

**SOURCES OF STRESS FOR TEACHERS AT HIGH RISK SECONDARY SCHOOLS IN
THE WESTERN CAPE**

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KEY WORDS

Teacher Stress

Occupational Stressors

High Risk Schools

Job Satisfaction

Job Overload

Job Control

Teacher Attrition

Teacher Burnout

Learner Misbehaviour

Coping Strategies



ABSTRACT

High risk secondary schools in the Western Cape are at risk of being declared dysfunctional due to their negative climate and/or poor performance, specifically where grade twelve results are below sixty percent. These schools are constantly plagued with crime and violence, the presence of police, government officials and Bambanani volunteers. Recent reports link teacher stress to several teacher suicides.

The main sources of teacher stress stem from difficulty in maintaining classroom discipline, time pressures, workload demands, excessive change, being evaluated by others, challenging relationships with colleagues and poor working conditions. This study therefore highlights the significant relationship between occupational stressors and the stress experienced by teachers at high risk secondary schools in the Western Cape. Occupational stress is related to job satisfaction, job overload and job control. The coping strategies of teachers at high risk secondary schools are explored.

A quantitative research study was undertaken, involving a stratified random sample of 129 teachers selected from a population of 300 teachers from high risk secondary schools in the Western Cape. A probability sampling method was used. The measuring instruments included; the Occupational Stress Inventory, Job Satisfaction Survey, Job Overload Survey and Job Control, Cognitive Demand and Production Responsibility Survey. Results were obtained by

using the Pearson Correlation Coefficient, Multiple Regression Analysis, Analysis of Variance (ANOVA) and T-tests.

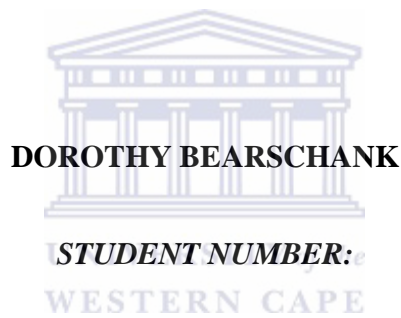
Permission to perform the research on teachers at high risk secondary schools was obtained from the Western Cape Education Department (WCED). Informed consent, anonymity and confidentiality of these teachers' responses were ensured.

The results indicate that there were no significant relationships between teacher stress and job satisfaction, job overload and job control at high risk secondary schools in the Western Cape. Job satisfaction however, showed an inverse, albeit not significant relationship to teacher stress. Furthermore, male and female teachers respond differently to these occupational stressors. Females were more prone to the experience of stress than males. The recommendations are based on the conclusions drawn from the study. In conclusion, occupational stress is considered a major source of stress for teachers, which needs to be addressed more vigorously at high risk secondary schools in the Western Cape.

DECLARATION

I DECLARE THAT, *SOURCES OF STRESS FOR TEACHERS AT HIGH RISK SECONDARY SCHOOLS IN THE WESTERN CAPE*, IS ORIGINAL AND MY OWN WORK.

FURTHERMORE, IT HAS NOT BEEN SUBMITTED BEFORE FOR ANY OTHER MODULE OR COURSE IN THIS OR ANY OTHER UNIVERSITY AND ALL SOURCES HAVE BEEN INDICATED AND ACKNOWLEDGED AS COMPLETE REFERENCES.



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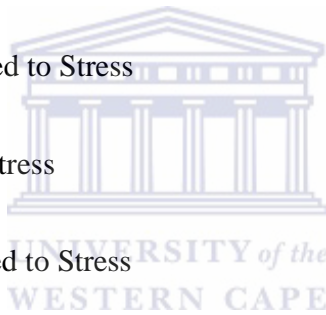
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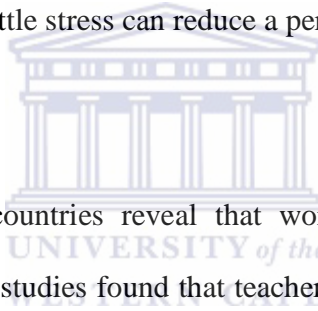


CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

Stress seems to be everywhere, at work and even at home (Brown & Harvey, 2006) and no-one can really be free from it (Isaacs, 2008). Seyle (1956 in Olivier & Venter, 2003, p. 186) warns that “being completely free from stress is death.” Toll (1993 cited in Olivier & Venter, 2003, p. 186) added that “too much or too little stress can reduce a person’s productivity.”



Studies undertaken in different countries reveal that workplace stressors contribute to the experience of stress. Many recent studies found that teachers experience high levels of stress in South Africa (Emsley, Emsley & Seedat, 2009; Kamper & Steyn, 2006); various workplace stressors (Jackson & Rothmann, 2006; Kamper & Steyn, 2006); work overload (Paulse, 2005); job dissatisfaction (Cooper, Pes & Zurlo, 2007; Jackson & Rothmann, 2006); poor working conditions (Kamper & Steyn, 2006); lack of control (De Bruin & Taylor, 2006; Youngusband, 2006) as well as burnout (Jackson & Rothmann, 2005). Ngidi and Siyaba (2002) compared teachers with other white collar professionals and found that teachers experience high levels of occupational stress. Olivier and Venter (2003) studied the stress levels of teachers in the George region and revealed that these teachers experience moderate to high levels of stress.

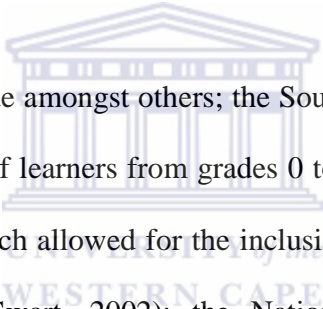
A Cape Town study involving 200 teachers revealed that 58% of the teachers took sick leave and 40% indicated an intention to leave the profession due to stress (Oosthuizen & Van de Bijl, 2007). Another South African study revealed that 55% of teachers have considered leaving the profession, due to inadequate salaries, increased workload, lack of career development, dissatisfaction with work policies, job insecurities and lack of professional recognition (Paulse, 2005). Ahrendse (2008) noted that the annual rate of teachers leaving the profession in Cape Town average to 3, 3%.

Rapid technological changes which involve keeping up with the latest technological advancements require teachers to adapt to changes and this increases their experience of stress (Berndt & Oosthuizen, 2008). Cartwright and Cooper (2008) argue that if performance is used as a workplace measure, it should not be contaminated by technology or the environment and should only represent inputs from the individual. However, if contamination does exist, then teachers' performance will be questionable.

For many South African teachers, stress is the result of the rapid democratic changes, which transpired in 1994. Isaacs (2008) and Ngidi and Siyaba (2002) agree that rapid changes cause stress. Democracy in South Africa was an attempt by the post apartheid government to redress the legacy of apartheid (Coetzee & Rothmann, 2004). The consequent restructuring, brought about many structural interventions ranging from the introduction of new information and

technology, the development of new organisations and redeployment of workers to changes in management structure (Maile, 2005).

Specifically with regard to education, democracy brought about an inequitable allocation of resources and other severe educational changes. Many South African schools are still ill-equipped (Khoza & Milner, 2008) and struggle to the cope with these changes. Consequently teachers struggle to cope due to inadequate resources and develop severe stress.



Internal educational changes include amongst others; the South African Schools Act 84 of 1996, which necessitated the enrolment of learners from grades 0 to 12 (Reiman, 2008); the change to an inclusive education system, which allowed for the inclusion of learners with special needs at schools (Eloff, Engelbrecht & Swart, 2002); the National Qualifications Forum (NQF), Curriculum 2005 now known as Outcomes-Based Education (OBE), which focused on the continuous assessment of learners' progress without emphasis on passing or failing them (Ngidi & Siyaba, 2002); the National Qualifications Authority Act (SAQA) of 1995 and the National Qualifications Framework (NQF) prior to the Norms and Standards for Teacher Education, Training and Development in the year 2000, which set out additional roles and responsibilities for teachers (Department of Education, 2000 in Douglas, 2005) and the abolishment of corporal punishment which necessitated the implementation of different methods of enforcing learner discipline (Reiman, 2008).

Many South Africans struggle to balance work and family life (Oosthuizen & Van der Bijl, 2007). Women have taken up the role of the provider while men acquired more responsibilities at home, and often their family responsibilities clash with their responsibilities at work. Consequently they experience work-home conflict, where work interferes with family life or family-work conflict where family interferes with work. Both these situations impact negatively on the quality of the individual's life and can cause stress (Nelson & Quick, 2006).

In South Africa, both situations can apply due to changes in family structures such as single parents and dual career couples. Females struggle to cope and have difficulty to balance work which can culminate in less life satisfaction, anxiety and work stress. Difficulties which families encounter in effecting such transitions, especially unexpected ones, such as retrenchment, may result in psychological and interpersonal conflicts or confusion and threaten family security, stability, quality of life, status and the very identity that work provided for the individual as well as family (Buys, Mostert & Wentzel, 2009).

Research indicates that individuals, who possess an internal locus of control, have higher job satisfaction and performance (Nelson & Quick, 2006). However, the South African working environment causes exhaustion and threatens the status, economic stability, self-esteem, basic beliefs and loved ones of individuals, which causes stress (Hobfoll, 1989 in Oosthuizen, 2005). Drastic changes in education policies, legislation and education programmes have made teachers the targets of criticism causing increased levels of stress and creating general dissatisfaction

among teachers (Badenhorst, George & Louw, 2008) especially those teachers at high risk schools in the Western Cape. At these schools, the matriculation pass percentages are poor and/or they have a negative school climate (WCED, Media Release, January 8, 2010). These schools are also called “a gangsters’ paradise” (Ahrendse, 2008). The recent shooting of a principal at Sithembele Matiso Secondary School in New Crossroads, which occurred on the school premises (South African Government Information, 2009), provides shocking evidence of the plight of employees at high risk secondary schools.

Reducing the stress of teachers at high risk schools is essential to ensure their continued existence as well as impedes growth in the existence of high risk secondary schools in the Western Cape. Employee assistance programmes at these schools are therefore essential to provide assistance and support for teachers and to reduce their stress. Stress management training and other services could assist teachers to perform optimally at work (Ivancevich, Konopaske & Matteson, 2002).

1.2 MOTIVATION FOR THE STUDY

South Africa is viewed as one of the most violent countries in the world (Becker & Reckson, 2005), with Cape Town being referred to as one of the main high risk areas in the world. In Cape Town, specifically previously disadvantaged areas, crime ranges from car jacking, theft, robbery, commercial crime, alcohol and drug related offences to murder. The teachers in the

Western Cape are increasingly becoming the victims of crime and violence (Becker & Reckson, 2005; Ewen & Steffgen, 2007; Wilson, 2002). According to Becker and Reckson (2005), approximately 100, 000 gang members in 137 gangs operate in the Western Cape alone. Recent crimes in this region include; property theft, possession of weapons, fighting, drug abuse, bullying and even murder (National Department of Education, 2001).

Recent incidents of crime at schools include the stabbing of a teenager at Beacon Hill Secondary School (Ahrendse, 2008), theft of electricity cables at Tygersig Primary School, vandalization of twenty two classrooms at Eurecon Primary School and computers at Hermeslaan Primary School (WCED, Media Release, January 11, 2010). More severe recent incidents include; teacher attacks, with consequent deaths, death threats from learners, disruptions of classroom discipline, traumatic events, shootings, school break-ins and drug abuse (Becker & Reckson, 2005; Benjamin, 2001, Morell, 2002; The Democratic Alliance, 2007). The number of vandalized schools from 2007 to January 2010 amounted to 151 and of these 21 incidents occurred in the year 2010 (WCED Media Release, January 11, 2010).

An alarming number of 109 high risk schools exist in the Western Cape of which the majority totalling 85 are secondary schools (WCED, Media Release, January 8, 2010). These are schools that obtained a poor matriculation pass rate of less than 60% in the past (WCED, Media Release, January 8, 2010) and/or experienced a negative climate and are consequently at risk of being

declared dysfunctional schools (The Democratic Alliance, 2007). The Western Cape's matriculation pass rate has declined by almost 10% over the last five years. In 2009, 75.7% of matriculants passed their examinations, with 31.9% qualifying for access to studies for bachelors degrees (WCED, Media Release, February 2, 2010).

Creating a positive school climate at high risk secondary schools would assist in improving the matriculation results of these schools. Aspects that need to be addressed include; unclear roles of teachers, difficult learners, absenteeism, presence of SAPS reservists and Bambanani volunteers, poor training, lack of support, wide age groups in classes, inadequate resources, poor education standards, authoritarian style of management, lack of parental responsibility (Ngidi & Siyaba, 2002; The Democratic Alliance, 2007); unqualified teachers, large pupil-teacher ratio of 1-38 or more, high school drop-out rates, lack of security, theft and vandalism (Salie, 2005); crime and violence (Becker & Reckson, 2005); as well as teacher victimization and deaths (Even & Steffgen, 2007).

The Minister of Education in the Western Cape, views safety at schools as a priority (WCED, Media Release, January 11, 2010), however, attending to the particular needs of teachers, specifically those employed at high risk secondary schools in the Western Cape, should be considered as equally important. Chien and Kyriacou (2004) found that there is a great need for basic research on stress, which considers the local circumstances in the design of the study.

1.3 AIMS AND OBJECTIVES

The primary objective of the study is to explore the sources of stress for teachers at high risk secondary schools in the Western Cape.

Secondly, to determine the relationship between, job satisfaction, job overload and job control to the stress of teachers at high risk secondary schools in the Western Cape.

Thirdly, to determine whether the biographical factors of teachers, such as age, gender, ethnic origin, marital status, number of children and years of experience, are related to the stress experienced by teachers at high risk secondary schools in the Western Cape.



1.4 HYPOTHESES

H_a: Job satisfaction is not related to stress of teachers at high risk secondary schools in the Western Cape.

H_b: Job overload is not related to stress of teachers at high risk secondary schools in the Western Cape.

H_c: Job control is not related to stress of teachers at high risk secondary schools in the Western Cape.

H_d: Biographical factors are not related to stress of teachers at high risk secondary schools in the Western Cape.

1.5 LIMITATIONS OF THE STUDY

Due to limitations in the current study, the results should be interpreted with caution. 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=129) 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 East and 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 metropolises in the Western Cape, however the results cannot be used in other workplace settings.



A quantitative design was deemed more practical by the researcher, however using qualitative data could have increased the value of the research, since more subjective inputs from respondents could have provided a better conceptualization of the stress experienced by teachers at high risk secondary schools in the Western Cape.

1.6 DEFINITIONS OF TERMS

Stress: Ivancevich et al. (2002, p. 281) define stress as “an adaptive response, moderated by individual differences, that is a consequence of any action, situation or event that places special demands on a person.”

Sources of stress / Stressors: A stressor is defined as “an external event or situation that is potentially harmful to a person” (Ivancevich et al., 2002, p. 281).

High Risk Schools: These schools are at risk of being declared dysfunctional due to their negative climate and/or poor performance (Khoza & Milner 2008).



1.7 OVERVIEW OF THE STUDY

Chapter 1

This chapter involves the introduction and background, motivation, aims and objectives as well as the hypotheses of the study. The main reasons for undertaking this research are explained in order to provide clarity on the focus of the research. Literature pertaining to the reasoning, as well as recent statistics on crime in the Western Cape is provided as evidence of crime and its relation to teacher stress in the Western Cape. The limitations of the study are provided to ensure that the results are interpreted carefully.

Chapter 2

This chapter focuses on providing an overview of the theory of the study. It explores the concept of stress and teacher stress as well as research findings based on the topic. The various models and frameworks which underpin the study are discussed. Furthermore possible coping strategies are suggested. The chapter concludes with an integration of the theoretical aspects of the study and providing a model of support for teachers at high risk secondary schools in the Western Cape.

Chapter 3

In this chapter the research design used to explore the research problem is provided. This involves a description of the sample size and its selection methods, the procedures employed as well as the statistical techniques used in the study. The reliability and validity of the data collection methods are also discussed.

Chapter 4

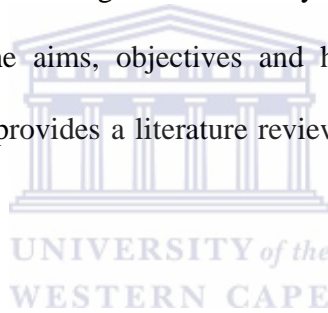
This chapter highlights the results gained from the research analysis and the findings obtained in the study of teacher stress at high risk secondary schools of the Western Cape. The results obtained as well as the biographical characteristics of these teachers are discussed and presented graphically and tabulated to illustrate their relationship to teacher stress.

Chapter 5

In this chapter a discussion of the results of the study is provided. An explanation of the results obtained in the present study, conclusions drawn based on these results as well as recommendations for future research is provided.

1.8 SUMMARY OF THE CHAPTER

This chapter explored the sources of stress for teachers at high risk secondary schools in the Western Cape. The sources of stress integral to this study were explained and evidenced with recent reports and statistics. The aims, objectives and hypothesis of the study were also provided. The following chapter provides a literature review based on the research problem of the current study.



CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter highlights the theoretical base of the study. It explores the sources of stress as well as possible coping strategies of teachers at high risk secondary schools in the Western Cape. A model for teacher support is also presented.

As the challenges for teachers increase, so does their experience of stress (Schulze & Steyn, 2007). Studies indicate that stress is becoming endemic, affecting both the physical and mental health of teachers (Olivier & Venter, 2003; Van Wyk, 1998). An epidemiological survey conducted in the United Kingdom, indicated that stress was considered the second most frequent condition of workers who reported work-related illnesses (Coetzee & Rothman, 2005). A study by Zhang and Zhu (2006) indicated that Chinese teachers, due to their hardworking character, suffered from stress and burnout.

South Africa has experienced many changes over the past few years, which contributed to the increased levels of stress and burnout of teachers. Jackson and Rothmann (2005) indicated that the South African education system accommodates more than 12,3 million learners, 29 386 primary and secondary schools, 375 000 teachers, 5000 inspectors and subject advisors as well as

68 000 officials, managers and support staff. The efficacy of teachers is however, still influenced by racism, violence and other manifestations of antisocial behaviour found in many schools. On a daily basis, teachers have to deal with large classes (40-60) and outcome based education (OBE) which increased their workload.

Similar to research in other countries, South African studies indicate that South Africans suffer from stress. Many studies have confirmed that anxiety, depression, job dissatisfaction and burnout, together with the physical-health consequences, are pronounced experiences of teachers (Van Tonder & Williams, 2009). A study involving teachers in Kwa-Zulu Natal, indicated that the level of stress experienced by these secondary school teachers was relatively high, when compared with countries like England, Australia, Malta and Wales (Ngidi & Siyaba, 2002). Due to democratization in 1994, the particular situation in South African schools has changed drastically, which increased the stress levels of these teachers.

Kamper and Steyn (2006, p. 115) found that “in South African schools, innovations such as inclusive education, the abolishment of corporal punishment, additional mediums of instruction, learner problems, unmotivated learners, large learner-educator ratios, redeployment and retrenchment of educators, time pressures, the threat of redundancy, inadequate salaries and new curriculum approaches, are main causes for the rising levels of stress among teachers.”

South African teachers are therefore not exempt from the negative outcomes of stress and this emphasizes the importance of attending to the well-being of teachers and the effects of stress on them. Prior to exploring the sources, manifestation, consequences of stress and possible coping strategies, it is essential to define the concept of stress, in order to gain a clear understanding of the topic.

