vhembe District. I opted for a survey research design which utilised mixed methods in which both quantitative and qualitative approaches were used. A combination of methods and investigators in the same study can contribute to the richness of the data

and insights and partially surmount the deficiencies that arise from using only one investigator or method (Cohen & Manion, 1985; Denzin & Lincoln, 1998; Babbie & Mouton, 2001; Huberman & Miles, 2002). Research design was described by Chabalala (2005) as the plan and structure of the investigation that is used to obtain evidence that is able to answer the research question(s). These are discussed in the subsections that follow:

3.2.1 Quantitative research design

Struwig and Stead (2003) describe quantitative research as a form of conclusive research involving fairly structured data collection procedures and large representative samples. Denzin and Lincoln (1998) indicate that the quantitative approach emphasizes the measurement relationships between variables and not processes. On the other hand, Babbie and Mouton (2001) and Krathwohl (1998) define quantitative approach as the best measurement of the properties of phenomena, which is the assignment of numbers to the perceived qualities of phenomenon. For the quantitative methodology approach, the questionnaires were administered to find out the effect of teacher stress on learner academic performance.

Research methodology

Research methodology refers to a range of approaches used in research to gather data for inference and interpretation to be able to come up with explanation and prediction (Cohen et al., 2000). Research methodology may be the science of methods that contains standards and principles meant to guide the choice structure process and use of methods as guided by the underlying paradigm. The quantitative research methodology followed in this study, which consisted of survey questionnaires, is discussed in this section and includes population of the study, sampling procedures, questionnaire development, pre-testing of the questionnaire, distribution of questionnaires and collection processes, as well as data analysis.

Population

Fraenkel and Wallen (2000) view population as the group of people the researcher uses to generalize the results of the study. Population may be used to denote the aggregate from which the sample is chosen. Mouton (1996), population is a collection of objects, events or individuals having some common characteristics that a researcher is interested in studying. The target population for this study were teachers and learners from rural based public secondary schools of Vhembe District. All six thousand teachers from 280 rural public secondary schools and 173597 learners within Vhembe District formed the population of this study.

Sampling procedure and sample size

A sample is an element of the population considered for actual inclusion in the study or a subset of measurements drawn from a population one is interested in (Byrne, 1994). A sample can also be defined as a small portion of a total set of objects, events or persons, which together compromise the subject of this study (Seaborg, 1988). In this study, simple random sampling was done where the list of teachers and learners from the circuit was obtained; and, from the list, every fifth teacher and learner were taken. Sample size consisted of 200 participants from 33 public secondary schools in the Mutale Area.

• The questionnaire

The questionnaire (Appendix A) is a vehicle for the collection of data (McCormack & Hill, 1997). The self-constructed and self-administered questionnaire consisted of 38 items arranged in four sections: Section A consisted of questions collecting demographic data from all participants in the sample. This section consisted of seven items requesting for data that included gender, age, educational attainment and years

of work experience. Section B consisted of items requesting participants to rate the extent to which they agreed or disagreed with issues related to effect of teachers' stress on learner academic performance in rural based secondary schools of Vhembe District.

The rating scale consisted of the following designations: 5=extreme stress; 4=much stress; 3=moderate stress; 2=mild stress; 1=no stress. Section C comprised of questions requesting participants to indicate the extent to which they think the stress they experience has effect on learner academic performance. Participants were requested to mark in the appropriate box following an appropriate rating scale to a great extent or lesser extent. Section D consisted of questions requesting participants to indicate how they can cope with related stress they experienced as teachers in rural secondary schools in the Vhembe district.

Questions were structured in such a way that learners and teachers were asked the same questions and with the same response options as postulated by Hofstee (2006). Close-ended questions were used for questionnaires, and these self-constructed questionnaires were pre-tested before being administered to increase validity. These were pretested with 10 teachers from the sampled schools in order to identify flaws and ambiguities while ensuring that the items were clear and easy to answer.

Data collection procedure

The questionnaires were administered on teachers from rural based secondary schools in the Mutale area of the Vhembe District. Questionnaires were distributed to teachers in the secondary schools; the purpose was discussed with the participants and were collected on different days. The survey tool enabled me to reach a large sample size with relative ease on the perceptions and experiences of teachers on their work-related stress. Questionnaires' return rate of 87.5% was achieved, and that was a good return.

Analysis of quantitative data

The data collected from the field was given to an expert to capture, edit and analyse. A computer loaded with Statistical Package for Social sciences (SPSS) (IBM SPSS statistics 24) program was used to analyze quantitative data from questionnaires on the personal computer which showed frequencies and corresponding percentages shown by means of tables and figures, means and cross tabulation to establish the level of significance in the results from data collected. The system of analysis was chosen due to its level of accuracy. Once the data has been correctly entered according to prescribed instructions, the possibility of errors may be vastly reduced.

Value labels of each variable, as well as all possible summary statistics, were listed. Where there were some differences, probably due to sampling error percentages based on row totals, column totals or total sample size were computed through cross tabulations. This exercise determines the probable link between a sample and the population from which is taken.

3.2.2 Qualitative research design

To ensure a deep understanding of a phenomenon in a study, the researcher ought to depend on verbal, visual, auditory and olfactory data (Ramphele, 2000). In this study, the qualitative approach was also used through applying the face-to-face interviews.

Qualitative approach is a type of primary research approach in which the researcher collects first-hand information obtained directly from participants (Miles & Huberman, 1994). According to Rubin and Barbie (2005), qualitative research methods emphasize the depth of understanding associated with ideographic concerns. In this study, face-to-face interview was conducted to collect data from respondents. In this section, the

research methodology showing the sampling and interview procedures when collecting and analyzing data for this study are discussed.

Sampling procedure and sample size

A sample is an element of the population considered for actual inclusion in the study or a subset of measurements drawn from a population one is interested in (Byrne, 1994). A sample can also be defined as a small portion of a total set of objects, events or persons, which together compromise the subject of this study (Seaborg, 1988). Determining an adequate sample size may be one of the most controversial aspects of sampling. How large a sample should be in order to be representative of the population has no simple answer. Best and Kahn (1993) argue that there is no fixed number or percentage of subjects that determines the size of an adequate sample.

A purposive sampling procedure was used in this study to select participants who were interviewed. The following procedure was followed in the selection of these participants: The participants from rural schools in Vhembe District with matric pass rate of below sixty percent performance were selected. The sample consisted of five teachers chosen based on their overall excellent performance as obtained from the teachers' excellence award performance report of the school and three learners who performed excellently in the previous year's Grade 11 results as informed by end year schedules from the selected public secondary schools in the Mutale area of the Vhembe District.

Qualitative data collection procedure

Interviews are used in qualitative studies, in addition to other instruments. Interviews attempt to tap the deeper meanings of particular human experiences and are intended to generate theoretically richer observations that are not easily reduced to numbers.,

An interviewing design is characterized by flexible, interactive, and continuous, rather than prepared in advance and locked in stone (Herbert & Rubin, 1995). Herbert and Rubin (1995) indicate further that interviewing is interactive. The continuous nature of qualitative interviewing means that questioning is redesigned throughout the project (Rubin & Rubin, 1995). The interview is regarded as a primary source of data collection (De Vos et al.; 2002), which gives a picture of the way in which individuals perceive and make sense of the world (McMillan & Schumacher, 2001). Interviews are used to collect information about individuals' experience and knowledge, beliefs, opinions and feelings (Best, 1993). In this study, participants were interviewed to get first-hand information on the levels of stress faced by teachers in rural secondary schools. In this study, face-to-face interviews were used to collect qualitative data from the participants and were used to get the experiences related to the practices (Alvesson, 2011) and they provided rich data (Hamilton & Corbett-Whittler, 2013).

An approximately 30-minute long face-to-face interview was conducted with eight participants (5 teachers and 3 learners) consisting of six females and two males to get a deeper insight into the experiences of the respondents. The interviews were conducted in English and Tshivenda language (with respondents who do not understand English). I was able to probe for in-depth experiences and perceptions of the participants on teachers' stress, as suggested by Opie (2004). Through such interviews, I was able to understand participants' perceptions of levels of teacher stress and their experiences in such regard.

A seven-item interview schedule was used to obtain information on issues pertaining to the work-related stress experienced by teachers in rural secondary schools. With the consent of the participants (teachers), the interview responses were audio taped after obtaining permission from the learners who also consented to take part in the interview.

The interviews were conducted in 2017. De Vos, Strydom, Fouche and Delport (2005) encourage researchers to find a quiet setting where there is as little interruption as

possible. The principal in each school was asked to assist with the provision of a class, and a "no disturbance" sign was put at the door. A follow up on answers given by interviewees during the discussion to elicit depth about the research topic, as postulated by Herbert and Rubin (2005) was done. The translation was done by a professional translator.

Analysis of qualitative data

Booyse, Limber and Smit (1996) indicted that data analysis is an ongoing cyclical process that integrates into every phase of qualitative research. The data analysis enables the researcher to discover themes and concepts embedded throughout the interview. Data analysis may be the final stage of listening to the meaning of what is said, and it is concerned with making sense and interpreting the data collected so that it is stored and accessible for later use (Rubin & Rubin, 1995); Poggenpoel, 1998). In this study, Atlas. ti programme was used to analyze qualitative data. Codes and subcodes were identified through atlas ti.

3. 3 VALIDITY AND RELIABILITY

All the audio recordings were done with the participants to increase validity and reliability of the results I ensured that they were audible for the transcriber to capture the data accurately, and these were listened to as they were being transcribed to ensure that accurate data were captured.

3.3.1. Validity

Validity may be the extent to which an account accurately represents the social phenomena to which it refers. Onwuegbuzie and Johnson (2006) maintain that in qualitative studies, a primary focus with regards to validity is for researchers to capture

authentically. The instrument was, the interview schedules, was validated before being used to collect data. The interview schedule was pre-tested as explained and mock-interviews were held to determine if questions would be clear. Respondents confirmed that the questions were clear and that they were reasonable as they could answer without having to get clarifications.

3.3.2 Reliability

Reliability refers to the degree of consistency with which instances as assigned to the same category by different observation or by the same observer on different occasions (Silverman, Kurtines, Ginsburg, Weems, Rabian & Serafini, 1999). Neuman (2006) defines reliability as an issue of dependability. Reliability in this study was ensured through capturing data depending on voice recorder while supplementing it by shorthand notes. During the transcription exercise, elimination of only those parts of the respondents' stories that were not appropriate with the topic of this study was done. Attempts were made to reproduce the interview scripts as accurately as possible. The interview was unbiased, and probing questions to guard against moving out of the research objectives were asked.

3.4 SIGNIFICANCE OF THE STUDY

It is believed that the Limpopo Department of Education, the district managers and the circuit managers in the Vhembe district could use the findings of this study to create coping strategies and also add to the body of knowledge on the effect of teacher stress on learner academic performance.

3.5 ETHICAL AND SAFETY ISSUES

The principle of informed consent arises from the subject's right to freedom and selfdetermination. Being free is a condition of living in a democracy, and when restrictions and limitations are placed on that freedom, they must be justified and consented to, as in research (McMillan & Schumacher, 2001; Cohen, Manion & Morrison, 2007). Consent thus, protects and respects the right of self-determination and places some of the responsibility on the participant should anything go wrong in the research. As part of the right to self-determination, a prospective participant has the right to refuse to take part, or to withdraw once the research has begun. Creswell (2002) asserts that most researchers who use a qualitative approach address the importance of ethical consideration. Mcmillan and Schumacher (2006) indicate that ethics are generally considered to deal with beliefs about what is right or wrong, proper or improper, good or bad. Mouton (2001) indicates that the ethics of science concern what is wrong and what is right in the conduct of research because scientific research is a form of human conduct which has to conform to generally accepted norm and values.

Written permission to undertake the study was sought and Ethical clearance was obtained from the University Higher Degrees committee (see attached Appendix E:) and Vhembe District (See Appendix D: Permission from district) and from schools (Appendix C) in order to conduct this study in secondary schools in rural based schools in Vhembe District. To comply with the requirements of this principle, all the participants were asked to sign a consent form (Appendix G: Participant informed consent declaration) and the following was observed: a description of the attendant discomforts and risks to be expected and disclosure of appropriate alternative procedures that might be advantageous to the participants.

Confidentiality means that although researchers know who has provided the information or able to identify participants from the information given, they will, in no way, make the connection for public identification of the participants; the boundaries surrounding the shared secret will be protected (Cohen, Manion & Morrison, 2007; McMillan & Schumacher, 2006). To ensure confidentiality, the following was done: deletion of identities, crude report categories and micro-aggregation, that is, the construction of average persons from data on individuals and the release of these data, rather than data from individuals.

The principle of equal respect demands that we respect the equal worth of all people (Cohen, Manion & Morrison, 2007). This requires people to regarded as free and rational, and to accept that they are entitled to the same basic rights as others.

The essence of anonymity is that information provided by participants should, in no way, reveal their identity (Cohen, Manion & Morrison, 2007; McMillan & Schumacher, 2001, 2006). A participant or subject is, therefore, considered anonymous when the researcher or another person cannot identify the participant or subject from the information provided. To ensure anonymity, I used expressions T1 and T2 to indicate the different teachers who participated in the study and did not use information that directly or indirectly helped to identify the participants.

Records of statistics containing the number of schools' educators and learners from all secondary schools in Vhembe District Permission from the Principals of Vhembe District Secondary schools was requested to conduct the study in their respective schools. Each participant was given a consent form to sign. The consent form was written in English, but was explained during discussion with participants, to which they all agreed and signed. Participants consented by signing letters to take part in the study. Permission to collect data from learners was obtained from the principal. Both learners and teachers were further informed about the purpose of the research and that the results would be confidential and only used for the purpose of this study and only available to them should they wish to have access to them or if they want to prove any aspect of the research. This was done to assure that there were no hidden plans in this study. They were also made aware that their participation was voluntary and that they were free to withdraw without any penalty. A further request for contact numbers of the Principal was done to secure appointments, and they assisted in introducing me to the School Governing Body (SGB) chairpersons in each selected secondary schools.

3.6 DELIMITATION OF THE STUDY

The research was focused on the effect of teacher stress on learner academic performance in rural based secondary schools of Vhembe District. The study was conducted at secondary schools in the Vhembe District of the Limpopo Province.

3.7 SOURCES OF ERROR

The main sources of error associated with this study were response effects caused by the sensitive nature of the questions which seemed to be invading the personal life of respondents on sources of stress. It is possible some respondents may have felt embarrassed to discuss how stressed they were as teachers particularly when the learners they were teaching were not performing well.

