

**TEACHER STRESS FACTORS IN THE METROPOLE NORTH,
CIRCUIT 6 OF THE WESTERN CAPE, SOUTH AFRICA**



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A minithesis submitted in partial fulfilment of the requirements for the degree of Magister
Educationist, University of the Western Cape

Supervisor: Prof Olaniyi Bujowoye

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It is indeed a pleasure to thank my supervisor, Prof O Bojuwoye. Thank you for your support, guidance and warmth. You really pushed me to the limit.

To all the primary school principals and educators in the Metropole North Circuit 6, thank you for assisting me in this study. I wish to thank all the staff at the various primary schools who participated in this study for affording me their time and sharing their experiences.



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DEDICATION

I dedicate this project to my wife, Juanita. Thank you for your unconditional support throughout this study. I would also like to thank my children Petrusché, Peter-John and Anneke. I hope this achievement would encourage you to greater things.



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DECLARATION

I declare that *Teacher stress factors in the Metropole North, Circuit 6 of the Western Cape, South Africa* is my own work, that it has not been submitted before for any examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged as complete references.

Peter John Steenkamp

September 2013



Signed: _____

P. Steenkamp

Teacher stress factors in the Metropole North, Circuit 6 of the Western Cape, South Africa

Peter John Steenkamp

Key words

Teachers

Stress factors

Occupational stress

Workload

Teaching profession

Condition of service



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TEACHER STRESS FACTORS IN THE METROPOLE NORTH, CIRCUIT 6 OF THE WESTERN CAPE, SOUTH AFRICA.

ABSTRACT

The aim of this study was to investigate the experiences of stress by teachers in the Metropole North, Circuit 6 of the Western Cape, South Africa. The study investigated factors causing teachers to experience stress as well as the levels or extent of their stress, to determine whether teacher stress due to learners, conditions of service, workload, resources for teaching and school-community relations could explain the variance in total stress experienced by teachers and to determine if there is no statistically significant difference in sources of stress based on the biographical variables (age, gender, marital status and tenure) amongst educators in primary schools.

A quantitative approach was utilized. Non-probability random sample of 79 teachers was employed based on their marital status, gender, and age. Biographical and Occupational Stress Inventory Revised (OSI-R) Questionnaire were administered to teachers in schools in the Metropole North region of the Western Cape.

The results indicate that there are significant differences in the factors that cause teachers to experience stress based on age, gender, marital status, and tenure. While there are limitations with respect to the size of the sample involved in this study, some useful insights, which necessitate attention, have been highlighted. Recommendation for teachers to cope with their stress in this study entails that the selection and recruitment of teachers must be improved, the development of staff must take place, conflicts within schools must be managed and stress amongst teachers must be controlled.

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LIST OF ACCRONYMS, TABLES AND FIGURES

Accronyms:

- OBE – Outcome Based Education
RNCS – Revised National Curriculum Statements
IEU – Independent Education Union
NAHT – National Association of Head Teachers
OSI-R – Occupational Stress Inventory Revised

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CHAPTER ONE

INTRODUCTION

1. Background to the study

The South African educational system is in a transitional stage. The government felt that the previous education system enhances apartheid especially the curriculum in subjects such as history. South Africa became a new state after the 1994 democratic elections, and the need to change the education system formed part of the change. The result was the Outcomes Based Education (OBE) approach which had an impact on the stress experienced by teachers. OBE is a philosophy towards learning and teaching that is learner-centered and is based on the understanding that all learners can master the curriculum. An outcomes-based system is a system of education that can accommodate all learners, including learners who experience barriers to learning and learners who are regarded as gifted. According to the Revised National Curriculum Statements (RNCS), OBE forms the foundation of the curriculum in South Africa. It strives to enable all learners to achieve to their maximum ability (RNCS, 2002:1). Evidence from an in-depth investigation in schools during a pilot by Education Labour Relations Council (2005) has shown that educators felt their workload had grown due to OBE. Primary school educators said they spent most of their time on assessment and often had to find extra time to complete assessments. Educators observed during the pilot study reported that assessment and record keeping had increased as well as the number of policy documents they were required to read and process. There is also a lot of administrative work associated with assessment because it requires analyzing year and test marks, letters and phone calls to parents and educator decisions. There is, therefore, not enough time to fulfill teaching objectives and cover the syllabus because of administration. Educators felt being placed under extreme pressure and, therefore, are experiencing stress.

Another aspect of stress experienced by teachers, in South Africa, in their workplace is the introduction of inclusive education. Apartheid created the South African context of, inequalities and economic deprivation which have had a significant impact on the provision of education for learners traditionally seen as having special education needs (National Department of Education, 2001). Poorer schools do not have the resources or the manpower to facilitate inclusive education which in return leads to frustration and stress for the ill equipped teachers in the poorer schools. Therefore teacher stress has also been related to changes in education policy amendments, most notably Inclusive Education. This has required the inclusion of learners with special needs or learners needing remedial attention, into mainstream schools without the necessary skills being imparted to teachers to enable them to deal with the challenges posed by this approach. Indeed, Engelbrecht, Swart, & Eloff, (2001) found in their qualitative research that amongst their sample of teachers from the Western Cape and Gauteng, teachers' experience of inclusive education is very limited. They conclude that the separate general and special education programmes in teacher education have not provided teachers with the necessary training and experience for the necessary skills and dispositions to handle diversity (Engelbrecht et al, 2001). Pausse (2005) found that there has been an increase in the variation and challenges faced by teachers in mainstream schools, and that research indicates that the casual factors of stress include role overload, poor learner behavior, lack of resources, the number of individuals for whom teachers are responsible, diversity in individuals with whom they have to work, resistance and the lack of motivation of co-workers. Saptoe (2000) also asserted that lack of discipline in schools, abolishment of corporal punishment, unmotivated learners, redeployment, and the threat of retrenchments and or retirement, large pupil-teacher ratios and a new curriculum approach all contribute to making teachers to experience stress.

In a workplace environment of teachers as described above, Williams and Gersch (2004) note the increasing recognition of the link between mental and physical health and occupational stress. In particular, Hayward (1994) is of the view that education policy changes probably cause even more stress as they impact on the basic occupational structure of teaching. Ngidi and Sibaya (2002) maintain that radical changes in the education system are apt to take their toll on the well-being of the teacher corps as changes in social life and school practice brings about serious psychological adjustment problems. Consequently teachers may feel threatened by these new demands, thus becoming stressed.

2. Statement of the Study Problem

Van Zyl and Pietersen (1999) found that South African education is undergoing significant evolution because of political changes in the country, and that teachers have to adapt to the new reality. This adaptation to the changes in educational system is what is likely to cause teachers stress and strain. Therefore, the concern of the study was to investigate, what teachers in Metropole North District of Western Cape consider as factors causing them to experience stress in their workplace. Understanding what factors are causing teachers to experience stress will go a long way to prepare them to cope and function effectively in schools. Understanding what are causing teachers to experience stress can also go a long way to assisting learners to learn better and succeed at school and later in life.

The study was also designed to investigate whether or not the experiences of stress by teachers are different for different categories of teachers. The study investigated whether or not male and female teachers and teachers of different age groups and marital statuses experience stress differently.

3. Statement of purpose for the study

- The major aim of the study was to find out factors which caused teachers, of Metropole North District of Western Cape, to experience stress in their work places and the levels of stress being experienced by them.
- To determine if there is no statistically significant difference in sources of stress based on the biographical variables (age, gender, marital status and tenure) amongst educators in primary schools.
- To determine whether teacher stress due to learners, conditions of service, workload, resources for teaching and school-community relations explain the variance in total stress experienced by teachers in the Metropole North of the Western Cape.



4. Research Questions

1. What factors do teachers consider as causing them to experience stress in their work places and the levels of stress being experience by them?
2. Are there any statistically significant difference in sources of stress based on the biographical variables (age, gender, marital status and tenure) amongst educators in primary schools?
3. Does teacher stress due to learners, conditions of service, workload, and resources for teaching and school-community relations explain the variance in total stress experienced by teachers in the Metropole North of the Western Cape.?

5. Rationale for the study

The South African education system went through a lot of changes during recent years as a result of internal and external factors from within the education system. The researcher has been a teacher for the last twenty three years in the Cape Flats area of the Western Cape, South Africa. The researcher has therefore experienced a number of changes in the Education system which some were good for teacher morale and the education climate, but most of the changes had negative effects on the researcher and his fellow colleagues. From observation of teachers in the researcher's own school, and other schools in the surroundings, the impact of the changes is more apparent in the amount of stress experience by teachers. The experiences of stress affect the morale of teachers as these are manifested in the problems they experience with coping with their workload and assisting learners to learn and succeed in their academic work. The consequences of the experience of stress are manifested in physical illness, absenteeism, attrition and high turnover rate. The fact that the Department of Education feels unconcerned about the experiences of stress by teachers further compound the situation as provisions are not being made to address the problem and the teachers to perform their work effectively so that the educational objectives of the Western Cape can be achieved. The concern felt by the researcher has led to carrying out this study with a view to providing information for creating an awareness of the experiences of stress by teachers and also a good understanding of the factors causing teachers to experience stress in their schools. The experiences of stress by teachers are causing a lot of problem for educational system. Already research has revealed that 20,626 educators of public schools in the nine provinces of South Africa, approximately 5.5%, considered leaving their teaching profession because of the intense stress they experienced (HSRC/ELRC, 2005). Losing such a large number of teachers can mean the collapse of the country's education system. Therefore it was important

to investigate what may be causing teachers to experience stress in order to protect the nation's education system from collapse.

6. Significance of the study

This study investigated the sources of teacher stress amongst a sample of teachers in a selected region in the Western Cape, South Africa and whether gender, age, marital status or any other variables are factors in the different sources of stress experience by the participants. The researcher's intention was to assist and make known all the different sources of stress as experience by teachers and whether biographical factors play a role in it. Knowledge and awareness of experiences of stress by teachers would go a long way to improve the plight of all teachers. Such knowledge could lead to policy formulation as to how best to address those factors causing teachers to experience stress so that the teachers can be freed from stress and be capable of performing to their optimum level. If teachers are rid of their experiences of stress the learners will succeed at school and later in life and they will be able to contribute meaningfully to their nation's economy. Effort at providing information which could lead to alleviating teachers' experiences of stress in schools, as this study attempted to do, certainly made it very significant.

7. Brief overview of the methodology of research employed in this study

Quantitative research design was adapted for the study with questionnaire method used to collect information. The responses to the questionnaire questions and or statements were coded to yield quantified information for the study.

All teachers in the primary schools of Metro pole North District of Western Cape comprised the population of the study. Two hundred of these were selected for the study, although only 78 (39%) returned properly completed questionnaire forms.

Ethical clearance for the study was obtained from the University and the Western Cape Education Department. Permission of the schools' authorities involved in the study was also sought. Participants of the study participated voluntarily and they signed informed consent forms before participation.

8. Definition of Terms

8.1 Stress

Greenberg and Baron (2000) surmise that stress is the complex pattern of emotional states, physiological reactions and related thoughts in response to external demands referred to as stressors. Arnold, Cooper and Robertson (1998) state that stress is any force that pushes a psychological or physical factor beyond its range of stability and produces a strain within the individual, and when the knowledge that a stress is likely to occur represents a threat to the individual, or causes a strain on the individual. These two sets of definitions of stress were adopted for the purpose of this study.

8.2 Stress factors: Stress factors in this study referred to events such as marriage, gender and age that could cause teachers to experience stress at work.

8.3 Job Stress: Job stress in this study refers to job overload which means that a new employee is given too much work to do, while qualitative job overload means the job is too difficult for the person to do and results in job stress (Crafford, Moerdyk, Nel, O'Neil & Southey 2006).

8.4 Teacher: Pedagogically speaking, a teacher is seen as a professional person or adult who intervenes in the life of a child in order to instil in the child values, norms and knowledge-scientific or experiential-via certain didactic method (Du Plooy & Kilian, 1984). For the

purpose of this study, therefore, teachers referred to the adults trained and placed in the schools involved in the study to impact knowledge and values on learners.

9. Overview of the Study

The research reports have been organized into the following chapters

Chapter One

This chapter provides an overview of the background to the study including the statement of the study problem, aims and objectives, hypotheses and research questions as well as the motivation for the rationale and the significance of the study.

Chapter Two

This chapter presents the literature review discussions including the conceptual and theoretical frame works as well as the review of previous studies related to the current study. The chapter explores the concept of stress and teacher stress including the theories underlying experiences of stress as well as research findings related to the experiences of stress.

Chapter Three

In this chapter the methodology adopted for the study is presented including descriptions of the research design, the population and sample as well as the data gathering instrument used for the study.

Chapter Four

This chapter presents the results gained from the data analysis and the findings obtained in the study of teacher stress at primary schools of the Western Cape.

Chapter Five

In this chapter a discussion of the results of the study is provided. Explanations as to the interpretations of the results, the summary and the conclusion drawn from the study as well as recommendations for future research are also provided.

10. Summary of the Chapter

This chapter served to contextualize the research and presented the aims, objectives and hypothesis of the study. The next chapter of this research report presents related literature review discussions.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the conceptual understandings of the main focus of this study – that is experiences of stress and factors associated with the experiences of stress especially by teachers in Metropole North Circuit District of the Western Cape. The chapter also discusses the theoretical underpinnings of the study by presenting a review of the theories underlying the experiences of stress in terms of why and how people experience stress. Also featuring in this chapter is the review of previous studies on stress with a view to identifying gaps in the literature which the study filled.



2.2 Conceptual Framework

This section presents discussion on the meanings of stress, manifestations of stress, factors responsible for or causes of stress and the consequences of stress.

2.2.1 Stress

Stress had been defined in many ways but in general it is recognized as a bad state which is said to occur when there have been long lasting, increased or new pressures that are significantly greater than the coping resource (Dunham, 1992 cited in Paulse, 2005).

According to Dollard (2002) stress can be regarded as environmental circumstances making a person to experience discomfort. An external source of pressure or what is causing a person to experience stress is referred to as stressor.

Stress is not only defined in terms of the pressure placed on a person. According to Elliot (1995) stress occurs when there is an imbalance between demands and response capabilities

of the organism. Greenberg and Baron (2000) surmise that stress is the complex pattern of emotional states, physiological reactions and related thoughts in response to external demands referred to as stressors. Arnold, Cooper and Robertson (1998) also define stress as any force that pushes a psychological or physical factor beyond its range of stability and produces a strain within the individual, and when the knowledge that a stress is likely to occur represents a threat to the individual, or causes a strain on the individual.

2.2.2. Causes of Stress

According to Cartwright and Cooper, (1997) major sources or causes of stress in the work places can be clustered into six categories. These sources of stress are related to factors inherent in the nature of job, employee's role, work relations, career advancement, structure and climate of the organisation as well as factors outside the work set-up. Figure 1.2 below presents an overview of the dynamics of stress in terms of sources of stress, symptoms and disease manifestation.

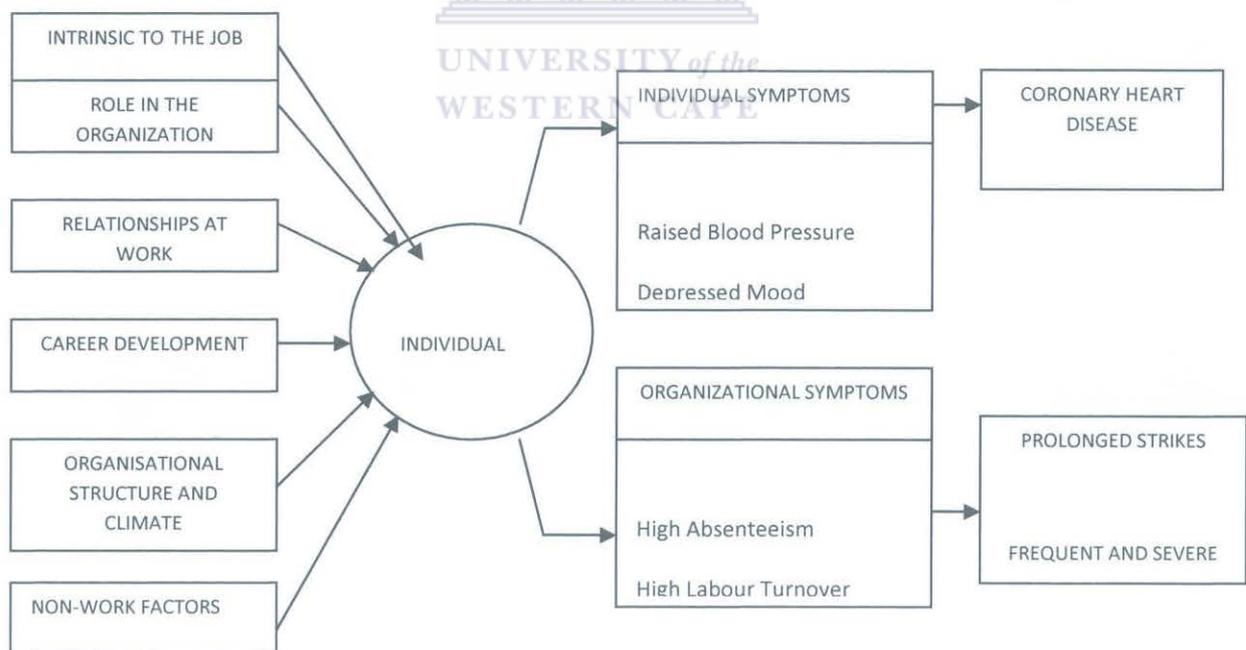


Figure 1.2 Dynamics of stress (Source: Cartwright and Cooper (1997)).