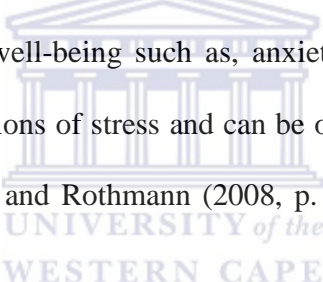
2.2.1 DEFINITION OF STRESS

Stress is a complex phenomenon. It involves three aspects namely the sources of stress that is experienced in the working environment, the perception and appraisal of the stressor and the emotional reactions that occur when the stressor is viewed as threatening by the individual. The latter could lead to the emotional arousal of anxiety and constant arousal could cause physical and psychological strain as well as adverse behaviour. Newell (2004) maintains that all stress definitions include three basic elements namely; external, psychological and physical reactions to stressful events.

The word stress originated from the Latin words “strictus” or “strictere” meaning strict, which literally means to draw tight (Younghusband, 2003, p. 4). Many definitions of stress exist in literature, creating confusion as to whether the term *stress*, *stressor* or *strain* should be used in defining various aspects of stress (Khoza & Milner, 2008; Thatcher & Miller, 2003).

Many theoretical approaches to stress exist, and influence how the term is used (Khoza & Milner, 2008). According to Nelson and Quick (2006, p. 214), stress is “the unconscious preparation to fight or flee that a person experiences when faced with a demand.” Furthermore a stressor is “a person or event that triggers a stress response, while strain or distress refers to the adverse psychological, physical, behavioural or organisational consequences that may arise as a result of stressful events” (Nelson & Quick, 2006, p. 214).

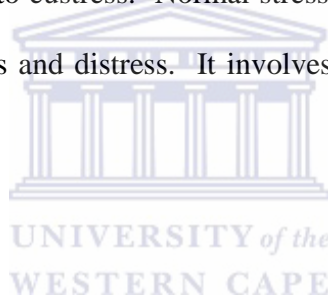
Khoza and Milner (2008, p. 157) noted that the term “stress” illustrates “the psychological and physiological response of an organism to an external threat.” Furthermore, strain results from “two or more negative forms of well-being such as, anxiety and depression. It involves the individual’s reactions to the conditions of stress and can be observed at a cognitive, behavioural and psychological level.” Cooper and Rothmann (2008, p. 3) concur that “strain refers to the condition of stress.”

The logo of the University of the Western Cape is centered on the page. It features a stylized classical building with a pediment and columns, rendered in a light blue color. Below the building, the text "UNIVERSITY of the WESTERN CAPE" is written in a serif font, with "UNIVERSITY" and "WESTERN CAPE" in all caps and "of the" in lowercase.

The theoretical approach implies that stress is inherent to a particular situation. Anderson, Litzenberger and Places (cited in Rothmann & Viljoen, 2009, pp. 1-2) define stress as “the response of an individual to the self-perceived imbalances between the demands of the situation, and the resources one has at one’s disposal to respond successfully.” Khoza and Milner (2008, p. 157) emphasize the negative aspects by defining stress as “a relationship between the person and the environment that is appraised by the person as taxing or exceeding their resources and

endangering their well-being.” Brown and Harvey (2006, p. 251) extends this notion by viewing stress as “an interaction between an individual and the environment, which affects physical and mental health.”

Stress is also distinguished as positive stress, negative stress and normal stress. Furthermore, positive (good) stress is known as “eustress” and involves aspects such as, opportunity and challenge, while negative (bad) stress is known as “distress” which pertains to feelings of anger, worry and frustration, which causes discomfort. Simmons (cited in Pieterse & Rothmann, 2007) noted that meaningful work leads to eustress. Normal stress, however, is referred to as “neutral stress” and it lies between eustress and distress. It involves aspects of change, discomfort and noise (Olivier & Venter, 2003).

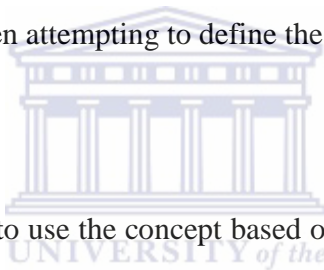


“Stress can be described as being functional or dysfunctional” according to Berndt and Oosthuizen (2008, p. 94). Functional stress can increase performance by motivating people to reach a certain objective. Excessive stress can, however, have negative consequences and can be considered as dysfunctional stress. South Africans are confronted with various stressors due to their unique social environment. Furthermore, due to political and legal requirements, such as government, equity and black empowerment, many organisations place additional stress on employees (Berndt & Oosthuizen, 2008).

Many studies involving workplace stress adopt the theoretical approach. This approach assists in identifying the work-related factors that places the individual's physical and psychological health in danger (Khoza & Milner, 2008; Milner & Thatcher, 2003).

2.2.2 Definition of Teacher Stress

Teacher stress refers to the “experience by teachers of unpleasant emotions such as anger, tension, frustration, anxiety, depression and nervousness, resulting from the aspect of their work as teachers” (Moomaw & Pearson, 2005, p. 39). Kyriacou (in Eloff, et al., 2002), noted that there are many issues involved when attempting to define the term teacher stress.



The first issue pertains to whether to use the concept based on the level of demands made on the individual, or whether the term should be used to demonstrate the emotional state provided by the demands. The second issue pertains to the inclusion of negative as well as positive demands as stress factors, or whether both positive and negative emotional states should be considered. The third issue pertains to an individual's perceptions, as well as ability to deal with a situation.

The term occupational stress has the same characteristics as the term teacher stress, since it appears within the parameters of the working environment. It is caused by work related factors and has consequences for the work situation. It also implies that individuals cannot handle work-

related demands such as work-load, role conflict and poor working conditions (Rothmann & Viljoen, 2009). The definition of teacher stress seems complex when considering these issues (Eloff, et al., 2002) however considering the various definitions of teacher stress could provide a better conceptualization of the concept.

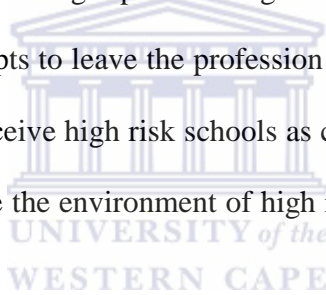
Researchers on stress in South Africa have examined the sources and consequences of stress and burnout amongst teachers, the effect of personality characteristics on the work-related stress of teachers, as well as the differences in stress across different hierarchical levels at various schools (Khoza & Milner, 2008; Ngidi & Sibaya, 2002). Other recent studies explored the high levels of teacher stress as well as how stress impacts on teachers' performance (Khoza & Milner, 2008; Ngidi & Siyaba, 2002). This present study concerns the sources of stress particular to teachers at high risk secondary schools in the Western Cape. The underlying theoretical framework of this study is also delineated.

2.3 THEORETICAL FRAMEWORK

In the current study only the theories, approaches and models that are mentioned in this study will serve as a framework for determining the sources of stress for teachers at high risk secondary schools in the Western Cape.

According to Folkman and Lazarus (1984 in Makie, 2006), stress is considered to be a dynamic and reciprocal relationship between the environment and the person, where stress is only experienced when situations are viewed as taxing one's resources. Stress brought about by the environment can therefore be perceived differently by each individual. An individual might consider a high risk school environment as threatening, while others might perceive it as challenging.

This links with Seyle's General Adaptation Model, which considers an individual's reaction to an external threat. Some individuals might perceive high risk schools as threatening and opt to "flight." This could include attempts to leave the profession or take extended sick leave or even commit suicide. Others might perceive high risk schools as challenging and opt to "fight." This could include attempts to influence the environment of high risk secondary schools positively or negatively.



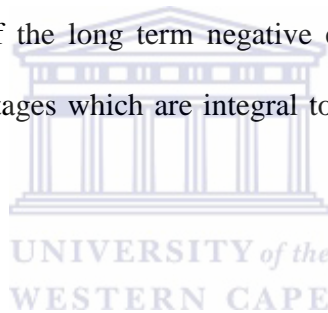
2.3.1 The Person-Environment Fit Approach

This approach developed by Khan, focuses on how confusing and conflicting expectations of an individual in a social role can create stress for the individual. He furthermore examined an individual's fit in the environment, and viewed a good person-environmental fit as occurring when a person's skills and abilities fit a clearly defined consistent set of expectations resulting in a lack of stress. Long periods of stress can have negative consequences such as strain in the

form of depression (Nelson & Quick, 2006). Seyle (1956) also highlights the long term negative effects of stress.

2.3.2 Seyle's General Adaptation Syndrome (GAS)

Selye (1956), who is regarded as the pioneer of stress, warns that being completely free from stress means death (Everley & Rosenfeld, 1991; Olivier & Venter, 2003). Seyle's classic theory, the General Adaptation Syndrome, provides insight into individuals' reactions to stress. Stress is the non-specific reaction of an individual to an external threat or stressor. A key component of this theory is the identification of the long term negative effects of stress (Khoza & Milner, 2008). Seyle explains the three stages which are integral to his General Adaptation Syndrome (GAS) as follows:



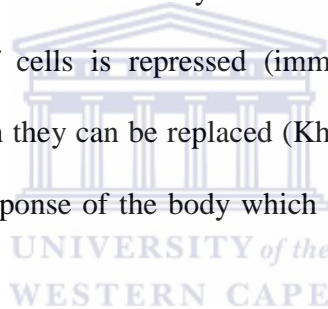
Stage One: Alarm Reaction

This stage is triggered by the perception of a stimulus as a stressor. Firstly, the body prepares for action which can either be a "fight or flight" reaction. Secondly, the initial shock phase occurs, where the body responds by a drop in blood pressure and muscle tension. Thirdly, a counter shock phase exists, which involves a response to a threat or injury. The alarm stage is triggered by the hypothalamus and regulated by the sympathetic autonomic nervous system and the

endocrine system (Khoza & Milner, 2008). At this stage the body is alerted and stress levels are at its highest (Paulse, 2005).

Stage Two: The Resistance Stage

At this stage the body is starting to cope. Endocrine and sympathetic activities decrease somewhat, since the individual is calmer. If the stressor can be dealt with or destroyed, then psychological damage is not likely to occur. However, much is still occurring physically. Corticosteroids worsen the natural inflammatory reaction and the immune system is less responsive. The replacement of cells is repressed (immuno- suppression) and the body's resources are exhausted faster than they can be replaced (Khoza & Milner, 2008). This stage is characterized by an adaptation response of the body which involves “fight or flight” responses (Steenkamp, 2003).



Stage Three: Exhaustion

Corticosteroids in the blood stream avert further release of ACTH (negative feedback). If the stressor was removed during the resistance phase, blood sugar will steadily return to normal. If the stressor was not dealt with, extended exposure means that higher brain centres will override the negative feedback and maintain the pituitary-adrenal excitation. This results in wear and tear

on the tissues, fatigued muscles and damage to the endocrine glands and kidneys. This is referred to as the diseases of adaptation or stress related illness (Khoza & Milner, 2008).

Key sources of stress for teachers include amongst others dealing with parents, lack of principal support, limited parental support and limited learner motivation which may lead to a lack of job satisfaction, job overload, lack of control and an overall negative working environment. These could reflect negatively on the teacher, causing the experience of stress (Schulze & Steyn, 2007). The stimulus-based model of stress considers the external environment as a source of stress.

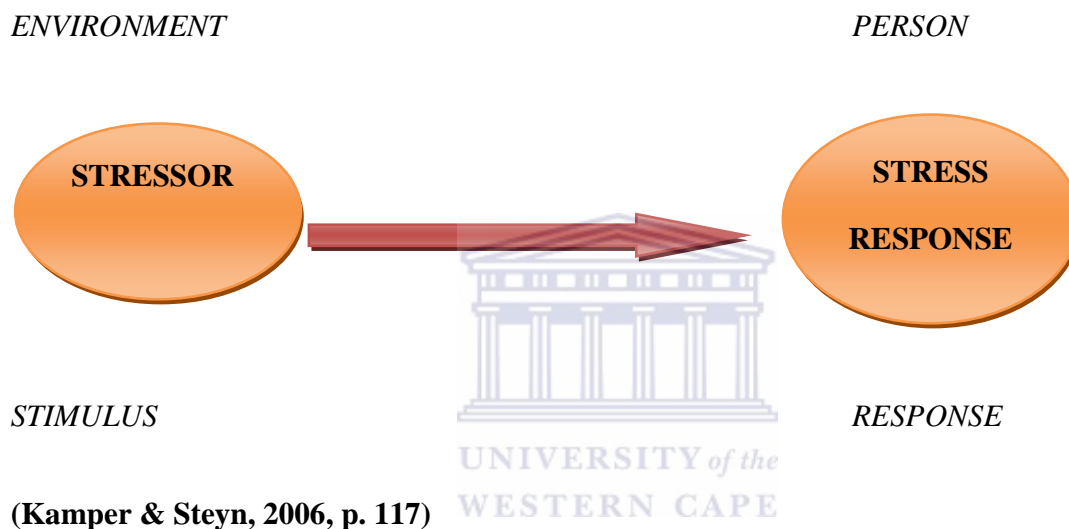


2.3.3 The Stimulus-Based Model of Stress

The Stimulus-Based Model of Stress developed by Folkman and Lazarus (1984) is derived from physics, particularly engineering according to Cooper, Dewe and O’Driscoll (2001 in Kamper & Steyn, 2006). Stress is considered as “a condition of the environment that is external to the individual and influences him or her in a disruptive way” (Kamper & Steyn, 2006, p. 117). As illustrated in figure 2.1 on page 24, the model shows that stress occurs when the demands made on an individual exceed the elastic limit of the individual’s ability to cope or adapt (Rout & Rout, 2002; Schulze & Steyn, 2007). Although this model is useful in identifying stressors, it is limited since it does not take individual perceptions into account (Schulze & Steyn, 2007).

Furthermore, stressors are considered as agents or demands that elicit a stress response. This model also has the potential to identify stressors that might affect teachers at high risk secondary schools in the Western Cape.

Figure 2.1: The Stimulus-Based Model of Stress



(Kamper & Steyn, 2006, p. 117)

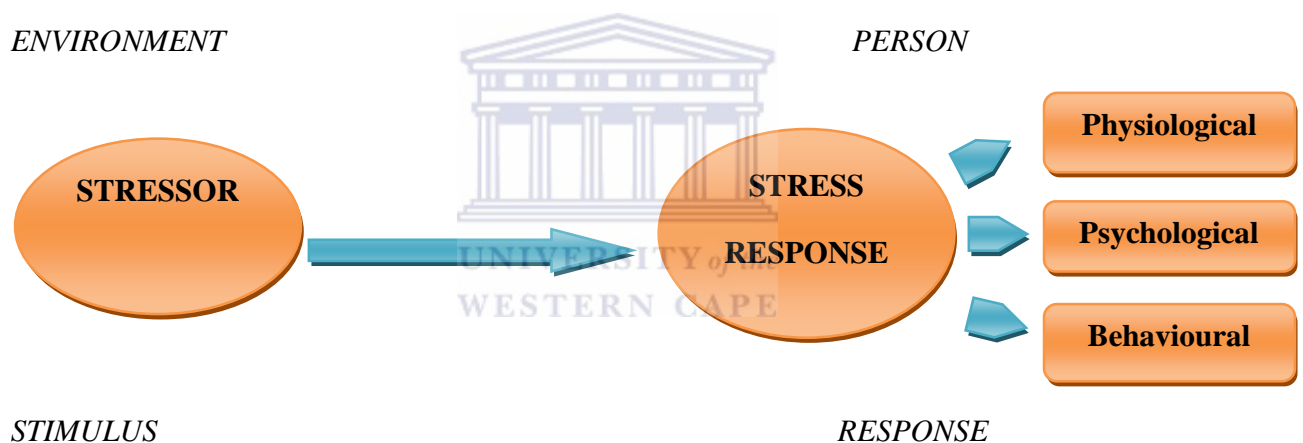
A different view of stress called the Response Based Model of Stress was also developed.

2.3.4 The Response-Based Model of Stress

The Response-Based Model of Stress developed by Folkman and Lazarus (1984) is illustrated in figure 2.2 on page 25. “It emerged from the field of medicine and is explained from a physiological perspective” (Kamper & Steyn, 2006, p. 117). Furthermore, it focuses on the

physiological, psychological and behavioural consequences of stress. These symptoms may also be attributed to other medical conditions. It is congruent with Seyle's theory and indicates that "stress is the individual's response to a threatening or disturbing stimulus (Kamper & Steyn, 2006, p. 117). In addition to this teachers can be viewed as the passive recipients of stimuli, who experience stress when under pressure (Schulze & Steyn, 2007). It focuses on the physiological, psychological and behavioural responses, which may appear as consequences of stress.

Figure 2.2: The Response-Based Model of Stress



(Kamper & Steyn, 2006, p. 118)

Theorists also developed meditational conceptualizations of stress which focus on the cognitive, evaluative and motivational processes that intervene between the stressor and the reaction to the stressor (Khoza & Milner, 2008). Considering the various sources of stress facilitates in broadening the view of the workplace environment of teachers at high risk secondary schools.

2.4 SOURCES OF STRESS

Sources of stress or stressors can be short-term or long-term in nature. Common acute stressors include; noise, high technology effects as well as thoughts about a threat or unsafe event, while chronic stressors involve ongoing stressful situations that are long-term and where the urge to act is suppressed (Isaacs, 2008).

Researchers have highlighted several occupational stressors in the teaching environment. These include their level of job satisfaction, job overload, job control, role ambiguity and conflict, pressures of the teacher's role, inadequate resources, poor working conditions, lack of professional recognition, low remuneration, lack of decision-making and effective communication, staff conflicts as well as learner misbehaviour (Bertoret, 2006; The Democratic Alliance, 2007). Montgomery and Rupp (2005) added that the main sources of teacher stress stem from students who lack motivation, maintaining discipline in the classroom, general time pressures, workload demands, large amounts of change, assessments, challenging relationships with colleagues, management and being exposed to generally poor working conditions.