Some respondents had questions as to why I was having an interview with them on issues they regard as personal on learner performance in the subjects they teach. Interviewer bias could have also affected the responses due to limited probing as a result of acquaintance with some respondents. It was also difficult to ask questions that would determine the degree to which situations in one's life were appraised as stressful. Further, a possible bias could have been the fact that since some of the interviewees were known to me since we are working in the same area, their attitude could have been different as observed with those I was not acquainted with. The fact that some interviews were done at the schools could have had an effect on their responses. The quality of data during analysis may have been affected by the selection of codes and bias in interpreting the interpreted texts since some word equivalence during translation from Tshivenda into English may have not been accurate, however, this could not have affected data to a large extent.

Matrix question format was used in the self-constructed questionnaire constructed. It is possible that some respondents may have developed a pattern of, say, identifying the issues as extremely stressful in sets of statements that indicated a particular orientation. In an attempt to reduce this error, the statements used in this questionnaire

were short and clear and did not appear in chronological order. While every care has been exercised for all questions to be understood by all respondents in the same context, it is possible that ambiguity in questions may not have been completely eradicated.

The questionnaire was pre-tested before it was applied to the respondents. It was pretested to five respondents from two schools. The questions were even discussed with the respondents who took part in the pre-test and thereafter, a questionnaire expert assessed it in order to reduce any ambiguities in the questions. Despite the limitations indicated above, the data collected was of a high quality, considering the fact that everything possible was done to reduce the possible errors during interview and in the questionnaire.

3.7 CONCLUSION

In this chapter, the research designs and methodology that was engaged in this study were outlined. The following tools: questionnaires and Individual interviews were used to collect data. The sample was described, and the sampling procedure explained. Steps that were followed in preparation for the field investigation were elucidated. Procedures that were followed when conducting interviews were explained. Validity, reliability of data collection, as well as generalizability of findings, were also discussed, and ethical issues were considered. The next chapter presents an analysis of results and discussions collected through questionnaires and interviews.

CHAPTER 4: PRESENTATION OF RESULTS AND DISCUSSION

Chapter 3 presented the research design and methodology of this study. This chapter presents the empirical investigation conducted to establish the effect of teacher stress on learners' academic performance in rural schools of Vhembe District. First, the demographic profile is presented and, thereafter, the main trends and patterns in the data. The data is then analyzed in the context of the research operation and literature review.

4.1 DEMOGRAPHIC INFORMATION

The demographic characteristics of the respondents who completed questionnaires and those who were interviewed which correlate best with their responses showing the effect of teacher stress on rural-based secondary schools of Vhembe District are addressed in this section. The variables, which include gender, age and educational level of respondents are presented and discussed.

First, the biographical information of the respondents is presented. Each variable is discussed separately, with the aim of giving a clear picture of the profiles of the respondents.

4.1.1 Gender

Table 4.1 presents gender distribution for both quantitative and qualitative results.

Table 4.1 Gender

	Quantitative results		Qualitative results	
Gender	Frequency (N)	Percentage	Frequency (N)	Percentage
Female	120	68.6	6	75
Male	55	31.4	2	25
Total	175	100	8	100

Three quarters (75%) of the interviewees (qualitative results) in the study were females. They consisted of 8 participants, and all (6 females and 2 males) were interviewed. The results suggest that the high proportion of females who responded was influenced by gender behaviour which may have effect on the results in this study. Females being exposed to some gender-specific stressors in being treated differently both by their organization, the environments and by male colleagues (Collins & Gibbs, 2003), may be prone to issues related to stress and may be biased towards their stress experiences.

4.1.2 The age of respondents

Table 4.2 shows age distribution of the respondents who completed the questionnaires and those who were interviewed.

Table 4.2 The age of respondents

	Quantitative			Qualitative	
	Teachers'	Percentage	Teachers'	Learners'	Percentage
			interview	interview	
13-17 years				3	37.5
25-30 years	17	9.7	1		12.5
31-35 years	13	7.4	1		12.5
36-40 years	19	10.9	1		12.5
41-45 years	44	25.1	1		12.5
46 years	82	46.9	1		12.5
and older					
Total	175	100	5	3	100

The study shows that those aged between 13-17 years are learners from secondary schools while those who are more than 21 years of age are teachers. In secondary schools, learners between 13-17 years are of the normal secondary school level age, an age category, which is far lower to be categorized as teachers who are expected

to complete their teaching degree at 21 years of age. The behavior of these teenagers may negatively affect teachers and the quality of teaching and learning. When teachers are affected, they may find it difficult to be effective in class, leading to poor learner academic performance.

Results reflect that almost half the respondents (46.9%) fell within the 46 years and older category, while 25.1% of respondents were in the 41 to 45 years old group. The respondents over 40 years made up more than 70% (72%) of respondents. The results suggest that the majority of those who took part in the study had substantial experience in teaching.

The majority of respondents in the teaching profession have little contribution as some teachers may leave teaching to other professions. When experienced teachers experience significant stress in their profession, it is interesting to establish how new comers in the profession would experience job related stress when faced with similar conditions. Some studies (Schannen-Moran and Hoy, 2007) indicate that there is a relationship between age and experience of stress in teaching. The more experience one has in teaching, the larger the likelihood of them experiencing more stress in teaching.

4.1.3 Academic qualifications

Table 4.3 presents distribution of academic qualification for both quantitative and qualitative results.

As reflected in Table 4.3, the greatest proportion of respondents (45.7%) held qualifications at honors degree, while 6.9% and 3.4% had qualifications at master's and doctoral degree levels, respectively. This implies that more than half (56%) of respondents had a post-graduate qualification. About a quarter (25.1%) of respondents had a first-degree qualification, while 18.9% had only a grade 12 certificate. The majority of respondents are highly qualified and could be expected to understand the relationship between work-related stress and the quality of teaching and learning.

Table 4.3 Academic qualifications

	Quantitative		Qual	litative
	Frequency	Percent	Frequency	Percent
Grade 9-12			3	37.5
Standard 10 (Grd 12)	33	18.9		
First degree	44	25.1		
B.Ed or Honours Degree	80	45.7	4	50
Master's Degree	12	6.9	1	12.5
Doctoral Degree	6	3.4		
Total	175	100.0		100

In addition to the years of experience inferred from the age distribution of respondents, the majority of respondents in the study are well qualified and could thus be expected to have potential to offer high quality lessons to learners in line with what Adedeji and Olaniyan (2011) alluded to. This shows that the quality of teaching in the classroom is the most important school related factor in ensuring students' achievement. The stress experienced by teachers in rural schools may negatively impact on the quality of teaching and thus have adverse effects on learner academic performance.

4.1.4 Teaching experience

Table 4.4 shows that 41.7% of respondents had more than 20 years teaching experience in a rural school, while those with 16-20 years and 11-15 years teaching experience had 11.4% and 14.9% of respondents respectively. This implies that more than half (53.1%) of the respondents had more than 10 years teaching experience in a rural school. The majority of the respondents had considerable experience as educators. This is reflected in Table 4. 4 which shows that 41.7 % of respondents had a teaching experience of over 20 years, 11.4% had an experience of between 16 and 20 years. Only 16% of respondents had a teaching experience of 5 years or less. This shows that a significant number of respondents had substantial experience as

educators and could be expected to have experienced or identified most of the challenges and stressors faced by teachers in rural schools.

Table 4.4: Teaching experience

	Quantitative		Qual	itative
	Frequency	Percent	Teacher	Percent
			learner	
			interview	
0-5 years	28	16.0	3	37.5
6 -10 years	28	16.0		
11-15 years	26	14.9	1	12.5
16-20 years	20	11.4	1	12.5
21 years or	73	41.7	3	37.5
more	7.5	71.7		
Total	175	100.0	8	100

The level of stress experienced by the respondents in this study should be viewed in the light that the majority of the respondents had an extensive experience of teaching in rural schools. It is notable that teachers with such an experience of teaching in rural schools still experience stress whereas they could have developed strategies of coping in such challenging environments.

The majority of respondents had most likely been exposed to the ups and downs of the teaching profession. When teachers with vast experiences in the profession experience high levels of work-related stress, the stressors giving them stress should be taken seriously, because they could be expected to have developed strategies to deal with such stressors through experience. Moreover, if high levels of work-related stress can be experienced by experienced teachers, the same levels of stress can spell disaster for the novice teachers. Danetta (2002) states that teachers with limited commitment also have a limited number of plans to improve the academic quality of their instruction. When teachers are stressed, their commitment towards their learners, in their delivery of tuition, may be negatively affected.

4.1.5 Teaching experience in a rural school

Table 4.5 shows the distribution of participants according to teaching experience in a rural school.

Table 4.5: Teaching experience in a rural school

	Frequency	Percent
0-5 years	50	28.6
6 -10 years	32	18.3
11-15 years	17	9.7
16-20 years	17	9.7
21 years or more	59	33.7

Table 4.5 shows that 33.7% of respondents had more than 20 years teaching experience in a rural school, while those with 16-20 years and 11-15 years teaching experience had 9.7% of respondents each. This implies that more than half (53.1%) of the respondents had considerable teaching experience in a rural school.

The level of stress experienced in this study should be viewed in the light that the majority of the respondents had an extensive experience of teaching in rural schools. Teachers with extensive experience of teaching in rural schools could be expected to have developed coping strategies in challenging environments.

4.1.6 Learners' enrolment

Table 4.6 shows the distribution of the respondents who completed the questionnaire according to learners' enrolment in their schools.

Table 4.6 Learners' enrolment

	Frequency	Percent
Below 300	25	14.3
300 – 600	44	25.1
601 – 900	34	19.4
901-and more	72	41.1
Total	175	100. 0

Table 4.6 shows that more than a quarter (41.1 %) of respondents were from schools with more than 900 learners, while 19.4% were from schools with learners' enrolment of above 600 but not more than 900. This implies that 60.5% of respondents were from schools with a high learner enrolment (600) with high learner-teacher ratio. Fewer schools in rural areas have fewer learner enrolments, about a quarter (25.1%) of respondents were from schools with learner enrolment ranging from 300 to 600.

Logically, a high number of learners in school demands a correspondingly high number of teachers to ensure that the teachers are not overloaded with work. The high learner enrolment complicates and worsens the challenges experienced in such schools. The high learner enrolment complicates and worsens the challenges experienced in such schools. State-of-the-art schools are built in urban communities, whereas some learners in rural schools still get their lessons under trees. The high learner enrolment has an effect on the challenges experienced in rural schools.

4.1.7 Teacher-learner ratio

Table 4.7 shows the distribution of the respondents who completed the questionnaire according to teacher-learner ratio in the schools where they teach.

Table 4.7: Teacher-learner ratio

	Frequency	Percent
1:90 and above	37	21.1
Between1:90 and 1:80	19	10.9
Between 1:70 and 1:80	24	13.7
Between 1:60 and 1:70	95	54.3
Total	175	100.0

More than half (54.3%) of respondents were from schools with a teacher-learner ratio of between 1:60 and 1:70, while 21.1% of respondents were from schools with a teacher-learner ratio of 1:90 and above. The national target for teacher-learner ratio according to the Department of Education (2008) is at a maximum of 35 learners per educator in secondary schools. There is unbalanced teacher-learner ratio in rural areas where experience of stress is high. Learners in those over-populated classes are being taught by a majority of teachers who are experiencing stress, which is unlikely to promote the well-being of the teachers and improve the quality of teaching and learning (Kutame et al. 2014). These ratios, together with the learner enrolment figures in the previous table, confirm the overcrowding that schools in rural communities' experience, which is a factor which needs to be addressed for learners to improve their academic performance. Managing such overcrowded classrooms is logically a potential source of stress for teachers in such schools which may have a negative effect on learners' academic performance.

Teacher-learner ratio may have an effect on the stress teachers experience which affects learner performance. Teachers who are experiencing stress may find it difficult to teach effectively classes that are over-crowded. Stressed teachers handling more than 90 learners in one classroom are unlikely to make a positive impact on the quality of teaching and learning (Kutame et al., 2014).

4. 2 SOURCES AND LEVEL OF TEACHER STRESS WHICH HAVE EFFECT ON LEARNERS' ACADEMIC PERFORMANCE IN RURAL AREAS

This section provides the results in ranking order according to the responses from participants giving an indication of the level of stress and the extent to which it affects learner academic performance. The assumption is that high levels of stress experienced have higher negative effects on learner academic performance. The effect of the stress on learner academic performance is related to the level of stress that teachers experience. These results are presented and discussed with the help of tables, showing the frequencies, corresponding percentages and level of significance of issues related to teacher stress and teachers' perception of their effect on learner academic performance. Results from interviews are discussed simultaneously with those from questionnaires, giving some remarks related to some issues being discussed.

Table 4.8 Sources of stress

Main Category	%	Rank order
Inadequate Learner discipline	85.7	1
Participation in the class when the lesson is on	85.7	1
Teenage pregnancy	84.0	2
The government's education policies	81.7	3
Lack of support from the principal	79.4	4
Learner absenteeism	77.7	5
No essential services nearby e. g banks, shops	77.1	6
Involving employees in group discussion	74.9	7
Dealing with late-coming learners	74.3	8
Having to teach a subject for which you are not trained for	72.6	9
Lack of opportunity to participate in school decision making	70.9	10
Difficulty in covering syllabus in the time available	69.7	11
Principal's reluctance to make tough decisions	69.1	12
Difficulty in motivating learners	68.0	13
Lack of facilities	65.7	14

4.2.1 Inadequate learners' discipline in the school

Table 4.9 presents inadequate learners' discipline in the school that may have effect on learner academic performance.

Table 4.9 Inadequate learners' discipline in the school

Level of stress	Frequency	Percent
Extreme stress	22	12.6
Much stress	30	17.1
Moderate stress	39	22.3
Mild stress	59	33.7
No stress	25	14.3
Total	175	100.0

Table 4.9 shows that the majority (85.7%) of teachers indicate that inadequate discipline in the school (ranked highest) is a source of stress for teachers which they think has effect on learner academic performance, while 14.3% shows that inadequate discipline in their schools was not a source of stress for them. The level of stress teachers experience affects their teaching skills, which impacts on learners they teach.