2.2.3 Stress intrinsic to the job

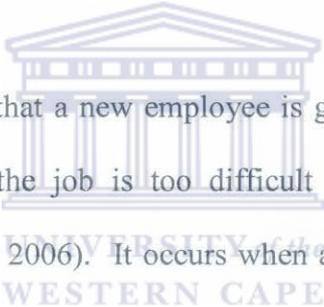
Greenhaus, Callanan and Godshalk (2000) state that job stress results when an individual is confronted by an opportunity, a constraint, or a demand, of which the outcome is uncertain, but for which a particular reaction is required, and hence, aroused only if the outcome of the stimulus is deemed important to the individual. Greenhaus et al. explain further that job stress can be produced. Arnold, Cooper and Robertson (1998) argue that factors intrinsic to the job, like working conditions, shift work, working long hours, the risk and danger involved with the work, new technology, work overload, work under-load, and the factors that stem from the individuals role within the organization like role ambiguity, role conflict, personality variables, responsibility at work, and the quality of relationships at work, all contribute to stress.



Greenberg and Baron (2000) list work-related causes of stress to be the occupational demands inherent to the type of work, conflict between work and non-work demands (called role conflict), uncertainty about what is expected (referred to as role ambiguity), being overloaded with work, being under-loaded with work, the lack of social support and sexual harassment. Miner (1992) suggests that external sources of stress are role conflict, role ambiguity, rotating shift work and sick organizations (which are organizations with high stress levels) and with individuals that experience high frequencies of headaches, faintness, nausea and illness.

Due to changes in educational system teachers' work is becoming more complex and demanding. The roles of teachers are not easily defined and the variables that come into play are growing more complex (Greenberg, 1984). Teachers are required to cope with demands such as rationalisation of personnel, increased specialisation, the growing scope of syllabuses and higher

number of learners per class (Niehaus, Myburgh & Kok, 1996). In South Africa the following factors contribute to the experience of stress of educators which include increasing changes in education and society, and educators burdened with having to make a variety of modifications in their personal and professional lives (source of information). These changes in the education system and in the society, in general, comprise of population increases, diversity in school populations, increases in cost of living, crime and its effects on learner behaviour, conditions of service, new rules and regulations of the education department, curriculum changes, performance appraisal systems and demands of unions (Mestry, 1999). Educators are subjected to high workloads with a resultant increase in stress and strain brought about as they attempt to adjust to these changes.



Quantitative job overload means that a new employee is given too much work to do, while qualitative job overload means the job is too difficult for the person to do (Crafford, Moerdyk, Nel, O'Neil & Southey 2006). It occurs when a person has either too little to do (quantitative) or the work is too easy (qualitative). Naylor (2001) found that workload increase leaves teachers exhausted and demoralized. Research on job overload performed in various countries, illustrates that teachers have become overloaded by external tasks (Cottrell, Graham & Timms, 2007). Wilson (2002) found that workload was considered as the most frequent, most anxiety-inducing and the most fatiguing problem in a study of 800 teachers in New Zealand. Bertoch, Borg and Nielsen (1988) linked job overload to environmental stressors of teachers. Research shows that when individuals experience high work demands, with little or no control over these demands, psychological changes can occur (Ivancevich, Konopske & Matteson, 2002).

Studies by Iyanceyich, Konopske and Matteson (2002) and Saptoe, (2000) have revealed that the introduction of rationalization and the new learner-teacher ratios has resulted in teachers having to deal with extremely large classes. Major complains by respondents of these studies were the demands of having to deal with large numbers of learners and lacking space, infrastructure and resources. This situation results in disciplinary problems and teachers have to tolerate a high noise level and general rowdiness of learners in the classroom (Olivier & Venter, 2003). Some teachers spend long hours at school, assist with extramural activities, are involved in meetings after hours and do their preparation and marking at home at night (Saptoe, 2000).

When employees do not have a clear understanding of the scope and responsibilities or the objectives of the work and expectations of fellow workers role ambiguity exists. Khan and Cooper (1993) elaborates further by stating that role ambiguity occurs when an employee does not know his or her role, hence where inadequate knowledge or information is given in order for the worker to perform the given task. Stress can be manifested in decreased self-esteem, feeling depressed, unhappiness or not feeling satisfied with life, poor interpersonal relationship, poor work output, low motivational level to work are related to role ambiguity. Educators reported role ambiguity, as a vital cause of their stress (Adams 2001; Van der Linde et al. 1992; Kyriacou, 2001). Motseke (1998), Tosi et al. (2000), Rout and Rout (2002), Nahavandi and Malekzadeh (1999), Wisniewski and Gargiulo 1997 states that role-based stress which includes role conflict and role ambiguity, exist when educators do not have clarity on their responsibility, expectations or work objectives. Role conflict occurs when the school provides information about educators' roles and responsibilities that conflict with the reality of daily professional life (Motseke 1998; Tosi et al. 2000; Rout & Rout 2002; Nahavandhi & Malekzadeh 1999; Wisniewski & Gargiulo 1997).

Dollard (2002) also reported on the sources of work stress as arising from the nature and the characteristics of the job and the risk factors pertaining to the individual. Ngidi and Sibaya (2002) particularly note that the working conditions for black educators have not been constructive, since they have been confronted with overcrowded classrooms and a lack of resources and facilities due to disparities during the apartheid dispensation. Such conditions exasperated problems related to covering the syllabi and maintaining an effective classroom environment for learning (Ngidi & Sibaya, 2002).

Managers and workers are required to continually adapt to new equipment, systems and work procedures as new technology is introduced (Cartwright & Cooper: 1997). In a study done by Travers and Coopers (1997: cited in Jarvis: 2002) teachers indicated that the lack of government support, shortage of information regarding change issues, constant change and National Curriculum demands are amongst the greatest sources of stress. According to Jacobs (2002) the speed of change since 1994 in the Department of Education caused a lot of stress for teachers. Educators reported feeling stress when external factors impeded or interfered with the teaching-learning process they developed in an educational setting with a specific curricular content. “More specifically, teachers expressed frustration in implementing policies that they felt was contrary to their own pedagogical understanding and professional values” (Moriarty et al., 2001). Cox et al. (as cited by Travers & Cooper, 1996) declare that “change is the single most important factor among current sources of stress for teachers and add that it is not only change, but change-on-change is beyond the control of most teachers that is the cause of stress.” (Armstrong, 1996) argues that many pressures of change, associated with increased demands on time (e.g. changes in curriculum), require teachers to accept proposed changes, examine their current practice and, in the light of new requirements, alter them.

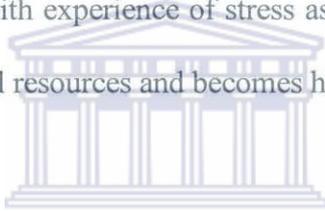
Ngidi and Sibaya (2002) and Oliver and Venter (2003) found out that South African teachers have to absorb continuous change in curriculum, assessment, school structures and at the same time account for failure of learners. The main problems facing teachers are due to the fact that the increases in responsibility have not been accompanied by appropriate changes in facilities and training in order to equip teachers with these new demands. As a result teachers may feel threatened by these new demands, thus becoming stressed. Changes in education as a major source of stress are not limited to South Africa, but have been recognised as a major source of stress among teachers in Britain (Cox).

2.2.4. Relationships at work

According to Sutherland and Cooper (1990) poor work relations is defined as “having low trust, low levels of supportiveness and low interest in problem solving within the organisation”. Bosses, peers and subordinates can dramatically influence employees just by their interactions. Problems of instability may occur in situations where the relationship between a boss and subordinate is psychologically unhealthy. Competition amongst colleagues and differences in personality clashes (“office politics”) amongst fellow workers can give rise to stress (Cartwright & Cooper: 1997). Jarvis (2002) found that factors such as social support amongst colleagues and leadership style are affecting levels of stress amongst educators. Kahn and Cooper (1993) emends that factors relating to organisational structure and climate that are stressors include poor communication, limited opportunity for personal advancement, insufficient performance feedback, performance assessment measures being inadequate and biased control systems and culture within the organisation.

Research by Hastings and Bham (2003) revealed that an important source of stress for teachers is student misbehaviour. Hastings and Bham (2003) assert that there is a relationship between

student misbehaviour and teacher burnout. To find out how stressful disruptive classroom behaviour is, Hastings and Bahm (2003) administered the Pupil Behaviour Patterns Scale, PBP, to measure the direct relationship between the extent of behaviour and classroom stress level. Among items on the scale were disrespect, attentiveness and sociability. Results from the study revealed that disrespectful student behaviour was reported to be the strongest predictor of burnout. Interestingly, even students themselves identified disrespectful behaviour as the factor that most likely irritated or disturbed their teachers (Hastings & Bahm, 2003). Feelings associated with disrespectful behaviours of learners are emotional exhaustion which Evers, Tomic and Brouwers (2004) describe as the “feeling of being emotionally overextended and having depleted one’s emotional resources”. Wood and McCarthy (2002) also consider emotional exhaustion associated with experience of stress as a situation in which an individual feels emptied of personal emotional resources and becomes highly vulnerable to stressors.



2.2.5. Factors outside the work set-up

According to Nel, Gerber, van Dyk, Haasbroek, Schultz, Sono and Werner (2001), the two main sources of job stress are environmental and personal. Environmental sources of job stress are external and include revised work procedures, new workplace facilities, the pace of work, job security, the route to and from work, and the number and nature of customers or clients, change, work under-load or over-load, the changing mix of the workforce, and organizational requirements (Nel et al., 2001).

Greenberg and Baron (2000) list work-related causes of stress to be the occupational demands inherent to the type of work, conflict between work and non-work demands (called role conflict), uncertainty about what is expected (referred to as role ambiguity), being overloaded with work, being under-loaded with work, the lack of social support and sexual

harassment. Miner (1992) suggests that external sources of stress are role conflict, role ambiguity, rotating shift work and sick organizations (which are organizations with high stress levels) and with individuals that experience high frequencies of headaches, faintness, nausea and illness. Sources of job strain among employees have been found to be the intrinsic job characteristics, organizational roles, work relationships, career development, organizational structure, organizational climate and the home-work interface (Warr, 2002).

According to Dollard (2002) personal factors responsible for stress (or seen as sources of stress) are those associated with many personality variables. For instance Type A personality style characterized by aggression, ambitious, hardworking, impatient, seeking to control and expressing time urgency are all associated with stress (Cooper & Bramwell, 1992). Negative affectivity reflects a steady tendency to experience low self-esteem and negative emotional states with individuals having gloomy views of the world, and become more highly sensitive to stressful conditions (O'Driscoll & Cooper, 2002). Situational control refers to the degree to which individuals believe they can exert control over a specific aspect of their job, such as the pace of work or the method for task completion, scheduling of tasks and decision latitude (O'Driscoll & Cooper, 2002). Locus of control and self-esteem has been related to teacher stress (Byrne, 1992; Farber, 1991; Fielding & Gall, 1982). For example, Byrne (1992) found that teachers who have low self-esteem tend to be more vulnerable to stress and that teachers with high self-esteem tend to handle stressors in a more productive manner. Likewise, teachers who have an external locus of control have been found to experience greater stress than teachers with an internal locus of control (Byrne, 1992; Farber, 1991; Kyriacou & Sutcliff, 1979). Dollard (2002) asserts that type-A personality characteristics associated with hardiness, locus of control, negative affectivity, and self-esteem may impact on the nature and magnitude on the stress response, affect coping, cause environments that are stressful and

may directly affect stress levels. These personal factors could constitute the sources of vulnerability or could provide positive resources to cope with stressors (Dollard, 2002). Betoret (2006) adds that high levels of self-efficacy and access to school coping resources may lessen burnout amongst teachers. The positive perception of their self-efficacy reduces burnout.

Other personal factors that influence the extent of stress experienced by individuals are personality types of tolerance for ambiguity, patience, self-esteem, health and exercise, work and sleep patterns, financial trouble, divorce and sickness (Nel et al., 2001). Similarly, Warr (2002) identifies moderators of stress to be personal characteristics of which the personality type, negative affectivity and self-efficacy are argued to predispose the individual to displaying particular behaviour, job-related moderators namely situational control, which is the extent to which individuals believe that they can have control over tasks, the pace of the work, procedures for task completion, task scheduling, or more specifically, to what extent the individual has decision-latitude, and organizational moderators namely, social support, which could serve as a buffer against severe stress and eventual burnout, or it could in the same way, exacerbate the stress situation (Warr, 2002).

Warr (2002) lists two types of behavioral indicators, of which the first category is significant to the organization, and examples of these are job performance, turnover, and absenteeism, and the second category has greater salience for the individual, examples of which are substance abuse and destructive behavior. In Warr (2002), the five categories of behavioral indicators have been labeled as work disruptions, job flight, aggressive behavior, disruptions to non-work, self-damaging behaviors, and that sufficient caution needs to be taken when

assessing whether the behavioral indicator is related to job stressors or whether it is a response triggered by off-the job factors or dispositional tendencies.

Greenhaus (2000) explains that career transitions also serve as a source of stress when the change is undesirable, when it involves extensive changes, when it is unexpected, when it is accompanied by other life transitions, when it is forced on an individual, when the individual lacks the personal resources like self-esteem and tolerance for ambiguity to deal with the transition, when the individual lacks support from family, friends or the organization, and when the individual lacks the ability to cope with the transition.

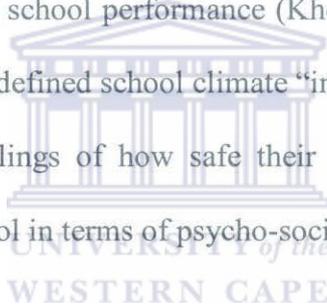
2.2.6 School Climate

An organizational climate refers to “a set of measurable properties of the work environment, perceived directly or indirectly by people who live and work in this environment, and is assumed to influence their motivational behavior” (Khoza, 2004), Reichers and Schneider (cited, in Khoza & Milner, 2008), agree that organizational climate is the shared perception of how things are in the workplace. Hemmingway and Smith (in Khoza, 2004) proposed a framework of possible relationships among organizational climate, occupational stress and stress related outcomes. They also discovered that a favorable climate dimension led to lower levels of occupational stress (Khoza, 2004; Khoza & Milner, 2000).

Hoy and Miskal (cited in Khoza & Milner, 2008) define school climate as “the set of internal characteristics that distinguishes one school from another and influences the behavior of people. Lui, Rovai and Wighting (2005) added that organizational climate is "the set of internal characteristics that distinguishes one school from another and influences the behavior of people". Four school climate dimensions were also noted. These include environmental

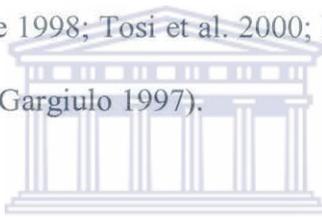
press, which describes the relationship between the school and the community; collegial leadership, which depicts the openness of the principal's leadership behavior; teacher professionalism, which describes openness of the relationships between the teachers and academic press, which address the relationship between the school, the learners and achievement motivation within the school.

Another framework which examines school climate draws on the notion of organizational health. Healthy organizations are considered to have the ability to survive within their environments and to adapt and cope with long term challenges. Research done internationally and in South Africa, identified school climate as an important factor influencing teacher attributes and school performance (Khoza & Milner, 2008). Hernandez and Seem (2004, in Khoza 2004) defined school climate "in terms of its safeness" and viewed school climate as "teachers' feelings of how safe their working environment is." They furthermore identified a safe school in terms of psycho-social variables and school behavior.



The introduction of rationalization and the new learner-teacher ratios has resulted in teachers having to deal with extremely large classes. Major complains by respondents were the demands of having to deal with large numbers of learners and lacking space, infrastructure and resources. This situation results in disciplinary problems and teachers have to tolerate a high noise level and general rowdiness of learners in the classroom (Olivier & Venter, 2003). Some teachers spend long hours at school, assist with extramural activities, are involved in meetings after hours and do their preparation and marking at home at night (Saptoe, 2000). When employees do not have a clear understanding of the scope and responsibilities, objectives of the work and expectations of fellow workers role ambiguity exists. Khan and Cooper (1993) elaborates further by stating that role ambiguity occurs when an employee

does not know his or her role, hence where inadequate knowledge or information is given in order for the worker to perform the given task. Stress can be manifested in decreased self-esteem, feeling depressed, unhappiness or not feeling satisfied with life, poor interpersonal relationship, poor work output, low motivational level to work are related to role ambiguity. Educators reported role ambiguity, as a vital cause of their stress (Adams 2001; Van der Linde et al. 1992; Kyriacou 2001). Motseke 1998; Tosi et al. 2000; Rout and Rout 2002; Nahavandi and Malekzadeh 1999; Wisniewski and Gargiulo 1997 states that role-based stress which includes role conflict and role ambiguity, exist when educators do not have clarity on their responsibility, expectations or work objectives. Role conflict occurs when the school provides information about educators' roles and responsibilities that conflict with the reality of daily professional life (Motseke 1998; Tosi et al. 2000; Rout & Rout 2002; Nahavandhi & Malekzadeh 1999; Wisniewski & Gargiulo 1997).