The sources of stress and burnout have been reported to include workload and work pressure, unsatisfactory working conditions, poor relationships with colleagues and superiors, unsatisfactory school management and administration, the form and content of school cultures, school structure and communication, leadership practices, a lack of promotional prospects,

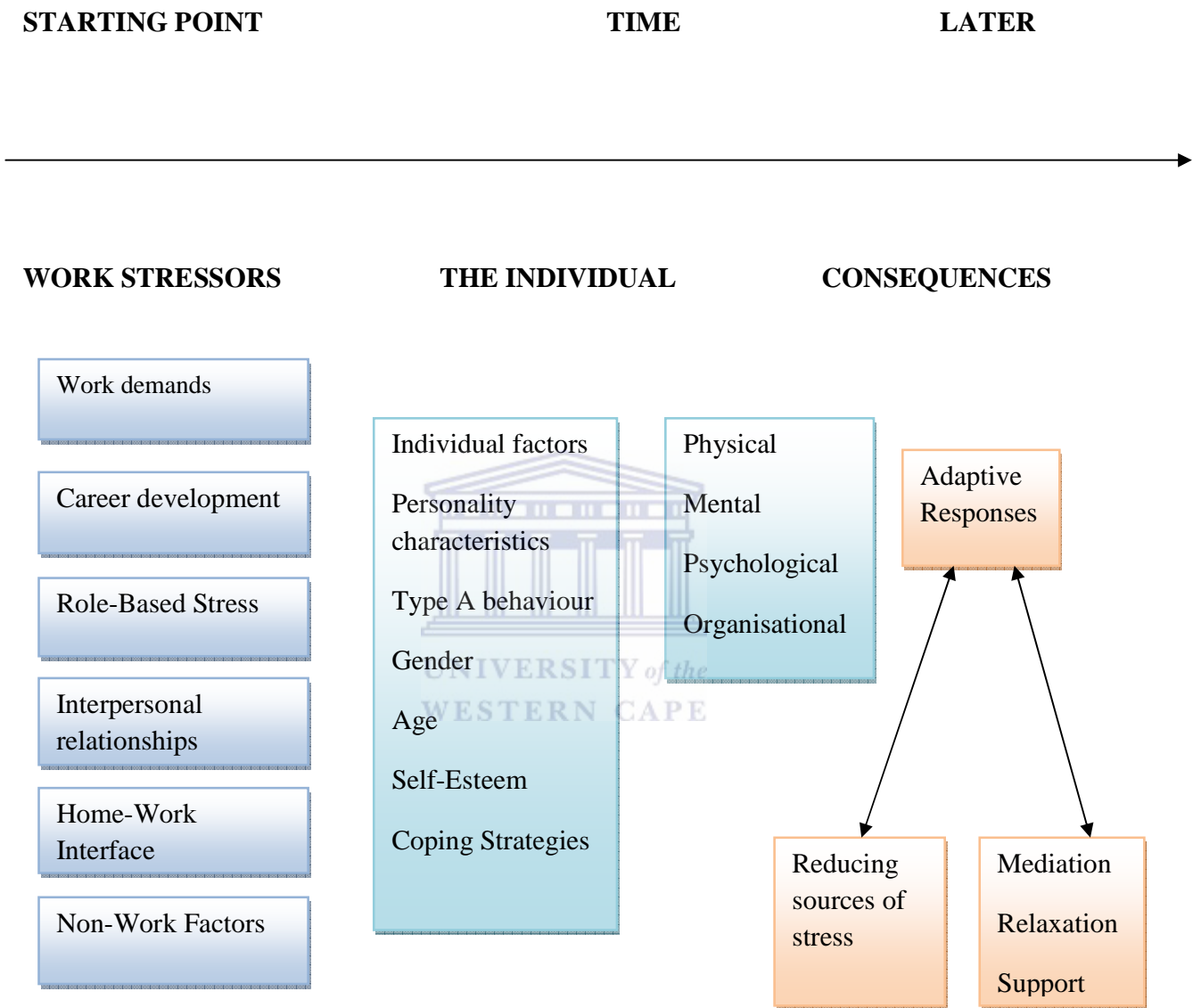
resources available to schools, the size of classes, educational policies and procedures, school reputation, relationships with the community and with parents as well as learner attitudes (Van Tonder & Williams, 2009). Institutional and social factors include, low pay, poor training, lack of sources, lack of teaching and learning materials and a breakdown in traditional support systems (Salie, 2002). Work pressure, emotional, mental and physical reactions of teachers also contribute to their stress (Sarief, 2004). Many of these sources of teacher stress seem to be evident at high risk secondary schools in the Western Cape.

2.4.1 Presentation of Occupational Stress

In figure 2.3 on page 28, the model presented by Kamper and Steyn (2006), indicates the link between the work stressors, the individual, consequences and adaptive responses. Work stressors indicate the work demands, career development, role-based stress, interpersonal relationships and home-work interface. The individual factors include; personality characteristics, Type A behaviour, social support, gender, age, self-esteem, self efficacy and coping strategies. The consequences include; physical, mental, psychological and organisational consequences, the adaptive responses include; managing stress by reducing sources of stress, meditation, relaxation and support.

Kamper and Steyn (2006) provide a presentation of occupational stress which the researcher of the present study views as key to determining the sources of stress at high risk secondary schools in the Western Cape.

Figure 2.3: Presentation of Occupational Stress



(Kamper & Steyn, 2006, p. 129)

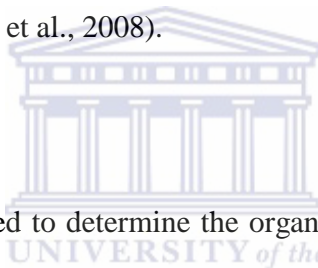
As illustrated in Figure 2.3, individuals with certain personality attributes, experience stress differently. Each of these differences does not predict a specific response, but the combination of these differences is used to theorize about the relative contributions of the stressors (Kamper & Steyn, 2006). Some consequences of stress can be disruptive, counterproductive and very dangerous, according to Ivancevich, Konopaske and Matteson (2002).

2.4.2 Model of Occupational Stress, Commitment and Ill-health (Strain)

Cartwright and Cooper (1997) suggested six major sources of pressure at work or stress in the job itself, namely; role-based stress, relationships, career development factors, organisational structure and climate and work-family interface. Five categories were suggested by Ivancevich and Matteson (1980), three of which deals with social psychological stressors in the workplace. They employed the frequently used organisational psychology categorization by level of thought and enquiry namely individual level, group level and organisational level (Makie, 2006).

Jorgensen and Rothman (2008) noted two aspects of organisational commitment namely, commitment of the individual to the organisation and perceived commitment of the organisation to the individual. They view organisational commitment as a state in which an employee identifies with an organisation and its goals, is willing to exert effort on behalf of the organisation, wish to maintain membership of the organisation and the extent to which employees are loyal and dedicated to the organisation.

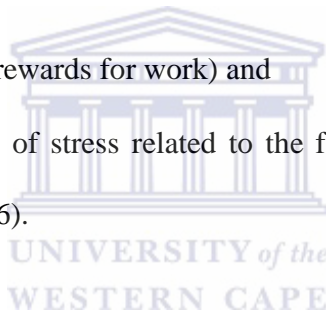
Organisational commitment also refers to the relative strength of an individual's identification with and involvement in an organisation and the desire to stay with the organisation. The intention to remain with the organisation is a consequence of the individual's commitment rather than the defining characteristic (Mostert et al., 2008; Rothmann & Viljoen, 2009). Coetzee and Rothmann (2005 in Mostert et al., 2008) found that employees perceive the attributes of their jobs as well as the extent of their job control as major sources of stress and therefore perceive the organisation as less committed to them. In return, they become less committed to the organisation. Poor and inadequate resources may also prohibit teachers' goal accomplishment, which may cause failure and frustration and result in withdrawal from work as well as reduced commitment to the school (Mostert et al., 2008).



The ASSET model is therefore used to determine the organisational commitment of teachers at high risk secondary schools. The ASSET model of Cartwright and Cooper (2002) in Figure 2.4 on page 32, illustrates the relationship between organisational commitment, occupational stress, and ill-health. The ASSET model integrates personal antecedents, indicators of the immediate stress response, perceived commitment from and to the organisation as well as the long-term consequences of stress, namely psychological and physical ill-health (strain), into a single model (Mohamed & Naudé, 2006). The model illustrates the sources of occupational stress that affect the commitment relationship between the organisation and the individual. Organisational commitment therefore refers to the employee's feelings of obligation to stay with the organisation. These feelings result from the internalization of pressures exerted on an individual before entry or following the entry of the pressures (Rothmann & Viljoen, 2009).

Seven occupational stressors are considered (Jackson & Rothmann, 2006).

- work relationships (poor or unsupportive relationships with colleagues and or superiors, isolation and unfair treatment),
- work-life imbalance (when work interferes with the personal and home life of workers),
- overload (unmanageable work loads and time pressures),
- job security (fear of job loss or obsolescence),
- control (lack of influence in the way work is organized and performed),
- resources and communication (having the appropriate training and equipment and resources),
- pay and benefits (financial rewards for work) and
- aspects of the job (sources of stress related to the fundamental nature of the job itself (Jackson & Rothmann, 2006).

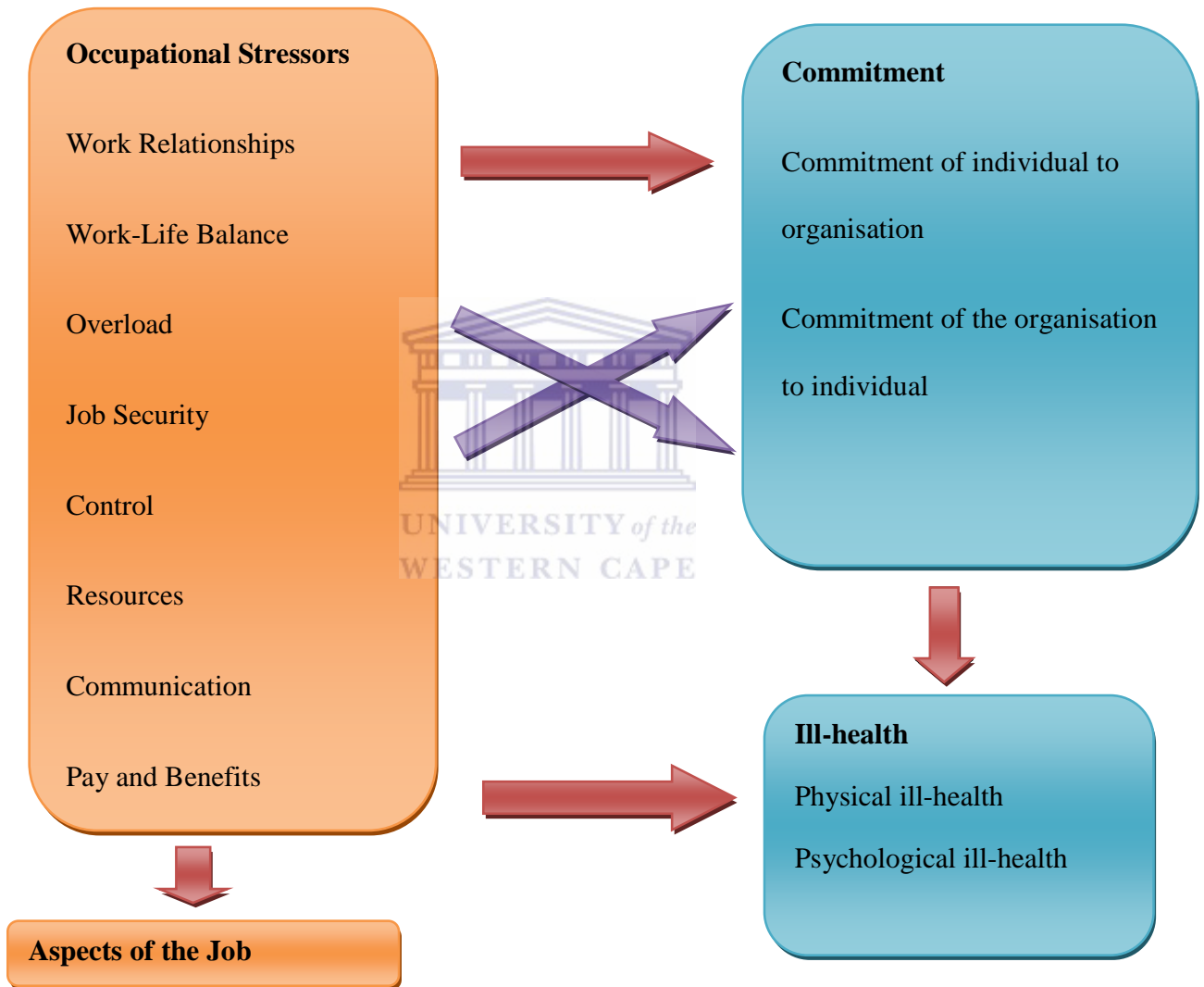


Organisational commitment also refers to the effects of stress on the individual (Jackson & Rothmann, 2006). Curry, Wakefield, Price and Mueller (1986) contest previous linkages between commitment and satisfaction. They could not find evidence for the relationship between commitment and satisfaction over time. Their findings indicate differences in commitment and satisfaction measures and differences in focus between studies (Jackson & Rothmann, 2006).

Ostroff (1992) found that effective commitment to a school and job satisfaction of teachers may not always lead to a well functioning school, however it is not likely that a school will function

well when these factors are lacking. Figure 2.4, below illustrates the occupational stress, commitment and ill-health relationship.

Figure 2.4: Model of Occupational Stress, Commitment and Ill-health (Strain)



(Jackson & Rothmann, 2006, p. 77)

Poor health is an outcome of stress, which can be used to determine whether the workplace pressures have positive or negative stress and damaging effects (Jackson & Rothmann, 2006). Many teachers often complain about their poor health, they suffer from migraines, aches, sleeplessness and other sicknesses associated with stress. These illnesses can also be attributed to having a huge workload. According to Cartwright and Cooper (2008), a poor psycho-social work environment creates conditions that encourage bullying in the workplace. These and other factors necessitate creating a positive school environment at high risk secondary schools in the Western Cape. Various environmental factors which affect the stress of teachers are discussed.

2.4.3 ENVIRONMENTAL FACTORS

2.4.3.1 High Risk Secondary Schools

The stress experienced by teachers has equally undesirable consequences for their work environment, since it affects the learning environment and interferes with the achievement of educational goals (Van Tonder & Williams, 2009).

The education sector is still neglected or rather the focus of attention is on restoration of the educational infrastructure, inter alia, rebuilding schools and upgrading technologies. The focus is therefore on the hardware rather than the software, namely teachers (Gallagher & Murphy, 2009). High risk secondary schools in Western Cape are precisely those schools that were neglected during the apartheid era, and where the focus is now on restoration of these schools,

rather than teacher effectiveness. Consequently poor school performance in the form of poor matriculation results and a negative climate, such as poor morale, crime and violence are key characteristics of these schools (Khoza & Milner 2008). School violence also seems to affect teacher stress.

2.4.3.2 School Violence

Many incidents of school violence have been reported in recent years. A survey of the South African Human Rights Commission in 2007 found that drugs and gangs are a major concern for 66% of the schools located in high crime areas and assaults occurred at 10% of the schools (The Democratic Alliance, 2007). According to Ewen and Steffgen (2007), the role of pre-conditional factors of violence in school culture and climate, have to be considered as explanatory background material for the evolution of violence. Furthermore, the context of socialization outside the school (family, peers, leisure time) and aspects of personality and school culture are implied in the occurrence of violence (De Wet, 2003). Learner misbehavior is also considered as a major contributor to teacher stress.

2.4.2.3 Learner Misbehaviour

Discipline is a serious issue for all schools and negatively affects teachers (Younghusband, 2005). South African studies revealed that poor learner discipline is a main cause of teacher stress (Olivier & Venter, 2003). Poor discipline includes disruptive behaviour, negative attitudes

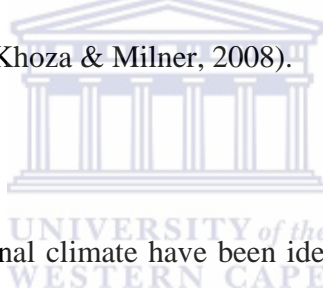
towards work, aggression, violence and even death of teachers. A clear distinction needs to be made between classroom management and discipline, since these two terms are sometimes used interchangeably. Classroom management emphasizes the provision of quality of instruction as a means of minimizing disruption in classrooms, while discipline refers to what teachers do in response to learners' misbehaviour (Lewis, 1999). It can be deduced that unless order is provided by effective classroom discipline, there is very little opportunity for teachers to instruct their learners or manage their classes.

Recently discipline has been characterized as a managerial function (Lewis, 1999) due to its extreme importance in creating order in the classroom. However, due to the banning of all forms of corporal punishment, promulgated in section 10 of the South African Schools Act (84 of 1996), many teachers struggle to implement classroom discipline at schools (RSA, 1996a). Pickering (2008) found that classroom discipline and managing disruptive students, demand time and energy from teachers and are linked to their stress. Younghusband (2003) agrees that student behaviour is a source of stress for teachers and added that teachers require stronger measures to deal with disruptive learners. Lorgat (2003) observed that despite the ban on corporal punishment, it continues to be used as a means of classroom discipline and is still practiced widely. Oosthuizen and Van der Bijl (2007) noted that teachers still perceived learners as unruly, rude and ill mannered and stressed that no adequate measures are in place to enforce discipline. This makes teachers feel disempowered, frustrated and even abused.

2.4.4 ORGANISATIONAL FACTORS

2.4.4.1 Organisational Climate

An organisational 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 behaviour” (Khoza, 2004, p. 27). Reichers and Schneider (cited, in Khoza & Milner, 2008), agree that organisational 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 organisational climate, occupational stress and stress related outcomes. They also discovered that a favourable climate dimension led to lower levels of occupational stress (Khoza, 2004; Khoza & Milner, 2008).



Various dimensions of organisational climate have been identified in previous research. These include autonomy, work pressure, support, trust, recognition and innovation (Khoza, 2004). Oiling (2002, in Khoza, 2004) found that organisational climate was considered an indicator of job satisfaction and absenteeism among nurses in Hong Kong. Pietersen and Van Zyl (1999, in Khoza, 2004) studied the effect of organisational climate on teachers' level of stress and found that secondary school teachers consider inadequate autonomy, inadequate recognition as well as limited opportunities to be existing in South African schools. These negative factors are purported to influence a negative school climate.

2.4.4.2 School Climate

Hoy and Miskel (cited in Khoza & Milner, 2008, p. 158) define school climate as “the set of internal characteristics that distinguishes one school from another and influences the behaviour of people. Lui, Rovai and Wighting (2005) agree that school climate involve a set of internal characteristics that distinguishes schools and influences individuals’ behaviour. Khoza and Milner (2008), found that four school climate dimensions exist. 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 behaviour; teacher professionalism, which describes openness of the relationships between teachers and academic press, which address the relationship between the school, the learners and the achievement motivation within the school.



Another framework which examines school climate draws on the notion of organisational health. Healthy organisations 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, p. 28) 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 behaviour. The Western Cape Education Department’s

(WCED) Safe Schools Project attempted to ensure safety of teachers and learners at schools (Ahrendse, 2008).

A report by the National Professional's Organisation of South Africa (2002) provided evidence of the poor morale of teachers at schools. The report states that every four teachers has a sense of low morale towards the profession, 38.2% experienced low morale towards job satisfaction. Factors which influence teacher morale negatively include poor leadership style (65.5%), lack of quality support from departmental officers (63.2%), constant change in education methods (60.0%), poor salary package (58,1%), poor communication of the Department of Education with schools (53,4%), lack of promotion prospects (50,8%), the enormous paperwork (49,3%), lack of resources in classrooms (43,7%), the amount of initiative allowed by the Department of Education (41, 1%) and low teacher- learner ratio (37,4%) (Bardenhorst, George & Louw, 2008). These are all postulated to influence schools' performance.

2.4.4.3 School Performance

According to Hoy and Smith (2007), a range of individual variables, including teacher stress, school climate, teacher commitment, learner characteristics, and social factors act together as predictors of school performance. Previous research linked school climate with school performance (Khoza, 2004). A study on schools in Michigan revealed that school climate factors accounted for 63% of the variation in mean school achievement between low and high achieving

schools (Khoza, 2004; McEvoy, 2000). Many studies have also found relationships between various aspects of school climate and school or learner achievement (Kelley, 2005). In recent years the number of (underperforming) high risk secondary schools increased.

In 2006 the number of high risk schools were 36, in 2007 it further increased to 57 high risk schools, in 2008 another increase of 74 high risk schools were noted, and 2009 the total augmented to 85 high risk schools (WCED, Media Release, February 2, 2010). This indicates a serious problem for schools in the Western Cape. Poor performance and many other workplace stressors can cause teacher stress.