Results suggest that learners are taught by more teachers in rural schools who regard inadequate discipline as a source of stress, which has effect on learner academic performance. Undisciplined learners are a source of stress for teachers, which affects their performance in rendering tuition, and thus have a negative effect on learner performance. Only a few teachers would then teach effectively and positively affect fewer learners. According to Maivha (1995), disciplined learners may carry out tasks such as writing of tests, assignments and homework given to them by their teachers. The following remarks by one of the learners interviewed further illustrate this:

Learner 1: inadequate learners' discipline in the classroom. It is very difficult for the teacher to teach an indiscipline class because he is not allowed to apply corporal punishment, if he asks the learners to leave the room as a way of punishment, they end up doing the same mistake to avoid attending classes it affects academic performance. There must be learners-teachers meetings and learners' meetings where they talk about performance and what can be done to maintain discipline. I think teachers must consult their doctors, exercise twice a month, get enough sleep and also get a chance to share their frustrations with friends.

4.2.2 Participation in class when the lesson is on

Table 4.10 presents results showing teachers' stress levels associated with participation in class by learners when the lesson is on, which they think, has a negative effect on learners' academic performance.

Table 4.10: Participation in class when the lesson is on

	Frequency	Percent
Extreme stress	25	14.3
Much stress	43	24.6
Moderate stress	27	15.4
Mild stress	31	17.7
No stress	49	28.0
Total	175	100.0

Table 4.10 shows that 72% (14.3% of these experiencing extreme stress) of respondents experienced stress associated with participation in class by learners when the lesson is on, which they indicate has effect on learner academic performance. Learners may not perform well if they are not participating in class.

Learners who do not participate in class may perform poorly because the teacher may not know how to assist them if he/she does not know whether they are facing challenges or not. Learners who do not participate in class may perform poorly because the teacher may not know how to assist them if he/she does not know whether they are facing challenges or not. When teachers are stressed, they portray reduced levels of interest in the work done by learners in class. This leads to learners 'sweating it out' on their own without the necessary guidance to assist them. This can easily be observed when teachers give classwork to learners, and immediately go and take a seat and attend to their own 'affairs' like writing university assignments or chatting with friends.

Cross tabulation results reveal significant differences for teachers based on their age (Chi-Square=26.152, p< 0.05, Cramer's V=0.387) in the rating of this item 'participation in class when the lesson is on'. Those teachers who those teachers who are 46 years and older think that the level of participation by learners when the lesson is on, creates a lot of stress for them, with detrimental effect on learner academic performance.

4.2.3 Teenage pregnancy and level of teacher stress

Table 4.11 shows participants' level of stress teachers experience as a result of teenage learners who fall pregnant while still attending school and continue to attend school during their pregnancy, which they think has a negative effect on learner academic performance.

Table 4.11: Teenage pregnancy and level of teacher stress

Level of stress	Frequency	Percent
Extreme stress	33	18.9
Much stress	33	18.9
Moderate stress	33	18.9
Mild stress	48	27.4
No stress	28	16.0
Total	175	100.0

Table 4. 11 shows that more than three quarters (84%) (of whom 18.9% experienced extreme stress) experienced stress as a result of teenage learners who fall pregnant while still attending school and continue to attend school during their pregnancy. These teachers indicate that the stress they experience has a negative effect on learner performance.

Teenage pregnancy is prevalent in rural areas (Mbulaheni, Kutame, Frances, & Maluleke, 2014). The high incidence of stress teachers experience may be associated with the high level of teenage pregnancy that rural areas experience (Mashao, 2008). The fact that teachers watch over pregnant learners while not having any nursing or medical skill in case such learners' pregnancies complicate is reported as a source of stress for teachers (Mashao, 2008). Results show that learner pregnancy issues frustrate and stress teachers. Learner pregnancy has an adverse effect on teachers' well-being, which impacts on their quality of teaching and learning (Kutame et al., 2014). Stressed teachers may not teach effectively and find it stressful to work effectively under such conditions of duress. The following remarks by one of the teachers interviewed further illustrate this:

Teacher 5: Teenage pregnancy, most learners are exposed to unprotected sex which leads them to teenage pregnancy. Most learners miss classes due to illhealth or fear of being embarrassed by friends. What I do is I don't care whether the child is absent or not, I just teach according to the tracker and the pace setter in order to cover the syllabus. I have no time to re-teach what I taught because when people in authority come, they expect me to have covered certain sections, that is why most learners' academic performance is affected because even if they don't understand we move to the next content. When my learners perform poorly, it affects me as a teacher. To remedy this, I must make sure I get enough sleep when stressed, if I fail to sleep, the doctor may help with sleeping tablets.

4.2.4 The government's education policies

Table 4.12 shows results of participants' experience of stress as a result of the government's education policies which they indicate that it has an effect on learner' academic performance.

Table 4.12: The government's education policies

Level of stress	Frequency	Percent
Extreme stress	44	25.1
Much stress	32	18.3
Moderate stress	34	19.4
Mild stress	33	18.9
No stress	32	18.3
Total	175	100.0

Table 4.12 presents results showing that more than three quarters (81.7%) of respondents experienced stress as a result of the government's education policies, with 25.1% of those experiencing extreme stress. Many government policies are often issued when there is a change in the curriculum and this suggests that teachers are most of the times stressed by these policies. Stress negatively affects teachers' skills and abilities, and this may have detrimental effects on learners' performance as they don't teach effectively when stressed.

The investment on urban schools, from the beginning, makes it unfair to apply the same departmental policies in such schools that are applied in their rural counterparts. When principals in rural schools fail to reach the standard prescribed by departmental policies, tension builds up between teachers and the principal, adding to the stress experienced by teachers.

There is a significant difference in the rating of this item by teaching experience (Chisquare = 26.843, p<0/05, Cramer's V 0.196). Teachers who have been teaching for

11 to 15 years in a rural school rated this item as having a significant effect on learner academic performance.

4.2.5 Lack of support from the principal

Table 4.13 shows participants' levels of stress that teachers experience as a result of lack of support from the principal, which has an effect on learner academic performance.

Table 4.13 Lack of support from the principal

	Frequency	Percent	
Extreme stress	33	18.9	
Much stress	29	16.6	
Moderate stress	37	21.1	
Mild stress	40	22.9	
No stress	36	20.6	
Total	175	100.0	

Table 4. 19 shows that more than three quarters (79.4%) of respondents experienced stress as a result of lack of support from the principal, with 18.9% experiencing extreme stress, 16.6% much stress, and 21.1% moderate stress. To add, 20.6% of respondents experienced more stress as a result of lack of support from the principal.

The principal will always expect teachers to perform well and yield positive results from the learners, while teachers will always expect the principal to support them in order to do their job with ease. Teachers' stress in the workplace is associated with factors such as lack of support required (Kokkinos, 2007). Teachers' occupational stress and, ultimately, burnout are associated with lack of support (Pithers, 1995; Burke, Greenglass & Schwarzer 1996; Chan, 1998).

It is natural for somebody who is frustrated or stressed to find something or someone to blame for the frustration. The principal is one such person who is likely to be blamed by teachers who, in most cases, overlook the government's educational policies and Bureaucratic System of administration.

There is always a reciprocal expectation between teachers and the principal. The principal will always expect teachers to perform well and yield positive results from the learners, while teachers will always expect the principal to go an extra mile in giving them support, in order for them to be able to do their job with ease. The principal, as the overseer in the school, however, show forth transformational leadership skills, getting the different stakeholders in the school to move in the same direction (Singh & Lokotsch, 2005).

An effort to empower principals should be made a priority and focus on separate programmes for principals of rural schools. The principal should give an impression of 'we are in this sinking ship together, and should help each other to survive', rather than 'you are making this ship to sink' when addressing the teachers. Taylor (2003) describes three types of benefits that social support provides to a stressed person, which are: tangible assistance, information and emotional support. Tangible assistance refers to actual goods and services that can be provided by family, friends, colleagues or any interested party.

4.2.6 Learner absenteeism

Table 4.14, which presents participants' level of stress that they experience as a result of learner absenteeism which has an effect on learner academic performance, shows that more than three quarters (77.7%) of respondents experienced stress (14.9% experiencing extreme stress) due to learner absenteeism which they think has effect on learner academic performance.

Table 4.14: Learner absenteeism

	Frequency	Percent	
Extreme stress	26	14.9	
Much stress	40	22.9	
Moderate stress	36	20.6	
Mild stress	34	19.4	
No stress	39	22.3	
Total	175	100.0	

4.2.7 Essential services nearby, e.g. shops and banks

Table 4.15 shows that absence of essential services near their schools causes teachers to experience stress which they think has an effect on learner academic performance.

Table 4.15: Absence of essential services near schools

	Frequency	Percent
Extreme stress	36	20.6
Much stress	31	17.7
Moderate stress	36	20.6
Mild stress	32	18.3
No stress	40	22.9
Total	175	10.0

Table 4.15 above indicates that 77.1% of respondents' experience stress as a result of non-availability of essential services like shops and banks near their schools which they think has an effect on learner academic performance. Essential services form part of the intrinsic motivational factors which are said to be external incentives that motivate one's behaviour (Santrock, 2003).

Without giving it much thought, one may be tempted to think that the issue of having essential services like shops and banks nearby is totally irrelevant to the teachers' work. Such an analysis would obviously be inaccurate because a teacher's undivided attention would be necessary in class to make an impact on the learners. Teachers in rural schools should thus be relieved of the need to solve the issue of when they would be able to get to town, to visit the bank or the supermarket, bearing in mind that the solving may take place during a lesson, thereby interfering with the teacher's effectiveness. If the department of education can actively get involved in addressing this shortfall faced by teachers' in rural schools, a motivated and less stressed batch of teachers would emanate. This would positively boost the tuition process.

Cross tabulation results reveal significant differences for teachers based on their teaching experience in a rural school (Chi-Square=28.530, p< 0.05, Cramer's V=0.202) in the rating of this item "No essential services nearby e.g Shops and banks". Those teachers who have been teaching for 21 years and more in a rural school rated this item as having a significant negative effect on learner academic performance.

4.2.8 Involving employees in decision making

Table 4.16 presents involving employees in decision making which they think has effect on learner academic performance.

Table 4.16: Involving employees in decision making

	Frequency	Percent
Extreme stress	39	22.3
Much stress	28	16.0
Moderate stress	28	16.6
Mild stress	36	20.6
No stress	44	25.1
Total	175	100.0

According to Table 4.16,74.9% of respondents experienced some stress pertaining to involving employees in decision-making; 22.3% experienced extreme stress and 16% much stress and moderate stress each; 25.1% reported no stress associated with involving employees in decision making.

When employees participate in decision making on issues that affect them, they feel valuable and important as part of the organisation and are convinced that they know about the affairs of the organization (Kleynhans et al. 2006). When teachers are given an opportunity to take part in decision-making, they become 'shareholders' of the challenges at the school as well as the solutions thereof. This is bound to enhance their self-esteem and reduce their stress levels.

The fact that there was lack of opportunity to participate in school decision making was stressful for most respondents. When a teacher s' voice is only given permission to educate the learners but silenced from raising issues of concern in the running of the affairs of the school, teachers would be treated like traffic lights that are expected to give out the right colour at the right time.

A substantial majority of respondents reported stress associated with the issue of involving employees in decision making. To be a reserve player who is permanently on the bench but never part of the team playing makes one to feel as less of a member of the team. Teachers would also like to see that their contribution in the team is treasured, even though involvement in decision making.

4.2.9 Dealing with late-coming learners

Table 4.17 shows dealing with late-coming learners which they think has an effect on learner academic performance. The majority (74.3%) of respondents experienced stress in dealing with late-coming learners, (6.9%) of these indicating that they experience extreme stress. Issues like poor road infrastructure, unavailable or unaffordable public transport, and learners' responsibilities to provide for their poor households can be linked to such late-coming by learners, to varying degrees. Late

coming can be quite disturbing to the teacher as this may not allow teaching to flow. Teachers may teach same lessons in the absence of some learners or repeat the same lessons when such learners arrive. This environment is not conducive for learning.

Table 4.17: Dealing with late-coming learners

	Frequency	Percent
Extreme stress	12	6.9
Much stress	30	17.1
Moderate stress	39	22.3
Mild stress	49	28.0
No stress	45	25.7
Total	175	100.0

When the government starts to send a clear message, through deeds, and not only words, that education is a priority, main roads leading to centers of learning will be prioritized. In the short term, gravel could be deposited on such roads, leveling them well to make them car worthy. In the long term, such roads should be tarred, to make travelling to such centers easy and inviting. The government should also subsidize transport for learners to school, providing buses for learners from rural communities to school. A lot of those late-comers and absentees would not like to miss the 'ride' to school and back.

It is very difficult for stressed teachers to finish their pace setters or syllabus when learners come to school late, and that affects learners' academic performance. Many secondary schools in the Brong Ahafo Region of Ghana face tuition challenges due to lateness to classroom and absenteeism by learners (Adesina, 1990; Boakye, 2006; Clarke, 2002). This affects teachers' stress level, making it difficult for them to render any effective tuition. Teachers at times stay away from such a class trying to avoid a stressful situation. This makes the learners to miss out on precious opportunities to

learn. Haller (1992) blames the prevalence of indiscipline in schools on large class size.

The high incidence of stress among respondents due to learner absenteeism is in agreement with the high incidence of stress as a result of dealing with late-coming learners. It would appear as though some of the learners who found themselves late decided to stay away from school on that particular day, while others decided to attend school, though late. Either way, the teachers, who have the passion for their job are bound to be stressed.

Teachers should devise strategies of finding out from learners' reasons for their late-coming or absenteeism. As part of the learning process, learners may be requested to write an essay or have a debate on late-coming and absenteeism. This would give the teachers an idea about the depth of the problem, as well as how learners feel about it. That would form a firm foundation necessary to address these challenges. It is very difficult for stressed teachers to finish their pace setters or syllabus and that affects learners' academic performance.

The majority of respondents indicated that dealing with late- coming learners was stressful. Rural schools are usually linked with poor road infrastructure and unavailable or unaffordable public transport for learners. Beyond that some learners may assume the role of miniature breadwinners using every minute they come across for the financial benefit of their households. All these factors may contribute to the late-coming of the learners, which makes the teachers stressed, as some lessons might need to be repeated for the sake of the late-comers, thereby hampering progress of the teacher- learner process. This would add even more stress upon the teachers. Once again, teachers usually address this challenge unilaterally, without actively involving the parents, who are in most cases illiterate and presumed to lack understanding of the value of education.