Smith and Bourke (in Overland, n.d.) suggest that one of the major contributing factors to teacher stress are those arising from lack of rewards and recognition. Teacher dissatisfaction regarding the education department's reward system has been an on-going battle for educators in South Africa. In 2004, South Africa experience its biggest strike in a single sector in history; in which the majority of the 800 000 (Cape Town-50 000; Durban-45 000 and Pretoria-90 000) unionised government employees took mass action to protest against the derisory 6% wage offer increase. In addition, the deterioration of conditions of service as well as the decline in infrastructure and the quality of service delivery in health and education have resulted in a migration of teachers, to work overseas (The Star, 2004).

Insufficient pay in relation to other occupations is one of the most important factors associated with stress amongst employees in several occupations. Olivier and Venter's (2003) revealed

that most teachers cite poor salaries as contributing to severe stress, in lieu of the after-hours input their jobs demand from them and how negatively their salaries compare with those people in the private sector and other state departments. They purport that this is a possible explanation for the fact that some teachers embark on second jobs, mostly to the detriment of the school and the learners, while others look for other propositions and change to completely new jobs for the sake of better incomes (Olivier & Venter, 2003).

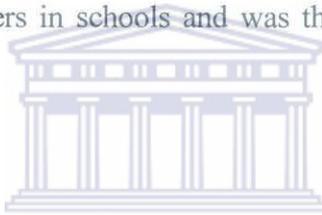
Violence at schools is increasingly characterising the education environment and teachers are exposed to violent behaviour of learners as negative media attention is drawn to the crisis (Verdugo & Vere, 2003). Harassment and bullying among learners themselves at schools in all areas of the land is not something new. External factors such as drugs, poverty and ethnic, racial or religious conflict create an environment of violence which may have serious repercussions for the staff of the school (Verdugo & Vere, 2003). Research indicates sporadic incidents of violence at schools which arise from firearms used against teachers and other learners result in teachers feeling unsafe. The present study focuses on the Western Cape where gangsterism, high divorce rates, drug and other substance abuse are rife and which aggravate the stress levels of teachers. A survey conducted in 1998, by the Institute of Criminology, revealed that crime and violence is endemic to both primary and secondary schools.

The following findings were tabulated:

- The major problems in all schools were the theft of property and the possessions of weapons.
- Fighting/ physical violence and vandalism were reported in 95 % of schools;
- Drug abuse was a serious concern in 90% of the schools;

- Bullying and intimidation were reported in over 75% of schools, assault in 60% of the schools, gangsterism in 50% and rape in seven of the twelve secondary schools (National Department of Education, 2001).

Gold and Roth (1993) declare that “the degenerating mode of teachers is an indication of the stressful conditions of work and the disillusionment they experience because of unmet expectations”. Numerous researchers describe this low morale in terms of “Educators in Crisis” or “Education in Crisis” or “A profession in Crisis”. Reports that are in print on a daily basis indicate that the situation has been exacerbated due to the abolishment of corporal punishment, changes in the educational system and the continuous change in curriculum. Media reports relating to stress amongst teachers have provided proof that rationalisation as a process had “decimated” the number of teachers in schools and was the primary cause of stress and low morale (“Pretoria News”, 2001).

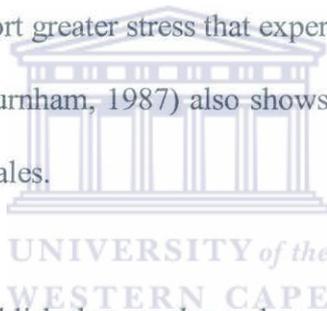


Empirical evidence suggests that teachers' morale is low because the perks they receive are inadequate to meet their needs, and outcomes-based education has caused uncertainty among teachers (Ngidi & Sibaya, 2002; Olivier & Venter, 2003). Gold and Roth (1993) declare that “the degenerating mode of teachers is an indication of the stressful conditions of work and the disillusionment they experience because of unmet expectations”. Numerous researchers describe this low morale in terms of “Educators in Crisis” or “Education in Crisis” or “A profession in Crisis”. Reports that are in print on a daily basis indicate that the situation has been exacerbated due to the abolishment of corporal punishment, changes in the educational system and the continuous change in curriculum. Media reports relating to stress amongst teachers have provided proof that rationalisation as a process had “decimated” the number of teachers in schools and was the primary cause of stress and low morale (“Pretoria News”, 2001).

2.2.7 The impact of biographical factors on experience of stress

Research has indicated that biographical variables have a direct effect on job stress (Decker & Borge, 1993; Furnham & Walsh, 1993; Long, 1990; Pretty, McCarthy & Catano, 1992). These biographical factors are purported to play roles as mediating, intervening, moderating or extenuating factors. In addition, they may simultaneously predispose susceptible individuals to stress (Aamodt, 2004).

The findings also reveal that despite gender and qualifications, the inexperienced group of teachers experiences more stress from time pressures than those with experience. These findings also correspond with those of Okebukola and Jegede (1989) in showing that inexperienced teachers tend to report greater stress than experienced ones. Research (Borg et al., 1991; Laughlin, 1984; Payne & Furnham, 1987) also shows that females tend to report greater stress due to time pressures than males.



Van Zyl and Pietersen (1999) establish that gender and marital status play a significant role in stress. However, they found that age; number of dependents (or family size), length of service, qualifications and job level did not considerably correlate with stress level amongst a sample of 59 school teachers.

2.2.7.1. Age

Research concerning stress levels of different age groups, is contradictory. In a study done on the effect of biographical variables on the levels of and causes of stress in final year medical students, it was established that younger doctors experience higher levels of stress compared to their older counterparts (source of information). Naylor (2001) reported that relatively young teachers who experienced such high levels of stress and nervousness contemplated suicide.

Research studies by Karasek and Theorell (1990) and Theorell and Karasek (1996) showed that age is linked with stress amongst teachers. However, research by Pisanti, Gagliardi, Razzino and Bertini (2003) amongst a sample of secondary school teachers in Italy did not find proof of a relationship between the age of teachers and the level of stress experienced. Results are thus, unequivocal.

2.2.7.2. Gender

There is proof that men and women experience stress differently. Tung (1980) established that women experienced lower levels of stress compared to men. Whereas Davidson and Cooper (1983) found that men and women responded differently to various types of stressors, Martocchhio and O'Leary (1989) did not find any significant gender differences in stress.

Much of the research on gender and stress is debatable. Study suggests that women experience more stress than men and that women are more prone to depression (Van Zyl, 2002). Other research claim that gender does not contribute to stress in female employees (Martocchio & O'Leary, 1989). Study by Pisanti et al. (2003) also found an insignificant connection between stress and gender. According to Aamodt (2004), however, role conflict and ambiguity in female employees are some factors that can add to higher stress levels amongst women. He argues that when employees have competing roles, it can cause them a great deal of stress. "For example, a female employee's role as manager may require her to work on a Saturday, but her role as a mother requires her to attend her daughter's soccer game on the same day" (Aamodt, 2004).

2.2.8. Consequences of Stress

Kyriacou (2001), states that symptoms of stress in teachers are manifested in concern and frustration, impaired performance, and ruptured interpersonal relationships at work and at home. Data reveal that teachers present more medical insurance claims than persons in other professions, have a four year shorter life expectancy than the national average and often blame stress as a reason for sick leave from school (Van Wyk, 1998). From an organisational point of view, the consequence of stress results in a significant loss of skilled and experienced teachers through resignation and /or premature retirement from all levels of the teaching workforce. The stressed teachers who remain within the profession, on the other hand, are likely to be less effective in key areas such as lesson organisation, student behaviour management, responsiveness to students and self confidence relationships with parents. In personal human terms, the cost of teacher stress can be enormous and include impaired health, reduced self-confidence and self esteem and broken personal relationships. If early retirement or resignation is taken, often the consequence is dramatically reduced economic status (Warren & Toll, 1993). Researchers generally agree that a certain degree of stress is a normal part of life, but prolonged stressors could lead to symptoms that are physical, psychological or behavioural (O'Driscoll & Behr, 2002).

2.3. Theoretical framework

2.3.1. Stress explained as a Transaction

When looking at the theoretical framework the researcher thought it best to have a look at how researchers tried best to explain stress experiences. Cox and Mackay (1978) explains that the transactional model of stress is an intricate and dynamic system that entails a transaction between the individual and his or her environment. Cox and Mackay's model is based on the stimulus-response interaction approach (transactional model). The model

consists of four phases. During phase one the environmental factors places demands on the person. The demand is seen as a stressor (Cox, 1978). During phase two the person appraises the demands and his or her ability to behave towards the demands. The pressure arises when the person assesses that he or she cannot cope with the demand. The third phase comprises physical changes of the person including the cognitive and behavioural responses to stress. Is there no physiological response to stress? The fourth phase describes the effect of the response on the person. Figure 1.1 provides an illustration of this model.

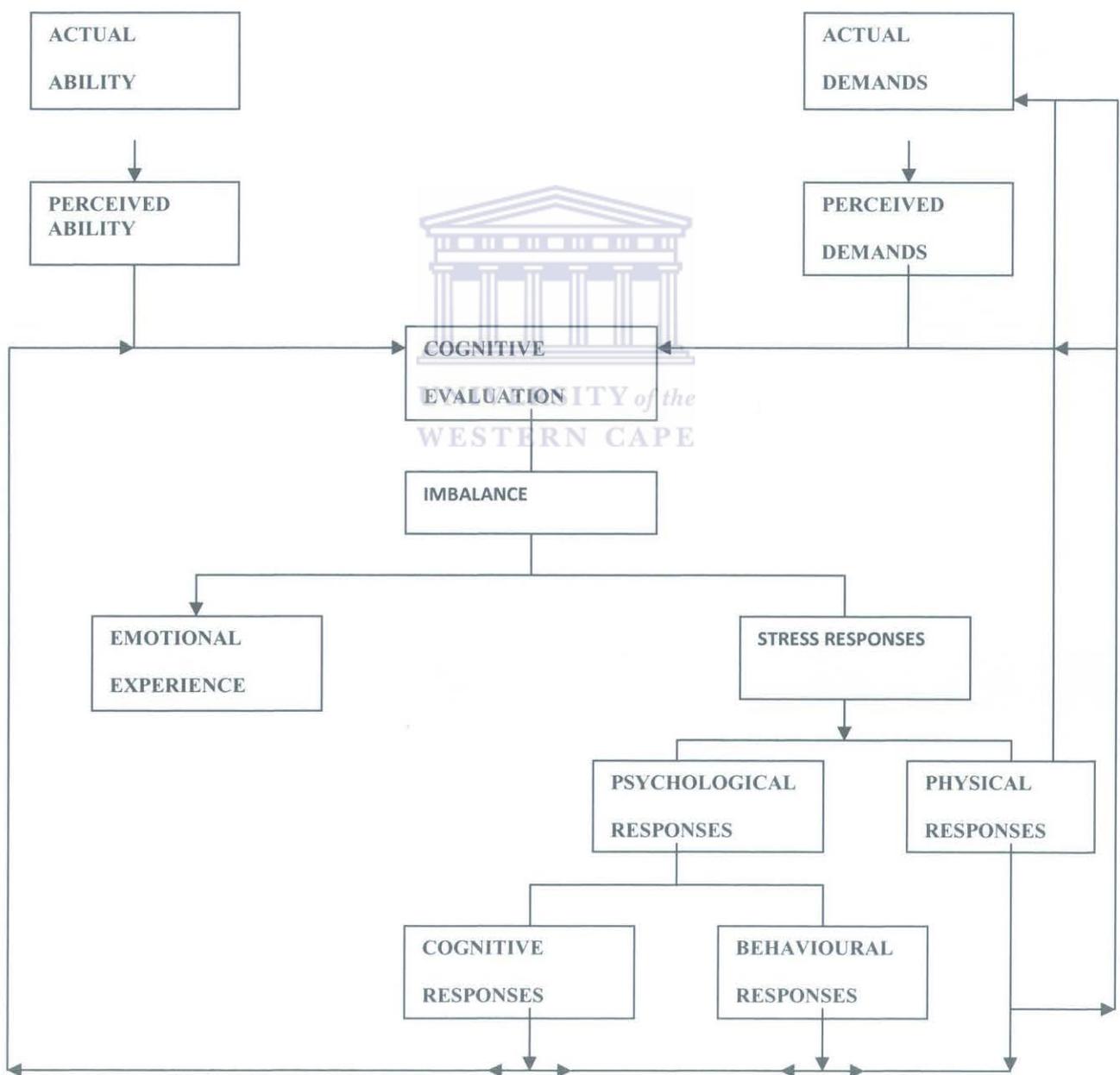
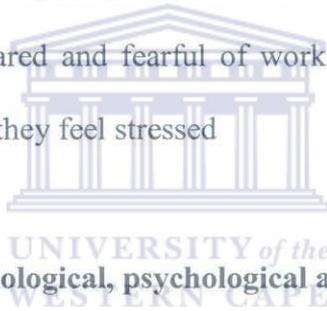


Figure 1.1 Cox and Mackay's Model (Cox, 1978)

Source: Van Zyl and Van der Walt (1994): Manual for the Experience of Work and Life Questionnaire (WLQ)

Claxton (1989) suggested that stress factors relating to the education environment include glimmers, hard work, being rushed, limited stopgaps, priority decisions, pragmatism, dissatisfaction, unappreciation, acting and isolation. Stress is considered to be the main factor contributing towards job dissatisfaction, job-related illness and early retirement in England (Van dick, Phillips, Marburg & Wagnes, cited in Paulse, 2005). With specific reference to South Africa, teachers have to adapt to changes in their environment affected by new policies and legislation in order to improve service delivery (van Zyl & Pietersen, 1999, cited in Paulse, 2005). Woods (1999, cited in Paulse, 2005) further suggested that mainstream teachers feel unprepared and fearful of work with learners with disabilities in mainstream classes and therefore they feel stressed



2.3.2 Stress as caused by physiological, psychological and environmental demands

Seyel (1974) theorises that stress is caused by physiological, psychological and environmental demands. He argues that when confronted with stressors, the body creates extra energy and it is when all the energy available is not utilised, that stress is a consequence.

This reaction to stress was first described in 1936 and was coined the General Adaptive Syndrome (GAS), which includes three distinct stages (Seyle, 1974: 1980):

1. Alarm reaction,
2. Stage of resistance, and
3. Stage of exhaustion.

Response to stress is therefore deemed to be invariant to the nature of the stressor and followed a universal pattern- three stages, i.e. an alarm stage, an opposition stage and an exhaustion stage.

Figure 2.1 provides a summary of this process.



Figure 2.1 Selye's General Adaptation Syndrome

Source: Brown and Blakeman (1983)

2.3.3 Alarm Phase

The alarm reaction is the instant psycho-physiological response and at this time of the initial shock, resistance to stress is lowered. This process includes the secretion of hormones from the endocrine glands, causing for example, increased heart rate and blood pressure, muscle tension and a decrease in maintenance functions, e.g. digestion and sexual responsiveness. In cases where the stressor is incessant, the resistance phase starts where the body triggers the needed bodily system to deal with the stressor (Steenkamp, 2003). The body is alerted and activated and stress levels are at its highest during this stage (Hubert, 1984).

2.3.4 Resistance Phase

According to Goldberger and Breznitz (1982, cited in Steenkamp, 2003) the resistance stage is characterised by an adaptation response of the body that is manifested with "fight or flight" responses. The body tries to remedy the shock caused by the stress and to return the homeostasis of the body. If the stressors continue, the body will continue in defending itself, thereby impeding any possibility of rest and repair.

2.3.5 Exhaustion Phase

In the exhaustion phase, there is a resistance to a continued stressor, and where the adaptation response and /or return to equilibrium replace the alarm reaction. If the alarm reaction is elicited too intensely or too frequently over an extended period of time, the energy required for adaptation becomes depleted, and the final stage of exhaustion, collapse or death occurs. It is during this stage that physical and mental breakdown occurs, the individual performance plummets and illness develops (Hubert, 1984).

In terms of adapting to stressors, Sigelman and Shaffer (1995) postulate that there are two schools of thought regarding the hypothesis that younger adults have more effective coping strategies than older adults. Pheiffer (1977) argues that coping capacity peaks in early age and deteriorates with age, referred to as the regression hypothesis. Contrary to this view, Vaillant (1977) proposes a growth hypothesis, arguing that coping capacities improve with age. Research has highlighted that neither of the two theories is well supported, as individuals at different ages are far more comparable than different in their coping styles (Rook, Dooley, & Catalano, 1991). Costa, Zonderman and McCrae (1991) further state that both younger and older adults may cope with stress in ways that are suitable to the stressful event.