2.4.5 WORK STRESSORS

2.4.5.1 Work Demands

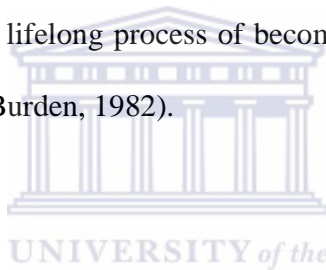


Work demands refer to tasks that have to be performed by an employee. These tasks can include physical, social and organisational dimensions. Quantitative job demands involve the amount of work and the time available to do the work, while qualitative work involves the worker's emotional reactions to the job (Cooper et al., 2001). Classroom teaching poses many demands, and researchers found that teachers do not have enough time to achieve the required standards of teaching (Kamper & Steyn, 2006). The job demands and resources could also affect work-related stress (Maslach, Schaufeli & Leiter, 2001). This implies that unless teachers are

developed, they will be unable to cope with their work demands and hence ongoing training and development as well as support both internal and external are critical factors which need to be considered in order to reduce teacher stress.

2.4.5.2 Career Development

Recent literature stresses the importance of effective development programmes for teachers (Bisshoff, Hendricks & Mestry, 2009). Career development as a source of stress includes job security, performance appraisal and professional training (Kamper & Steyn, 2006). Career development is considered to be a lifelong process of becoming aware of factors that influence various aspects of a person's life (Burden, 1982).



A study by Olivier and Venter (2003) revealed that many teachers perceive the educational workplace as stressful, and ultimately experience failure in their careers. Professional development at schools deals with the Integration of the Development Appraisal System, (IQMS), the Whole School Evaluation and Performance Management Systems. However, in many schools professional development is difficult to implement and results in stress for teachers. This could be due to insufficient training provided, low morale of staff and resistance from unions (Bisshoff et al., 2009). Stress can also be attributed to the job overload of teachers.

2.4.5.3 Job Overload

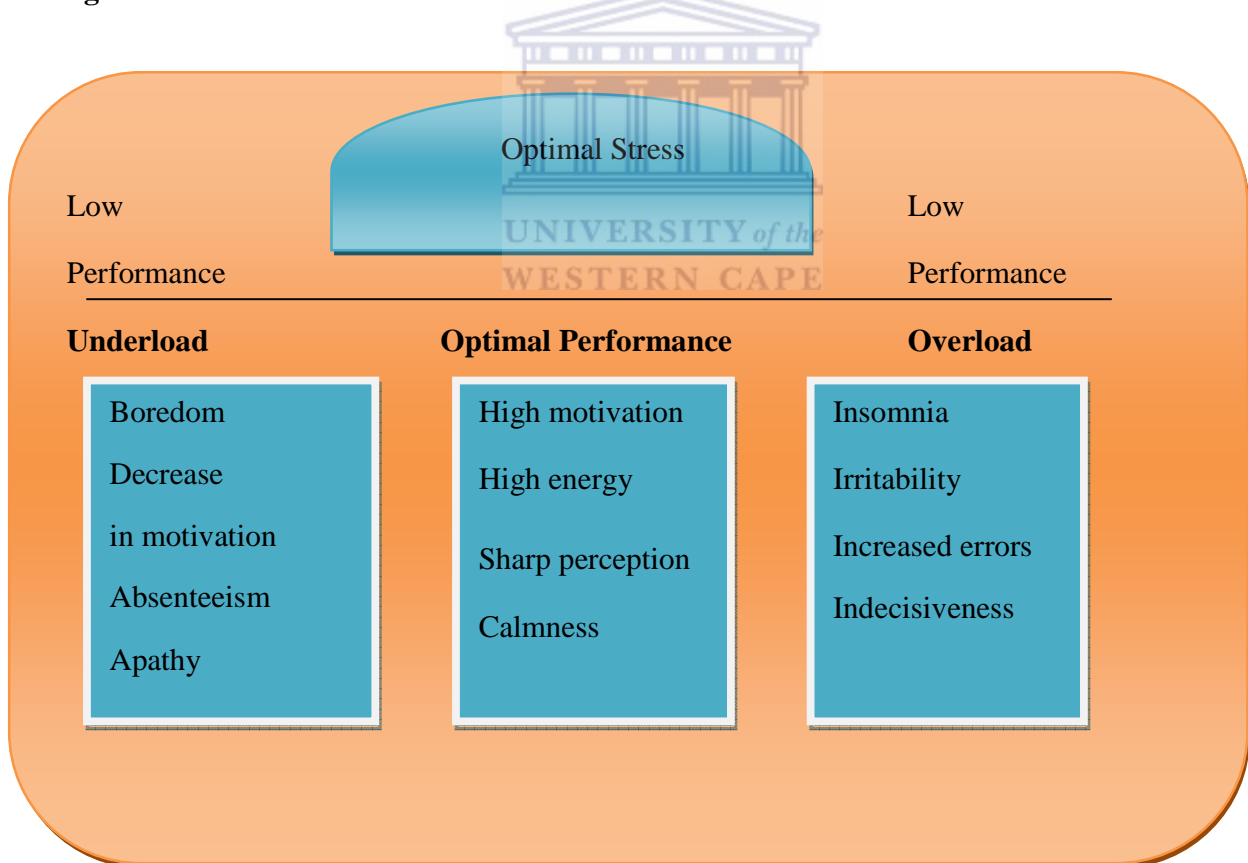
Quantitative job overload means that a new employee is given too much work to do, while qualitative job overload means the job is too difficult for the person to do (Crafford, Moerdyk, Nel, O'Neil & Southey, 2006). Job overload occurs when a person has either too little to do (quantitative) or the work 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).

Dewe (cited in 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 et al., 2002).

In figure 2.5 on page 42, the optimal stress level, which indicates the best balance between challenge, responsibility and rewards, is presented. It shows that the potential negative effects of job overload can be increased when job overload is coupled with low control over work demands (Ivancevich et al., 2002). Teachers' workload can affect their level of control in the classroom.

The introduction of rationalization and the new learner-teacher ratios has resulted in teachers having to deal with extremely large classes. Major complaints by respondents concerned the demands of having to deal with large numbers of learners and lacking space, infrastructure and resources. This situation results in disciplinary problems as well as teachers having to tolerate high noise levels 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 (Saptoe, 2000).

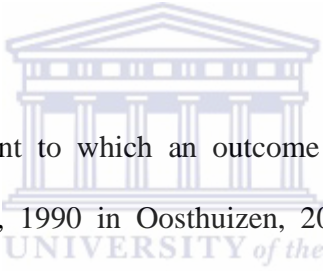
Figure 2.5: Work Underload-Overload Continuum.



(Ivancevich, et al., 2002, p. 285).

2.4.5.4 Job Control

Job control refers to the extent to which an employee can choose the types of behaviours needed to complete a task (behavioural control) and the ability to make work related decisions (decisional control) or both (Jones, Schaubroeck & Xie, 2001). Karasek (1979) developed a model of job strain relating job demands, job control, negative health and psychological outcomes. De Bruin and Taylor (2006) refer to this model as the Job Demand Control Model (JDC). This model considers control as a cognitive mediator of a stressful transaction of which the outcome is adaptational (Folkman, 1984). Two variables are considered, namely internal and external control.



Internal control involves the extent to which an outcome of behaviour is dependent on an individual's own attitudes (Rotter, 1990 in Oosthuizen, 2005). Conversely external control involves the extent to which individuals expect that the outcome is due to luck or fate and resides in the hands of powerful others (McWatts, 2005). In a study on stress, researchers found that jobs where individuals had little control over their work environment were more stressful than those where they had control (Brown & Harvey, 2006).

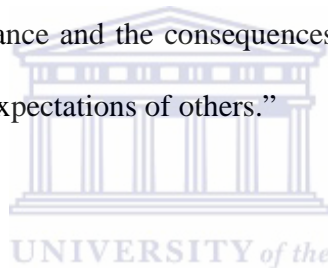
2.4.5.5 Role-Based Stress

The impact of changes in the workplace can change the nature of job roles, causing role ambiguity or role conflict or added demands (Paulse, 2005). Kamper and Steyn (2006, p. 122)

concur that role-based stress “includes role conflict and role ambiguity.” It exists when individuals have unclear role responsibilities, expectations and work objectives.

2.4.5.5.1 Role Ambiguity

Role ambiguity is viewed as the second major cause of role stress (Nelson & Quick, 2006). According to Johns (1996, p. 245), role ambiguity occurs “when workers have a lack of clarity of job goals and methods.” Berndt and Oosthuizen (2008, p. 94) posit “that role ambiguity occurs when a person does not know how to perform on the job or what the expected relationship is (that is, the link between performance and the consequences). It also refers to the confusion a person experiences regarding the expectations of others.”



Nelson and Quick (2006, p. 219) concur that role ambiguity refers to “the confusion a person experiences related to the expectations of others.” Furthermore, it may be caused by not understanding what is expected, not knowing how to do the job, or not knowing the result of failure to do the job. Friedman (1991) agrees that role ambiguity occurs when an employee does not have enough information to perform a task or does not understand the expectations related to that particular task. Teachers that are new to the profession typically suffer from role ambiguity, since they are unclear about their role expectations. This results in unclear objectives (Paulse, 2005) which can result in role conflict.

2.4.5.5.2 Role Conflict

King and King (in Paulse, 2005, p.36) define role conflict as conflict that arises “when an employee experiences incompatible demands or incompatible goals surrounding tasks connected with their job which can induce negative emotional reactions due to their perceived inability.” Johns (1996) concurs that role conflict occurs when a person has incompatible role expectations. Consequently, performing tasks that are not related to an individual’s work role can result in stress experienced by the individual, since role conflict may occur (Cooper & Sutherland, 2000; Paulse, 2005). This can affect a teacher’s relationships with colleagues, learners, principals and parents.

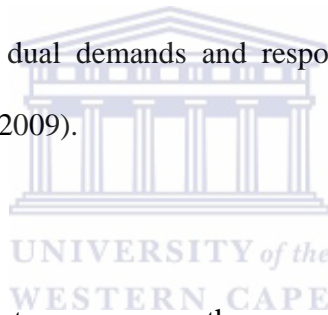


2.4.5.6 Interpersonal Relationships

Interpersonal relationships refer to those stresses that occur between employees and the organisation. Struggling to maintain a balance between home and work life is also a cause of stress. Friendly, considerate superiors and co-workers contribute tremendously to job satisfaction of colleagues since they assist the individual in achieving their goals (Johns, 1996). Driscoll and Beehr (2000 in Paulse, 2005) maintain that negative interpersonal relations with others can cause stress for employees.

2.4.5.7 Home–Work Interface

Balancing the demands of work and family life is a complex and well researched phenomenon. Studies have linked it to the development of stress (Rothman & Viljoen, 2009). The availability of flexible work arrangements provides employees with greater enrichment from the work to the home, creates higher job satisfaction and lower employee turnover intentions. Flexible work arrangements are defined as “the employers’ benefits that allows workers some level of control over when and where they work outside of the standard workday” (Masuda, McNall & Nicklin, 2010, p. 62). Females in particular, who in addition to their work, have to tend to their families’ needs, struggle to cope. They have difficulty in finding work-life balance, minimizing work-family conflict and fulfilling the dual demands and responsibilities demanded by work and family (Buys, Mostert & Wentzel, 2009).



Kamper and Steyn (2006) agree that more women than men reported home as a source of stress as a result of the unequal division of labour at home. This inequity causes work-family conflict which consequently causes lowered performance in the parental role, lowered productivity at work, less life satisfaction, anxiety and work stress (Buys et al., 2009). Flexible work schedules and managerial support is instrumental in creating home-work balance (Cinamon, Rich & Westman, 2007; Masuda et al., 2010). Furthermore, studies indicate that family matters such as divorce and death are contributors to stress levels of individuals therefore the successful implementation of home-work balance rests mainly with the individual.

2.4.5.8 Job Security

Job security refers to the prospect of job loss or redundancy and performance appraisal. The process of implementation of these processes can be stressful (Burden, 1992). Many teachers blame their disciplinary problems and job insecurity on the abolishment of corporal punishment (Paulse, 2005). Job satisfaction was associated with job security and respect among Albanian teachers, according to Kloep and Tarifa (1994 in Bull, 2005). An individual's pay and benefits can also be related to their stress.

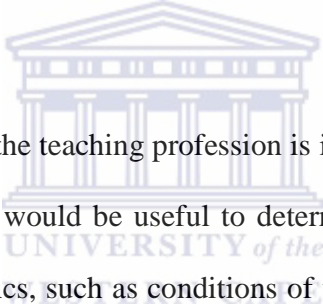
2.4.5.9 Pay and Benefits

Pay involves the amount of financial payment that an individual receives together with the extent to which the compensation is viewed as equitable (Bull, 2005). Luthans (1998) noted that salaries do not only aid in the achievement of basic needs, but also satisfy the higher level needs of individuals. Boone and Kuntz (1992) noted that offering employees fair and reasonable remuneration, which are related to their value to the organisation, should be the main objective of any compensation system. The benefits included with compensation include; medical aid schemes, bonuses, pension schemes, paid leave, housing subsidies and travel allowances.

Teacher dissatisfaction with particularly pay and advancement opportunities illuminated the areas that can potentially be given attention by the National Department of Education. Van Wyk (1998) argues that, while there are reasons to question the salary system of teachers, other strategies should also be focused on in order to increase teacher satisfaction.

2.4.5.10 Job Satisfaction

Johns (1996, p. 137) defines job satisfaction as “a collection of attitudes that workers have about their job satisfaction, self-actualization and fulfillment which involves the physical, mental, emotional and economic wellbeing of workers (Badenhorst et al., 2008). It is also associated with, turnover, absenteeism and job performance (Schulze, 2006). The concept intrinsic and extrinsic motivational factors relating to the experience of job satisfaction was originally documented by Barbara, Herzberg, Mausner and Snyderman (1967). Intrinsic factors were termed motivators which related to the actual performance of the work, while extrinsic factors were termed hygiene factors which referred to the work environment (Badenhorst et al., 2008).



Mwamweda (1995) maintains that the teaching profession is in serious jeopardy if many teachers are dissatisfied with their jobs. It would be useful to determine which factors related to work involves perceived job characteristics, such as conditions of work, roles and responsibilities and classroom practices, and are related to job satisfaction and work centrality.

Schaufeli, Scheurs, Taris, and Van Horn (2004) caution that in order to prevent undesirable outcomes, it may not be enough to only improve one aspect of the work situation, if other problematic aspects are not dealt with. Van Wyk (1998) noted that if teacher performance is to be improved, it is necessary to pay attention to the kind of work environment that enhances teachers' sense of professionalism and decreases their dissatisfaction.

According to Moomaw and Pearson (2005), job satisfaction leads to stress and consequently burnout if it is allowed to continue. Prior research revealed that teacher motivation and autonomy are also related to job satisfaction and stress. Furthermore, the more intrinsically motivated teachers are, the more satisfied they are with their jobs and the less stress they experience. This is in line with findings from Jackson, Rothmann and Van de Viver (2006), who revealed that no statistically significant relationship between occupational stress, and work engagement exist. However, it is in contrast with findings of Perchard, Nielsen and Terry (1993, in Hirschfield, 2000) who indicated that employees still like the extrinsic and intrinsic nature of their jobs.



2.4.6 THE INDIVIDUAL FACTORS

2.4.6.1 Personality Characteristics

An individual's age, gender, background, previous work experience and the degree of social support obtained can affect their experience of stress and personality characteristics and are postulated to moderate their stress levels. These factors feature strongly in an individual's experiences of stress by affecting their exposure to stressful events, their response to these events and by affecting both simultaneously. Personality characteristics can include anxiety, negative attitudes and tolerance of individuals (Kamper & Steyn, 2006).

Two distinct personality types exist namely, Type A and Type B personalities. The differences between these two personalities will be delineated in order to understand how individuals who portray these personalities, react to the experience of stress.

2.4.6.2 Type A Behaviour

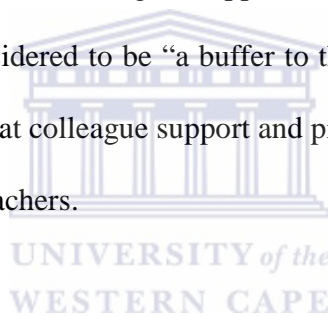
People with type A personalities are “hard driving and competitive people.” They have a strong drive to achieve more in less time (Kamper & Steyn, 2006, p. 125). They often get aggressive, impatient and irritable if people interfere with their work and therefore respond with even more agitation to stress than type B personalities. Type A personalities are more at risk of developing illnesses related to stress. Individuals with type B behaviour, are relatively free of Type A behaviour and are less prone to coronary illnesses. However, if they do have a heart attack, they do not seem to recover as well as Type A personalities. Type A individuals are more at risk of health disorders, since they struggle to deal with their work demands (Nelson & Quick, 2006). Seemingly individual factors can influence how stress is experienced in the workplace (Nelson & Quick, 2006).

Type A behaviour or coronary-prone behaviour is a complex of personality and behavioural characteristics, which include competitiveness, time urgency, social status insecurity, aggression, hostility and a quest for achievement. These individuals are impatient and struggle to cope with leisure time and are more likely to be stressed. The four primary components of the Type A

behaviour pattern is; sense of time urgency, the quest for numbers, status insecurity and aggression as well as hostility. However, gaining the necessary support can assist in this regard (Nelson & Quick, 2006).

2.4.6.3 Social Support

“Social support refers to the assistance provided by the social network” (Zhang & Zhu, 2006, p. 490). Support can be in the form of emotional (love and care), instrumental (material assistance) and informational support (facts and advice). Kamper and Steyn (2006, p. 125) add that “social support, including administrative and collegial support, refers to help from other people.” Furthermore social support is considered to be “a buffer to the experience of stress.” However, Kamper and Steyn (2006) found that colleague support and principal support were not among the more important stress buffers in teachers.



Another study by Zhang and Zhu (2006) indicated that supervisor support is a more effective stress relief than colleague support. Rout and Rout (2002) found that people who lack support from others have more physical and psychological symptoms than those with support (Kamper & Steyn, 2006). Studies also reveal that a lack of principal support is a cause of teacher stress (Kamper & Steyn, 2006). Schulze and Steyn, (2007) noted that supportive colleagues promote the experience of job satisfaction, while a lack of support, may lead to stress.

2.4.6.4 Self-Esteem & Self-Efficacy

Self-esteem refers to the way individuals perceive themselves (Kamper & Steyn, 2006). According to Nelson and Quick (2006, p. 87), “self-esteem is an individual’s general feeling of self-worth.” High self esteem individuals are less prone to environmental events than low self-esteem individuals (Kamper & Steyn, 2006).

Byrne (1992, in Paulse, 2005) studied the self-esteem of teachers and revealed that teachers with low self-esteem are more susceptible to stress than teachers with high self-esteem. Self-efficacy refers to the individuals’ overall perception of themselves. Individuals with high self efficacy have more confidence in their job related abilities and personal resources, while people with low self-efficacy tend to feel ineffective at work (Nelson & Quick, 2005). Hence, those with high self-efficacy are argued to deal with stress more effectively, believing in their ability to cope (Nelson & Quick, 2005).

2.4.7 BIOGRAPHICAL FACTORS RELATED TO STRESS

2.4.7.1 Gender related to Stress

Studies indicate that females report significantly higher levels of stress (Kamper & Steyn, 2006; Ngidi & Siyaba, 2002). Women who are expected to meet domestic commitments and

conflicting work and family demands may experience added stress (Jones, 2002; Kamper & Steyn, 2006). Rout and Rout (2002) reported that female teachers experience higher levels of stress, while male educators report higher perceived social support from families and friends.