The following are remarks given by a participant during the interview:

Learner 3: Late coming. We learners are at times late because we stay far away from school wherein when it is raining the roads are slippery and at times water from rain cover the bridges, should we cross, it's a risk. We again walk for more than 5km and we get to school late and we miss morning classes. These problems stress our teachers and it also affect our academic performance.it will be good for the government to build schools closer to our homes or provide us with transport to and from the school.

4.2.10 Having to teach a subject which they are not trained for

Table 4.18 shows the levels of stress experienced by teachers as a result of having to teach a subject which they were not trained, which they think has effect on learner academic performance.

Table 4.18: Having to teach a subject which they are not trained

	Frequency	Percent
Extreme stress	27	15.4
Much stress	20	11.4
Moderate stress	37	21.1
Mild stress	43	24.6
No stress	48	27.4
Total	175	100.0

More than half (72%) of respondents experienced some stress as a result of having to teach a subject for which they were not trained. There is a shortage of teachers in rural areas. Results show that there are teachers who teach subjects they are not trained to teach, which puts them under severe stress. Results suggest that stressed teachers experience is associated with learner performance, teaching may not be effective under conditions of duress, and this leads to poor learner performance. Results further show that teachers think that the stress level they experience as a result of teaching subjects they are not trained to teach affects learners. Such conduct may not promote

teaching and learning. Teachers teach effectively when teaching subjects, they have been trained to teach.

As Shulman (1987) puts it, someone who takes the responsibility of a teacher must first demonstrate knowledge of the subject matter, before any effective teaching can take place. This is unfortunately not the case in most rural schools, where teachers end up teaching subjects for which they are not trained. This puts such teachers under severe stress, impairing further any possibility of such teachers making any impact in the rendering of tuition to learners which contributes positively to their performance.

There are two routes that the department of education should consider addressing this shortfall in rural schools: firstly, skilled teachers on affected subjects should be recruited to such schools with incentives attached; secondly, teachers should be empowered through continuing professional development workshops.

Malik (2003) posits that teachers ought to be competent in the subjects they teach in order to make an impact in the teaching-learning process. Once the teacher realizes they are not competent, they experience stress which impacts on learner performance. According to Mosely (2000), teachers actually need more than just subject content to make an impact: they also need the ability to understand such content from the learners' perspective, to determine relevant strategies to enhance the quality of teaching and learning. That contributes to promotion of teachers' well-being which affects learner academic performance positively.

Following are verbatim remarks by one of the respondents during the interview which confirm this:

Teacher 1: Teaching a subject I am not trained for, Learners expect more from me on how things should be done, therefore it affects learners' academic performance. At times learners fail because I don't teach them the right way as no thorough explanation is done due to lack of knowledge and competence. As

a result, I get stressed. My suggestion is that teachers should teach subjects they were trained for or rather subjects they are competent in.

4.2.11 Lack of opportunity to participate in school decision making

Table 4.19 Shows the level of stress experienced by teachers as a result of lack of support from the principal which they think affects learners' academic performance.

Table 4.19: Lack of opportunity to participate in school decision making

	Frequency	Percent
Extreme stress	23	13.1
Much stress	20	11.4
Moderate stress	42	24.0
Mild stress	39	22.3
No stress	51	29.1
Total	175	100.0

Teachers' stress in the workplace is associated with several contributory factors such as time pressure, discipline problems, lack of resources, lack of professional recognition, lack of support and the diversity of tasks required (Kokkinos, 2007). More than half (70.9%) of respondents experienced stress due to lack of opportunity to participate in school decision-making. Respondents show that not being given the platform to participate in decision making processes is a source of stress for them which may affect learner performance.

4.2.12 Difficulty in covering the syllabus in the time available

Table 4.20 Shows participants' level of stress they experience as a result of difficulty in covering the syllabus in the time available, which has effect on learner academic performance

Table 4.20: Difficulty in covering the syllabus in the time available

	Frequency	Percent
Extreme stress	24	13.7
Much stress	20	11.4
Moderate stress	35	20.0
Mild stress	43	24.6
No stress	53	30.3
Total	175	100.0

Table 4.20 shows that 69.7% of respondents experienced stress as a result of difficulty in covering the syllabus in the time available. The extent of stress experienced as a result of difficulty in covering the syllabus in the time available is lower than one could have expected from rural, overcrowded schools. One is made to believe that the teachers in such schools have over the years developed strategies of how to get around this hurdle.

It would really be unfair to look at this challenge in isolation. This is because a number of factors are intertwined around this challenge. When highly qualified teachers (like most of the respondents in this study), who also have extensive experience are faced with high absenteeism rate, prevalence of late-coming by learners, overcrowded classrooms and lack of essential resources, their ability to cover the syllabus in the available time is tempered with, adding to the stress that the teacher already had due to the other factors alluded to above. It is very difficult for stressed teachers to finish their pace setters or syllabus, and that affects learners' academic performance. The frustration that teachers go through in their endeavor to cover the syllabus in the time available can be inferred from the perceived levels of stress by the respondents in Table 4.20. Failure to cover the syllabus by the teachers appears to be a source of stress that may impact negatively on the standard of teaching and learning.

4.2.13 Principal's reluctance to make tough decisions

Table 4.21 Shows participants' level of stress that they experience as a result of principal's reluctance to make tough decisions, which has effect on learner academic performance

Table 4.21 Principal's reluctance to make tough decisions

	Frequency	Percent
Extreme stress	26	14.9
Much stress	14	8.0
Moderate stress	35	20.0
Mild stress	46	26.3
No stress	54	30.9
Total	175	100.0

Table 4.21 shows that 69.1% (14.9% of these experiencing extreme stress) of respondents experienced stress as a result of the principal's reluctance to make tough decisions which they think has effect on learner academic performance. There are however some (30.9%) respondents who indicate that they do not experience stress as a result of the principal's reluctance to make tough decisions. This suggests that they do not think that the principal's reluctance to make tough decisions has effect on learner academic performance.

It is always said that tough situations require tough decisions. The tough situations that teachers in rural schools' face can best be solved through tough decisions and actions that teachers always expect the principal to take. The question we are asking is: "Have these principals been given the liberty to make such tough decisions?" The answer to this question, unfortunately is that in most instances, the school principals do not have the necessary powers to make some tough decisions, and somebody in a higher office (the circuit manager) has to make such decisions. Mafuwane (2011) posits that circuit managers have a crucial role of coaching, staff development and modelling, designed to influence principals' thinking and practice. When circuit managers, especially those attached to rural schools, fail to give the necessary support to the principals, the decisions that they should take end up not being taken as principals are not authorised. Most teachers interpret this as the principal's incompetence or lack of support, and this gives them a lot of stress.

4.2.14 Difficulty in motivating learners

Table 4.22 Presents difficulty in motivating learners on quantitative results that has effect on learner academic performance.

Table 4.22: Difficulty in motivating learners

	Frequency	Percent
Extreme stress	22	12.6
Much stress	26	14.9
Moderate stress	40	22.9
Mild stress	31	17.7
No stress	56	32.0
Total	175	100.0

According to Table 4.22 above, 68% of respondents considered difficulty in motivating learners to be a source of stress, ranging from extreme stress (12.6%), through much stress (14.9%) to moderate stress (22.9%). Additionally, 32% of respondents indicated that they did not get any stress in their endeavour to motivate learners. Research has shown that most learners in rural schools do not enjoy parental support and motivation like their urban counterparts because most parents in rural communities are illiterate. It is no surprise that teachers have to go an extra mile to single-handedly do the best to motivate these learners, experiencing stress in the process.

Moreover, learners in rural schools are surrounded by many examples in their communities of people who dropped out of school. Most of them end up with low self-esteem, failing to believe that they can be able to make a name for themselves in society. Teachers, therefore, need to put an extra effort to get such learners from the negative outlook, before starting to build on their self-esteem. This obviously drains a lot of teachers' energy. When such energy gets drained from the teachers' encounter with just under a hundred learners in the classroom, it is only a matter of time before the teacher experiences burnout.

A significant proportion of respondents considered difficulty in motivating learners to be a source of stress. This comes as no surprise, because for most learners, the motivation language spoken by their teachers at school is not reiterated by their illiterate parents at home. The unilateral effort by the teachers to motivate such learners becomes a daunting task.

Cross-tabulations reveal significant differences for the teachers of different ages in their rating of this item (Chi-Square = 10.587, p< 0.05; Cramer's V = 0.246). Males find it more difficult to motivate learners as compared to females and which they regard as a source of high stress level, and they indicate that this has effect on learner academic performance.

4.2.15 Lack of facilities

Table 4.23 Presents lack of facilities in quantitative results

Table 4.23: Lack of facilities

	Frequency	Percent
Extreme stress	40	22.9
Much stress	24	13.7
Moderate stress	28	16.0
Mild stress	23	13.1
No stress	60	34.3
Total	175	100.0

The data in Table 4.23 sheds some light on how much lack of facilities contributed towards the building up of stress for the respondents 65,7% of respondents experienced some stress as a result of lack of facilities, with 22,9% experiencing extreme stress, 13,7% much stress and 16% moderate stress, 34% of respondents reported no stress associated with lack of facilities. Though one could have expected a higher incident of stress due to lack of facilities as most rural schools lack essential facilities, there is a likelihood that because most of the respondents have been serving

in rural schools for a long time (some for over 20 years), they could possibly have acclimatized to such facilities, seeing nothing stressful in them.

There is a significance proportion of respondents that reported stress due to lack of facilities. However, an even higher proportion was expected, noting that most of the rural schools have limited facilities. It is understandable, however, that some people who live in poverty are able to find some comfort zone in the midst of their poverty, making them to survive with relative ease, that no rich man would manage if put in a similar situation. Some teachers, especially those with extensive experience of teaching in rural schools tend to overlook lack of facilities; this however leads to the rendering of tuition that is below par, with resultant stress-provoking poor academic performance by learners. Mushtaq (2012) found that learner performance is significantly correlated with the availability of facilities such as a library, laboratories of computers and others in the institution.

It is essential for facilities to be there in rural schools, as they are necessary for effective teaching and learning because lack of facilities affect learners' academic performance. The importance of having essential facilities in any field of service cannot be overemphasized. Teachers do get appropriate training and are ready to offer effective training to their leaners, only to face the drawback of lack of resources, regarded as one of the contributory factors of teacher stress (Kokkinos, 2007). There are challenges barring schools from reaching their full academic potential that affect mental health promotion and wellbeing of teachers (Kutame et al. 2014). These are realities faced by rural school teachers.

Beilock et al. (2010) indicated that teacher anxiety plays an important role in the reduction of learner performance, whereas Kunter et al. (2008) indicated that a lot of teacher exhaustion makes for more effective instruction and produce better learner results.

Teacher 2: Lack of facilities as we need to conduct experiments in the laboratory and a library in order to research for more information and facilities are not available, it affects learners' academic performance and as a teacher I feel stressed. I suggest that schools in rural areas have facilities like those in urban areas all learners should not be discriminated based on where they come from. I feel stressed teaching at a school with lack of facilities because it affects learners' academic performance.

4.3 TEACHER STRESS HAVING AN EFFECT ON LEARNER ACADEMIC PERFORMANCE.

This section provides the results in ranking order according to the responses from participants giving an indication of teacher stress having effect on learner academic performance. The assumption is that teacher stress experienced have higher negative effect on learner academic performance. These results are presented and discussed with the help of tables, showing the frequencies and corresponding percentages of issues related to teacher stress and teachers' perception of their effect on learner academic performance. Results from interviews are discussed simultaneously with those from questionnaires, giving some remarks related to some issues being discussed.

Table 4.24 Shows teacher stress having an effect on learner academic performance

Table 4.24 Teachers stress having an effect on learner academic performance

	%	Rank
		order
Doing of homework by learners	84.6	1
Learners' performance in class tests	84.0	2
Overall performance in group presentations	78.3	4
Learner participation in group discussion	75.4	5
Learners completing their class work	73.1	6
Learners asking questions during lessons	69.1	8

4.3.1. Doing of homework by learners

Table 4.25 Presents doing of homework by learners in the school distribution of the respondents who completed the questionnaire.

Table 4.25 Doing of homework by learners

	Frequency	Percent
Extreme stress	27	15.4
Much stress	23	13.1
Moderate stress	50	28.6
Mild stress	18	10.3
No stress	57	32.6
Total	175	100.0

Table 4.25 shows that more than half (60%) of respondents experienced considerable stress with (15.4%) of these are experiencing stress to a great extent, which is associated with doing of homework by learners. Homework can be considered to be take-home 'classwork' with the difference that the teacher is not around to give support when it's being done. Learners have to depend on means of assistance. With most parents in rural communities being illiterate (Rahman, Iqbal & Harrington, 2003; Hammond, 2005), such assistance is not there. The high stress levels for teachers associated with doing of homework by learners is a testimony to this reality that exists in rural schools.

A significant majority of respondents reported experiencing stress linked to the doing of homework by learners. The technical difference between classwork and homework is that homework is done in the absence of the teacher, who is otherwise present for classwork to give guidance and mentor. For most learners from rural schools, homework is a serious challenge, since the majority of parents from rural communities are illiterate and not be able to assist their children with the homework. When a teacher realizes that homework was either not done or incorrectly done, he or she gets

stressed, leading to failure of active engagement with the learners on the homework. Some teachers in similar situations go to the extent of ignoring the 'undone' homework and move to a different lesson, thus leaving the learners poorly equipped.

The majority of the respondents felt that they were not responsible for the poor or non-performance pertaining to learners' homework. This analysis appears to be based on the conviction that teachers have no contribution in the performance of learners in their homework. It must be said that such an analysis is inaccurate because a homework is supposed to be an application of what has been taught in class, and the impact made by the teacher during lessons in class gets revealed in the homework.

Learners may choose to either write or not write homework, and that can affect teachers and at the same time have effect on learner academic performance as learners do as they wish. Homework is an important means of promoting feedback as they should give each learner guidance on how to improve, and each pupil is given an opportunity to work on the improvement (Black & William, 1998). The teachers' attitude towards homework may have a negative effect on the teaching and learning. Homework helps teachers to know how much learners have understood their work that was done in class. If teachers cannot teach effectively, that may affect learners' academic performance.