2.3.6 Response-Based Model of Stress

A Response- based model of stress is presented in the figure below

A Response- based model of stress



Figure 2.3: Stimulus-Response Model of Stress (Source: Sutherland & Cooper, 2000).

2.3.6.1. Physiological effects of stress

Cartwright and Cooper (1997) propose that when an individual is confronted with a challenging situation, stress or pressure, the sympathetic nervous system can be triggered to activate a wide variety of hormonal secretions. The hypothalamus, when it identifies danger, triggers the pituitary gland to release hormones that causes the adrenal glands to increase its secretion of several hormones, including cortisol which provides more energy to the body; epinephrine which increases both the rate and strength of the heart's contractions and raises blood pressure; and norepinephrine, which similar to the body's considerate nervous system, acts as the body's fight or flight system when faced with emergencies (Rice, 1992).

According to Tucker-Ladd (1996), the hormonal responses determine the severity of the individual's anxiety reactions, mind-set, energy level, level of hopelessness, and physical state of health after experiencing a stressful event. Dollard (2002) however maintains that when the challenge is short term the body's first reaction is adaptive, enabling the person to

set in action energy resources to combat the stressor, however when these challenges are constant, severe or repetitive the “normal physiological reaction may turn pathological” (Dollard, 2002).

Researchers have linked many diseases to job stress. Some ailments are minor whilst others are deadly. Landsmann (1977) highlighted that a survey conducted by the Chicago Teachers’ Union revealed that 56.6% of the participating teachers had suffered physical or mental illness related to their teaching occupations, and symptoms included migraine and sinus headaches; allergies; colds; post nasal drip; hypertension; bladder disorders; kidney disorders, bowel disorders; colitis; nervous stomach; acne and weight problems.

2.3.6.2 Psychological Problems and Behavioural problems

Stress has a marked impact on an individual’s mental well-being. The most often reported symptoms are anxiety, frustration, passivity, aggression and depression, which often combine in a potent form to reduce productivity and performance. The UK Times Educational Supplement reported that a number of teacher suicides, specifically in England and Wales, are directly related to anxiety over workloads and school inspection (Bunting, 2000). During 1996, a study by the Independent Education Union (IEU) in Victoria Australia found that teachers reported experiences of stress due to workload pressure, difficulties with management and poor staff-student relationships. The stress manifested in terms of irritability at home (59%) and in class (55%), anxiety (64%) and feelings of powerlessness (45%). Eighteen percent (18%) of the respondents reported psychosomatic complaints such as headaches, chronic fatigue, shingles and heart palpitations (Howard & Johnson, n.d).

In a survey of head teachers by the National Association of Head Teachers (NAHT) in May 2000, 40% of respondents reported having visited their doctor with stress-related problems in

the previous year; 20% considered that they drank too much alcohol, and 15% believed that they were alcoholics; 25% suffered from serious stress related health problems including hypertension, insomnia, depression and gastrointestinal disorders (Jarvis, 2002).

Tucker-Ladd (1996) highlights signs of stress as presented in the table below:



Table: 1.2

Psycho physiological responses (Somatoform disorders)	Behavioural-emotional signs (Anxiety reactions)	Tiredness and lack of energy	Anxiety intruding on consciousness or cognition
Sweating	Hyperactivity	General lack of interest	Excessive preoccupation with the threatening person or situation.
Strong startle response	Outbursts of emotions	Excessive sleeping	Unstoppable pangs of emotion (e.g. anger, jealousy, etc.)
Haemorrhoids	Preoccupation with a certain situation	Insomnia	Repeatedly obsessing about the upsetting event
Inflammation of the colon (Colitis)	Obsessive thoughts	Sighing	Excessive vigilance and startle reactions.
Frequent urination	Holding a grudge	Moving slowly	Insomnia and bad dreams.
Diarrhoea	Excessive worrying	Falling asleep while watching television.	Aches, pains and unwanted sensations.
Rashes	Irritability	Feeling bored	Striving desperately to understand behaviour of person.
Ulcers	Changing habits	Lack of humour	Feeling Nervous
Headaches	Compulsive actions	Difficulty to start	Feeling Uptight
Heart disease		Poor memory	Apprehensive
Having a stiff posture		Crying	Feeling scared
High blood pressure			Irritation with delays
Itch or skin problems			Bad dreams
Frequent colds			Getting tongue-tangled
Stomach that's upset			Stumbling over words

Source's adapted from Tucker-Ladd (1996). Summary of the effects of stress and anxiety.

2.4. Review of previous related studies

There are a lot of books and articles on stress and teacher stress factors. Two studies that are of relevance to this study are those of Janine Paulse (2005) and Dorothy Bearschalk (2010). Janine Paulse's (2005) study looked at the levels of stress experienced by teachers involved in the implementation of classroom practices associated with inclusive education. The population for the study consisted of 300 teachers from various schools in Cape Town and included both high schools and primary schools. The study approach was quantitative and data was collected by questionnaire - The Teacher Stress Questionnaire – Revised with items dealing with administration and assessment practices in inclusive education as well as support, student behaviours, general classroom environment and parents and school relations. .

The current study investigated experiences of stress by primary school teachers. This study also investigated not only the levels of stress among teachers but also what were causing teachers to experience stress while implementing practices associated with inclusive education.

Another study done that is related to the current study is that of Dorothy Bearshank (2010). The study investigated sources of stress for teachers at high risk Secondary schools in the Western Cape. The population for the study consisted of 300 teachers from various high risk Secondary schools in the Western Cape. She made use of a quantitative investigation method. She made use of Occupational Stress Inventory Revised (OSI – R). The questionnaire was originally developed by Osipow and Spokane (1998). The questionnaire was developed for two main reasons namely, to develop generic measures of occupational stressors which could apply to multiple occupational levels and work environment as well as to private operational measures for their theoretical model which integrates the sources of work stress, and

environment stress, the consequent levels of stress and available coping resources (Swanson, 1991). The OSI model's key focus was on the subjective perception of the individuals pertaining to the occupational stress and the amount of strain they experience, which is influenced by the availability of coping resources.

The current study investigated experiences of stress by primary school teachers. This study also investigated not only the levels of stress among teachers but also to ascertain if gender, age and marital status of teachers influence the experiences of stress by teachers

In a study of stress in teachers in the George region of the Western Cape it was found that stress manifested itself in teachers mainly on the emotional level, to a lesser degree but still significant level on physical, psychological and behavioral levels (Olivier & Venter, 2003).

In fact the stress that the teachers in the George region experienced is called "job compassion fatigue" and the findings of Olivier and Venter (2003) were confirmed by other research done by Van Wyk (1998) and Marais (1992).

The current study investigated experiences of stress by primary school teachers in the Western Cape and is also looking at the levels and causes of stress being experience by teachers.

In a study that examined stress in Italian teachers it was found that the teachers reported most pressure with some aspects of their work related to the perceived lack of status and professional support, to the job of teaching itself, to the workload in the form of overcrowded classes and the lack of support from pupils and parents (Zurlo, Pes & Cooper, 2007).

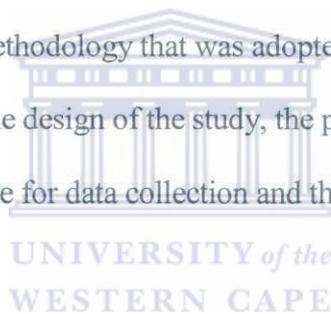
The current study was done in The Republic of South Africa and investigated not only the causes of stress but also the levels of stress among teachers. The current study went further by determining whether task characteristics, organizational functioning, physical work

conditions and job equipment, career and social matter and remuneration, fringe benefits and personnel policies explain the variance in total stress experienced by teachers in the Metropole North of the Western Cape.

2.5 Summary of the chapter

The literature review provided an overview of the conceptual and theoretical understandings about stress and particularly experiences of stress by teachers in their work places. The review led to identification and understanding of the different factors that cause people to experience stress which the researcher investigated among the teachers in the Metropole North Circuit of the Western Cape.

The next chapter focuses on the methodology that was adopted to conduct the research. Attention is specifically given to the design of the study, the population and sample, data collecting instrument, the procedure for data collection and the methods of data analysis.



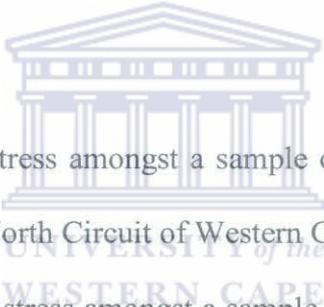
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents descriptions of the research design, the population and sample, the data gathering instruments, the procedure for data collection and method of data analysis adopted for the study. The methodology adopted for the study was geared towards achieving the objectives set for the study. The research objectives that guided the methodology adopted for the study are presented in the next section.

3.2 Research Objectives

- 
- To determine sources of stress amongst a sample of teachers selected from primary schools in the Metropole North Circuit of Western Cape, South Africa.
 - To determine the levels of stress amongst a sample of teachers selected from Primary schools in the Metropole North Circuit in the Western Cape, South Africa.
 - To establish if there is statistically significant difference in sources of stress based on the biographical variables (age, gender, marital status and tenure) amongst educators in primary schools.
 - To determine whether task characteristics, organizational functioning, physical work conditions and job equipment, career and social matter and remuneration, fringe benefits and personnel policies will explain the variance in total stress experienced by teachers.

3.3. Research Design

For the purpose of the current research, a quantitative approach was adopted. Babbie and Mouton (2007) describe quantitative research as the numerical presentation and manipulation of observations for the purpose of describing and explaining the phenomena that those observations reflect. Polit and Hungler (1995 in Makie, 2006) also describe quantitative research as systematic collection of numerical information and analysis of that information using statistical procedures. Quantitative approaches are also considered to be more objective, structured and have both high validity and reliability (Coolican, 1999). A quantitative method of research was chosen for this study, since the aim of the research was to find answers to the stated problems. This was accomplished by analyzing and interpreting the data with the aid of statistical measures. The advantages of this research method, is that it has the potential to be generalized to huge populations, if sampling was done effectively. Furthermore, it is considered to be valid if the instrument of data collection, namely a questionnaire in this case, was of a good quality (Reiman, 2008). The questionnaire should also be objective, structured and have high validity and reliability coefficients (Paulse, 2005).

3.4 Population and Sample

Huysamen (1994) defines a population as encompassing the total collection of all members, cases or elements about which the researcher wishes to draw conclusions. A sample, on the other hand, constitutes a subset of this population. Tredoux and Durrheim (2002) explain that a population is an entire collection of elements or individuals and a sample as a subset of such collection. Conclusions are, thus, drawn from the sample and are generalized to the population as a whole (Sekaran, 2000).

The population for this study consisted of teachers on the payroll of the Western Cape Education Department, Metropole North. There are 20 schools in the circuit. Ten schools were involved in this study. The population size constituted of approximately 300 teachers.

In deciding on the size of the sample to be drawn, the following issues were born in mind. Firstly, the sample had to be representative of the population of interest, and had to be large enough to allow for precision, confidence and generalizability in the research findings. It is further pointed out by Sekaran (2000) that sample sizes of between thirty and five hundred subjects are appropriate for most research.

For the purpose of this research 200 questionnaires were handed out by hand to 50% of the teachers in the circuit, of which 78 in the circuit were returned, representing a response rate of 39%. Such a response rate may be considered relatively good. In fact, Sekaran (2000) is of the view that a response rate of thirty percent (30%) could be regarded as acceptable.

3.4.1 Characteristics of Participants

The descriptions of the characteristics of the teacher participants of this study are presented in the following figures.

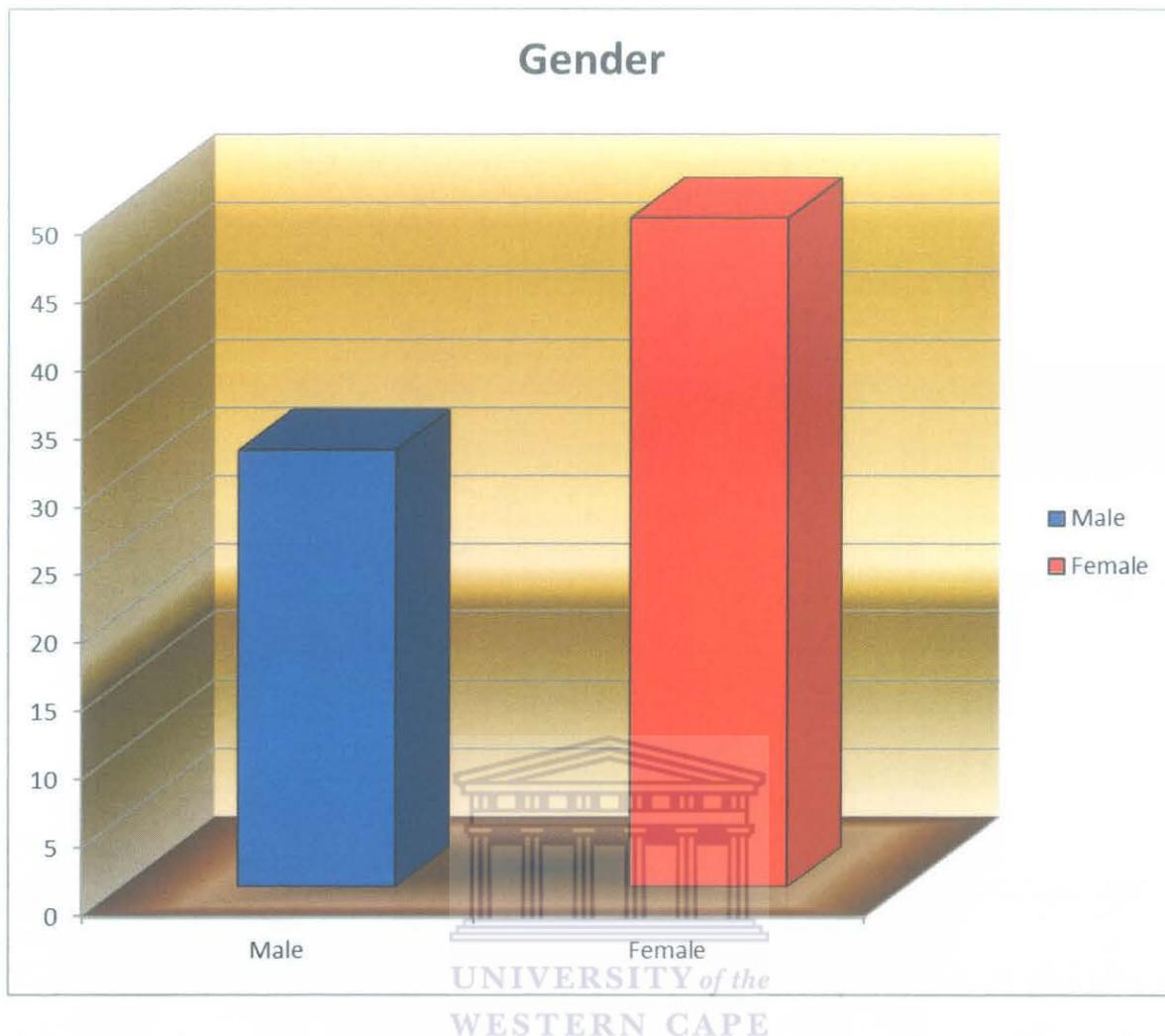
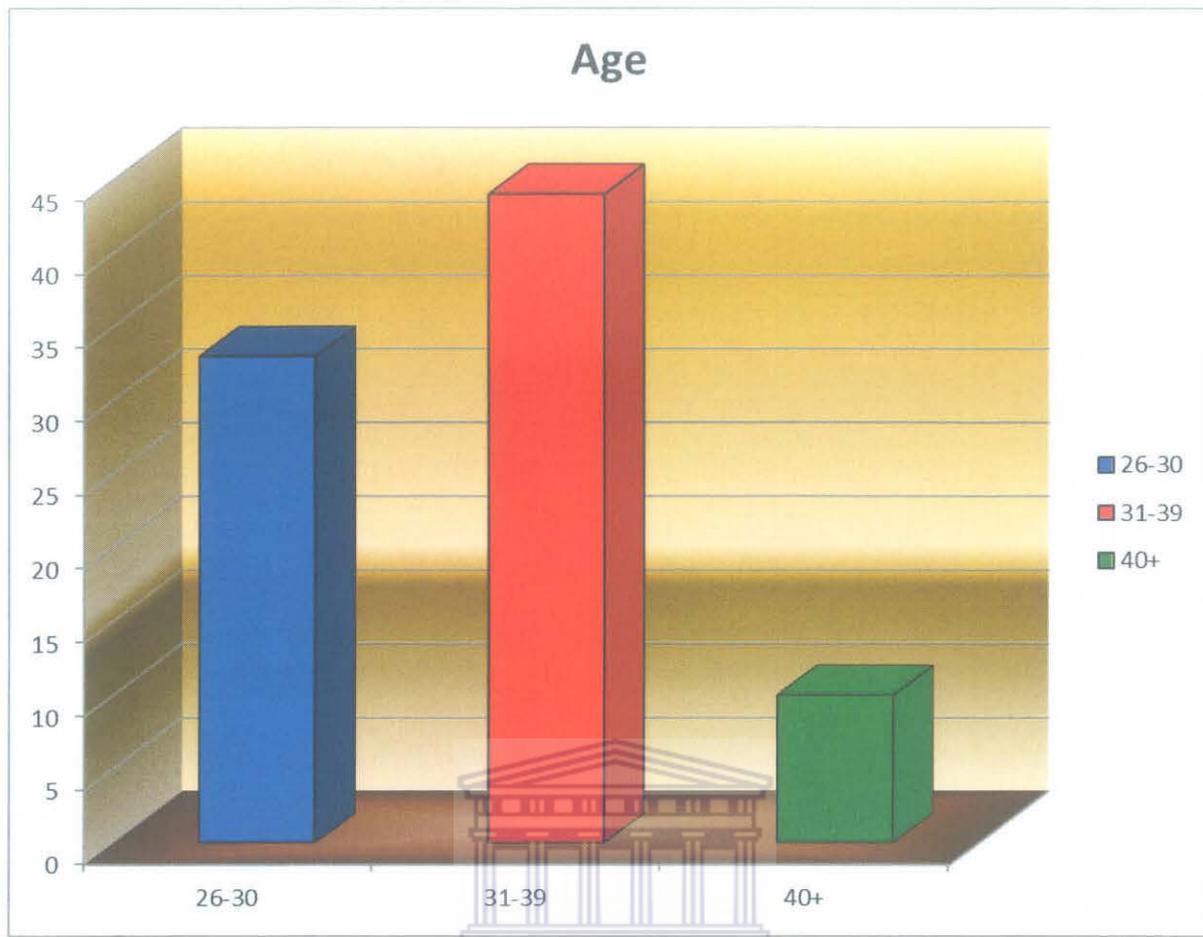
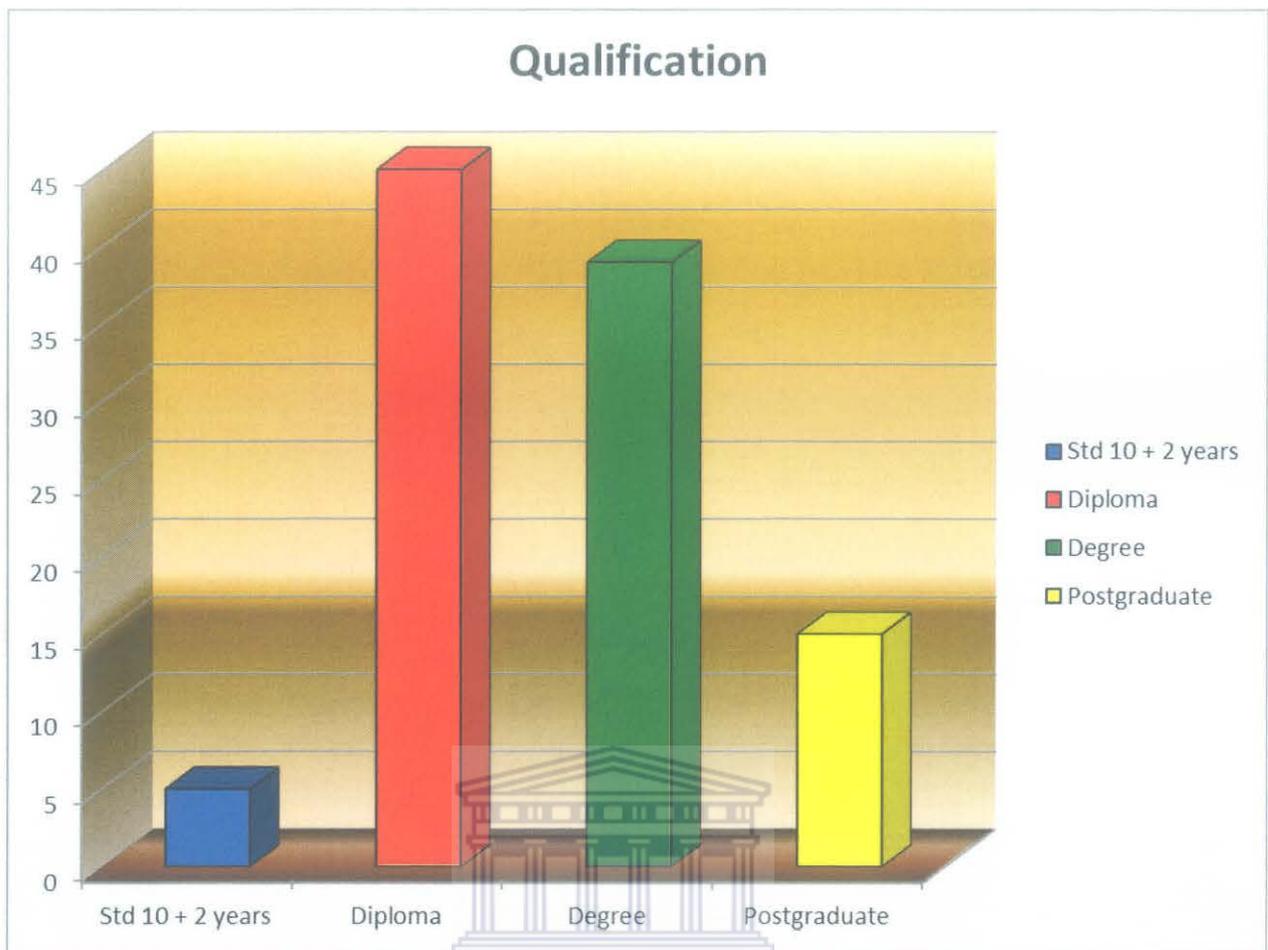