Studies by Schulze and Steyn (2007) affirmed that the roles of females as teachers, parents and house-keepers, compound their stress. Cope (2003) maintain that although males are four times as likely to die of heart disease, five times more likely to die of alcohol-associated disease and have a life expectancy of eight years less than females, studies indicate that more females tend to have health related behaviours, such as visits to doctors and psychologists.

2.4.7.2 Age related to Stress



Studies indicate that significant differences exist between age groups (Schulze & Steyn, 2007). Age is another major factor that influences the individual's perception of stress. An experience of a mid life crisis can increase an individual's sensitivity to stress (Kamper & Steyn, 2006; Rout & Rout, 2002). Barkhuizen and Rothman (2008) found that younger teachers reported more stress as a result of work politics, work conditions and job significance than older teachers. Furthermore, younger teachers struggle to cope with occupational stressors and therefore experience more psychological and interpersonal strain than their older colleagues (Rout & Rout, 2002).

A study among 81 disabled Cape Town teachers revealed that younger disabled teachers experienced unfavourable working conditions and job overload which were the main causes of their stress (Emsley et al., 2009). A study by Jacobsson, Pausette and Thylerfors (2001) revealed that increased age was related to increased work demands (Kamper & Steyn, 2006). This increased the likelihood of their experience of stress. Barkhuizen and Rothman (2008), in contrast, believed that stress usually declines with chronological age.

2.4.7.3 Years of Experience related to Stress

Individuals' previous experience may affect their susceptibility to stress. However, their personalities could moderate the level of stress they experience (Kamper & Steyn, 2006). The number of years of teaching experience was not considered a significant factor by teachers in a study by Campbell, Green-Reese and Johnson (2001). A study by Parkhouse and Johnson (1980) revealed that number of years of teaching experience was not considered a factor in teacher stress.

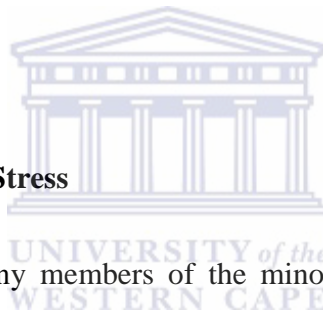
2.4.7.4 Marital Status related to Stress

Marital status poses increased responsibilities, which makes an individual's job seem more valuable and important. Conversely, marital status can also increase workplace stress (Kamper & Steyn, 2003). Many married women with young children enter the labour market, and carry

an unfair share of household duties, which could lead to their experience of stress. Their partners may have egalitarian attitudes towards work and family responsibilities, but the division of labour at home is still considered unequal (Kamper & Steyn, 2003).

2.4.7.5 Number of Children related to Stress

When employees' children become sick, they tend to stay absent from work due to unforeseen or unavoidable circumstances, according to Aamodt (2004 in Josias, 2005). Research pertaining to teacher stress and number of children seems contradictory. This could be due to parents investing in after care or day care facilities for their children, while they are at work.

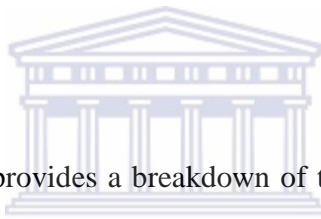


2.4.7.6 Ethnic Group related to Stress

From the beginning of 1990, many members of the minority groups entered the workplace. Today an almost equal balance exists between the existence of men and women in the workplace. The proportion of minority groups has increased so rapidly that White people are a considerably smaller majority. Research in South Africa also indicated that factors affecting the job stress of White teachers include working conditions, inter-personal relations with managers, colleagues and learners, professional development, management style and community involvement (Badenhorst et al., 2008).

2.5 MANIFESTATIONS OF STRESS

Pickering (2008) noted that the physical effects of stress can be felt in many ways. These include increased heart rate, headache, dizziness, palpitations, skin rashes, aching neck and shoulders and lower resistance to infection. Over a long period, stress may contribute to chronic health problems such as, heart disease and stomach ulcers. Many psychological and behavioural changes affecting work performance and interpersonal relationships may be noticed by the stressed individuals' colleagues. These include inability to concentrate, overworking, irritability or aggression, becoming withdrawn or unsociable or reluctant to accept constructive criticism and advice (Pickering, 2008).



Laffingwell (in Asonibare, 1984) provides a breakdown of the manifestations of stress namely; wringing of hands, developing pallor and rash, shaking hands, feet and legs, squirming or inability to sit still, lateness or absence, excessive talk, usually in the form of rambling, lashing out verbally in inappropriate ways and displacing aggression on family members. These are just a few signs of stress, which can have major consequences for the individual as well as the organisation.

Berndt and Oosthuizen (2008) provide a breakdown of the physiological, psychological and behavioural symptoms of stress.

2.5.1 Physiological problems (Ill-health)

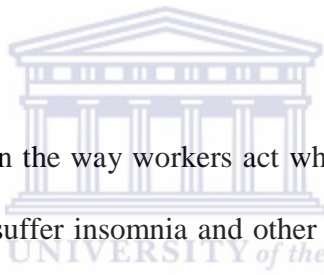
Physiological problems include, heart disease, changes in metabolic and breathing rates, blood pressure problems, headaches and heart attacks.

2.5.2 Psychological problems

Psychological symptoms are visible in the negative emotions experienced by individuals namely, depression, anxiety, apathy, anger, tension, boredom and job related dissatisfaction.

2.5.3 Behavioural problems

Behavioural problems are visible in the way workers act when they think they are under stress. Some people smoke more, others suffer insomnia and other people drink more. The degrees to which the symptoms of stress are visible in individuals vary and often a combination of these symptoms can be noted seen in individuals, with severe consequences.



2.6 CONSEQUENCES OF STRESS

2.6.1 Teacher Turnover Intentions

“Turnover refers to the movement of employees out of the organisation or any permanent departure beyond organisational boundaries” according to Xaba (2003, p. 287). Mostert et al. (2008) noted that excessive turnover affects organisations directly and indirectly.

Anon (1998 in Xaba, 2003) found that the need for rationalization and restructuring has resulted in offers of severance packages, retrenchments, redeployment of excess teachers in schools and widespread resignments from the profession. A study by Oosthuizen and Van der Bijl (2007) at Cape Town schools revealed that a huge proportion of teachers intended to leave the profession, 35% males and 42% females, due to anxiety and depression which can be linked to workplace factors.

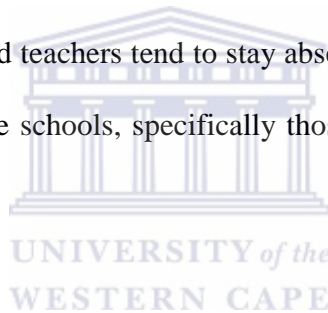
2.6.2 Teacher Attrition

Xaba (2003, p. 288) noted that “teacher attrition disrupts schooling.” Mostert et al. (2008) found that limited resources cause failure and frustration and therefore may lead to withdrawal from work. Van Wyk (1998) found that teachers hand in more medical insurance claims than persons in other professions, have a four-year shorter life expectancy than the national average and tend to blame stress as a reason for sick leave from school.

Olivier and Venter (2003) conducted research amongst five schools in George, which indicated that teachers were leaving the profession due to health and psychological problems. Their research showed that a relatively large proportion (20%) of teachers experienced high levels of psychological stress with regards to both the incidence and intensity thereof. A study in Kwazulu-Natal alone, found that approximately 3000 teachers took voluntary severance packages. It is also reported that many teachers feign sickness as a way of obtaining early retirement packages (Ngidi & Sibaya, 2002).

Xaba (2003) blames an aging teacher workforce, low salaries and demands for even more complex teaching abilities as reasons for withdrawal from teaching. Rylance and Bongers (2001, in Xaba, 2003), maintain that high attrition rates among teachers can be attributed to job dissatisfaction. They also noted that a lack of recognition, few opportunities for promotion, excessive paperwork, loss of autonomy, lack of supplies, low pay, and stressful interpersonal interactions all contribute to teachers' decisions to leave schools.

The adverse effect applies when teachers leave the profession during the academic year or when involved with critical projects at school (Xaba, 2003). Another factor is the HIV/AIDS pandemic in South Africa. Infected teachers tend to stay absent due to illness or death. This has a negative, disruptive effect on the schools, specifically those in Sub Saharan countries (Xaba, 2003).



2.6.3 Alcohol Use and Abuse

Alcohol consumption refers to the use of alcohol while alcohol abuse is an illness that affects individuals at all levels of the organisation. Alcohol abuse affects performance and leads to negative behaviour over time. Signs of alcohol dependence are visible and include lies, excessive absenteeism, long lunch breaks, errors and low productivity. Alcoholism affects an individual's family life and influences financial stability (Mostert et al., 2008). Excessive alcohol consumption may lead to serious health problems.

A recent study revealed that alcohol addiction accounts for 60% of all substances abused in Kuwait while a South African study, during 2004, involving 4351 participants revealed that alcohol use was 38, 7%, tobacco smoking was 30%, cannabis use was 8, 4%, other drug use was 2.0% and extra medical psychoactive drug use was 19, 3% (Grimsrud, Myer, Seedat, Stein, Van Heerden & Williams, 2009). This indicates that alcohol use is very high compared to other drugs used in South Africa. A study undertaken by Oosthuizen and Van der Bijl (2007) indicated that both doctors and teachers were equally likely to use alcohol to relieve their anxiety and depression. Teachers totalling 16%, and doctors totalling 15% indicated that they use alcohol as a means of handling psychological stress.



2.6.4 Drug Addiction

Drug addiction is a serious factor influencing the health and well-being of employees, with often devastating effects on the organisation. Individuals who start to use drugs show a decline in appearance and personal hygiene. Their behaviour is characterized by emotional outbursts, lower job performance, including higher rate of accidents and absenteeism and they tend to borrow money or steal at the workplace (Mostert et al., 2008). A study in Cape Town involving 200 teachers from the northern suburbs revealed that teachers only admitted to smoking (17%) and drinking (16%) (Oosthuizen & Van der Bijl, 2007). Drug addiction can also cause excessive burnout.

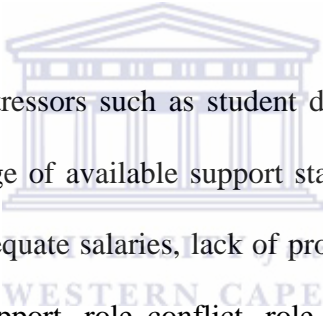
2.6.5 Burnout

“Burnout, refers to physical, mental and emotional exhaustion resulting from chronic job attrition.” It occurs when an individual feels overwhelmed and unable to meet daily demands (Zhang & Zhu, 2006, p. 490). Reduced personal accomplishment is the feeling that the individual employee is not accomplishing anything worthwhile at work. Individual performance is evaluated negatively and this leads to feelings of incompetence and inability to achieve goals (Cooper & O’ Driscoll, 2002). According to Spector (2000 in Paulse, 2005), a person suffering from burnout is emotionally exhausted and has low work motivation.

Burnout can be healed if detected at the early stages, however in later stages of burnout, it may take more effort and longer to overcome. It is therefore necessary for teachers to making time for themselves and to seek support from others. If the necessary support is not provided, burnout can have severe consequences. It can lead to many destructive feelings such as, depersonalization and lack of personal accomplishment that is a response to chronic stress in jobs where individuals work with people. Doctors and other professionals performing jobs involved with caring for others are also at risk of burnout. The symptoms include fatigue, emotional exhaustion, apathy, cynicism, irritability, anger, avoidance, indecency and inefficiency (Oosthuizen & Van der Bijl, 2007). High levels of burnout were observed in education managers and teachers, since the introduction of Outcomes Based Education (OBE) in a study by Pienaar and Van Wyk (2006).

2.6.5.1 Teacher Burnout

Many studies indicate that burnout is more prevalent among teachers and more relevant to the teaching profession than any other profession. It has received considerable research attention due to its negative affect on the mental and physical health of teachers (Van Tonder & Williams, 2009). A study undertaken in Germany involving school teachers revealed that 33% suffered from burnout and 18% suffered from severe strain. These teachers regarded huge classes and destructive and aggressive behaviour of learners as primary stressors (Emsley, Emsley & Seedat, 2009).



Teacher burnout is the result of stressors such as student discipline problems, student apathy, overcrowded classrooms, a shortage of available support staff, excessive paperwork, excessive testing, involuntary transfers, inadequate salaries, lack of promotional opportunities, demanding parents, lack of administrative support, role conflict, role ambiguity and public criticism of teachers (Cammilli, 2004). Burnout could also lead to teacher absenteeism, alienation, detachment, withdrawal and consequently, teachers abandon the profession (Cammilli, 2004).

Studies revealed that feelings of low status and gender, teachers' level of interaction with their learners and colleagues, access to new and professional knowledge, opportunities and challenges, working conditions, advancement opportunities and job security are important predictors of

burnout (Van Tonder & Williams, 2009). These factors indicate the importance of considering the role and prevalence of burnout among teachers in South Africa (Van Tonder & Williams, 2009).

2.6.6 Withdrawal

The consequence of stress can be either psychological or physical. Physical withdrawal involves the temporary absence of teachers due to sickness or staying away from work. Teachers tend to take short or extended sick leave periods, usually two years or longer. Physical withdrawal also refers to actions short of physically doing things to absent oneself from work (Martin, 2001). A study conducted in Cape Town comparing doctors and teachers, revealed that more teachers (79%) visited their doctors than doctors (15%) do (Oosthuizen & Van der Bijl, 2007). Studies in Germany revealed that 33% of teachers suffered from burnout and 18% suffered from severe strain (Emsley et al., 2009). This necessitates the exploration of effective coping strategies to enable particularly teachers in Western Cape high risk secondary schools to cope with their stress.

2.7 COPING STRATEGIES

Research studies have demonstrated the success of coping skills programs applied to problems such as speech anxiety, test anxiety, phobias, anger, social incompetence, addictions, alcoholism, sexual dysfunctions, post traumatic stress disorder and social withdrawal (Corey, 2005). Two types of coping can be distinguished namely; emotion-focused coping and problem-focused coping.

2.7.1 Emotion-Focused Coping

Emotion-focused coping involves regulating the emotion itself or reducing psychological distress to sustain an individual's equilibrium (Buys et al., 2009). Kamper and Steyn (2006) agree that emotion-focused functioning is aimed at controlling the emotions linked with the stress situation. The strategies used include: focusing on and venting emotions, mental disengagement, positive reassessment, acceptance and denial. South African businesswomen make use of both emotional and problem-focused coping strategies to deal with work-family conflict, according to Buys et al. (2009). These strategies include positive reappraisal, problem solving, exercising self-control and seeking social support.



2.7.2 Problem-Focused Coping

Problem-focused coping involves efforts aimed at productively altering the conditions that harm, threaten or challenge the individual or efforts directed at managing the type of stress (Buys et al., 2009). Problem-focused coping involves efforts to obtain information about what to do and to act accordingly to change the reality. Problem-focused coping strategies lead to more positive long-term adjustment for the stressed individuals (Kamper & Steyn, 2006). Isaacs (2008) define problem-focused coping strategies as an attempt to control a stressful situation, locating its causes and then changing or removing them. The focus of educational processes is apparently on cognitive restructuring.

2.7.3 Cognitive Restructuring

According to Chang (2005), cognitive restructuring has the ability to influence individuals' existing cognitive structure and increase their ability to learn meaningfully. Studies indicated that women who use cognitive appraisal (control) as a coping strategy are less likely to choose escape-avoidance as a coping strategy to manage a situation (Corey, 2005). Cognitive restructuring generates meaningfulness by, for example, building insight into the relationship among aspects and brings about the most orderly efficient way of retaining it (Chang, 2005).

2.7.4 Exercise

Mentally, exercise at schools improves performance concentration and memory. It also improves self-confidence. Physically, it improves an individual's self-image, boosts energy levels, lowers body fat and improves quality of sleep and also affects behaviour (Isaacs, 2008). Some individuals enjoy going to the gym to relieve their stress. Others stay active and keep themselves busy (Buys et al., 2009). Martin (2001) found that the regular use of exercise can produce many advantages in addition to weight loss and fitness improvement. It can reduce the possibility of severe medical conditions, and can also provide the opportunity to work off some of the aggression and frustration built up during stress.

2.7.5 Prayer

Barnes, Mccubbin, Muxen and Olsen (in Der Kinderen & Greeff, 2003) found that 1000 South African families identified spiritual support as the most important coping strategy. Furthermore, religion contributed to the family's ability to deal with their problems. Another study revealed that teachers rely on religion to help them with the problems they experience. During tough times, they pray and believe that everything would get better. Teachers also mentioned that when they have problems with learners at school, they pray for them and believe that God will hear and answer their prayers (Buys et al., 2009). Prayer can also be another way of communication.

2.7.6 Communication and Involvement

Studies indicate that teachers communicate with someone when they experience problems at either work or at home. The individuals they communicate with include their spouse or partners, principals and pastors. Some also watch educational television shows to help them cope with the interaction between work and their personal lives (Buys et al., 2009). Teachers who are involved in decision-making aspects of their work are more likely to be able to understand their own position in relation to the overall picture or the workplace. This causes decreased ambiguity about the way the workplace functions and reduces stress in the workplace. In order to assist in reducing stress, proper work planning is required (Martin, 2001).

2.7.7 Planning

Teachers believe that planning ahead is extremely important and is considered to be a means of coping with home, personal life and work. Planning ahead is also associated with time management, since teachers must plan their time well otherwise work accumulates and comes down all at once (Buys et al., 2009). Martin (2001) believes that the actual organisation of work and planning for the future are ways of reducing ambiguity and bringing clarity and predictability into the work life. Consequently, many stressors can be reduced. The personality of individuals can reduce their perception of stress.

2.7.8 Hardiness

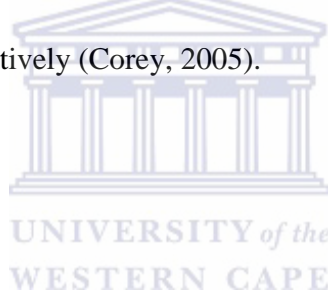
Researchers found evidence that a positive relationship exists between hardiness and physical and mental health. They also determined that hardiness reduces the negative outcomes of stress (Oosthuizen, 2005). “Hardiness refers to a personality resistant to distress and is characterised by commitment, control and challenge” (Nelson & Quick, 2006, p. 227). It involves “the degree to which an individual has a sense and ability to control the pace of events” (Nelson & Quick, 2006, p. 227).

Smith (2002 in Oosthuizen, 2005) also found that the outlook of individuals who cope and stay healthy in stressful situations consists of three factors. These include, control, commitment and challenge. Control involves the individual’s beliefs that they are able to influence their situation or the course of events. Commitment refers to the individual’s curiosity and sense of

meaningfulness in their lives. Challenge refers to the individual's expectations that it is normal for life to change and considers challenges as an advantage. Teachers who possess these characteristics also have to be self-aware (Oosthuizen, 2005).

2.7.9 Self-Awareness

Corey (2005) noted that humans reflect and make decisions because they are capable of self-awareness. Greater self-awareness of individuals, increases their freedom and ability to live fuller lives. Self-awareness also involves an individual's ability to make choices, since they are capable of being self aware. Self-awareness can also reduce teacher stress, since it can allow teachers to manage their time effectively (Corey, 2005).



2.7.10 Time Management

Time pressure is a major source of stress for people at work. The main symptoms of poor time management include constant rushing, missed deadlines, job overload, a sense of being overwhelmed, insufficient time to rest and indecision. Time management can include individual goal setting, prioritizing and planning. Furthermore, the system of time management enables individuals to track their success over time and reduce stress and confusion (Nelson & Quick, 2006).