It is reasonable to expect learners in rural areas to fail doing their homework due to lack of support which may consistently affect teachers stress level. Some parents in rural areas may not be in a position to support their children. A number of studies have revealed the value of parental support in their children's learning. Sanders and Sheldon (2009) posit that effective learning takes place where there is a strong school-home relationship achieved through reaching out to learners' parents for cooperation. Lack of such support result in learners not doing their homework effectively, which may increase teachers stress levels. High stress levels have adverse effects on their teaching skills, which may negatively affect learner performance. According to Maivha

(1995), disciplined learners may carry out some tasks such as writing of tests, assignments and homework given to them by their teachers.

High levels of academic achievements by learners is dependent on parental involvement in their academic activities (Barnard, 2004). Epstein (2006) also indicated that learners whose parents walk along the same wavelength with their teachers improve their academic performance. The usual case scenario in rural schools is that parents are not available to offer the necessary support for their children's academic success. Teachers in such schools are usually forced by circumstances to unilaterally exert an effort to get these learners to achieve academically. This becomes a stressful exercise, since doing something that has to be done by two or three people, while being alone, can never be easy. When such learners fail to achieve academically, even more stress ensues for the teacher concerned.

A number of studies have revealed the value of parental support in their children's learning. Sanders and Sheldon (2009) posit that effective learning takes place where there is a strong school-home relationship achieved through reaching out to learners' parents for cooperation.

Such cooperation is non-existent in most rural schools, as easily deducible in a remark by one of the teachers interviewed:

Teacher 3: Learners not doing their homework. There are parents who don't seem to be bothered about their children's schoolwork. They don't make an effort to get them assisted with their home-works, and when I invite them to school they don't come. I feel it would be best for teachers and parents to work together for the benefit of the learners though it is understandable that most parents are illiterate.

Teachers who are 31 to 35 years of age regard 'doing homework by learners' as a significant (Chi-Square = 31.942, p< 0.05, Cramer's V = 0.214) source of stress for

teachers which they think has a significant effect on learner academic performance. These are teachers in the middle-age group. They still have many years in the field and should therefore be assisted for them to cope in the system.

4.3.2 Learner performance in class tests

Table 4.26 Presents learners' performance in class test for both quantitative and qualitative results.

Table 4.26 Learners performance in class test

	Frequency	Percent
Extreme stress	28	16.0
Much stress	51	29.1
Moderate stress	34	19.4
Mild stress	34	19.4
No stress	28	16.0
Total	175	100.0

Table 4.26 shows that the majority (84%) of respondents' experience stress associated with how learners perform in a test, 16% of those experiencing extreme stress and only 15% of those who participated indicating that they do not experience any stress associated with how leaners performance in a class test. Learner performance in class tests is regarded as a major contributor of stress for most of the respondents. Learner performance in schools in rural areas has been reported to be poor (Kutame et al., 2014) which may be associated with effect of stress experienced by teachers in those schools. Learner performance in a class test is regarded as a major contributor of stress for most respondents.

The greater proportion of respondents indicated that they experienced stress due to learners' performance in class tests. Class tests are a form of summative assessment for the learners and give an indication of how much a learner has learned during a

stipulated period. It is no surprise that teachers get stressed by learners' poor performance in class tests as they indicate the ultimate 'harvest' of their labour over a number of days or weeks. The stress experienced by teachers due to poor performance of learners in class tests makes such teachers to lack motivation and self-esteem, leading to an even further decline in the performance by the learners.

A significant proportion of respondents believed that their stress levels influenced learners' performance in class tests. Of note is the fact that a greater proportion of respondents felt that their stress levels influenced learners' performance in classwork, compared to class tests. It should be stated, however, that the cumulative effect of a teachers' impact during daily lessons determines learners' performance in class tests and ultimately, in their final examinations. This becomes stressful for teachers who are supposed to promote teaching and learning. Teaching learners while stressed usually has adverse effect on learner performance. When learners fail to achieve academically, even more stress ensues for the teacher concerned. A remark by one of the teachers interviewed illustrates this:

Teacher 4: Paperwork is too much, instead of us teaching, we are completing the documents and learners are left by themselves without being taught, at the end of the day we are expected to produce best results, what does that do to me as a teacher? I get stressed as some teachers from urban areas or those few selected schools with facilities get awarded at the end of the year. If I don't visit psychologists and doctors for assistance, my stress will affect learner academic performance.

Age of respondents was found to have a significant effect on causes of stress related to learner performance in class. Cross-tabulations reveal significant differences for the teachers of different ages in their rating of this item (Chi-Square = 33.945, p< 0.05; Cramer's V = 0.220). Those teachers who are 46 years and older significantly think that learners' performance in class tests creates a highly significant level of stress for them which they indicate has significant effect on learner academic performance.

4.3.3 Learners' group discussions and participation

Table 4.27 Shows learner participation in group discussions, which has effect on learner academic performance.

Table 4.27: Learner participation in group discussions

	Frequency	Percent
Extreme stress	31	17.7
Much stress	47	26.9
Moderate stress	22	12.6
Mild stress	32	18.3
No stress	43	24.6
Total	175	100.0

Table 4.27 shows that 75.4% respondents experienced some stress associated with learners' participation in group discussions, with 17.75 experiencing extreme stress and 26.9% much stress. To add, 24.6% reported no stress associated with learner participation in group discussions. When learners fail to participate during the lesson, they are more likely to lack participation in group discussions. Teachers are likely to be stressed by this lack of participation, as their immediate objective is to make sure that learners understand the lessons.

It should be noted that activities in the class are interlinked, starting from a show of interest during lessons, asking of questions by learners during lessons, and ultimately, participation and performance of learners in group activities. Surely, if a learner fails to grasp the concepts during the lesson, not much can be expected during group discussions or group presentations from such a learner. It, therefore, follows that if teacher stress affects one in a series of class activities, all the activities following thereafter also get affected.

4.3.4 Lack of participation of learners in the classroom

Table 4.28 shows distribution of respondents indicating that lack of participation of learners in the classroom as a source of stress for teachers which affect learner academic performance.

Table 4.28 Lack of participation of learners in the classroom

Level of stress	Frequency	Percent
Extreme stress	41	23.4
Much stress	36	20.6
Moderate stress	46	26.3
Mild stress	27	15.4
No stress	25	14.3
Total	175	100.0

Table 4.28 shows that 44% of respondents think that the stress they experience had a bearing on the participation of learners in the class during lessons. When learners are not participating, teachers get stressed because lack of participation may lead to poor performance, which may impact negatively on their teachers.

Stressed teachers may become emotional and end up being aggressive to learners, they may shout at them, beat them, and these learners may get threatened and confused. These results suggest that stressed teacher behaviour has a negative effect on learners and thus on learning. Learners' concentration and thinking skills may be affected. It is at this stage of the General Adaption Syndrome that the body suffers permanent damage and death may even ensue (Santrock, 2003).

4.3.5 Level of stress

Table 4.29 shows participants' level of stress they experience associated with how learners show interest in the lessons teachers offer which has effect on learner academic performance.

Table 4.29 Showing interest in the lessons teachers offer

	Frequency	Percent
Extreme stress	48	27.4
Much stress	52	29.7
Moderate stress	21	12.0
Mild stress	21	12.0
No stress	33	18.9
Total	175	100.0

Table 4.29 shows that more than three quarters (81.1%) of respondents found the way learners show interest during lessons quite stressful. Lessons are not all about subject content, but also about the emotion that goes with it. Teachers think that the level of stress they experience affects learners negatively. If learners do not show interest, teachers feel stressed and that affects their level of effective teaching which adversely affect learner academic performance. Teachers' experience of high level of stress has adverse effect on learner academic performance as they cannot deliver the lesson the way they do when not stressed (Johnson & Birkeland, 2003; Neves de Jesus & Lens, 2005; Stoeber & Rennert, 2015).

Considerable studies (Johnson & Birkeland 2003; Neves de Jesus & Lens, 2005; Stoeber & Rennert, 2015) indicate that a high degree of teacher stress affects learner academic performance; stressed teachers' state of well-being is negatively affected, and this has an adverse effect on their teaching skills. Poor delivery of a lesson leads to poor learner performance. Teachers with high efficacy tend to give room to new ideas and show interest in the use of new methods (Berman et al., 1977; Stein & Wang, 1988). Such flexibility by such teachers is logically to the benefit of the students concerned.

No matter the experience or qualification a teacher might have, learners are good at reading an emotional state and respond automatically to it, either through increased

or decreased level of interest in the lesson. Teachers' mental state may create an environment that is not conducive for learning. This has negative effect for the learning process and, ultimately, on learner academic performance.

Cross tabulation results showed that age has significant effect (p= 0.04) on the item "showing interest in what you are teaching during lessons"; those teachers aged 46 years and older significantly think that learners showing interest in what they are teaching during lessons creates significantly higher levels of stress for teachers which they indicate has significant effect on learner academic performance.

Age of respondents was found to have a significant effect on causes of stress related to 'showing interest in what you are teaching during lessons'. Cross-tabulations reveal significant differences for the teachers of different ages in their rating of this item (Chi-Square = 26.788, p< 0.05; Cramer's V = 0.196). Those teachers who are 46 years and older significantly think that learners' performance in class tests creates a highly significant level of stress for them which they indicate has significant effect on learner academic performance.

Teaching experience was found to have a significant effect (Chi-Square = 38.292, p< 0.05; Cramer's V = 0.234). on the item 'showing interest in what you are teaching during lessons'. Those teachers who have been teaching for teachers who have 21 years and more experience teaching in a rural school significantly think that the fact that issues related to learners showing interest in what they are teaching during lessons create for them a highly significant level of stress for them which they indicate has significant effect on learner academic performance.

4.3.6 Overall learner performance in group presentations

Table 4.30 Shows participants' level of stress they experience as a result of overall learner performance in group presentations which has effect on learner academic performance.

Table 4.30 Overall learner performance in group presentations

	Frequency	Percent
Extreme stress	32	18.3
Much stress	48	27.4
Moderate stress	23	13.1
Mild stress	34	19.4
No stress	38	21.7
Total	175	100.0

Table 4.30 shows that more than three quarters (78, 3%) of respondents experienced stress related to overall performance in group presentations, which they think affects learner academic performance. Beilock et al. (2010) indicated that teacher anxiety plays an important role in the reduction of learner performance, whereas Kunter et al. (2008) indicated that a less teacher exhaustion makes for more effective instruction and produces better learner results. Many environmental factors associated with teachers' occupational stress and, ultimately, to burnout appear in literature and include: lack of professional recognition, learner and teacher discipline problems in the classroom, diversity of tasks required, bureaucracy, lack of support, workload, interpersonal demands, time pressure, the amount of paperwork required and lack of resources provided (Pithers, 1995; Burke, Greenglass & Schwarzer, 1996; Chan, 1998).

Age of respondents was found to have a significant effect on causes of stress related to 'showing interest in what you are teaching during lessons'. Cross-tabulations (Chi-Square = 28.757, p< 0.05; Cramer's V = 0.203) reveal significant differences for the teachers of different ages in their rating of this item. Those teachers who are 46 years and older significantly think that learners' performance in class tests creates a highly significant level of stress for them which they indicate has significant effect on learner academic performance.

4.3.7 Learners completing their classwork

Table 4.31 Shows participants' level of stress they experience as a result of leaners completing their classwork which has an effect on learner academic performance

Table 4.31 Learners completing their classwork

	Frequency	Percent
Extreme stress	24	13.7
Much stress	22	12.6
Moderate stress	31	17.7
Mild stress	51	29.1
No stress	47	26.9
Total	175	100.0

According to Table 4.31 above, 73.1% of respondents experienced some stress associated with learners' completing their classwork while 13.7% experienced extreme stress, 12.6% much stress, and 17.7% moderate stress. To add, 26.9% of respondents reported no stress associated with learners completing their classwork. Learners were apparently failing to complete their classwork in the process.

The majority of respondents indicate that the stress they experienced affected the learner's ability to complete their classwork. Teachers are the best judges of their own performance. A teacher is able to tell a good day in class from a bad one, and can be expected to be able to tell how learners struggled to complete their classwork during days when he or she was stressed and ineffective in reading tuition in class.

Teachers get stressed by learners who do not complete their classwork because a classwork is given to learners to see how much they understood about the lesson, if needs be, the teacher has to teach the lesson again. Teachers get stressed because if learners do not complete their classwork, it may affect their academic performance.

Both the learners' completion of their classwork, as well as their overall performance in such classwork was a source of stress for a substantial proportion of respondents. Classwork is a reflection of the effectiveness of the teaching learning – process. When teaching loses its effectiveness, learners tend to lose their commitment to the lessons, resulting in poor completion of classwork, or accompanied by poor learner performance in such classwork. Loss of teaching effectiveness can be attributed to teacher stress, which tempers with the teacher-learner interaction in class. This is supported by findings which show that a significant proportion of respondents reported that they were convinced that the stress they experienced negatively influenced the learners' ability to either complete their classwork or to perform well in such classwork.

4.3.8 Learners asking questions during lessons

Table 4.32 shows participants' level of stress they experience as a result of learners asking questions during lessons, which has effect on learner academic performance

Table 4.32: Learners asking questions during lessons

	Frequency	Percent
To a great extent	22	12.6
To a less extent	15	8.6
Not sure	33	18.9
Not at all	36	20.6
No stress	69	39.4
Total	175	100.0

According to Table 4.32, 21.2% of respondents felt that the stress they experienced influenced to some extent the way learners asked questions during lessons. To add, 12.6% felt that such an influence was extreme whereas 8.6% felt that it was to a less extent. A substantial majority of respondents reported experiencing stress linked to learners asking questions during lessons. When learners ask questions, which are too difficult for the teacher to answer or irrelevant, that can be stressful to the teacher, thus impacting negatively on his or her teaching.

The results suggest that teachers get irritated when asked questions by learners such that they end up referring them to the text books for answers, learners even develop fear to ask questions even if they do not understand. Therefore, learners' academic performance is affected

Learner 1: Learners asking questions during lessons When we ask teachers questions, teachers ask us to open text books and tell us answers are in there. At times, teachers walk away and go to staff room. They tell us they are coming back but never come back. Teachers come to class looking sick. They sit and ask us not to increase their stress by asking questions, therefore we fear to ask questions if we don't understand as they answer anyhow. At times I fail because when we ask questions, we are not given proper answers, so we end up not knowing what to answer.

It is apparent that learners are never given chance to ask questions as they increase teachers' stress. Hence their reason for asking questions is because they don't understand. It is reasonable for them to fail because instead of them getting answers they do not because they fear to ask questions even if they don't understand. Teachers come to class looking sick and this proves they are stressed and if some issues are not clarified through questions, learners' academic performance can be affected.