Figure 4.1 indicates the gender distribution of the sample of educators who participated in the research. In terms of information contained in Figure 4.1, the majority of respondents were female (n=47) or 59%, while males (n=32) constituted 41% of the sample.

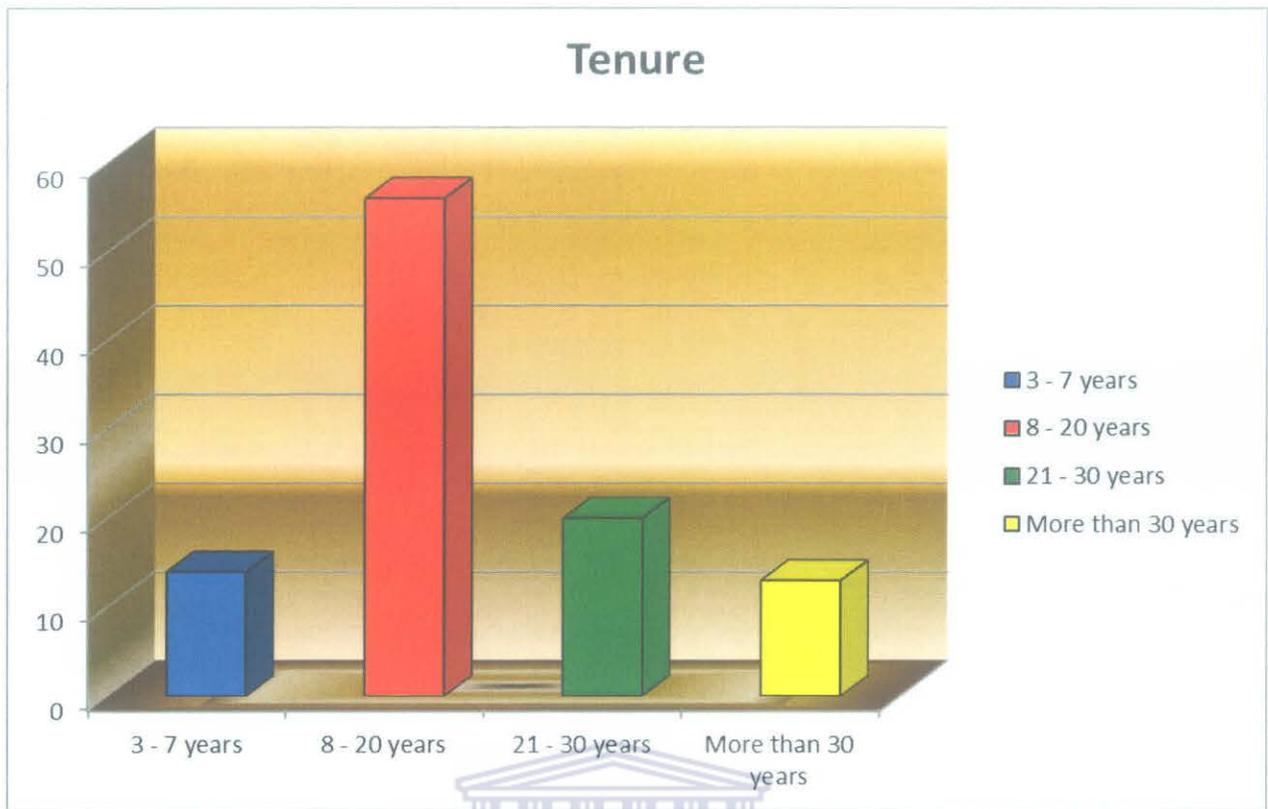


Based on the frequency distribution presented in Figure 4.2, it can be deduced that the majority of the respondents (n=35) or 44% of the sample were in the age category 30-39 years. Respondents in the age category 40-49 years constituted the second largest group of respondents (n=26), thereby comprising 33% of the sample. Only 8 respondents (10%) were in the age group 22-29 years.



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In terms of information displayed in Figure 4.3 above, it may be seen that the majority of the respondents had a teachers' diploma ($n=35$, or 44%). A further 29 teachers had a degree (that is 37%), while 11 respondents had postgraduate qualifications, constituting 14%. Only 4 respondents or 5% of the sample had a matric plus 2 year qualification.



In terms of information displayed in Figure 4.4, it can be seen that the majority of the respondents (n=42), or 53% of the respondents had been in teaching for 8-20 years, while a further 16, that is 20% had been in teaching for 21-30 years.

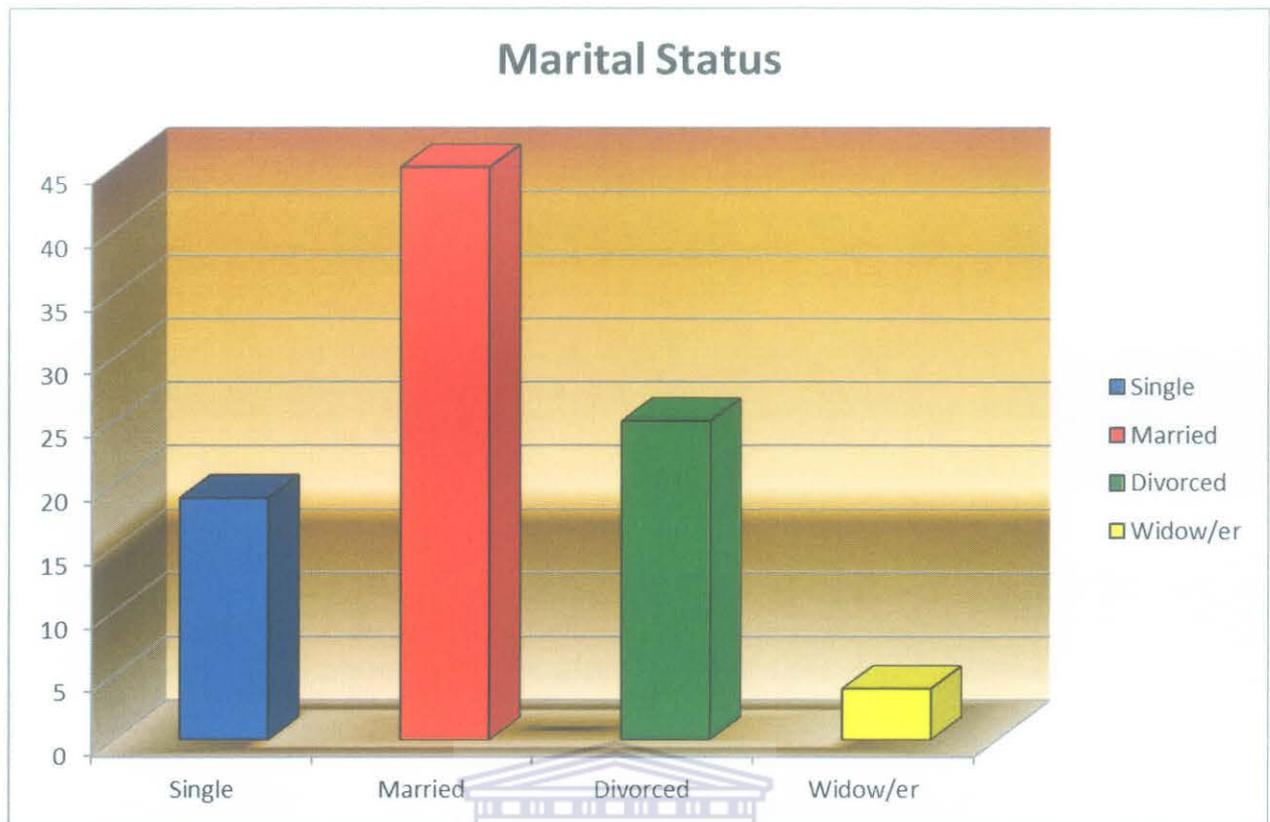


Figure 4.5 indicates that the majority of the sample ($n=42$) or 47% of the sample were married, while a further 25% of the respondents ($n=22$) indicated that they were divorced. Sixteen (16) respondents, that is 18%, indicated that they are single, while those who were widowed ($n=9$), constitute 10% of the sample.

3.5 Research instruments

Biographical Questionnaire and the Occupational Stress Inventory Revised were used in the present study. Questionnaires were used as a method of data collection, since it was considered to be cost saving and economical. Furthermore, the respondents were provided with enough time to answer the questions (Nelson, & Quick; 2006). The disadvantages were however, the possibility of non-response or no return of the questionnaire.

3.5.1 Biographical Questionnaire

A biographical questionnaire, containing six questions, was developed by the researcher, and used to obtain the biographical information related to the sample. The participants were asked to furnish information with regard to their gender, age in years, years of experience and marital status.

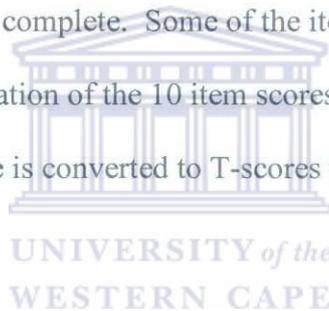
3.5.2 Occupational Stress Inventory Revised (OSI-R)

The OSI-R questionnaire was originally developed by Osipow and Spokane (1998), two career psychology researchers. The questionnaire was developed for two main reasons namely, to develop generic measures of occupational stressors which could apply to multiple occupational levels and work environments as well as to provide operational measures for their theoretical model which integrates the sources of work stress and environment stress, the consequent strains and available coping resources (Swanson, 1991). The OSI-R model's key focus was on the subjective perception of the individual pertaining to the occupational stress and the amount of strain they experience, which is influenced by the availability of coping resources.

Occupational stressors have consequences for the individuals in terms of the extent to which people experience stress in their work places which can also affect their ultimate performance. The difference between an individual's perceived stress and experienced strain is a crucial element in this model of occupational stress. Coping skills are also viewed as integral to the definition of any occupational stress or mental health model and were therefore included in the OSI-R model (Swanson, 1991).

The development of the scales and measures began after the three dimensions were identified.

Within the OSI model of occupational stress, the work context is viewed as an integral part of the research domain. Therefore, stress is recognized as being involved with specific job roles. Six work roles were identified. These were measured as part of the Occupational Roles Questionnaire, which was the first instrument in the OSI and OSI-R. Four types of responses to stress were identified within the psychological strain dimension of the Psychological Strain Questionnaire and four sets of moderating, coping behaviours were identified in the Personal Resources Questionnaire. The OSI was modified by changing 26 of the 140 items. The current version of OSI-R is the result of reliability research (Cope, 2003; Swanson, 1991). The OSI-R is a self-report inventory which includes three questionnaires. Each of these has items with five-point Likert scale response format. Together, the three sub questionnaires take approximately 30 minutes to complete. Some of the items were reversed to ensure response consistency. The summation of the 10 item scores produces a subscale score for the particular variable. The raw score is converted to T-scores using published norm table information (Cope, 2003).



The OSI-R was considered appropriate for use in the present study, since it is based on a clear model. The normative data for the OSI-R were derived from a representative sample of 983 respondents from a cross-sectional demographic background. T-scores provide information about the individual's scores relative to the scores of participants presented in the normative sample. According to Osipow (1998), the T-scores have a mean of 50 and a standard deviation of 10. The OSI-R is easy to administer and complete and clearly set out. It can be used in career counselling for information on choice or change, in counselling to facilitate discussion and in organisational settings to resolve issues and assess intervention effectiveness (Osipow, 1998; Cope, 2003). It can also be applied in employee selection and

placement, work attitudes, turnover, and absenteeism, work-related stress, behavioural correlates of coronary diseases and managerial counselling and development (Sigma, 2007).