Stress results from poor time management skills on the part of both the employees and employers. Time management courses often include goal-setting, prioritization and delegation,

and starts from the premise that goal achievement reduces stress. Stress related to poor time management stems from the level of constraint and routine in the job or from the freedom to prioritize and regulate tasks (Martin, 2001). Various programmes which can assist employees to cope with stress exist in the workplace.

2.8 MANAGING WORKPLACE STRESS

2.8.1 RELAXATION TECHNIQUES

2.8.1.1 Stress Management Training

Stress management training includes instruction on goal setting, counselling of subordinates, self-awareness, relaxation techniques, time management, conflict resolution, stress inoculation, meditation, rational-emotive behaviour, environmental adjustment, systematic desensitisation, wellness programmes and employee assistance programmes (EAP's) (Brown & Harvey, 2006). These are briefly explained in order to determine their relevance in reducing teacher stress. There are other techniques not mentioned that are also discussed.

2.8.1.2 Meditation

People using meditation repeat in their minds a specific sound called a “mantra” during two, twenty minutes sessions, three times a day. Users of meditation report higher energy and productivity levels, ability to get along better with others, lowered heart rate and increased creativity and they tend to be more relaxed (Brown & Harvey, 2006).

2.8.1.3 Biofeedback

Common techniques used include: biofeedback and meditation which take several weeks to three or four months. It is administered in a clinic by a trained technician and begins with an analysis of the individual's stress points typically comprising of work and family. Instruments that can measure brain waves, heart activity, temperature and muscle activity are joined to individuals to assess their physical reactions to stress. The biological feedback derived from the monitoring machines teaches individuals how to consciously control their autonomic nervous system by decreasing the pulse rate and blood pressure. Afterwards an individual can practice biofeedback during stressful work or personal activity, without the use of the monitoring devices (Brown & Harvey, 2006). Individuals can also undergo sensitivity training to relieve their stress.



2.8.1.4 Sensitivity Training

Martin (2001) noted that sensitivity training is a process of making people aware of the existence of stress, its causes and mechanisms of coping with stress. It is a process of bringing stress out into the open in order to deal with it. Individuals aware of the nature of their stress can deal more effectively with stress, while others require additional support.

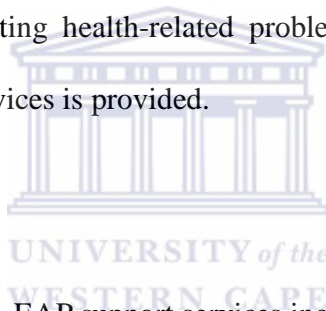
2.8.2 EMPLOYEE SUPPORT

2.8.2.1 Employee Assistance Programmes (EAP)

Initially used as alcohol abuse programmes, most contemporary employee assistance

programmes are designed to deal with a variety of stress related problems, both work and non-work related, including behavioural and emotional difficulties, substance abuse, family and marital problems and other personal problems. An EAP programme includes: diagnosis of the problem, treatment of the problem through counselling and support therapy, screening through a periodic examination of the worker in highly stressful jobs and prevention, involving education and persuasion to convince workers to cope with stress (Ivancevich et al., 2002).

The main way to manage health and well-being in an organisation is through an EAP. The goals of the EAP are to address existing problems and to promote healthy living among employees. This assists employees in preventing health-related problems from happening in future. A breakdown of the EAP support services is provided.



According to Crafford et al. (2006), EAP support services include:

- A referral system, which is a way for employees to be referred to the EAP.
- Marketing of the EAP which involves the marketing of the service offered by the EAP to families and staff.
- Stress management programmes which assist employees to manage their stress could include teaching them relaxation and meditation techniques.
- Health promotion which includes programmes that focus on the prevention of illness and distress.

- Consultation and training which assists supervisors and managers by presenting them with programmes that focus on solving problems at work.
- Outreach programmes which are designed for employees who are involved with transition in their lives. These programmes are applied when employees are promoted, join a new organisation, relocate within the same organisation or retire.
- Assessment, short-term counselling and referrals to health practitioners are also offered.

Wellness programmes can provide an individual with the means to cope with stress.



2.8.2.2 Wellness Programmes

Wellness programmes can provide an individual with the means to cope with stress. These are essential to ensure the continued productivity of employees and improve their overall well-being. Wellness programmes focus on employees' overall physical and mental health, and involves any activity in the organisation which assists in preventing or correcting specific health problems, health hazards or negative habits of workers. Among the most prevalent examples are programmes that emphasize hypertension, identification and control, smoking cessation, physical fitness and exercise, nutrition and diet control as well as job and personal stress management (Ivancevich et al., 2002). Employees can also attend counseling sessions to assist them to deal with their stress.

2.8.2.3 Counseling

Counseling is a process by which clients are invited to look honestly at their behaviour and make certain decisions about how they want to modify the quality of their life. Counseling helps individuals to recognize their own strengths, discover what is preventing them from using their resources and clarify what kind of life they want to live. Counselors provide support and warmth, yet challenge clients so that they are able to take actions to bring about change (Corey, 2005).

The provision of counseling encourages teachers to explore their feelings and other emotions pertaining to the events creating stress. Many reasons for stress exist, therefore having the opportunity to talk about them, provides teachers with the opportunity to develop ways of coping. Traumatic events, however, are difficult to re-live since it can cause fear or panic attacks in teachers. Counseling can provide a means of coming to terms with these experiences more easily (Martin, 2001). Counselors can also prescribe self-awareness techniques in order to make teachers more aware of their own strengths and weaknesses as well as manage conflict situations.

2.8.2.4 Conflict Management

Conflict is endemic to the workplace. The inclusion of conflict management can reduce the sources of stress that exist in the workplace however, conflict cannot be entirely eliminated. Bringing competition into the open is part of the natural decision- making process in the

workplace. However, trying to at the same time restrict conflict is difficult especially when power and politics exist. Nevertheless, attempting to restrict conflict can reduce the levels of stress teachers experience in the workplace (Martin, 2001). Role conflict resolution, for example, involves the resolving of conflict associated with role stress. Role conflict resolution is achieved by clarifying the task-role expectations communicated to employees (Nelson & Quick, 2006).

2.8.2.5 Stress Inoculation Training

Corey (2005) noted that a particular application of a coping skills programme is teaching clients stress management techniques by way of a strategy known as stress inoculation. Training rests on the assumption that individuals can affect their ability to cope with stress by modifying their beliefs and self statements about their performance in stressful situations. Stress inoculation training consists of a combination of information giving, discussion, cognitive restructuring, problem solving, relaxation training, behavioural rehearsals, self-monitoring, self-instruction, self-reinforcement and modifying environmental situations. It is designed to teach coping skills that can be applied to both present and future problems. It can be used for both treatment and preventive purposes. Meichenbaum (in Corey, 2005) designed a three stage model of stress inoculation training:

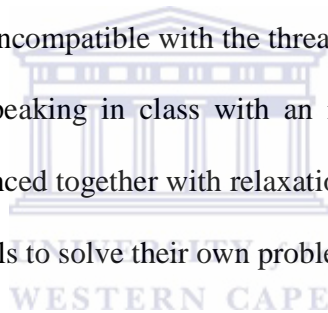
- The conceptual education phase involves creating a working relationship with clients.

- The skills acquisition, consolidation and rehearsal phase involve providing clients with a variety of behavioural and cognitive coping techniques to apply to stressful situations.
- Carefully arranging for transfer and maintenance of change from therapeutic situations to everyday life.

Individuals can also learn to cope with stress through systematic desensitisation.

2.8.2.6 Systematic Desensitisation

Systematic desensitisation is a method of reducing the emotional responsiveness to unpleasant stimuli by introducing an activity incompatible with the threat response. The individual learns to associate fear of, for example, speaking in class with an incompatible, pleasant and relaxed feeling. Therefore, fear is experienced together with relaxation (Corey, 2005). Rational-emotive behaviour can also assist individuals to solve their own problems.

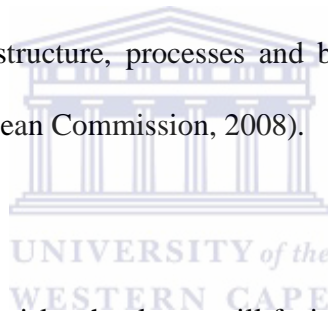


2.8.2.7 Rational-Emotive Behaviour

Rational-emotive behaviour is one of the first cognitive behaviour therapies. The basic assumption is that people contribute to their own psychological problems as well as to specific symptoms, through interpreting events and situations. It is based on the assumption that cognitions, emotions and behaviours interact significantly and have a reciprocal cause-and-effect relationship. It is considered an integrative approach (Corey, 2005). Individuals can also learn to cope with stressful situations through environmental adjustment.

2.8.2.8 Environmental Adjustment

Environmental adjustment involves the development of situational coping strategies. Participants are trained in strategies that help them either change their reaction to specific stressful situations or alter their work environment. Assertiveness techniques involve having tools for enlisting the co-operation of others and skills for changing stressful situations. The belief that the work environment is a causal factor that contributes to teachers' stress was supported by the action research of Galaszewski and Milstein (1985). They identified an effective, three phase organisational intervention for reducing stress. Teachers clarify specific stress related issues at school; co-operatively establish specific goals and develop and implement strategies to alleviate or modify structure, processes and behaviours especially in relation to changes in the environment (European Commission, 2008).

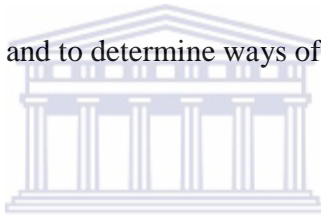


Teachers specifically those at high risk schools are still facing significant changes in their roles, responsibilities and expectations (Eloff, Engelbrecht, Forlin & Swart, 2001). They require the necessary support to ensure that change does not cause severe stress. The management of change is integral to ensure that the necessary support structures are in place in institutions in order to assist individuals to deal with changes (Eloff, et al., 2001).

An adapted model for teacher support is presented to assist in reducing or even alleviating teacher stress and promote positive change at high risk secondary schools in the Western Cape.

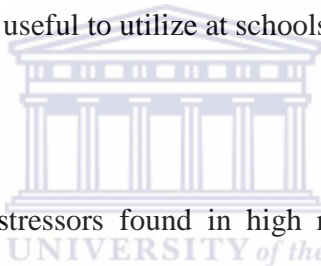
2.9 MODEL FOR TEACHER SUPPORT

High risk schools are institutions which have, since the change to democracy in 1994, undergone severe changes. The implementation of a new curriculum, new styles of management and new legislation have all brought about major changes. These changes affected teachers in particular, those who were at the fore-front of changes at schools, and had to learn to adjust or bear the consequences of these changes. Teachers, specifically those employed at high risk secondary schools, are still feeling the effects of political and institutional change. The negative environment in which high risk schools exist is usually the consequence of the devastating effects of change, however, the secret of any change management strategy is to determine how the individual perceives the change and to determine ways of reducing the impact of change.



Individuals should take responsibility for their own stress. They have to develop plans and strategies to identify their stressors and develop an action plan to cope with their stress. Depending on the type of support individuals receive, they may develop an understanding of the change agent and generate sufficient change management tools to eliminate or reduce the effect of change or stress. In many high risk schools, the concept of teacher support is new or not considered as vital to the success of institutional change. This forces teachers to find individual and collective ways of determining and managing their stress with the hope that the institution will benefit from their efforts (Eloff et al., 2001).

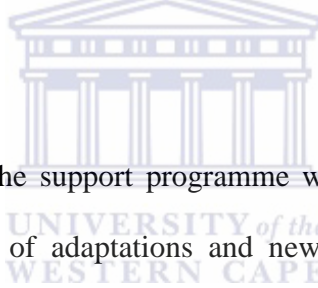
The model for teacher support illustrated in figure 2.6 on page 80 (adapted from Cooley & Yovanoff, 1996; Soto & Goetz, 1998) is suggested for meeting the needs of schools required to implement proposed changes outlined in the Draft White Paper (Eloff et al., 2001). Figure 2.6 provides a means of support for teachers, in an attempt to alleviate their stress and promote positive change at high risk secondary schools. This support programme focuses on addressing the issues that teachers currently involved with high risk schools, found most stressful. The proposed support programme features three key areas of attention, namely individual approach, team approach and institutional approach. Each key area is designed to address specific stressors identified by teachers with regards to high risk schools. The coping skills are based on those indicated by these teachers as most useful to utilize at schools (Cooley & Yovanoff, 1996).



It is posited that addressing the stressors found in high risk secondary schools will enable teachers to develop a high sense of efficacy and job satisfaction. Such a support programme will provide teachers with a range of opportunities to gain knowledge about their own performance, to assess further knowledge and to have appropriate opportunities to practice skills and apply knowledge in classrooms. Firstly, effectively managing their stress is crucial to survive at high risk schools. Teachers need to plan, organize, control themselves as well as lead others by example. They should also facilitate institutional change. Secondly, having regular meetings and interventions with relevant parties to discuss own and other's stressors or challenges to ensure that all teachers are capable of coping successfully with change (Eloff et al., 2001). Thirdly, focussing on the expressed needs of support providers, parents, learners, teachers and other personnel regarding the skills needed to establish and facilitate school and district-based

collaborative support teams to promote and support ongoing implementation of quality education at high risk schools (Eloff, et al., 2001).

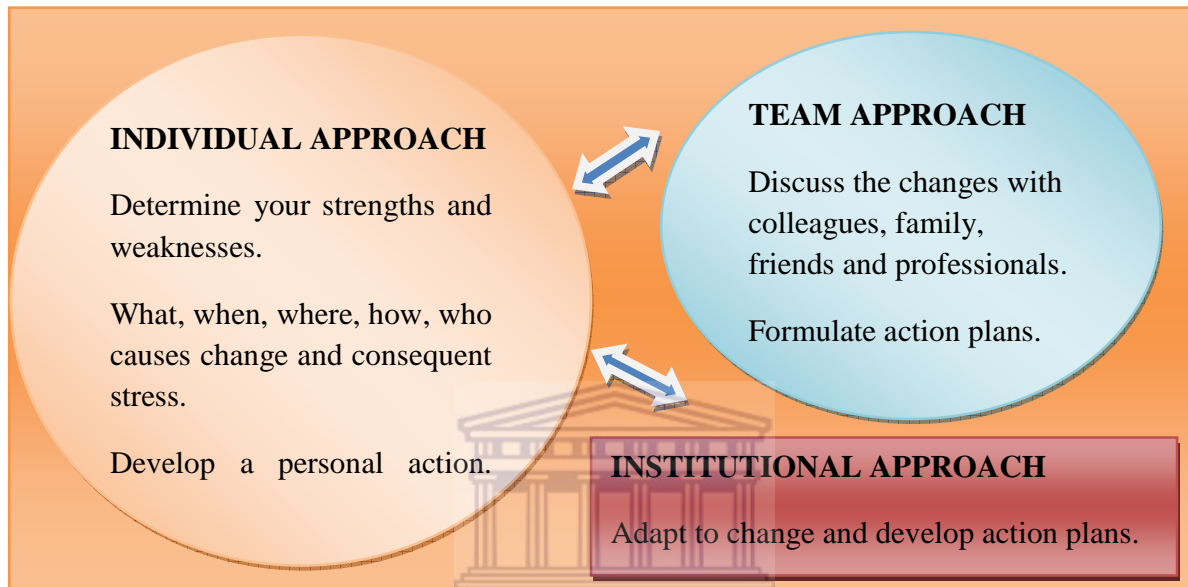
The planning of appropriate action research should form an important part of the support programme. According to Eloff et al. (2001), a well-planned training and professional development programme, which is facilitated by a professional such as an educational psychologist, is integral to support teachers in overcoming doubts and resistance. It would also allow them to become committed to the significant innovation and change and create a willingness to be involved with collaborative support teams.



The effective implementation of the support programme will allow for continued programme monitoring and the incorporation of adaptations and new material needed. The last phase focuses on creating an institutional environment which deals with changes in a constructive manner. It involves adjusting and adapting to the changes in a manner that is acceptable to all and facilitated by all in the change process. In doing so, the impact of change on the teachers' experience of stress could be reduced (Eloff et al., 2001).

Figure 2.6: Model of Teacher Support

Team Involvement: Involvement of members.



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Individual Behaviour Management **Institutional Management**

Planning

Develop new strategies.

Leading

Lead and guide others by example.

Organising

Organize challenges into manageable units.

Controlling

Facilitation of the change process.

Adapting to the change.

Unit plans formulated.

Communication channels improved.

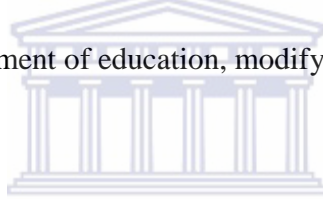
Environmental improvements.

Operate the institution independently.

(Adapted from Eloff et al., 2001, p. 4)

Teachers require assistance and support from various individuals in their immediate environment. Many teachers often have to cope without any support from peers, principals, family and friends. This could lead to them leaving the profession due to stress, which could have been prevented had they received the necessary support (Eloff et al., 2001).

In conclusion, high risk schools operate in communities plagued with crime and violence. Providing the necessary support in line with teachers' needs would assist them in responding to the needs of their peers, learners, principals and family. This would also enable teachers to assimilate the proposed changes, examine their own current coping strategies and in the light of the new requirements of the department of education, modify their pedagogy (Eloff et al., 2001).



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One of the key points to be drawn from this research is that it is critical to identify and understand the conditions that are likely to cause teachers stress at high risk secondary schools. Addressing these prospective areas, would assist teachers at high risk secondary schools in becoming more involved and encouraged to implement positive change at schools.

2.10 SUMMARY OF THE CHAPTER

This chapter provided a review of literature regarding the sources of stress, mainly job satisfaction, job overload and job control. The definition of stress was introduced and explained in terms of the stressors for teachers. Coping techniques as well as stress management techniques for teachers were explored. An adapted teacher support model was designed to assist teachers in dealing with job stress. However, unless teacher stress is reduced and the actual contexts in which crime and violence occur at schools are addressed, a total collapse of a learning culture at high risk secondary schools in the Western Cape would be inevitable.



CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter provides an outline of the research methodology used in the investigation of the relationship between teacher stress, job satisfaction; job overload and job control at high risk secondary schools in the Western Cape. The hypotheses, sample selection, measuring instruments, data collection procedure and the statistical techniques employed are delineated.



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3.2 HYPOTHESES

H_a: Job satisfaction is not related to stress of teachers at high risk secondary schools in the Western Cape.

H_b: Job overload is not related to stress of teachers at high risk secondary schools in the Western Cape.

H_c: Job control is not related to stress of teachers at high risk secondary schools in the Western Cape.

H_d: Biographical factors are not related to stress of teachers at high risk secondary schools in the Western Cape.

3.3 RESEARCH DESIGN

Babbie and Mouton (2007, p. 646) define 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, p. 45) define quantitative research as “systematic collection of numerical information and analysis of that information using statistical procedures.” A quantitative method of investigation was chosen for this study, since the aim of the research was to find solutions 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 for large 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). The researcher assigned numbers to observations, produced data by counting and measuring the variables and made use of statistics to make sense of the data presented in this study.