Learner 2: Teachers come to class looking sick. They sit and ask us not to increase their stress by asking questions, therefore we fear to ask questions if we don't understand

Teachers who answer learners' questions anyhow may not give correct and relevant answers to the question, in other words they just answer for the sake of answering without giving learners proper answers that leads to learners getting confused as they may not know what to answer and that may affect learner academic performance.

Learner 3: When we ask teachers questions, they answer anyhow. At times teachers don't answer our questions. At times I fail because when we ask

questions, we are not given proper answers, so we end up not knowing what to answer.

Teachers are not ready to answer learners' questions as they tell them answers are in the text books. This happens maybe because they do not know the answers or understand the questions, or they get irritated and shout at the learners when asked questions as a result of stress and therefore it affects learner academic performance. The level of stress makes them unable to assist learners. Teachers feel more stressed when asked questions because they go to class already stressed and as a result their stress has effect on learner academic performance.

Teacher 1: I feel more stressed when questions are asked by learners because it add stress to me as a stressed teacher.

Teachers who are stressed may easily get angry and start to harass learners using improper language, pushing them away or send learners outside for no reason. Learners may happen to do funny staff in order to be sent away and if they are not taught, their academic performance can be affected.

Teacher 2: I feel angry and harass learners who ask questions, send them out but they do funny staff to be sent outside, I push them away, use improper language and end up not helping them.

The teachers feel embarrassed because they are asked questions they have no answers to and as a result they give learners no attention. This may happen when teachers teach subjects they were not trained for and that they have no knowledge of. These teachers end up getting stressed that leads to learner academic performance

Teacher 3: I feel embarrassed and don't give learners total attention as I know a little about the subject I am teaching.

Teachers get irritated when questions are asked for fun or teasing, but if the questions are subject matter related, they don't feel stressed. Once they get irritated, they then shout at the learners as a replacement of corporal punishment. These teachers end up not teaching these learners but talk to them instead and that affect learner academic performance.

Teacher 4: If questions are for fun or teasing, then I get irritated but there is no problem if questions are educative. Once I get irritated then I shout at the learners as a replacement of corporal punishment, I don't teach them, I just talk to them instead of teaching.

Teachers ignore learners who are misbehaving in class and just look at them because of stress. They don't bother if learners are following what they are teaching, listening or understanding what they are teaching, as long as they complete their pace setter and tracker, therefore learners' academic performance is affected.

Teacher 5: I ignore learners and just look at them without bothering if the child is listening or not, as long as I complete the pace setter and tracker.

Cross-tabulations reveal significant differences for the teachers based on their gender in their rating of this item (Chi-Square = 3.097, p< 0.05, Cramer's V =0,133). Females significantly that learners asking them questions during the lesson create significantly higher levels of stress for them which they indicate has significant effect on learner academic performance. Further, those teachers aged between 25 and 30 years significantly (Chi-Square = 3.097, p< 0.05, Cramer's V =0,133) think that learners asking them questions during the lesson create significantly higher levels of stress for them which they indicate has significant effect on learner academic performance.

4.4 Rank order of the teachers' stress coping strategies in rural secondary schools of Vhembe District.

These factors are strengthened through: giving social support to the teacher, enhanced professional development for teachers, getting enough rest, counselling, competition, meditation and exercise.

4.4.1 Teacher stress coping strategies in rural secondary schools

Table 4.33 shows teacher stress coping strategies in rural secondary schools that has effect on learner academic performance.

Table 4.33 Teacher stress coping strategies in rural secondary schools

Teacher stress coping strategies in rural						
secondary schools	Never	Rarely	Sometimes	Often	Always	Rank order
Coping with stress by getting enough rest		23	22	45	46	1
Coping with stress by seeking counselling		27	46	36	41	2
Coping with stress by avoiding competition		31	53	37	37	3
Coping with stress by taking medication		18	50	23	27	4
Coping with stress by doing exercises		31	67	25	24	5
Coping with stress by eating a balanced diet	69	36	33	15	22	6

4.4.1.1 Coping with stress and getting enough rest

Table 4.34 shows participants' level of stress they experience as a result of coping with stress and getting enough rest which has effect on learner academic performance

Table 4.34 shows that 44.0% of respondents ensured they have enough rest as a way of coping with stress, 14.3% indicating that they never use this strategy. This is in agreement with what Adedeji and Olaniyan (2011), showing that the quality of teaching

in the classroom is the most important school related factor in ensuring students' achievement. This makes sense since most of the respondents also take medication as a way of coping with stress and most of the medication taken to relieve one of stresses make one drowsy. Most of the respondents who use such medication would also find themselves getting some rest.

Table 4.34 Coping with stress and getting enough rest

	Frequency	Percent
Always	41	23.4
Often	36	20.6
Sometimes	46	26.3
Rarely	27	15.4
Never	25	14.3
Total	175	100.0

It is two concepts as revealed in literature, efficiency and resilience that would determine whether a teacher would be able to cope or not, when exposed to stressors, as they build the character of a teacher. These two factors are strengthened through: giving social support to the teacher, enhanced professional development for teachers, exercise, getting enough rest, religion and meditation.

4.4.1.2 Coping with stress by seeking counseling

Table 4.35 shows participants' level of stress they experience as a result of coping with stress by seeking counseling which has effect on learner academic performance. As reflected in this table, 28.0% of respondents indicated that they sought counseling either always or often in order to cope with stress. A significant 38.3% of respondents only sought counseling sometimes, whereas 16.0% never sought counseling.

Table 4.35 Coping with stress by seeking counseling

	Frequency	Percent
Always	24	13.7
Often	25	14.3
Sometimes	67	38.3
Rarely	31	17.7
Never	28	16.0
Total	175	100.0

Some causes of violence in schools are mentioned by Maree (2000) as: gang activities, the lack of transformation, learners carrying guns and smoking dagga, lack of counselling services, the intolerance of school management towards some groups, and parental apathy, and all have negative connotations on the teacher's mental well-being and would in all probabilities instill stress in the affected teacher.

Lack of counselling services, intolerance of school management towards some groups and parental apathy all have negative connotations on the teacher's mental well-being. These would reasonably instill stress in the affected teacher.

4.4.1.3 Coping with stress by avoiding competition

Table 4.36 presents participants' level of stress they experience as a result of coping with stress by avoiding competition which has effect on learner academic performance. These results show that 21.1% of respondents used this strategy either always or often in coping with stress by avoiding competition. A significant 30.3% used this strategy sometimes, whereas 9.7% never used it as a coping strategy.

Table 4.36 Coping with stress by avoiding competition.

	Frequencies	Frequency percentage
Always	37	21.1
Often	37	21.1
Sometimes	53	30.3
Rarely	31	17.7
Never	17	9.7
Total	175	100.0

Competition at whatever level is stressful. A stressed teacher who avoids competition with fellow colleagues, but concentrates on the delivery of tuition, should surely cope better in the stressful work environment. Danetta (2002) stated that teachers with limited commitment also have a limited number of plans to improve the academic quality of their instruction.

Findings revealed that only 28.6% of respondents used exercise either always or often to cope with stress. A further 28.6% used it sometimes, whereas 32.6 never use it to cope with stress. Regular exercise and not smoking are among the essential ingredients of a healthier lifestyle (Santrock, 2003).

Management of the organization should provide fitness facilities for the employees. This is because exercise is regarded as one of the best ways to reduce stress and improve emotional well-being (Kleynhans et al., 2006). This comes about as there has been observed release of stress by the body through physical exertion (Uma, 2011). Such fitness facilities can assist teachers in reducing their stress levels in the workplace.

4.4.1.4 Coping with stress by taking medication

Table 4.37 shows participants' level of stress they experience as a result of coping with stress by taking medication which has effect on learner academic performance.

Table 4.37 Coping with stress by taking medication

	Frequencies	Frequency percentage
Always	46	26.3
Often	45	25.7
Sometimes	22	12.6
Rarely	23	13.1
Never	39	22.3
Total	175	100.0

Table 4.37 shows that more than half the respondents (52.0%) indicated that they took medication either always or often in order to cope with stress while 12.6% indicated that they sometimes took medication to cope with stress, whereas 22.3% indicated that they never used medication in order to cope with stress. This is reasonable since most of the respondents also take medication as a way of coping with stress, and most of the medication taken to relieve one of stress makes one drowsy. Most of the respondents who use such medication would also find themselves getting some rest.

4.4.1.5 Coping with stress by doing exercise

Table 4.38 shows participants' level of stress they experience as a result of coping with stress by doing exercise, which has effect on learner academic performance.

Table 4.38 Coping with stress by doing exercise

	Frequencies	Frequency percentage
Always	27	15.4
Often	23	13.1
Sometimes	50	28.6
Rarely	18	10.3
Never	57	32.6
Total	175	100.0

Findings revealed that only 28.6% of respondents used exercise either always or often to cope with stress. A further 28.6% used it sometimes, whereas 32.6 never use it to cope with stress. Regular exercise and not smoking are among the essential ingredients of a healthier lifestyle (Santrock, 2003).

Management of the organization should provide fitness facilities for the employees. This is because exercise is regarded as one of the best ways to reduce stress and improve emotional well-being (Kleynhans et al., 2006). This comes about as there has been observed release of stress by the body through physical exertion (Uma, 2011). Such fitness facilities can assist teachers in reducing their stress levels in the workplace.

4.4.1.6 Coping with stress by eating a balanced diet

Table 4.39 shows participants' level of stress that they experience as a result of coping with stress by eating a balanced diet, which has an effect on learner academic performance.

Table 4.39 Coping with stress by eating a balanced diet

	Frequencies	Frequency percentage
Always	22	12.6
Often	15	8.6
Sometimes	33	18.9
Rarely	36	20.6
Never	69	39.4
Total	175	100.0

More than half (60.6%) the respondents reflect that eating a balanced diet made them cope with stress. Table 4.39 reflects that only 21.1% of respondents ate a balanced diet either always or often as a strategy to cope with stress. A significant 39.4%

indicated that they never ate a balanced diet to cope with stress, whereas 20.6% rarely used this strategy of coping with stress.

Beilock et al. (2010) indicated that teacher anxiety plays an important role in the reduction of learner performance, whereas Kunter et al. (2008) indicated that a lot of teacher exhaustion makes for more effective instruction and produces better learner results. Teachers who are stressed need to eat a balanced diet in order to cope with stress; that will help academic learners' performance to improve.

4.5 CONCLUSION

There were many sources of stress in rural schools which affected teachers in different ways. They raised stress level of teachers to an extent that it affected their teaching skills, teaching ability and teaching methods. The way teachers were affected by high stress level, it also affected learners' academic performance and as a result learner did not do well.

CHAPTER 5: SUMMARY OF RESULTS, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The aim of this study was to identify the effect of teacher stress on learner academic performance in rural secondary schools of Vhembe District. Schools with a pass rate of less than 60% over a five-year period were identified and teachers from the schools formed the sample. A literature review provided the theoretical foundation of the study. A questionnaire and interview schedule were used in collecting quantitative and qualitative data respectively. Data analysis was done, and results presented in Chapter 4. Chapter five gives the summary of findings, conclusions and recommendations pertaining to the study. the model developed guided by the results of this study is presented and explained in this chapter.

5.2 SUMMARY OF RESULTS

This section presents a summary of results in the study on the effects of the level of stress teachers experience which has effect on learner academic performance in rural secondary schools of Vhembe District.

5.2.1 The summary of the demographic factors in this study which were considered are presented.

Following is the summary of the demographic results for this study.

5.2.2 Gender, age, academic qualifications, experience, learner enrolment and teacher-learner ratio

The majority of our respondents were over the age of 40 years, the majority of whom were males. Most of the respondents had high qualifications to teach in secondary schools and had extensive experience as educators. High academic qualifications and experience can be expected to give any stressed teacher some confidence during stressful situations. A teacher who is a novice in the profession, and who is not well qualified, may find it hard to cope with the stressors experienced by teachers in these rural school environment as indicated in the study. The majority of teachers in the study had more than ten years-experience of teaching in a rural school. Learner enrolment and teacher-learner ratio in the majority of the schools was quite high.

5.2.3 Summary of results according to research questions.

This sub-section presents the summary of results showing how each research question was answered.

5.2.3.1 Major findings

Inadequate learners' discipline in the school

The majority of teachers found inadequate discipline in the school as a source of high levels of stress which they think has an effect on learner academic performance. It is reasonable that the high learner enrolment and teacher-learner ratios be a source of high stress levels since overcrowded classrooms can be a nightmare for teachers to control. When precious time that was supposed to be used for teaching, it instead gets wasted in ensuring that learners are disciplined. Teachers are no longer free to teach in classes as they do as learners say out of fear and that affects learners' performance. There seems to be a relationship between lower levels of job satisfaction and level of stress because teachers under-perform when unsatisfied with the job they do on a daily basis.

The participation in class during lessons

Respondents reported experiencing higher stress levels associated with the way learners participate in class during lessons which they think has effect on learner academic performance. A class environment which would most likely be created by a stressed teacher would restrict a possibility of active participation of learners during lessons. A number of respondents felt that their stress levels had an impact on the participation of learners during lessons.

• Teenage pregnancy

The majority of respondents indicated that teenage pregnancy was a source of high stress levels which they indicate has effect on learner academic performance. The high prevalence of teenage pregnancy in rural communities explains why teenage pregnancy a source of high stress levels for teachers in rural schools could be. Teachers and fellow learners normally get affected by teenage pregnancy, with negative implications on teaching and learning. A stressful school environment resulting from numerous teenage pregnancies can impair the confidence that a teacher has, thereby negatively affecting their ability to provide the learners with effective teaching.

• The government's education policies

The majority of respondents reported high levels of stress due to government's education policies. Most of the education policies in government are drawn based on an ideal situation. Such policies, however, get applied in situations in rural schools, which are far from ideal, giving stress to the teacher involved.

Lack of support from the principal

The findings reveal that a majority of respondents experienced high levels of stress associated to lack of support from the principal. The tension that builds up between the teachers and the principal creates an environment that is not conducive for proper teaching and learning to take place.

5.2.3.2 Research question 1 teacher perceptions about the effect of teacher stress on learner academic performance in rural secondary schools in vhembe district

Results show that the level of stress teachers experience as a result of each of the issues summarized below was high and they indicated that the level has effect on learner academic performance.