3.6 Validity of Instruments used

Validity determines whether a measure reflects what the researcher is investigating (Bless & Higson-Smith, 1995, in Josias, 2005). Validity can be determined in various ways, namely content validity, construct validity and criterion-related validity (Creswell, 2005).

Content validity: involves “the degree to which a measure covers a range of meanings included in the concept” (Babbie & Mouton, 2007). It also reflects the extent to which tests measure the content they were intended to measure (Josias, 2005). **Construct validity:** involves “the degree to which a measure correlates well with other variables within a system of theoretical relationships” (Babbie & Mouton, 2007). **Criterion-related validity:** involves “the degree to which a measure relates with some external criterion” (Babbie & Mouton, 2007). It also determines the extent to which measures can successfully predict an outcome and how successfully they correlate with other instruments (Josiah, 2005).

For the purpose of this study, content validity was established by given a sample of the instrument to a panel of judges (psychologists and researchers in the field of stress) to inspect and make judgment as to the suitability of the instrument.

Occupational Stress Inventory Revised: Further establishment of validity for OSI-R was done by administration of two versions of the instrument. (The original OSI and the OSI-R). The data collected were subjected to correlation analysis. The resulting scale correlation proved to be relatively high, suggesting that two versions were similar enough to generalize validity from the OSI to the OSI-R (Osipow, 1998). The validity of the OSI was tested in many studies. Convergent validity studies used the OSI-R in conjunction with other

instruments such as, the Career Attitudes and Strategies Inventory. Results showed that there were statistically significant correlations between S-scales and similar scales on other instruments. The correlation values were statistically significant and consistent with the expectation that high strain can be associated with many workplace problems (Osipow, 1998). Spew (1998 in Cope, 2003) highlights the findings which provided moderate to strong support for the concurrent validity of the OSI. Treatment studies employed the OSI scales to assess the effectiveness of stress reduction programmes in decreasing occupationally induced stress and strain. It was found that the PSQ and PRQ effectively indicated differences due to stress reduction interventions. Dorr (1988 in Cope, 2003) found that social support interact with stressful life events and buffer the effects of strain and job satisfaction. Richard and Kai-shek (1989) indicated that strain was experienced differently in women and men. Segedin (1992 cited in Cope, 2003) noted that the person-environment fit predicted social support and that a positive relationship exists between age, recreation and self-care. Decker and Borgen (1993 in Cope, 2003) studied adults in 75 occupations and their findings supported the validity of the interaction of stress, strain and coping. They found that individuals with higher stress scores had higher strain scores and lower job satisfaction.

3.7 Reliability of Instruments used

Reliability refers to the accuracy of a test, consistency of scores obtained by the same individuals when re-tested using the same test on different occasions (Cooper & Schindler, 2003 in Oosthuizen, 2005). Reliability determines how consistent a measure is (Bless & Higson-Smith, 1995 in Josias, 2005). This means that an instrument which continually provides the same scores, is considered to have high reliability, while an instrument that does not provide the same scores every time, is considered to have low reliability. However, the

generally accepted minimum standard of internal consistency of 0.70 (Spector, 1997) was obtained for nearly all the questionnaires used in this study. Reliability measures include; **Internal consistency:** determines the consistency of items across different constructs. It considers how well scale items are related to each other (Creswell, 2005). **Test-retest reliability:** determines how stable a scale is over time. This implies that when the same test is administered a second time to the same subjects over a period of time, and it generates the same results, it has test-retest reliability (Spector, 1997). The **Split-half method:** involves making more than one measurement of any complex social concept (Babbie & Mouton, 2007).

The Occupational Stress Inventory Revised (OSI-R): The reliability of the OSI-R was measured in two ways. Test-retest reliability indicated in table 3.2 on page 52 indicates correlations ranging from 0.39 for self-care to a high of 0.74 for the total PSQ score. Two correlations were less than 0.05 (self-care and role boundary), with all correlations between the administration sessions significant at 0,01 level (Osipow, 1998). Internal consistency analysis was the second reliability estimate used. The revised version of the OSI-R manual and several research studies provide strong support for the reliability of this carefully constructed assessment (Sigma, 2007). The internal consistency (alpha coefficients) for each variable and scale are also depicted in table 3.2 on next page.

Table 3.2: Test-Retest Correlations and Alpha Coefficients for the OSI-R Scales

QUESTIONNAIRE	SUBSCALE	R	ALPHA COEFFICIENT
ORQ		0,61	0,88
	Role overload		
	Role insufficiency	0,68	0,78
	Role ambiguity	0,64	0,85
	Role boundary	0,57	0,79
	Responsibility	0,41	0,72
	Physical environment	0,56	0,75
		0,60	0,89
PSQ		0,74	0,93
	Vocational strain		
	Psychological strain	0,59	0,75
	Interpersonal strain	0,65	0,86
	Physical strain	0,55	0,75
		0,67	0,85
PRQ		0,68	0,89
	Recreation		
	Self-care	0,64	0,77
	Social support	0,39	0,70
	Rational and or cognitive	0,52 0,71	0,88 0,81

(Cope, 2003) Occupational stress, strain and coping in a professional accounting organization. Unpublished master's thesis, University of South Africa, South Africa.

3.8 Procedure

Ethical clearance was obtained from the University of the Western Cape and the Western Cape Department of Education to conduct the research. Once the permission was obtained, additional permission was sought from the various schools' principals at where the study was conducted. Cover letters were attached to the questionnaires which fully explained the nature of the study, the conditions for participation, as well as assuring respondents of the confidentiality of any information provided. Respondents were also provided with detailed instructions as to how the questionnaires were to be completed and returned. The rationale behind providing clear instructions and assuring confidentiality of information rests on the fact that this significantly reduces the likelihood of obtaining biased responses (Sekaran, 2000). Measuring instruments were carefully structured/formatted and investigated for validity evidence and reliability, in order to prevent harm to employees. The human rights and welfare of the participants were acknowledged and protected throughout the entire project. The study was then conducted with the voluntary participation of primary school teachers in the Metropole North District 6 of the Western Cape South Africa and informed consent was obtained.

3.9. Method of data analysis

The research involved seventy eight primary school teachers in the primary schools of the Northern Metropole in the Western Cape. The statistical analysis was done using the SPSS computer package, version 17. Data is the unprocessed feedback that is collected in research study by way of questionnaires, interviews, observations, or secondary databases and by arranging data in a specific way, analyzing the data and making sense of the results, the answers to the questions posed, are obtained (Sekaran, 2003).

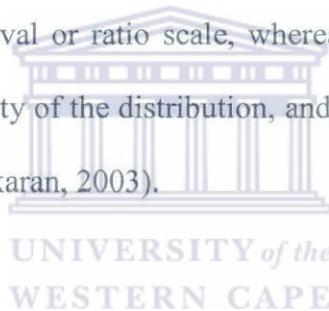
Descriptive statistics enable the researcher to present data in a structured, accurate and summarized way (Huysamen, 1990) and the descriptive data employed in the presentation of the data collected in the survey includes frequencies, percentages, means and deviations. Descriptive statistics look at how frequently certain phenomena occur (frequencies), the mean (average) score of a set of data collected, and the extent of the variability in the set, namely the central tendencies and the dispersions of the dependent and the independent variables (Sekaran, 2003). Statistical analyses involved both descriptive and inferential statistics which include Analysis of variance (ANOVA) and Scheffe' multiple comparison procedure. Which are the descriptive statistics and inferential statistics here?

The first research question is with regard to the determination of the levels and sources of teacher stress amongst a sample of teachers in a selected region in the Western Cape. The responses of the teachers to the questionnaire regarding the causes and levels of stress were used. A student's t-test and a series of one-way ANOVA's were carried out to determine whether the educators' stress levels (dependent variable) differed in terms of their biographical variables (gender, age, marital status, and tenure). Scheffe's post hoc multiple comparison technique was used to determine the statistical difference between the groups. The third research question was to determine whether task characteristics, organizational functioning, physical work conditions and job equipment, career and social matter and remuneration, fringe benefits and personnel policies explain the variance in total stress experienced by teachers in the Metropole North of the Western Cape. The Stepwise regression table was used to answer the question.

Inferential statistics enable the researcher to infer from the data through analysis, the relationship between two or more variables, the differences in a variable among different

subgroups, and how several independent variables might explain the variance in a dependent variable (Sekaran, 2000). Inferential statistics enable researchers to know how variables relate to one another, and whether or not there are any significant differences between two groups, and in inferential statistics the researcher is able to infer from the data through analysis that (1) the relationship between two variables (2) the differences in a variable among different subgroups, and (3) how several independent variables might explain the variance in a dependent variable (Sekaran, 2003).

The two categories of inferential statistics are parametric statistics, which are based on the assumption that the population from which the sample is drawn is normally distributed and that the data is collected at interval or ratio scale, whereas non-parametric data makes the assumption regarding the normality of the distribution, and is used when the data is collected on a nominal or ordinal scale (Sekaran, 2003).



3.10 Summary of the chapter

This chapter has presented the procedure that was followed in executing the research, the sampling technique and design, the data collection methods, the psychometric properties of the instrument, and discussed the various statistical techniques utilised to test the research questions.

The following chapter proceeds with the presentation of the results.

CHAPTER FOUR

PRESENTATION OF RESULTS

4.1 Introduction

This chapter focuses on the findings of the study and provides an explanation thereof. Data analyses involved both descriptive and inferential statistics (a student's t-test and a series of one-way Anova's, Scheffe's post hoc multiple comparison technique). The Statistical Package for the Social Sciences (SPSS) was used for all the statistical analyses in this study.

- The major aim of the study was to find out factors which caused teachers, of Metropole North District of Western Cape, to experience stress in their work places and the levels of stress being experience.
- To determine if there is no statistically significant difference in sources of stress based on the biographical variables (age, gender, marital status and tenure) amongst educators in primary schools.
- To determine whether teacher stress due to learners, conditions of service, workload, resources for teaching and school-community relations explain the variance in total stress experienced by teachers in the Metropole North of the Western Cape.

In the previous chapter a description of the methodology that was employed to achieve the objectives of the study were represented. The results of data analyses are presented next.

4.2 Presentation of the results

Research Question 1

The first research question is with regard to the determination of the levels and sources of stress amongst a sample of teachers in a selected region in the Western Cape. The responses of the teachers to the questionnaire are presented in the table below.

Table 4.1: Levels and sources of stress identified by the respondents of this study

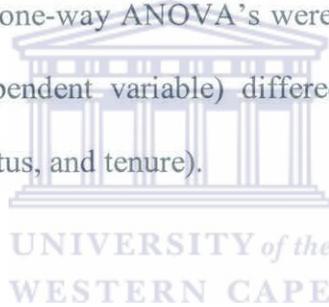
Sources of Stress	Levels of stress		Interpretation
	Mean	Sd	
	108.49	9.322	High
Teacher stress due to learners 1. Learner's misconduct, (e.g. learners' violent behaviours). 2. Learners' poor attitude to school work, (e.g. lack of interest in school work).	9.53	0.922	4.7 Normal
Conditions of Service 1. Changeable education policy by Government. 2. Being placed in work role not trained for (e.g. having to attend to learners' with disabilities).	28.2	2.4	4.7 High
Workload 1. Too many subjects. 2. Too much content to teach in too little time.	30.2	2.4	4.3 High
School-Community Relations 1. Public attitude to schools (community rather very hostile to school). 2. Lack of parental support (parents don't help their children with the latter's school work).	10.5	1.3	3.5 Normal
Resources for Teaching 1. No library in the school. 2. No computer to facilitate communication and sourcing for information (e.g. gaining access to internet).	30.06	2.3	4.28 High

Table 4.1 indicates that as a group, primary school, teachers experience high stress. Teachers report the highest stress as emanating from workload (Mean = 30.2, s = 2.4), as well as resources for teaching (Mean = 30.06, s = 2.3). In addition, they report their stress levels to be high (Mean = 108.49, s = 9.322), rating conditions of service to be stressful (Mean = 28.2, s = 2.4) and school-community relations normal at (Mean=10.5, s=1.3). The lowest reported (Mean =9.53, s =0.922) was for stress due to learners misconduct.

Research Question 2

There is no statistically significant difference in the stress levels of teachers based on their biographical characteristics.

A student's t-test and a series of one-way ANOVA's were carried out to determine whether the educators' stress levels (dependent variable) differed in terms of their biographical variables (gender, age, marital status, and tenure).



Teacher Stress and Gender

Table 4.2: t-test Job stress by Gender

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
total_stress_mean	M	23	4.3496	.16808	.03505
	F	55	4.3353	.29125	.03927

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
total_stress_mean	Equal variances assumed	1.954	.166	.220	76	.826	.01429	.06497	-.11510	.14369
	Equal variances not assumed			.272	68.157	.787	.01429	.05264	-.09074	.11932

Table 4.2 presents the results of the t-test with respect to job stress based on the gender of respondents. The results indicate that there are statistically no significant differences in the stress levels of educators based on their gender.

Using the variable general stress in the questionnaire

Table 4.3

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
General_stressful	M	23	4.74	.619	.129
	F	55	4.35	.799	.108

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
General_stressful	Equal variances assumed	4.822	.031	2.111	76	.038	.394	.186	.022	.765
	Equal variances not assumed			2.342	52.835	.023	.394	.168	.056	.731

Table 4.3 presents the results of the t-test using the variable general stress in the questionnaire. The results indicate that there are statistically significant differences, in the stress levels of educators based on their gender. ($t=2.111$, $pvalue=0.038 < 0.05$). The mean stress is 4.7 for males and 4.3 for females.

Teacher Stress and Age

Table 4.4: ANOVA: Job stress by Age

	Sum of squares	df	Mean square
Between groups	1645.898	5	411.474
Within groups	41931.645	78	471.142
Total	43577.543	83	

** p < 0.01

Table 4.4 presents the results of the ANOVA with respect to job stress based on the ages of respondents. The results indicate that there are statistically significant differences, $F= 0.456$; $p < 0.01$, in the stress levels of educators based on their ages. Hence, the null hypothesis is rejected with respect to differences in stress levels of educators based on age groups.

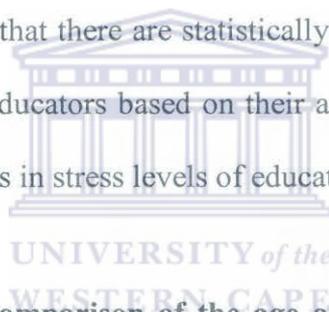


Table 4.5: Scheffe's Post hoc comparison of the age of respondents in relation to job stress

	Mean	Std error
21 and younger	63.72	11.46*
22-29 years	72.18	13.25
30-39 years	83.46	27.94
40-49 years	103.34	12.96*
50 years +	76.34	8.73

** p < 0.01

The results indicate that educators in the age group 40-49 years differ significantly from the teachers in other age groups, with respondents in the age group 21 years and younger experiencing lower stress levels relative to the other age groups. The results also indicate that the age group 30 – 39 years experience more stress than the 21 and younger age group, but less stress than the 40 – 49 years age group.

Teacher Stress and Marital Status

Table 4.6: ANOVA: Job stress by Marital Status

	Sum of squares	Df	Mean square	F
Between groups	1546.924	4	386.731	0.810*
Within groups	42501.552	78	477.546	
Total	44048.476	82		

** p < 0.01

Table 4.6 shows the ANOVA with respect to job stress based on the marital status of respondents. The results indicate that there are statistically significant differences, F (0.810; p < 0.01), in the stress levels of educators based on their marital status.

Table 4.7: Scheffe's Post hoc comparison of the marital status of respondents in relation to job stress

	Mean	Std error
Single	74.34	12.46*
Married	78.26	17.35
Divorced	108.28	15.32*
Widowed	89.64	10.02

** $p < 0.01$

The results indicate that there are significant differences in stress based on marital status, with divorced educators reporting significantly higher stress levels relative to the other categories of respondents ($p < 0.01$). The mean stress levels for those that are divorced (Mean = 108.28, $s = 15.32$) are significantly higher than those who are widowed (Mean = 89.64, $s = 10.02$), those who are married (Mean = 78.26, $s = 17.35$) and those who are single (Mean = 74.34, $s = 12.46$). The results also indicate that single teachers (Mean 74.34, $s = 12.46$) experience less stress than widowed teachers (Mean 89.64, $s = 10.02$).

Teacher Stress and Tenure

Table 4.8: ANOVA: Job stress by tenure

	Sum of squares	df	Mean square	F
Between groups	1324.934	3	220.822	0.574*
Within groups	34231.354	78	384.622	
Total	35556.288	81		

** p < 0.01

Table 4.8 presents the results of the ANOVA with respect to job stress based on the tenure of the respondents. The results indicate that there are statistically significant differences, (F = 0.574; p < 0.01), in the stress levels of educators based on their tenure.

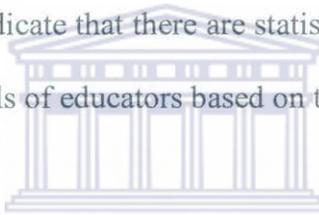


Table 4.9: Scheffe's Post hoc comparison of the tenure of respondents

	Mean	Std error
3-7 years	63.34	11.29
8-20 years	65.36	16.32*
21-30 years	62.26	10.65
> 30 years	87.28	16.73*

** p < 0.01

The results indicate that educators with more than 30 years tenure experience the highest stress, followed by those with 8-20 years' tenure.