3.3.1 Population

Creswell (2005, p. 145) defines a population as “a group of individuals who comprise the same characteristics.” In the present study the population comprises as all teachers from high risk

secondary schools in the Western Cape, in particular teachers from schools in the Northern and Eastern Metropoles. A total of 109 high risk or underperforming schools exist in the Western Cape (The Democratic Alliance, 2007). This total includes 24 primary schools and the majority, 85 secondary schools. The sampling unit is therefore teachers employed at the 85 high risk secondary schools, in the Northern and Eastern Metropoles of the Western Cape. The population included teachers (N=300) from high risk secondary schools in the Western Cape. A representative sample was drawn from this population.

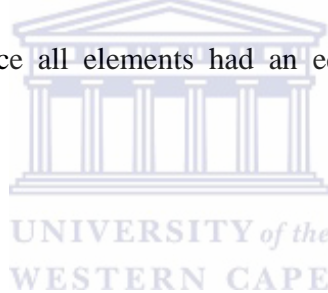
3.3.2 Sample

Creswell (2005, p. 46) defines “a sample as a subgroup of the target population that the researcher plans to study for generalizing about the target population.” Babbie and Mouton (2007) concur that a sample is representative of the population from which it is drawn, if the aggregate characteristics of the sample closely resemble those aggregate characteristics of the population. The sample included (n=129) teachers from high risk secondary schools in the Western Cape. In order to select a sample which is representative of the population, the researcher used a multiple-stage technique.

The first stage involved selecting all 85 high risk secondary schools in the Western Cape. These schools obtained a matriculation pass percentage of less than 60% at least once in the past few years and/or have a negative school climate. Secondly, five schools from the Northern and Eastern Metropoles, who met the criteria, were selected from the 85 high risk secondary schools

in the Western Cape. Thirdly a total of (n=129) teachers, were drawn from the population of (N=300) teachers, to participate in the present study. These teachers were employed at high risk secondary schools in the Western Cape. A stratified sampling method was used to select the participants for the present study.

A population of (N=300) and a sample size of (n= 129) teachers was considered as appropriate for this study. Creswell (2005, p. 150) maintains that “this number is an estimate based on the size needed for statistical procedure, so that the sample is likely to be a good estimate of the characteristics of the population. These teachers were randomly selected by using a random probability sampling method, since all elements had an equal chance to be included in the sample.



3.3.3 Sampling Method

Stratified random sampling is “a method for obtaining a greater degree of representativeness, which decreases the probable sampling error” (Babbie & Mouton, 2007). According to Cooper and Schindler (2003 cited in Oosthuizen, 2005), increases in the sample's statistical significance provides adequate data to analyse sub-populations.

In the present study, the population was divided into three strata; Management, Senior Teachers and Junior Teachers. A simple random sample was then taken within each stratum.

The sampling results were then weighted and combined into appropriate population estimates (Cooper & Schindler, 2003). The questionnaires used were given to the population and the sample was drawn based on the returned questionnaires. The questionnaires used included the Biographical Questions, the Occupational Stress Inventory Revised, the Job Satisfaction Survey, the Job Overload Survey and the Job Control, Cognitive Demand and Production Responsibility Survey.

3.3.4 Sample Size

The table 3.1 on page 88 which is used for determining the sample size from a given population indicates that for a population of (N=300) an appropriate sample size should be (n=169). The sample size of the present study comprised (n=129) of the population of (N=300) teachers from high risk secondary schools. Although, a total of (N=300) questionnaires were distributed, only 129 questionnaires were returned, providing a response rate of 43%. The sample size, however, does provide a fairly accurate representation of the population and is sufficient to draw inferences from. However, the sample generalization is limited, since the appropriate sample size, as indicated by Sekaran's (2001) tables, was not obtained.

Table: 3.1 Determining the Sample Size

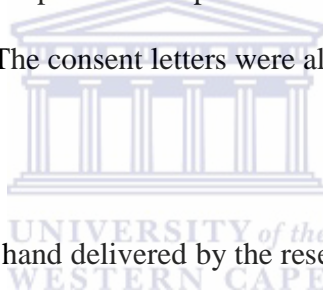
N	S	N	S	N	S
100	80	650	242	20000	377
110	86	700	248	30000	379
120	92	750	254	40000	380
130	97	800	260	50000	381
140	103	850	265	75000	382
150	108	900	269	1000000	384
160	113	950	274		
170	118	1000	278		
180	123	1100	285		
190	127	1200	291		
200	132	1300	297		
210	136	1400	302		
220	140	1500	306		
230	144	1600	310		
240	148	1700	313		
250	152	1800	317		
260	155	1900	320		
270	159	2000	322		
280	162	2200	327		
290	165	2400	331		
300	169	2600	335		

(Sekaran, 2001, p. 295)

3.4 DATA COLLECTION METHODS

3.4.1 The Procedure

The procedure involved obtaining permission from the Western Cape Education Department to distribute and administer the questionnaires to (N=300) teachers at high risk secondary schools in the Western Cape. The principals were first contacted telephonically to arrange personal school visits. During the personal visits, permission to allow teachers to participate in the research study was obtained and principals were provided with consent forms as well as copies of the letter of approval from the Department of Education to perform research at high risk secondary schools. The principals explained this procedure to the teachers and their anonymity and confidentiality were ensured. The consent letters were also handed out by the principals.



The questionnaires were thereafter hand delivered by the researcher for distribution by principals and an agreed collection date was determined. Due to time constraints, the researcher only distributed the cover letters and questionnaires at randomly selected high risk secondary schools in the Northern and Eastern Metropoles. A total of (N=300) questionnaires were distributed of which (n=129) of the questionnaires were returned. The researcher collected the questionnaires together with the cover letters, within two weeks after delivery. The researcher then calculated and scored the questions and captured the data in SPSS, version 17, checked the integrity of the data and was then able to analyse the data.

3.4.2 Measuring Instruments Used

Biographical Questions, the Occupational Stress Inventory Revised, Job Satisfaction Survey, Job Overload and Timing and Method control items of the Job Control, Cognitive Demand and Production Responsibility Survey 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.

3.4.2.1 Biographical Questionnaire

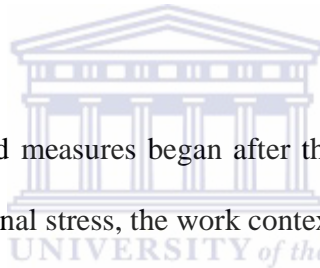
A biographical questionnaire, containing six questions, was developed by the researcher, and used to obtain the biographic information related to the sample. The participants were asked to furnish information with regard to their gender, age in years, years of experience, marital status, number of children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

3.4.2.2 Occupational Stress Inventory Revised (OSI-R)

The 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 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 strain, which can 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 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).

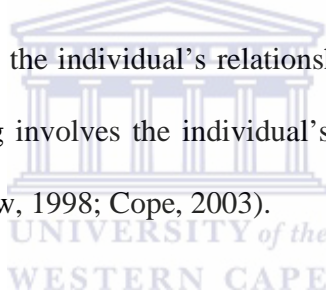
The OSI-R is a self-report inventory which includes three questionnaires. Each of these has five point Likert scale items. Together, the three sub questionnaires take approximately 30 minutes to complete. Some of the items were reversed to ensure response consistency. The summation of the 10 item scores produces a subscale score for the particular variable. The raw score is converted to T-scores using published norm table information (Cope, 2003).

The Occupational Role Questionnaire (ORQ) measures the amount of stress provided by work roles. Sixty items are included in this scale, which are divided into the subscales namely; Role overload, which measures the extent to which role demands are viewed by the individual as exceeding personal and workplace resources and the perceived ability to achieve the expected workload. Role insufficiency measures the extent to which an individual's training, education, skills and experience are appropriate to perform the work. Role ambiguity measures the degree to which expectations, priorities and evaluation criteria are clear to the individual. Role boundary measures the conflicting role demands and loyalties experienced in the work context. Responsibility involves the amount of responsibility the individual has for the performance and welfare of other workers. Physical environment considers the amount of exposure to extreme physical conditions (Osipow, 1998; Cope 2003).

The Personal Strain questionnaire (PSQ) consists of 40 items and is divided into four subscales which measure the outcome of the occupational stressors as manifested in personal strain. The four subscales include; Vocational Strain, which is the degree to which an individual struggle to

produce quality work. Psychological Strain which involves the individual's ability to adjust psychologically and emotionally. Interpersonal Strain involves the disruption in interpersonal relationships which the individual experiences. Physical Strain deals with physical illness or poor self-care habits of individuals (Osipow, 1998; Cope, 2003).

The Personal Resources questionnaire (PRQ) comprises 40 items in four subscales. It measures the coping mechanisms used by the individual. The following subscales are measured namely; Reaction activities which provide a distraction from stressful events and a source of satisfaction outside of the work environment. Self-care deals with the individual's participation in healthy activities. Social support involves the individual's relationships with family, friends and social groups. Rational-cognitive coping involves the individual's ability to minimize stress through effective time management (Osipow, 1998; 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 be 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).

3.4.2.3 Job Satisfaction Survey

The Job Satisfaction Survey was developed by Spector (1987). It was originally designed to assess job satisfaction in the human service, non profit and public organisations (Fields, 2002). A total of 36 items were used to describe nine job facets of the questionnaire, while each facet contained four items. These included pay, promotion, supervision, benefits, contingent rewards, operating procedures, co-workers, nature of work and communication. The responses were obtained by using a 6-point Likert-Type scale. The answers ranged from 1 to 6, as follows; 1=disagree very much, 2=disagree moderately, 3=disagree slightly, 4=agree slightly, 5=agree moderately and 6=agree very much (Fields, 2002). According to Blau in Fields (2002), a longitudinal study indicated that job satisfaction related positively to job utility, professional commitment, extent of downsizing, shift assignments and professional commitment.

3.4.2.4 Job Overload Survey

This measure was developed by Caplan, Cobb, French, Pinneau and Van Harrison (1980). It focuses on employees' perceptions of quantitative job overload and describes the perceived pace and amount of work (Field, 2002). It uses 11 items to describe an employee's job overload. Responses were obtained on a 5-point Likert-type scale, with items 1 to 4 providing answers

such as, 1=rarely, 2=occasionally, 3=sometimes, 4=fairly often and 5=very often and responses for items 5 to 11 providing answers such as, 1=hardly any, 2=a little, 3=some, 4=a lot and 5=a great deal (Field, 2002). Dwyer and Ganster (1991, in Fields 2002) indicated that job overload was positively related to hours worked, competitiveness, firm size and absenteeism.

3.4.2.5 Job Control, Cognitive Demand and Production Responsibility Survey

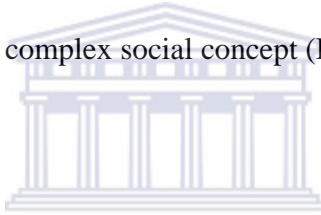
This measure was developed by Davids, Jackson, Martin and Wall (1993). It evaluates the extent of job control and employee experiences in a job. In this study only timing control and method control were used. Timing control involves the extent to which a job gives an employee freedom to determine the scheduling of work behaviour and method control involves the extent to which an employee has the freedom to choose how to carry out tasks. Timing control consists of 4 items and method control consists of 6 items. The responses were obtained on 5-point Likert type scale, which provided answers such as, 1=not at all, 2=just a little, 3=a moderate amount, 4=quite a lot and 5=a great deal (Fields, 2002). A brief overview of the reliability and validity of the instruments is provided.

3.5. 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 97 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 page 97.

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

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

(Cope, 2003, p. 77)

Job Satisfaction Survey (JSS): There are two types of reliability estimates, which were used when evaluating the JSS, namely internal consistency and test-retest reliability (Spector, 1997).

Internal consistency reliability: The JSS has been tested for internal consistency reliability. Coefficient alphas that were reported ranged from 0.60 for the co-worker subscales to 0.91 for the total scale. **Test-retest reliability:** The test-retest reliability of the JSS ranged from 0.37 to 0.74 as indicated by Spector (1997).

Job Overload Survey: Coefficient alpha values which were indicated by previous studies ranged from 0.72 to 0.81 according to Wallance (1997 in Fields, 2002).

Job Control, Cognitive Demand and Production Responsibility Survey: Only two items namely timing control and method control were used in this study, since the coefficient alpha values ranged from 0.79 to 0.85 for timing control and 0.77 to 0.80 for method control according to Fields (2002). Job control was also positively related to length of service, job decision latitude and job satisfaction (Fields, 2002). Wall, Jackson, Mullarkey and Parker (1996 in Fields, 2002), had method and timing control combined into a single scale with a coefficient alpha of 0.86.

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, p. 641). 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, p. 640). **Criterion-related validity:** involves “the degree to which a measure relates with some external criterion” (Babbie & Mouton, 2007, p. 641). It also determines the extent to which measures can successfully predict an outcome and how successfully they correlate with other instruments (Josiah, 2005). The researcher used the Occupational Stress Inventory Revised to identify teachers with varying stress levels, in order to determine the relationship between stress levels and the sources of their stress. The questionnaires used in this study have been tested for validity.

Occupational Stress Inventory Revised: In order to ascertain the validity of the OSI-R, data were collected using the original OSI as well as the OSI-R. 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).

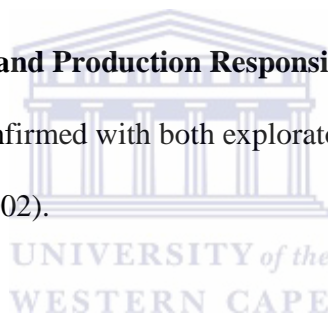
Spew (1998 in Cope, 2003) highlights the findings which provided moderate to strong support for the concurrent validity of the OSI. Treatment studies employed the OSI scales to assess the effectiveness of stress reduction programmes in decreasing occupationally induced stress and strain. It was found 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.

Job Satisfaction Survey (JSS): The JSS which measures job satisfaction is considered to have content validity. The JSS subscales of pay, promotion, supervision, co-workers and the nature of

work related successfully with corresponding subscales of the Job Demand Index (JDI). These correlations ranged from 0.61 for co-workers to 0.80 for supervision (Cooper & Schindler, 2003 in Josias, 2005).

Job Overload Survey: A positive correlation was gathered between job overload, hours worked competitiveness and organisation size, while absenteeism correlated negatively with work satisfaction and professional commitment (Fields, 2002).

Job Control, Cognitive Demand and Production Responsibility Survey: The structure of the dimensions of the measure was confirmed with both exploratory and confirmatory factor analysis in two separate samples (Fields, 2002).

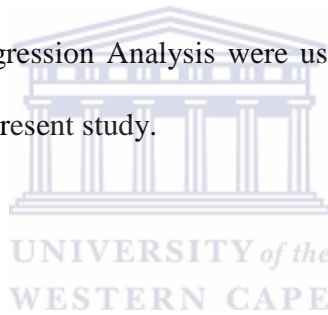


3.7 ETHICAL CONSIDERATIONS

This study was conducted with ethical considerations in mind (Khoza, 2004). Participants were selected on a voluntary basis and informed consent was obtained. The measuring instruments were considered based on their validity and reliability. Data was secured and considered highly confidential during this whole research project. A letter requesting consent, the letter of approval from the Department of Education and the questionnaires were handed to the principals of the schools. These were then issued to the teachers after thorough explanation by the examiner. The present research conformed to the code of ethics prescribed by the Board of Psychology of the Health Professions Council of South Africa.

3.8 DATA ANALYSIS

The research was conducted on (n=129) teachers from five high risk secondary schools from the Northern and Eastern Metropoles in the Western Cape. The statistical analysis was done using the SPSS computer package, version 17. The analysis involved obtaining inferential results, investigating the psychometric properties for the various questionnaires used as well as determining the inter-correlations between the different scales used. An analysis of the data of each instrument used were undertaken to determine the reliability of the test items. The hypotheses were constructed and the research was based on determining the significant relationships between the constructs. Statistical techniques namely, Pearson Product Moment, ANOVA, T-test and Multiple Regression Analysis were used. These are briefly explained to highlight their significance in the present study.



3.8.1 Pearson Product Moment

The Pearson Product Moment was considered suitable for use in this study, since it determined whether a statistically significant relationship existed between job stress, job satisfaction, job overload and job control of teachers. The Pearson correlation procedure measures the strength of association between variables (Josias, 2005) and is suitable for measuring interval and ratio scaled variables (Pauze, 2005). A positive relationship indicates that when occupational stressors increase, teacher stress also increases. An inverse relationship indicates that when occupational stressors increase, teacher stress decreases (Foxcroft & Roodt, 2005).

The Pearson Product Moment was used to determine the hypothesis H_a , which states that job satisfaction is not related to stress of teachers at high risk secondary schools in the Western Cape, H_b , which states that job overload is not related to stress of teachers at high risk secondary schools in the Western Cape and H_c , which states that job control is not related to stress of teachers at high risk secondary schools in the Western Cape.

3.8.2 Analysis of Variance (ANOVA)

The ANOVA deals with differences between sample means and has no restriction on the number of means (Howell, 1999 in Oosthuizen, 2005). Coolican (1999 in Paulse, 2005, p. 73), maintains that “analysis of variance procedures are powerful parametric methods for testing the significance of differences between sample means where more than two conditions are used, or even when several independent variables are involved.” ANOVA produces an F-statistic, which compares the amount of systematic variance in the data to the amount of unsystematic variance (Fields, 2000). It also tests for an overall experimental effect and provides information about the general success of the experimental manipulations; however it does not provide specific information about the affected groups (Oosthuizen, 2005). ANOVA creates feasibility in appraising the separate or combined influences of several independent variables on the experimental criterion. In this study, ANOVA was used to establish whether a statistical significant difference exists between the levels of stress based on the biographical details and the variables namely job satisfaction, job overload and job control.

3.8.3 T-Tests

T-tests are used to determine whether the sample was experiencing significant levels of stress or not. T-tests allows for the comparison of the means of two groups to analyze their unique differences based on the assumption that the two groups belong in the same population or two populations who possess the same population mean. The significant differences in the levels of stress of teachers based on their gender, was determined by using the T-test method (Oosthuizen, 2005).

3.8.4 Multiple Regression Analysis

In general, regression refers to the prediction of one variable from knowledge of one or more other variables, according to Howell (1999 in Oosthuizen, 2005). Babbie and Mouton (2007, p. 466) regard multiple regression as a means of analyzing how “a given dependent variable is affected simultaneously by several independent variables.” Foxcroft and Roodt (2005) view multiple regression as a technique that allows additional factors to enter the analysis separately so that the effect of each can be estimated.

The multiple regression analysis is suitable for use in the present study, since it provides a description of the relationship between teacher stress, job satisfaction, job overload and job control of teachers at high risk secondary schools in the Western Cape. The Multiple Regression Analysis was also used to determine the extent to which biographical factors explain the variance in the stress of these teachers.

3.9 SUMMARY OF THE CHAPTER

This chapter provided an explanation of the research design or research method employed in the study. The sample and procedure used in the study was explained. The measuring instruments and targeted population were discussed briefly. An explanation of the reliability, validity and justification of the instruments used were also provided. The stratified random sample of 129 teachers from five high risk schools in the Western Cape was chosen. The statistical analysis provided descriptive and inferential information. It included the Pearson Product, ANOVA, Multiple Regression Analysis and T-tests as well as a justification for each of their use in the study.



CHAPTER 4

RESULTS AND DISCUSSION

4.1 INTRODUCTION

The current chapter concludes the research investigation by outlining the results obtained in the study and providing a comprehensive discussion of these results. The descriptive statistics computed for the study are presented firstly in an outline of the characteristics of the sample with regards to the variables included in the study. Thereafter, the analyses of the constructs relevant to the study, that is, job stress, job satisfaction, job overload and job control, are presented with the aid of inferential statistical procedures. Conclusions are then drawn on the basis of the obtained results. Finally, the chapter concludes by providing some recommendations that may prove fruitful in future research projects of a similar nature.