Learner absenteeism

Learner absenteeism was identified as a source of high level of stress for most respondents, the level of which they think has effect on learner academic performance. Learner absenteeism result in the loss of a day's lessons for the learner. For a teacher to offer catch-up lessons for all the lessons missed by learners who were absent on different days can be very tricky and impractical at times. In the end, learners are the ones who lose out as teaching may never be effective.

No essential services nearby, e.g. shops and banks

A substantial majority of respondents reported stress levels resulting from unavailability of essential services nearby. It is unfortunate that situations of learners

have a teacher solving a mathematical problem, while simultaneously trying to get a solution to a challenge of when they will get an opportunity to get to town to visit the bank or the supermarket. These situations affect the teacher's well-being and learner performance.

Involving employees in decision making

A majority of respondents reported stress associated with the issue of involving employees in decision making. Teachers would also like to see that their contribution in the team is treasured through involvement in decision making.

Dealing with late-coming learners

The majority of respondents indicated that dealing with late coming learners is a source of higher stress levels, which they think has effect on learner academic performance. Rural schools are usually linked with poor road infrastructure and unavailable or unaffordable public transport for learners. All these factors may contribute to the late-coming of the learners, which makes the teachers stressed, as some lessons might need to be repeated for the sake of the late-comers, thereby hampering progress of the teacher- learner process. This would add even more stress upon the teachers.

Having to teach a subject for which you are not trained

A majority of teachers experienced stress as a result of having to teach a subject for which they were not trained. Most subject specialists or experts are unwilling to teach in rural schools. This usually leaves teachers in rural schools characterized by abnormal teacher-learner ratios, filling up gaps that were supposed to be filled by such subject experts. The price for such a sacrifice is unfortunately paid by the learners,

who end up being taught by teachers who lack basic understanding of the subject. Their academic performance is adversely affected.

Lack of opportunity to participate in school decision-making

The fact that there was lack of opportunity to participate in school decision making was stressful for most respondents. When a teacher's voice is only given permission to educate the learners but silenced from raising issues of concern in the running of the affairs of the school, teachers would be treated like traffic lights that are expected to give out the right colour at the right time. Teachers think that this has effect on learner academic performance.

Difficulty in covering the syllabus in the time available

The majority of respondents reported an experience of stress linked to the difficulty in covering the syllabus in the time available. When a teacher is stressed, they may impact on rendering tuition with the aim of enhancing learners' performance, to covering the syllabus in time. In such cases, the quantity rather than the quality of lessons matters.

Principals' reluctance to make tough decisions

The majority of respondents reported high levels of stress as a result of the principals' reluctance to make tough decisions. Such a conviction can only aid the continuous build-up of tension between the teacher and the principal, thus impacting negatively on the performance of teachers in rendering tuition. It is quite unfortunate that when such a balance is placed on the principal, unfavourable departmental policies that guides the principals' actions are usually not brought to the picture.

Difficulty in motivating learners

The majority of teachers found difficulty in motivating learners to be a source of stress, which they indicate has effect on learner academic performance. Some learners may find motivation language by their teachers not acceptable as it is not reiterated by their illiterate parents at home. Such parents would go to an extent of encouraging their children to even miss school to earn some money for household use. The unilateral effort by the teachers to motivate such learners becomes a daunting task.

Lack of facilities

The majority of teachers indicated that the level of stress they experience as a result lack of facilities in rural schools has an effect on learner academic performance. However, an even higher proportion was expected, noting that most of the rural schools have limited facilities. Some teachers, especially those with extensive experience of teaching in rural schools, tend to overlook lack of facilities; this leads to the rendering of tuition that is below par, with resultant stress-provoking poor academic performance by learners.

Doing of homework by learners

A majority of respondents reported experiencing stress linked to the doing of homework by learners. The technical difference between classwork and homework is that homework is done in the absence of the teacher, who is otherwise present for classwork to give guidance and mentor. For most learners from rural schools, homework is a nightmare, since the majority of parents from rural communities are illiterate and not be able to assist their children with the homework. When a teacher realizes that homework was either not done or incorrectly done, he or she gets stressed, leading to failure of active engagement with the learners on the homework.

Some teachers in similar situations go to the extent of ignoring the 'undone' homework and move to a different lesson, thus leaving the learners poorly equipped.

Furthermore, only a minority of respondents felt that the stress they were experiencing had an effect on the doing of classwork by the learners. This means that the majority of the respondents felt that they were not responsible for the poor or non- performance pertaining to learners' homework. Homework is supposed to be an application of what has been taught in class, and the impact made by the teacher during lessons in class gets revealed in the homework.

Learner performance in class tests

The majority of teachers indicated that they experienced higher stress levels due to learners' performance in class tests which they think affects learner academic performance. Class tests are a form of summative assessment for the learners and give an indication of how much a learner has learned during a stipulated period. It is reasonable that teachers get stressed by learners' poor performance in class tests as they indicate the ultimate 'harvest' of their labour over a number of days or weeks.

A reasonable number of respondents indicated that their stress levels affected them, and they think it also affected learners' improvement as the year progressed. This implies a progressive rise in stress levels for most respondents as the year progressed, leading to a decline in their performance in rendering tuition and ultimately impacting negatively on learners' improvement as the year progressed.

• Learners' group discussions and participation

A majority of respondents reported stress levels associated with either learners' participation in group discussion or their overall performance in group presentations

which have effect on learner academic performance. It should be noted that activities in the class are interlinked, starting from a show of interest during lessons, asking of questions by learners during lessons, and ultimately, participation and performance of learners in group activities. Surely, if a learner fails to grasp the concepts during the lesson, not much can be expected during group discussions or group presentations from such a learner. It, therefore, follows that if teacher stress affects one in a series of class activities, all the activities following thereafter also get affected.

Learners' completion and overall performance in classwork

Both the learners' completion of their classwork, as well as their overall performance in such classwork was a source of stress for a substantial proportion of respondents. Classwork is a reflection of the effectiveness of the teaching learning-process. When teaching loses its effectiveness, learners tend to lose their commitment to the lessons, resulting in poor completion of classwork, or accompanied by poor learner performance in such classwork. Loss of teaching effectiveness can be attributed to teacher stress, which tempers with the teacher-learner interaction in class. This is supported by findings which show that some respondents reported that they were convinced that the stress they experienced negatively influenced the learners' ability to either complete their classwork, or to perform well in such classwork.

Learners asking questions during lessons

Teachers reported experiencing stress linked to learners asking of questions during lessons which they indicate has effect on learner academic performance. When learners ask questions which are too difficult for the teacher to answer, which may be a result of poor lesson preparation by a stressed teacher, when learners ask irrelevant questions which clearly show that they do not follow the lesson, or when they fail to ask any question, leaving the teacher guessing whether they understand or not, are some of the scenarios that can be stressful for the teacher, thus impacting negatively on his or her teaching.

The majority of teachers found the way learners show interest during lessons quite stressful, and that the stress level they experience as a result has an effect on learner academic performance. Lessons are not all about subject content but are about the emotion that goes with it. No matter the experience or qualification a teacher might have, learners are good at reading their emotional state and respond automatically to it, either through and increased or a decreased level of interest in the lesson.

The teachers, in a stressed mental state, may create an environment that is not welcoming or friendly towards the learners in the class. This has a negative effect for the learning process and ultimately on learner academic performance.

5.2.5 Research question 2: What are the effects of teacher stress on learner academic performance?

All sources of stress as discussed above caused high level of stress for teachers and this has been found to be having effect on learner academic performance in the rural schools of Vhembe District. Teachers did not do well, and this affected learners negatively.

- 5.2.6 Research question 3: What are some of the coping strategies used by teachers experiencing work-related stress?
- Coping with stress by getting enough rest

The majority of respondents indicated that they chose to get enough rest as a way of coping with stress. This is reasonable since most of the respondents also take medication as a way of coping with stress.

Coping with stress by seeking counseling

Findings revealed that seeking counseling was not a usual strategy of coping with stress by most of the respondents. Some people, when stressed, prefer to be alone and do not even want to discuss their stressors with other people. This is evident for most of the respondents, who would rather have their stress-relieving medication in their own private corners away from counselors to treat themselves.

Coping with stress by taking medication

A majority of respondents indicated that they opted for medication as a way of coping with stress. This is a clear sign that a human element in the form of support either from family, colleagues or even professional counselors may not be readily available to such stressed teachers.

Coping with stress by doing exercises

Findings revealed that regular exercise was not a preferred option by most the respondents in their endeavor to cope with stress. The management dilemma eventually leads most of the teachers in rural schools to be engaged in limited or no exercise at all as a coping strategy against stress, as most of them have to travel long distances on general roads to and from school and also drive long distances to towns for banking and shopping. It is thus no surprise that exercise was not a preferred strategy for coping with stress.

Coping with stress by eating a balanced diet

A significant proportion of respondents indicated that they never ate a balanced diet as a way of coping with stress. For people in rural communities, eating a balanced diet is a far-fetched practice, as most of them eat whatever they can lay their hands on for survival. Some of the teachers in rural schools come from such communities, whereas others have taught in rural schools for many years and end up failing to attach any value to a balanced diet.

This model is very relevant in an attempt to understand what might go wrong in the performance of a teacher who is placed at a rural school when the learners' performance is poor. Firstly, the teacher may view this as a stable or long-lived occurrence, which means that the teacher's perception is that the learners' performance shall continue to be poor for an indefinite period. Secondly, the teacher might view this as internal issue, meaning attributing the learners' poor performance on his or her failure as a teacher. The teacher would thus overlook all the other possible causes of poor learner performance and put all the blame on himself or herself. Thirdly, the teacher might view this as global, meaning that his or her failure as a teacher will not only affect the class that has shown signs of poor performance, but that all the other classes that he or she is teaching will also experience poor performance.

Stress has been criticized on the basis that it does not take into account individual differences, and that it brings down people from their complexity to a simple level of a machine. It also gives a logical explanation why some people suffer the effects of stress while others do not, under similar circumstances.

I agree with findings of fellow researchers on rural schools and intend to find a correlation between such challenges and stress experienced by teachers in rural schools. Such challenges are: teenage pregnancies, the needy/ hungry learner, violence, lack of next to essential facilities and discipline.

Intrinsic factors (pay scale jobs, job status, domestic problems, economic problems and job security) and extrinsic factors (physical resources, working conditions,

students' behaviour (Gu, 1999) administrative pressures and relationship with colleagues) have a strong effect on academic performance as compared to extrinsic factors. Lack of essential resources in rural schools like a library and a laboratory, for instance, hinders teachers in such schools from rendering effective teaching to learners. This can be expected to contribute to the build-up of stress amongst the teachers teaching in such schools.

5.3 CONCLUSIONS FROM THE RESULTS

The following conclusions were reached from the findings of this study:

- Most of the educators of rural schools have high qualifications and extensive experience with a potential for rendering quality education to learners.
- Teachers in rural schools are exposed to a variety of stresses that impact negatively on their performance as educators, and these have a negative effect on learner academic performance.
- There is an abnormally high learner enrolment and teacher-learner ratio in rural schools which are stressful for teachers, thereby retarding their effectiveness in the classroom. Learner academic performance is negatively affected when teachers are not performing optimally.
- There is a unilateral effort by teachers in fighting learner indiscipline and in motivating learners' academic performance, with no notable support from the parents. These efforts have adverse effects on learner academic performance as teacher end up focusing on discipline rather than promoting the quality of teaching and learning.
- There is generally a scarcity of essential facilities, in rural schools, which are necessary for effective teaching and learning and are a source of high stress

levels for teachers. When teachers experience high levels of stress, it has adverse effects on learner academic performance.

- The overall school environment in rural schools makes it difficult for teachers to cover the syllabus within the prescribed period contributing to high stress levels on them and has adverse effects on learner academic performance.
- Teenage pregnancy is considerably high in rural schools and is a source of considerable high stress levels for teachers who find it negatively affecting their morale. This impacts on their endevour to promote the quality of teaching and learning, thus negatively affecting learner academic performance.
- The governments' education policies were drawn with an ideal education system in mind, with unintended effects of making them a source of stress for teachers in rural schools, where the education system is far from being ideal. Teachers find it difficult to engage with these policies creating an unfavourable situation in the learning environment.
- Teachers in possession of specific expertise are not readily available in rural schools, leaving available teachers not qualified to teach some subjects to fill the posts of teaching subjects for which they were not trained. This creates stress levels for teachers who find themselves teaching subjects they have not been trained to teach, these conditions are not easy to cope with. Such stress levels endured by teachers affect learners' academic performance adversely.

5.4 RECOMMENDATIONS FOR FUTURE RESEARCH

The following recommendations are made for future research based on the findings of this study:

 Investigating the involvement of parents from rural community in maintenance of learner discipline that could serve as a way of addressing stress teachers experience in rural areas.

- Investigating how government education policies can be improved to reduce stress they induce on teachers in rural secondary schools.
- Finding out on whether giving teachers support can be a helpful strategy by the district in reducing the level of stress teacher in rural secondary schools experience
- Research on how department of health can assist department of education in reducing teenage learner pregnancy which has been identified as having adverse effects on learner academic performance in secondary schools.

5.5 IMPLICATIONS

My study discovered that teachers experience stress that has effect on learner academic performance. From my study I have recommended the following model on how to reduce stress while dealing with learner academic performance. The model depicted below is called Three Pillars Teacher Stress Coping Model.

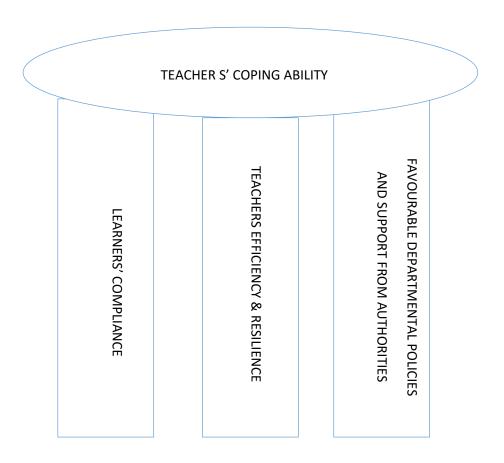


Figure 5. 2 Three Pillars Teacher Stress Coping Model

The model (Figure 5.2) shows that the teacher's ability to cope with stress levels they experience which affect learners' academic performance rests on the three pillars, namely: learners' compliance, teacher's efficiency and resilience and favourable departmental policies and support from authorities.