Research Question 3

The aim of this question is to determine whether teacher stress due to learners, conditions of service, workload, resources for teaching and school-community relations explain the variance in total stress experienced by teachers in the Metropole North of the Western Cape. The Stepwise regression table below was used to answer the question.

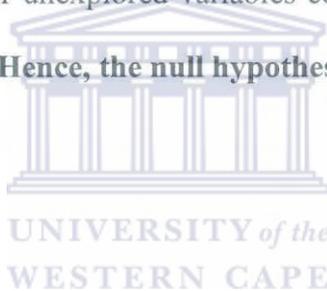
Table 4.10 Results of Stepwise regression: Dependent variable (Total stress)

Multiple Regression	0.65928			
R squared (R²)	0.43465			
R squared (Adjusted R²)	0.35327			
Standard error	0.41228			
			F = 8.047	Significant F = 0.00**
Variables in the equation	B	Standard Error for B	T	P
Conditions of service	-2.929	1.235	-3.26	0.02*
Workload	-0.452	0.232	3.54	0.06
Resources for teaching	-3.562	0.152	1.83	0.00**
Teachers stress due to learners	-2.343	1.664	-1.63	0.00**
School-community relations	-1.426	0.242	-1.42	0.00**

* p < 0.05

** $p < 0.01$

Table 4.10 presents the results of the results of regressing the five independent variables against total stress. The results shown in Table 4.10 suggest a moderate percentage of the variation in Total Stress explained by the variables entered in the equation ($R^2 = 65.93\%$; R^2 (adjusted) = 35.33%). Thus 35.33% of the variance in total stress can be explained by teacher stress due to learners, conditions of service, workload, and resources for teaching and school-community relations. The F-ratio of 8.047 ($p = 0.00$) indicates the regression of total stress on teacher stress due to learners, conditions of service, workload, resources for teaching and school-community relations expressed through the adjusted squared multiple (R^2 (adj.) = 35.33%) is statistically significant. These variables account for 33.53% of the variance in total stress, and suggest that other unexplored variables could explain the variance in stress levels experienced by educators. **Hence, the null hypothesis is rejected.**



4.3. Conclusion

This chapter focused on the presentation of results obtained from the analysis of the data that was generated based on the sample of educators from the North Metropole in primary schools situated in the Western Cape. Both descriptive and inferential statistical techniques were applied. In the following chapter, the results arising from the empirical data analysis will be discussed and contextualised based on previous research within the field.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The primary objective of this study was to determine the sources and levels of stress of teachers at selected primary schools in the North Metropole of the Western Cape. This chapter presents a summary of the most important findings of the research. In order to contextualize the research, comparisons are drawn with available literature on stress amongst teachers in various settings. The remainder of the chapter provides the conclusions that can be drawn from the research as well as recommendations to address the problem of teacher stress.



5.2 Summary of findings

The results indicated that the present sample of teachers are experiencing relatively moderate levels of stress ($M = 93.1$, $SD = 17.18$).

An analysis of the level and sources of stress indicates that teacher stress due to workload and resources for teaching are regarded as the most highly stressful. This is followed by conditions of service which is high. School-community relations and teacher stress due learners are normal.

The results of the study indicate that there are statistically significant differences in stress based on age, gender, tenure and marital status.

In addition, Scheffe's Test revealed the following findings in terms of levels of stress and biographical variables:

- Female respondents displayed almost the same stress levels compared to males.
- Educators in the age group 40-49 years reported significantly higher stress levels.
- Divorced respondents displayed the highest stress levels relative to the other marital status categories.
- Those with more than 30 years' tenure experience greater stress.
- The results of research to compare job stress based on the basis of ages of the respondents indicate that educators in the age group 40-49 differ significantly from the other groups, with respondents in the age category 21 years and younger experiencing lower stress levels relative to the other age categories. The results also indicate that the age group 30 – 39 years experience more stress than the 21 and younger age group, but less stress than the 40 – 49 years age group.
- The results revealed there are significant differences ($F=.810$, $p<0.01$) in stress levels based on the marital status of respondents.
- The results of regressing the five independent variables against total stress suggest a moderate percentage of the variation in Total Stress explained by the variables entered in the equation ($R^2 = 65.93\%$; R^2 (adjusted) = 35.33%). Thus 35.33% of the variance in total stress can be explained by teacher stress due to learners, conditions of service, workload, and resources for teaching and school-community relations.

5.3 Discussion of findings

The major aim of the study was to find out factors which caused teachers, of Metropole North District of Western Cape, to experience stress in their work places and the levels of stress being experienced by them.

To determine if there is no statistically significant difference in sources of stress based on the biographical variables (age, gender, marital status and tenure) amongst educators in primary schools.

To determine whether teacher stress due to learners, conditions of service, workload, resources for teaching and school-community relations explain the variance in total stress experienced by teachers in the Metropole North of the Western Cape.

5.3.1 The results indicated that the present sample of employees is consistent with what exist in the literature. According to Van Zyl and van der Walt (1991) a score of 40-79 is viewed as normal, a score of 80 or above is an indication of high stress and a score of 98 -200 is viewed as very high. However, it should be noted that the categories only serve as guidelines and should not be regarded as absolute limits in this regard (Van Zyl & van der Walt, 1991). An analysis of the level and sources of stress indicates that workload and resources for teaching are regarded as the most highly stressful. This is followed by conditions of service, school-community relations and teacher stress due learners. Researchers (Cole & Walker, 1989; Travers & Cooper, 1996) indicate a definite connection between the physical environment and work-related stress experienced by teachers. Researchers are of the opinion that educators are faced with working conditions that force them to perform their jobs poorly due to, inter alia, a lack of adequate resources, large class sizes, poor staffroom facilities, vandalism by learners, poor lightning, broken windows and furniture, high noise levels and absent parents (Olivier & Venter, 2003). Research done after 1994 brought to light that there is a difference in the available materials, equipment and resources in schools in townships and Ex-model C schools

(Ngidi & Sibaya, 2002). The shortage of materials or means to prepare and present a well-planned lesson seems to be a great source of frustration and disillusionment for teachers and concomitantly contributes to stress (Travers & Cooper, 1996).

5.3.2 The results in the study indicate that there are statistically significant differences in stress experienced by teachers based on age, gender, tenure and marital status. In addition, Scheffe's Test revealed the following findings in terms of levels of stress and biographical variables:

- Female respondents displayed almost the same stress levels compared to males.
- Educators in the age group 40-49 years reported significantly higher stress levels.
- Divorced respondents displayed the highest stress levels relative to the other marital status categories.
- Those with more than 30 years' tenure experience greater stress.
- The results comparing job stress based on the gender of the respondents indicates that there are statistically significant differences ($F=4.654$; $p.<0.01$), in the stress levels of teachers based on their gender.

Although much of the research on gender and stress is contentious, empirical evidence exists attesting to the fact that men and women experience stress differently. For example, while Tung (1980) found that women experienced lower levels of stress compared to men, Van Zyl (2002) and Van Zyl and Pietersen (1999) suggest that women experience more stress than men. Many female teachers experience the changes in the South African educational system as traumatic. The adjustments associated with these changes, together with the female teachers' normal duties and busy work schedules; result in continuous stress (van der Linde, van der Westhuizen & Wissing, 1999). Van Zyl (2002) maintains that this commitment of female teachers result in high stress levels. In conjunction with this, Pearlin (1989, in Long,

1998) posits the view that “greater vulnerability to stress may be attributed to social roles that reflect the unequal distribution of resources, opportunities and self-regard”. Nevertheless, female teachers’ normal duties and busy work schedules combined with other roles that need to be fulfilled results in continuous stress (van der Linde, van der Westhuizen & Wissin, 1999). The results of research to compare job stress based on the basis of ages of the respondents indicate that there are statistically significant differences ($F=0.873$; $p<0.01$), in the stress levels based on age.

Research regarding stress levels of different age groups, is contradictory. Naylor (2001) reported on relatively young teachers who experienced such high levels of stress and anxiety that they contemplated suicide. Research (Karasek & Theorell, 1990; Theorell & Karasek, 1996) suggests that age is associated with stress amongst teachers. However, research by Pisanti, Gagliardi, Razzino and Bertini (2003) amongst a sample of secondary school teachers in Italy did not find evidence of a relationship between the age of teachers and the level of stress experienced. Results, are hence, unequivocal. Literature suggests that younger teachers experience lower levels of stress due to the absence of family responsibilities. Van Zyl (2002) and Van Zyl and Pietersen (1999) maintain that it is likely that older respondents experience higher levels of stress due to the fact that they are less mobile and more loyal to the profession that they have chosen. Indeed, Borg and Falzon (1989) found that, despite the high prevalence of stress, the majority of teachers regarded their profession as highly rewarding. The results revealed there are significant differences ($F=.810$, $p<0.01$) in stress levels based on the marital status of respondents. The mean stress levels for those that are divorced (Mean = 89.64, s = 10.02) are significantly higher than those who are widowed (Mean = 82.63, s.15.56). In their study of 55 teachers, Van Zyl and Pietersen (1999) found that married female teachers in particular experience high levels of stress. Linde and Marx (1995) advance the view that stereotypes and discrimination against women in general have a

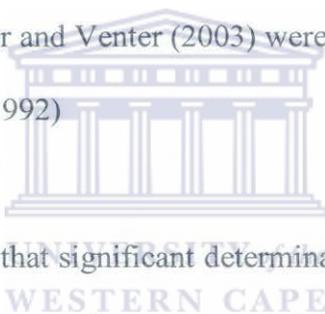
negative effect on their income, status and opportunities for promotion. Possible reasons why the teachers in the divorced and widowed groups experience high levels of stress could be due to the extra family and financial responsibilities that they have as single parents.

5.3.3 The results suggest a moderate percentage of the variation in Total Stress explained by the variables entered in the equation ($R^2 = 65.93\%$; R^2 (adjusted) = 35.33%). Thus 35.33% of the variance in total stress can be explained by teacher stress due to learners, conditions of service, workload, and resources for teaching and school-community relations. The F-ratio of 8.047 ($p = 0.00$) indicates the regression of total stress on the teacher stress due to learners, conditions of service, workload, resources for teaching and school-community relations expressed through the adjusted squared multiple (R^2 (adj.) = 35.33%) is statistically significant. These variables account for 33.53% of the variance in total stress, and suggest that other unexplored variables could explain the variance in stress levels experienced by educators. Kyriacou and Sutcliffe (1987) asked their sample of 257 teachers in 16-medium sized schools to indicate the most significant stressors. They indicated pupil misbehavior, poor working conditions, time pressures and poor school ethos as stressful. These factors were also identified by researchers in other countries (Borg et al, 1991; Laughlin, 1984; Okebukola & Jegede, 1989, Payne & Furnham, 1987). In a study that examined stress in Italian teachers it was found that the teachers reported most pressure with some aspects of their work related to the perceived lack of status and professional support, to the job of teaching itself, to the workload in the form of overcrowded classes and the lack of support from pupils and parents (Zurlo, Pes & Cooper, 2007).

An important influence of the study of stress in Italian teachers revealed the presence of particularly strong coping mechanisms within Italian teachers, these moderating factors

buffer the teachers from the negative effects of stress and are based on their tendency to centre their behavior on individual work rather than teamwork, and this could impact on the quality of teaching, the lack of job commitment and job disengagement in the long term (Zurlo, et al., 2007). It would be critical for researchers to explore the impact of moderating variables or buffering factors that may reduce the negative effect of stress in teaching.

In a study of stress in teachers in the George region of the Western Cape it was found that stress manifested itself in teachers mainly on the emotional level, to a lesser degree but still significant level on physical, psychological and behavioral levels (Olivier & Venter, 2003). In fact the stress that the teachers in the George region experienced is called “job compassion fatigue” and the findings of Olivier and Venter (2003) were confirmed by other research done by Van Wyk (1998) and Marais (1992)



Sutton and Huberty (2001) found that significant determinants of teacher stress are related to stressors found within the teaching environment, and that more research is needed in the study of individual differences in stress proneness, coping methods, personality variables, and the susceptibility and management of stress.

Olivier and Venter (2003) found teachers indicated that what caused stress for them were inadequate salaries when considering time at work tasks and work input, the poor discipline of learners which explain their poor performance at tasks and this couples with bad behavior, high teacher-learner ratios in the classroom, a lack of space, infrastructure and resources with which to complete tasks, little time for recreational activity and after-hours meetings, a lack of their suggestions being heard and acted on, feelings of being depressed, and cardiovascular and gastronomic symptoms.

5.4 Recommendations

The research findings of this study should be interpreted carefully and with caution, because of some limitations. Although the response rate of 43% is considered fairly acceptable for this kind of research, the uneven distribution of male and female teachers could have biased implications. The sample size (N=78) was relatively small, and the schools in the Western Cape were divided into clusters, which could add to the bias of the study. A stratified random sampling method was used, however only respondents from the North Metropoles participated in the study. Consequently clear limitations in comparing with potentially different groups and in generalizing the findings of the localized study exist. It is possible to find similar conditions across the other school metropoles in the Western Cape; however the results cannot be used in other workplace settings.



5.4.1 Implications of findings

According to findings:

5.4.1.1. It is important that the plight of teachers who experience stress be heard by not only themselves but also by the authorities that governs them.

The Provincial Department of Education should design valid and reliable procedures to monitor the stress levels of teachers (van Wyk, 1998)

5.4.1.2 There is a need to improve the physical environment, equipment, remuneration, and policies governing teachers. The best possible representatives of teachers unions could negotiate a better salary structure to improve teachers' situation and to curb the exiting of teachers from the profession. Incentives for teachers to supplement their income as well as

reward for extra effort and responsibilities should be provided. School governing bodies could review these incentives on a regular basis (Saptoe, 2000).

Teachers must be kept up-to-date with new teaching innovations through in-service training and strategies. Salaries must be reviewed and after-hours work that teachers do be given special consideration. Forms of punishment other than the corporal method should be used to solve the problem of misbehaving and ill-disciplined learners especially ways that will gain their cooperation and willingness to learn through topics of interest and relevance to their world. The state and the school governing bodies should make the effort to right-size the teacher-learner ratio's and solve the problem with the lack of space, the lack of infrastructure and the lack of resources with which to do the work, and that the work environment of teachers be invested in. The time teachers spend at school and extra-curricular activities should be controlled and that recreational activity, sport and exercise be encouraged. The views, opinions and ideas of teachers have to be acted on and reinforced in a positive way and the participation of teachers in school policy should be encouraged. Feelings of depression and helplessness must be addressed through the availability of professional counseling within the structure of the Education Department or even through the initiative of support groups being formed around the town or province. The physical well-being must be managed and healthy lifestyles should be encouraged. Additional teachers should be employed in cases that have the demand. The Education Department should take the responsibility to ensure that proper communication channels are in place within schools and allow that teachers are take leave days when the situation becomes such that it is needed.

5.4.1.3 The current study has found that there is a need to investigate the problem further through more thorough research.

5.5 Recommendations to improve research

Future studies should ensure sufficient representation of the different groups in the total population. Future studies should focus on longitudinal designs where inferences in terms of the cause and effect of stress can be drawn (Coetzee & Rothmann, 2005). Research is required into the role of successful coping mechanisms in teachers' careers according to Kariacou, (2001).

Stratified random sampling is a suitable technique as it allows greater flexibility and validity in the research (Anastasi, 1990; Murphy & Davidshofer, 1988). In future studies, researchers could stratify the sample by perhaps using a specific number of teachers across the different occupational categories namely General Classroom Teachers, Teachers with matric plus 3 year Diploma, Teachers with a post-graduate qualification and across the different teaching phases namely Foundation, Intermediate and Senior Phases. The Proportionate Stratified chance of giving feedback on the questionnaire and their representation in the sample could even be improved if the number of selected participants' are based on the ration of presentation on the payroll.

Studies need to assess the effectiveness of interventions to assist teachers and schools with the alleviation of stress (Kariacou, 2001). Investigating the impact of teacher-learner relationships and classroom climate on teacher stress is considered crucial (Kariacou, 2001). Stress-coping research should adopt a holistic approach, considering the totality of the teachers' life-span, rather than just assessing one domain in isolation (Cooper et al., 2001). Future research should use a proportionate stratified random sample in order to compare the measurements of job stress and job satisfaction as it exists among teachers at primary schools

across the Metro-South Zone of primary schools in the Western Cape. The researcher is of the opinion that the aims and objectives of the study had been achieved.