Explanation of the model

• Learners' compliance

Results showed that learners contribute high levels of stress to teachers. Factors which include late-coming by learners, learner absenteeism, learner indiscipline, violence and teenage pregnancy were found to be significant contributors of teacher stress. These factors are related to learners' none compliance with school rules that are meant to make the school environment favourable for promotion of quality teaching and learning. Involving the parents to ensure that learners who do not comply with the rules are brought back to tune is an essential initiative to ensure that 'learners' compliance' pillar is strengthened.

Teacher s' efficiency and resilience

There are two concepts as revealed in literature, efficiency and resilience that would determine whether a teacher would be able to cope or not, when exposed to stressors, as they build the character of a teacher. These two factors are strengthened through giving social support to the teacher, enhanced professional development for teachers, exercise, getting enough rest, religion and meditation. The 'Burger Teacher Stress Model' indicates that the stress flowing from above and that rising from below, both have adverse effects on the teacher's ability to promote teaching and learning. Using the imagination, the impact made on a teacher who can absorb pressures would be tested and should be found to be resistive. The teacher should be able to cope with

demanding situations though still being able to be efficient in order to be able to promote the quality of teaching and learning.

Favorable departmental policies and support from authorities

It was revealed in the study that the departmental policies and resource management strategies are sources of high stress levels for teachers. Departmental policies should therefore be drawn with a rural school also in mind, customizing them to suite rural needs, making them favorable for leaders to implement. The challenges experienced by teachers due to unfavorable departmental policies and management strategies would be reduced thereby contributing to the teacher's ability to promote the quality of teaching and learning.

5.6 CONCLUSION

Chapter 5 presented summary of results and made conclusions based on the results. This chapter concluded by suggesting a model that can be used by teachers to cope with stress so that they are able to teach learners and improve the quality of teaching and learning. The model has not been pilot tested which is recommended for further research to see if this model is applicable.

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APPENDIX A: QUESTIONNAIRE

TEACHER STRESS EFFECT ON LEARNER ACADEMIC PERFORMANCE QUESTIONNAIRE

Gender

Female	1
Male	2

Age

25-30 years	1
31-35 years	2
36-40 years	3
41-45 years	4
46 years and older	5

Your highest academic qualification

Standard 10 (Grade 12)	1
First degree	2
Bed or Honours Degree	3
Master's Degree	4
Doctoral Degree	5

Your experience as an educator

0-5 years	1
6-10 years	2
11-15 years	3
16-20Years	4
21 years or more	5

Your teaching experience in a rural school

0-5 years	1
6-10 years	2
11-15 years	3
16-20 years	4
21 years and more	5

Learner enrolment

Below 300	1
300-600	2
601-900	3
901- and more	4

Teacher learner ratio

1:90 and above	1
Between 1:90 and 1:80	2
Between 1:70 and 1:80	3
Between 1:60 and 1:70	4

The following questions require you to indicate whether the level of teacher stress you experience caused by each of the following issues would have effect on learner academic performance. Please, answer all questions by making a cross (X) in the appropriate numbered block what applies to you.

Causes of stress and learner academic performance	Extreme stress	Much stress	Moderate stress	Mild stress	No stress
Difficulty in motivating learners	1	2	3	4	5
Dealing with late coming learners	1	2	3	4	5
Verbal abuse by learners	1	2	3	4	5
Learner absenteeism	1	2	3	4	5
Inadequate discipline in the school	1	2	3	4	5
Teenage pregnancy		2	3	4	5
Lack of facilities		2	3	4	5
The government's education policies		2	3	4	5
No essential services nearby e. g. Shops and banks		2	3	4	5
Difficulty in covering the syllabus in the time available		2	3	4	5
Lack of support from the principal	1	2	3	4	5
Principal's reluctance to make tough decisions		2	3	4	5
Lack of opportunity to participate in school decision making		2	3	4	5
Having to teach a subject for which you are not trained		2	3	4	5
Involving employees in decision making	1	2	3	4	5

In each of the following statements, indicate, by making a mark in the appropriate block what applies to you regarding the extent to which your experience of stress may affect each of the following regarding the academic performance of the learners you teach or interact with.

Experience of stress and learner academic performance	To a great extent	To a less extent	Not aware	Not at all	No stress and effect
Learner completing their classwork	1	2	3	4	5
Overall performance in classwork	1	2	3	4	5
Doing of homework by learners	1	2	3	4	5
Showing interest in what you are teaching during lessons	1	2	3	4	5
Learners asking you questions during the lesson	1	2	3	4	5
Participation in class when the lesson is on	1	2	3	4	5
Learner participation in group discussions	1	2	3	4	5
Overall learner performance in group presentations	1	2	3	4	5
Learner performance in class tests	1	2	3	4	5
Learners' improvement as year progresses	1	2	3	4	5

Research question 3: What are some of the coping strategies used by teachers experiencing work-related stress?

Coping strategies	Always	Often	Sometimes	Rarely	Never
Taking medication	1	2	3	4	5
Doing exercises	1	2	3	4	5
Seeking counselling	1	2	3	4	5
Eating a balanced diet	1	2	3	4	5
Getting enough rest	1	2	3	4	5
Avoiding competition	1	2	3	4	5

APPENDIX B: LEARNER'S INTERVIEW SCHEDULE

I am going to ask you the following questions based on what you have experienced in class and its going to be about your teachers and your academic performance.

1.	Are you at times taught by teachers who look stressed, angry, bored of tired?
2.	Do you recall a situation where teachers who looked stressed, fatigued bored or angry behaved in class?
3.	How do they behave?
4.	What do they do to you as learners when they seem to be stressed angry, bored or fatigued?
5.	Does that affect your academic performance?
6.	How does it affect your academic performance?

7. What do you think should be done to remedy the situation?

APPENDIX C: REQUEST FOR PERMISSION

P.O BOX 134

Sibasa

0970

18 July 2016

The District Director: Vhembe

.......

Private Bag X5050

Sibasa

0970

Dear Sir/ Madam

I am studying at the University of Zululand. My project title is "Impact of teacher stress on learner academic performance in rural schools of Vhembe district".

I would be most grateful if you could help me with this part of my research project by completing the inventory.

I assure you that the survey is anonymous and designed mainly to obtain an overall statistical picture.

In anticipation, please accept my sincere appreciation for you for your willingness to assist me.

Yours sincerely

Israel Creleanor Mulaudzi

082 799 4927

APPENDIX D: PERMISSION FROM DISTRICT



EDUCATION

CONFIDENTIALITY

REF: 14/7/R

ENG: MATIBE M.S TEL: 015 962 1029

MULAUDZI I.C P.O. BOX 134 SIBASA 0970

DEPARTMENT OF EDUCATION VHEMBE DISTRICT = 2016 **-**09- 2 6 PRIVATE BAG X 2250 SIBASA 0970 TEL: 015 962 1313/4 FAX: 015 962 6039 LIMPOPO PROVINCE

APPLICATION FOR PERMISSION TO CONDUCT RESEARCH IN THE SCHOOLS

- 1. The above matter refers.
- 2. You are hereby informed that your request for permission to conduct research titled, Impact of teacher stress on learner academic performance in rural schools of Vhembe district has been granted.
- 3. We appreciate your commitment to ensure confidentiality, anonymity and voluntary participation by research subjects.
- 4. Kindly inform circuit managers and principals of selected schools prior to commencing your data collection.
- 5. Wishing you the best in your study.

DISTRICT DIRECTOR

Thohoyandou Government Building, Old Parliament, Block D, Private Bag X2250, SIBASA, 0970 Tel: (015) 962 1313 or (015) 962 1331, Fax: (015) 962 6039 or (015) 962 2288

Application for permission to conduct research in the schools

Page 1

APPENDIX E: ETHICAL CLEARANCE

UNIVERSITY OF ZULULAND RESEARCH ETHICS COMMITTEE

(Reg No: UZREC 171110-030)



RESEARCH & INNOVATION

Website: http://www.unizulu.ac.za Private Bag X1001 KwaDlangezwa 3886 Tel: 035 902 6887

Fax: 035 902 6222 Email: MangeleS@unizulu.ac.za

ETHICAL CLEARANCE CERTIFICATE

Certificate Number	UZREC 171110-030 PGD 2016/144				
Project Title	Effects of teacher stress on learner academic performance in rur secondary schools in Vhembe District				rformance in rural
Principal Researcher/ Investigator	IC Mulaudzi				
Supervisor and Co- supervisor	Prof MM Hlongwane		Prof AP Kutame		
Department	Educational Psychology & Special Education				
Nature of Project	Honours/4 th Year	Master's	Doctoral	x	Departmental

The University of Zululand's Research Ethics Committee (UZREC) hereby gives ethical approval in respect of the undertakings contained in the above-mentioned project proposal and the documents listed on page 2 of this Certificate.

Special conditions:

- (1) This certificate is valid for 3 years from the date of issue.
- (2) Principal researcher must provide an annual report to the UZREC in the prescribed format [due date-31 August 2017]
- (3) Principal researcher must submit a report at the end of project in respect of ethical compliance.

The Researcher may therefore commence with the research as from the date of this Certificate, using the reference number indicated above, but may not conduct any data collection using research instruments that are yet to be approved.

Please note that the UZREC must be informed immediately of

- Any material change in the conditions or undertakings mentioned in the documents that were presented to the UZREC
- Any material breaches of ethical undertakings or events that impact upon the ethical conduct of the research

IC Mulaudzi - PGD 2016/144

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Classification:

Data collection	Animals	Human Health	Children	Vulnerable pp.	Other
Χ					
Low Risk		Medium Risk		High Risk	
			K		

The table below indicates which documents the UZREC considered in granting this Certificate and which documents, if any, still require ethical clearance. (Please note that this is not a closed list and should new instruments be developed, these would require approval.)

Documents	Considered	To be submitted	Not required
Faculty Research Ethics Committee recommendation	Х		
Animal Research Ethics Committee recommendation			X
Health Research Ethics Committee recommendation			X
Ethical clearance application form	Х		
Project registration proposal	Х		
Informed consent from participants	Х		
Informed consent from parent/guardian			Х
Permission for access to sites/information/participants	Х		
Permission to use documents/copyright clearance			Х
Data collection/survey instrument/questionnaire	Х		X
Data collection instrument in appropriate language		Only if necessary	
Other data collection instruments		Only if used	

The UZREC retains the right to

- · Withdraw or amend this Certificate if
 - o Any unethical principles or practices are revealed or suspected
 - o Relevant information has been withheld or misrepresented
 - o Regulatory changes of whatsoever nature so require
 - o The conditions contained in this Certificate have not been adhered to
- Request access to any information or data at any time during the course or after completion of the project

The UZREC wishes the researcher well in conducting the research

Professor Gideon De Wet

Chairperson: University Research Ethics Committee

Deputy Vice-Chancellor: Research & Innovation 21 November 2016

Goe wet

IC Mulaudzi - PGM 2016/144

CHAIRPERSON
UNIVERSITY OF ZULULAND RESEARCH
ETHICS COMMITTEE (UZREC)
REG NO: UZREC 171110-30

2 1 -11- 2016

RESEARCH & INNOVATION OFFICE

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APPENDIX F: VHEMBE DISTRICT MAP

VHEMBE DISTRICT



<u>APPENDIX G: PARTICIPANT INFORMED CONSENT DECLARATION</u>

INFORMED CONSENT DECLARATION

(Participant)

<u>Project Title</u>: Effect of teacher stress on learner academic performance in rural secondary schools in Vhembe district (Israel Creleanor Mulaudzi) *from* the Department of **Educational Psychology**, University of Zululand has requested my permission to participate in the above-mentioned research project.

The nature and the purpose of the research project, and of this informed consent declaration have been explained to me in a language that I understand.

I am aware that:

- The purpose of the research project is to investigate the t Effect of teacher stress on learner academic performance in rural secondary schools in Vhembe district.
- 2. The University of Zululand has given ethical clearance to this research project and I have seen/ may request to see the clearance certificate.
 - By participating in this research project I will be contributing towards on how teachers in rural areas, who experience some level of stress, can be assisted to reduce the stress levels; on how the stress levels that teachers in rural areas experience, has effect on learner academic performance; and regarding the debates on the extent to which stress amongst teachers in rural schools is critical in relation to promotion of quality teaching and learning.

- I will participate in the project by Completing a questionnaire and by answering oral questions during interview where the interview will be recorded by means of a data recorder.
- 4. My participation is entirely voluntary and should I at any stage wish to withdraw from participating further, I may do so without any negative consequences.
- 5. I will not be compensated for participating in the research, but my out-of-pocket expenses will be reimbursed.
- 6. There may be risks associated with my participation in the project. I am aware that
 - a. the following risks are associated with my participation: (issues of confidentiality)..
 - b. the following steps have been taken to prevent the risks: No name will be written on the questionnaire.
 - c. there is a 0% chance of the risk materialising
- 7. The researcher intends publishing the research results in the form of **journal articles**. However, confidentiality and anonymity of records will be maintained and that my name and identity will not be revealed to anyone who has not been involved in the conduct of the research.
- 8. I will receive feedback in the form of results regarding the results obtained during the study.
- 9. Any further questions that I might have concerning the research or my participation will be answered by Israel Creleanor Mulaudzi (0827994927.
- 10. By signing this informed consent declaration I am not waiving any legal claims, rights or remedies.

11.	A copy of this informed consent declarate will be kept on record.	ion will be given to me, and the original
l,		have read the
above	e information / confirm that the above info	rmation has been explained to me in a
langu	age that I understand and I am aware of t	his document's contents. I have asked
all que	estions that I wished to ask and these hav	ve been answered to my satisfaction. I
fully u	nderstand what is expected of me during	the research.
I have	e not been pressurised in any way and I	voluntarily agree to participate in the
above	e-mentioned project.	
raruc	cipant's signature	Date

APPENDIX H: EDITOR'S LETTER

23 Elfin Glen Road, Nahoon Valley Heights, East London, 5200



To whom it may concern:

This document certifies that the PhD thesis whose title appears below has been edited for proper English language, grammar, punctuation, spelling, and overall style by Rose Masha, a member of the Professional Editors' Group whose qualifications are listed in the footer of this certificate.

Title:

EFFECT OF TEACHER STRESS ON LEARNER ACADEMIC PERFORMANCE IN RURAL SECONDARY SCHOOLS IN VHEMBE DISTRICT

Author:

ISRAEL CRELEANOR MULAUDZI

Date Edited:

08 January 2018

Signed

Dr. Rose Masha

B. Library & Inf. Sc.; HDE; Hons. ELT; M. Phil. Hyll.; PhD Ed.