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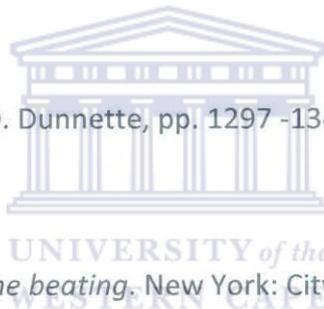
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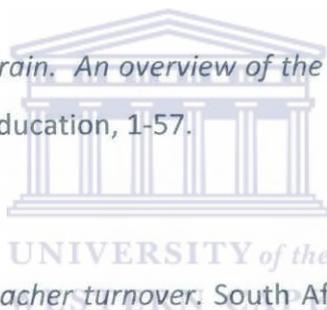
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Media Releases by Western Cape Education Department

WCED Media Release: 8 January 2010. *Underperforming schools-Minister's Comment.*

WCED Media Release: 11 January 2010. *Reports reveal a drop in vandalism incidents in schools.*

WCED Media Release: 2 February 2010. *Minister Grant reveals strategy to increase the Grade 12 pass rate.*

WCED Media Release: 3 March 2010. *Minister Grant condemns senseless killing.*



APPENDICES

Appendix (I)

Teacher Stress Factors Questionnaire

Appendix (II)

Occupational Stress Inventory



UNIVERSITY *of the*
WESTERN CAPE

FACULTY OF EDUCATION

Private Bag X17, Belville, 7535
South Africa
Tel: +27 (0) 21 959 2246
Fax: +27 (0) 21 959 3943
Website: www.uwc.ac.za

July 28, 2009

Director of Research (**Dr. Ronald Cornelisen**)
Western Cape Education Department

Dear Sir,

GRANTING OF ETHICAL CLEARANCE TO CONDUCT A RESEARCH

Mr. Peter John Steenkamp, (Student Number 9005942) is a registered Master in Education (Educational Psychology) degree student of the University of the Western Cape. As part of the requirements of the degree program, students are expected to conduct and report on a research study. Mr. Steenkamp is registered to conduct a study on "Teacher stress factors in the Metropole North, Circuit 6 of the Western Cape". The study is focused essentially on finding out the causes of teacher stress. Knowing the implications of high levels of occupational stress, the research is expected to come up with recommendations as to the causes of stress and how teachers can be made more aware of and to avoid stressors associated with the performance of their roles within their profession.

I have been appointed as his supervisor for the research study. He needs ethical clearance from the Department of Education to conduct the study. It should be pointed out that students conducting research studies for a degree have been carefully educated on the guidelines for involving human beings including the requirements of voluntary participation, informed consent and confidentiality of information. We should be highly grateful, therefore, if you are kind enough to facilitate this student's research study by granting him permission to conduct his study in the schools under your jurisdiction.

Thank you very much.

Yours truly



O. Bojuwoye, PhD (Pitt.)
Professor of Educational Psychology



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UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959, Fax: 27 21-959

E-mail:

CONSENT FORM

Title of Research Project: Teacher stress factors in the Metropole North, of the Western Cape Education Department.

The study has been described to me in language that I understand and I freely and voluntarily agree to participate. My questions about the study have been answered. I understand that my identity will not be disclosed and that I may withdraw from the study without giving a reason at any time and this will not negatively affect me in any way.

Participant's name.....

Participant's signature.....

Witness.....

Date.....



Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact the study coordinator:

Study Coordinator's Name: Prof O Bojuwoye

University of the Western Cape

Private Bag X17, Belville 7535

Telephone: (021)959-2246

Fax: (021)959-3943

Email: obojuwoye@uwc.ac.za



UNIVERSITY of the
WESTERN CAPE

Faculty of Education, Private Bag X17 Bellville 7535, Western Cape South Africa

The School Principal

I hereby solicit permission to carry out a study on teacher stress factors in the Metropole North, Circuit 6 of the Western Cape.

I am Peter John Steenkamp, currently Deputy Principal at Tygersig Primary School in Uitsig, Western Cape. I am enrolled at The University of the Western Cape as a second year Masters Student in the Faculty of Education. I am doing this study because stress amongst teachers is becoming an area of concern as highlighted by recent media reports. Stress causes many personal problems to teachers at home as well as in the school environment. The available empirical evidence suggests that stress is wide spread and in many cases severe. The financial implications and the potential burdens placed on those covering for stressed out teachers may exacerbate the problem. It is important for everybody involved to understand the nature and causes of stress.

The purpose of the study are as follows: 1) To obtain a reliable and valid indication of the major stressors for teachers in the Metro Pole North Circuit 6 of the Western cape; 2) to compare and contract sources of stress and to establish if there are statistical significant differences in the causes of stress by teachers based on their biographical characteristics; 3) to determine whether there are differences in the stress levels of teachers from different environments.

Teachers will benefit in having a clear understanding of the nature and the causes of stress. They will be able to identify stressors coming from learners, nature of work, environment of work, conditions of service, parents, community, and school management.

The role of the respondents is simply to answer Part A, B and C of the questionnaire as honestly as possible. The respondent will be asked to answer a short questionnaire. It will only take about 5-10 minutes to answer. The questions will give us information about teacher stress in the Metropole North , Circuit 6 of the Western Cape.

We will do our best to keep your personal information confidential. To help protect your confidentiality, the questionnaire that you answer will not have your name on it and will be kept in a secure locked cabinet. There will be nothing on the questionnaire that can identify you.

If we write a report or article about this research project, your identity will be protected to the maximum extent possible.

In accordance with legal requirements and/or professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning teacher stress.

There are no known risks associated with participating in this research project.

Thanking you in advance.

.....

Peter J Steenkamp (SPH, BA; B.Ed Hons)





Faculty of Education, Private Bag X17 Bellville 7535, Western Cape South Africa

Dear Fellow Educators

I am Peter John Steenkamp, currently Deputy Principal at Tygersig Primary School in Uitsig, Western Cape. I am enrolled at The University of the Western Cape as a second year Masters Student in the Faculty of Education. I am conducting a research titled: "Teacher stress factors in the Metropole North, of the Western Cape Education Department." I am doing this study because stress amongst teachers is becoming an area of concern as highlighted by recent media reports. Stress causes many personal problems to teachers at home as well as in the school environment. The available empirical evidence suggests that stress is wide spread and in many cases severe.

The purposes of the study are as follows: 1) To obtain a reliable and valid indication of the major stressors for teachers in the Metro Pole North Circuit 6 of the Western cape; 2) to compare and contract sources of stress and to establish if there are statistical significant differences in the causes of stress by teachers based on their biographical characteristics. Teachers will benefit in having a clear understanding of the nature and the causes of stress.

I am using the questionnaire method to gather information for the study. The role of the respondents is simply to answer Part A, B and C of the questionnaire as honestly as possible. The respondent will be asked to answer a short questionnaire. It will only take about 5-10 minutes to answer. The questions will give us information about teacher stress in the Metropole North , Circuit 6 of the Western Cape.

The researcher is aware of the need to maintain confidentiality of information to collect. We will keep your personal information confidential. In accordance with legal requirements and/or professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning teacher stress. To help protect your confidentiality, the questionnaire that you answer will not have your name on it and will be kept in a secure locked cabinet. There will be nothing on the questionnaire that can identify you. If we write a report or article about this research project, your identity will be protected.

There are no known risks associated with participating in this research project. If you are willing to participate, please sign the accompanied consent form.

Thanking you in advance.

.....

Peter J Steenkamp (SPHl, BA; B.Ed Hons)

Questionnaire

TEACHER STRESS FACTORS FOR PRIMARY SCHOOL TEACHERS IN THE METRO POLE NORTH THE WESTERN CAPE EDUCATION DEPARTMENT

Dear Teacher,

This questionnaire is designed to explore the possible causes of stress for primary school teachers in the Metropole North of the Western Cape.

This questionnaire is anonymous and confidential.

Please tick responses as honestly and spontaneously as possible.

Yours faithfully,

Peter J Steenkamp

Masters Student, Department of Education, University of the Western Cape, Bellville.

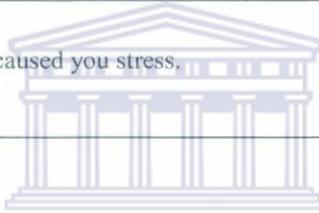
Please place a tick in the appropriate boxes

1. Indicate the extent to which these factors constitute stress to you.

	No stress 1	A little stress 2	Some stress 3	A lot of stress 4	Extreme stress 5
1. Learners who lack motivation					
2. Learners misbehavior.					
3. Having to work with learners with different educational needs/disabilities.					
4. Learners poor attitudes towards classroom tasks.					
5. Additional administrative work					
6. Having to do extra curricular activities like instructing learners.					
7. Too many learners in one class.					
8. Having to attend too many teacher workshops and study seminars.					
9. Too much subject matter to teach.					
10. Changeable education policy of the					

government.					
11. Competition between classes/colleagues.					
12. Bad elements on school premises.					
13. Physical state of school buildings.					
14. Poor working conditions.					
15. The nature of assessment.					
16. Not enough teaching resource.					
17. Communications to and from parents.					
18. Public's attitude and misunderstanding about primary school teachers' workload.					
19. Lack of parental support.					
20. Management style of the school principal.					
21. Place in a work role not trained for.					
22. Inadequate training.					

2. Please list below anything else that has caused you stress.



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3. In general, how stressful do you find being a primary school teacher? E

Not at all stressful	Mildly stressful	Moderately stressful	Very stressful	Extremely stressful

Thank you very much!

Occupational Stress Inventory

Instructions

In this questionnaire, there are three sections which contain statements about work situations and individual habits. Five possible responses to each sentence:

1 – Rarely or Never True

2 – Occasionally True

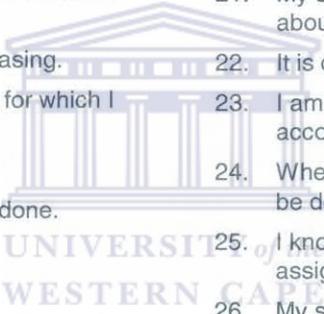
3 – Often True

4 – Usually True

5 – True Most of the Time

Please ensure that you have recorded your name and any other details requested on the answer sheet. Be as truthful as you can – don't give an answer just because it seems to be the right thing to say. There is no time limit, but work quickly and make sure that you consider and respond to *every* statement, even those which do not seem to apply to you. If a statement is not applicable, please mark *1 – Rarely or Never True*.

Section One

- 
1. At work I am expected to do too many different tasks in too little time.
 2. I feel that my job responsibilities are increasing.
 3. I am expected to perform tasks on my job for which I have never been trained.
 4. I have to take work home with me.
 5. I have the resources I need to get my job done.
 6. I'm good at my job.
 7. I work under tight time deadlines.
 8. I wish that I had more help to deal with the demands placed upon me at work.
 9. My job requires me to work in several equally important areas at once.
 10. I am expected to do more work than is reasonable.

 11. My career is progressing about as I hoped it would.
 12. My job fits my skills and interests.
 13. I am bored with my job.
 14. I feel I have enough responsibility on my job.
 15. My talents are being used on my job.
 16. My job has a good future.
 17. I am able to satisfy my needs for success and recognition in my job.
 18. I feel overqualified for my job.
 19. I learn new skills in my work.
 20. I have to perform tasks that are beneath my ability.
 21. My supervisor provides me with useful feedback about my performance.
 22. It is clear to me what I have to do to get ahead.
 23. I am uncertain about what I am supposed to accomplish in my work.
 24. When faced with several tasks I know which should be done first.
 25. I know where to begin a new project when it is assigned to me.
 26. My supervisor asks for one thing, but really wants another.
 27. I understand what is acceptable personal behaviour on my job (eg. dress, interpersonal relations, etc.)
 28. The priorities of my job are clear to me.
 29. I have a clear understanding of how my boss wants me to spend my time.
 30. I know the basis on which I am evaluated.

 31. I feel conflict between what my employer expects me to do and what I think is right or proper.
 32. I feel caught between factions at work.
 33. I have more than one person telling me what to do.
 34. I know where I fit in my organisation.
 35. I feel good about the work I do.
 36. My supervisors have conflicting ideas about what I should be doing.
 37. My job requires working with individuals from several departments or work areas.
 38. It is clear who really runs things where I work.
 39. I have divided loyalties on my job.
 40. I frequently disagree with individuals from other work units or departments.

Occupational Stress Inventory

- 1 – Rarely or Never True
- 2 – Occasionally True
- 3 – Often True
- 4 – Usually True
- 5 – True Most of the Time

Section One (continued)

- 41. I deal with more people during the day than I prefer.
- 42. I spend time concerned with the problems others at work bring to me.
- 43. I am responsible for the welfare of subordinates.
- 44. People on-the-job look to me for leadership.
- 45. I have on-the-job responsibility for the activities of others.
- 46. I worry about whether the people who work for/with me will get things done properly.
- 47. My job requires me to make important decisions.
- 48. If I make a mistake in my work, the consequences for others can be pretty bad.
- 49. I worry about meeting my job responsibilities.
- 50. I like the people I work with.
- 51. On my job I am exposed to high levels of noise.
- 52. On my job I am exposed to high levels of wetness.
- 53. On my job I am exposed to high levels of dust.
- 54. On my job I am exposed to temperature extremes.
- 55. On my job I am exposed to bright light.
- 56. My job is physically dangerous.
- 57. I have an erratic work schedule.
- 58. I work all by myself.
- 59. On my job I am exposed to unpleasant odors.
- 60. On my job I am exposed to poisonous substances.



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Occupational Stress Inventory

- 1 – Rarely or Never True
- 2 – Occasionally True
- 3 – Often True
- 4 – Usually True
- 5 – True Most of the Time

Section Two

- | | |
|---|---|
| 1. I don't seem to be able to get much done at work. | 21. I wish I had more time to spend with close friends. |
| 2. Lately, I dread going to work. | 22. I often quarrel with the person closest to me. |
| 3. I am bored with my work. | 23. I often argue with friends. |
| 4. I find myself getting behind in my work, lately. | 24. My spouse and I are happy together. |
| 5. I have accidents on the job of late. | 25. Lately, I do things by myself instead of with other people. |
| 6. The quality of my work is good. | 26. I quarrel with members of the family. |
| 7. Recently, I have been absent from work. | 27. Lately, my relationships with people are good. |
| 8. I find my work interesting and/or exciting. | 28. I find that I need time to myself to work out my problems. |
| 9. I can concentrate on the things I need to at work. | 29. Lately, I am worried about how others at work view me. |
| 10. I make errors or mistakes in my work. | 30. I have been withdrawing from people lately. |
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|---|--|
| 11. Lately, I am easily irritated. | 31. I have unplanned weight gains. |
| 12. Lately, I have been depressed. | 32. My eating habits are erratic. |
| 13. Lately, I have been feeling anxious. | 33. I find myself drinking a lot lately. |
| 14. I have been happy, lately. | 34. Lately, I have been tired. |
| 15. So many thoughts run through my head at night that I have trouble falling asleep. | 35. I have been feeling tense. |
| 16. Lately, I respond badly in situations that normally wouldn't bother me. | 36. I have trouble falling and staying asleep. |
| 17. I find myself complaining about little things. | 37. I have aches and pains I can not explain. |
| 18. Lately, I have been worrying. | 38. I eat the wrong foods. |
| 19. I have a good sense of humor. | 39. I feel well. |
| 20. Things are going about as they should. | 40. I have lots of energy lately. |



Occupational Stress Inventory

- 1 – Rarely or Never True
- 2 – Occasionally True
- 3 – Often True
- 4 – Usually True
- 5 – True Most of the Time

Section Three

1. When I need a vacation I take one.
2. I am able to do what I want to do in my free time.
3. On weekends I spend time doing the things I enjoy most.
4. I hardly ever watch television.
5. A lot of my free time is spent attending performances (eg. sporting events, theater, movies, concerts, etc.).
6. I spend a lot of my free time in participant activities (eg. sports, music, painting, woodworking, sewing, etc.).
7. I set aside time to do the things I really enjoy.
8. When I'm relaxing, I frequently think about work.
9. I spend enough time in recreational activities to satisfy my needs.
10. I spend a lot of my free time on hobbies (eg. collections of various kinds, etc.).
11. I am careful about my diet (eg. eating regularly, moderately, and with good nutrition in mind).
12. I get regular physical checkups.
13. I avoid excessive use of alcohol.
14. I exercise regularly (at least 20 minutes, 3 times a week).
15. I practice "relaxation" techniques.
16. I get the sleep I need.
17. I avoid eating or drinking things I know are unhealthy (eg. coffee, tea, cigarettes, etc.).
18. I engage in meditation.
19. I practice deep breathing exercises a few minutes several times each day.
20. I floss my teeth regularly.
21. There is at least one person important to me who values me.
22. I have help with tasks around the house.
23. I have help with the important things that have to be done.
24. There is at least one sympathetic person with whom I can discuss my concerns.
25. There is at least one sympathetic person with whom I can discuss my work problems.
26. I feel I have at least one good friend I can count on.
27. I feel loved.
28. There is a person with whom I feel really close.
29. I have a circle of friends who value me.
30. If I need help at work, I know who to approach.
31. I am able to put my job out of my mind when I go home.
32. I feel that there are other jobs I could do besides my current one.
33. I periodically re-examine or re-organise my work style and schedule.
34. I can establish priorities for the use of my time.
35. Once they are set, I am able to stick to my priorities.
36. I have techniques to help avoid being distracted.
37. I can identify important elements of problems I encounter.
38. When faced with a problem I use a systematic approach.
39. When faced with the need to make a decision I try to think through the consequences of choices I might make.
40. I try to keep aware of important ways I behave and things I do.