4.2 RESULTS

4.2.1 Descriptive Statistics

According to Babbie and Mouton (2008), descriptive statistics is a way of indicating quantitative descriptions in a manageable form. Furthermore, it describes single variables or associations that connect variables to each other. Descriptive statistics consists of tabular or graphical representations of evidence. It involves the analysis of data by using frequencies, dispersions

dependent and independent variables and measures of central tendencies. Initial data analysis is facilitated by the use of descriptive data. The descriptive statistics calculated for the sample are provided in the sections that follow. The data pertaining to the variables included in the study, as collected by the three measuring instruments employed, are summarised by means of graphic representation and the calculation of descriptive measures. In this manner, the properties of the observed data clearly emerge and an overall picture thereof is obtained. Descriptive statistics, in the form of frequencies, are subsequently presented graphically for each of the above-mentioned variables.



FIGURE 4.1: GENDER

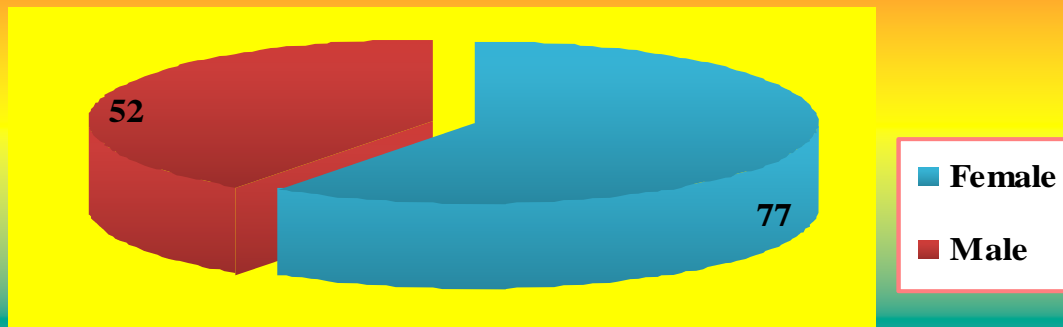
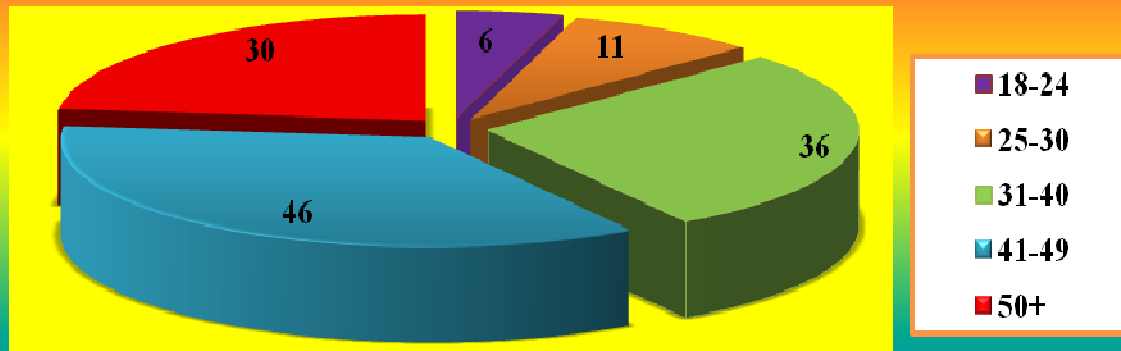
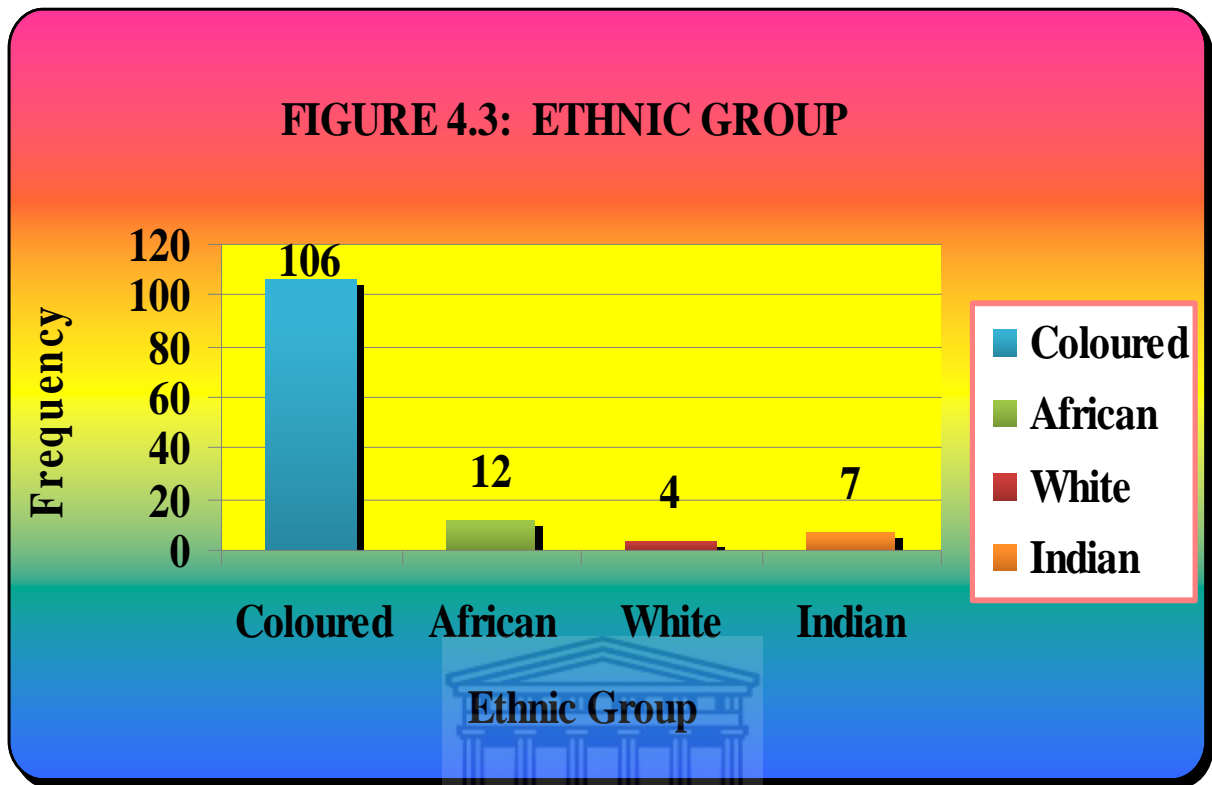


Figure 4.1 depicts the gender distribution of the respondents. As can be seen from the illustration, it may be observed that the number of male respondents comprised 40% (n=52) of the sample, while females constituted 60 % of the sample (n=77).

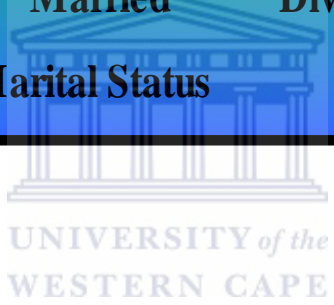
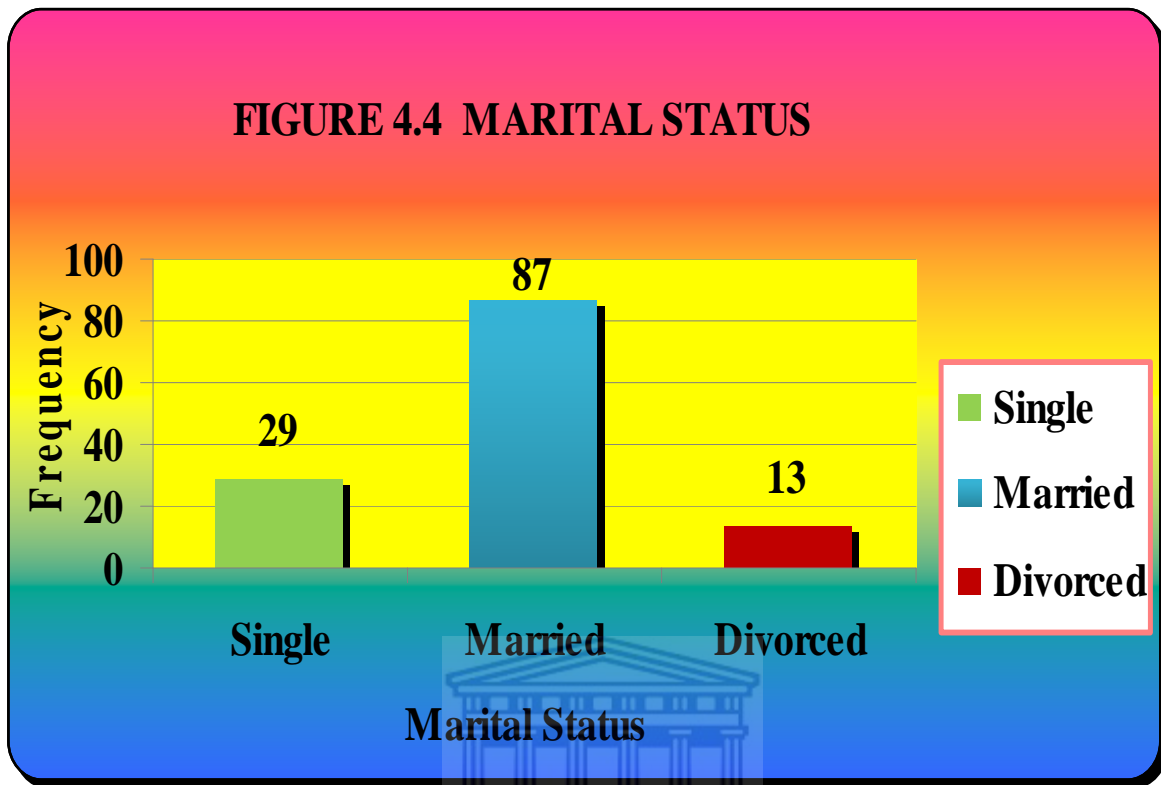
FIGURE 4.2 AGE IN YEARS



In terms of figure 4.2, it may be seen that (23%; n=30) were in the age group of 50 and more, the majority of the respondents (35%; n=46) was in the age group 41-49, while a further (28%; n=36) respondents were in the age group 31-40. A further (9%; n=11) was in the age group 25-30. Only (5%; n=6) of the sample was in the age group 18-24.



Coloured respondents represented the majority of the respondents in terms of figure 4.3, in which the group represented (82.2%; n=106) of the respondents. African respondents comprised (9.3%; n=12) of the sample. White respondents comprised the minority in that they constituted only (3.1%; n=4) of the respondents, while Indians comprised a further (5.4%; n=7) of the sample.



In terms of figure 4.4 it may be seen that the majority of the respondents (67%; n = 87) was married, while those that are divorced comprised the minority (10%; n=13) of the sample. Single respondents made up a further (23%; n=29).

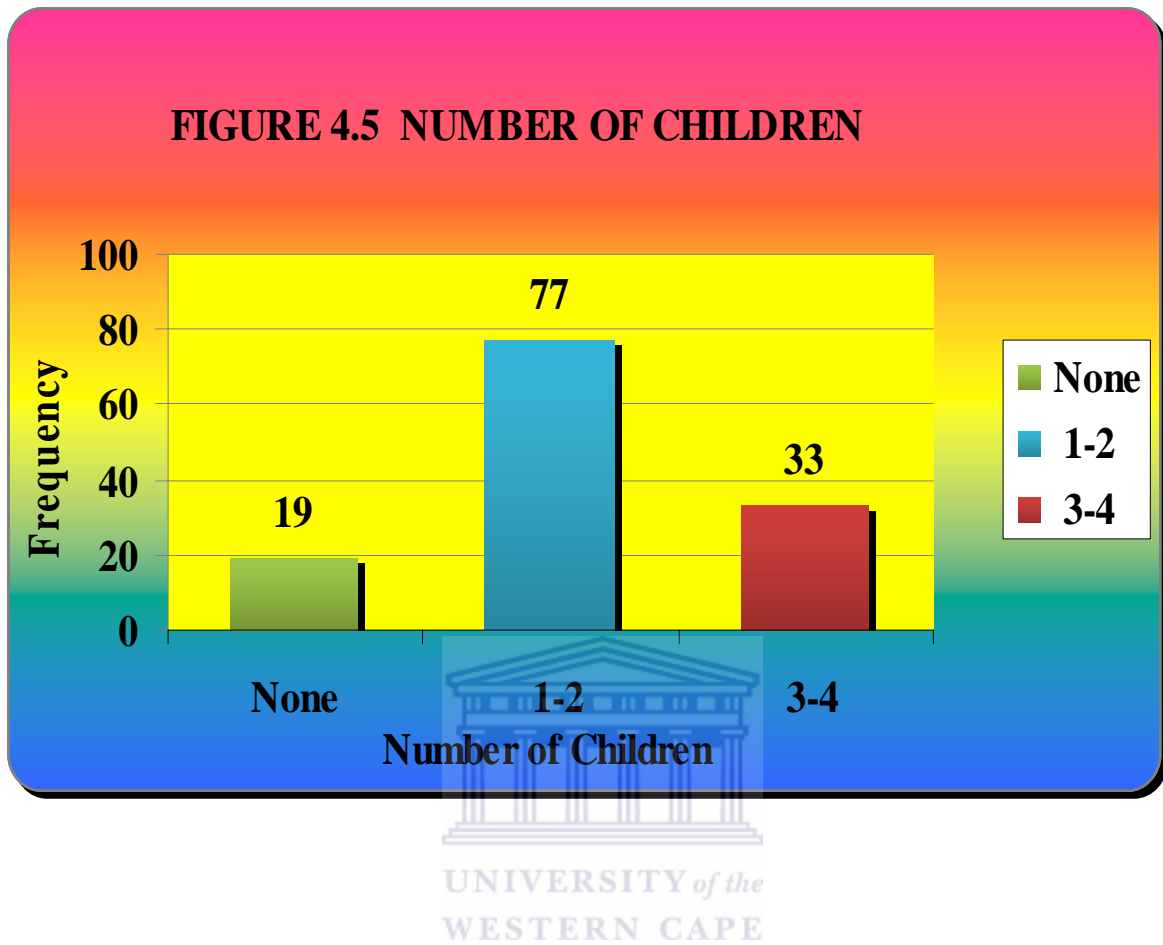


Figure 4.5 depicts the number of children that respondents have. The majority, that is (60%; n = 77) has 1-2 children, while (25%; n=33) had 3-4 children. A further (15%; n=19) respondents which is the minority, has no children.

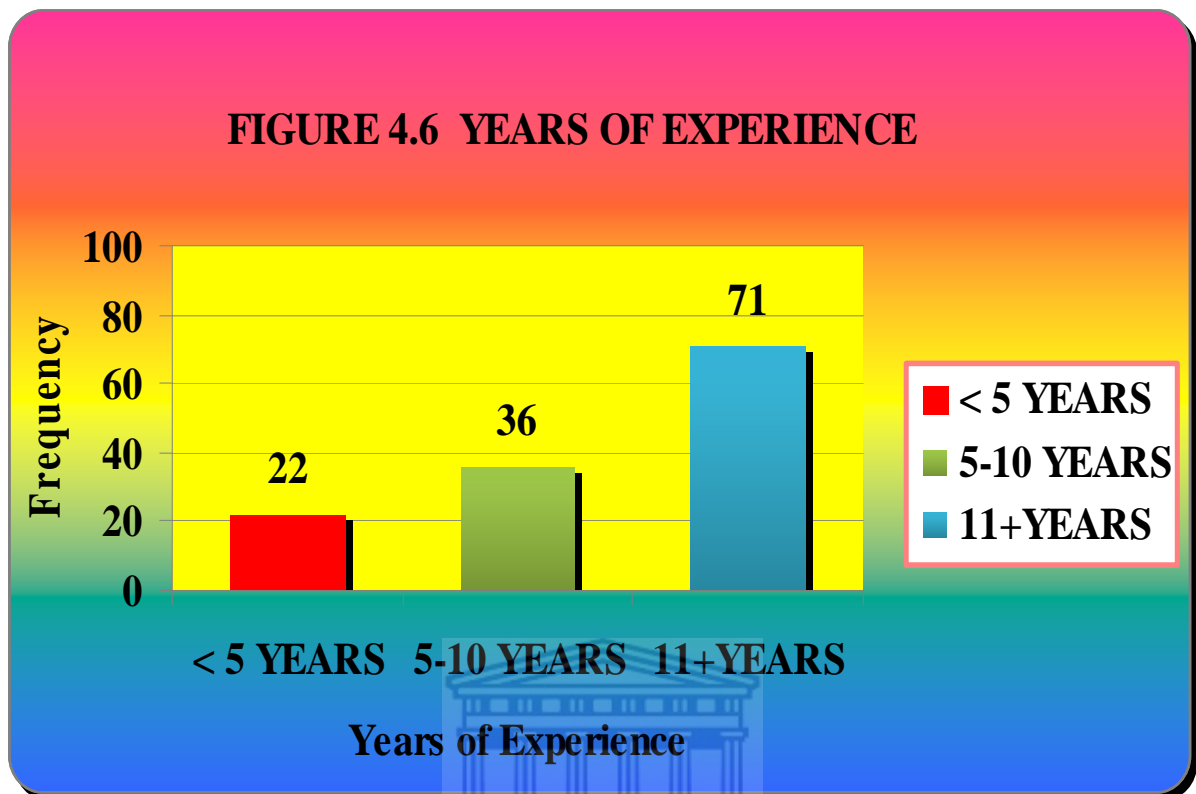


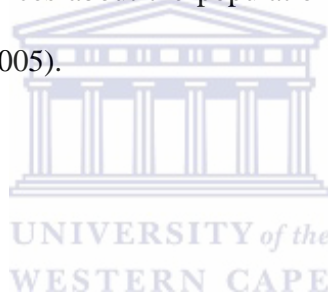
Figure 4.6 provides an overview of the years of experience which respondents have within their profession. The majority of the respondents (55%; n=71) of the sample has in excess of 11 years experience, while (28%; n=36) has 5-10 years experience. While (17%; n=22) of the sample has less than 5 years experience.

Table 4.7: Descriptive statistics for male and female teachers comparing job stress, job satisfaction, job overload and job control.

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Job Stress	male	52	3.50	1.260	.175
	female	77	3.70	.889	.101
Job Satisfaction	male	52	3.79	.848	.118
	female	77	3.77	.999	.114
Job Overload	male	52	3.42	.801	.111
	female	77	3.14	.702	.080
Job Control	male	52	34.29	5.952	.825
	female	77	33.22	4.103	.468

Figure 4.7 depicts the results in the study which indicate that males experience lower mean job stress (Mean = 3.50, sd = 1.260) than females do (Mean = 3.70, sd = .889). Male teachers, however experience slightly higher job satisfaction (Mean = 3.79, sd = .848) compared to female teachers (Mean = 3.77, sd = .999). Job overload is experienced as being more problematic for male teachers (Mean = 3.42, sd = .801) compared to female teachers (mean = 3.14, sd = .702). Male teachers report higher levels of job control (mean = 34.29, sd = 5.952) compared to female teachers (mean = 33.22, sd = 4.103).

In order to obtain statistical inferences about the population under study, it is necessary to use inferential statistics (Oosthuizen, 2005).



4.2.2 Inferential Statistics

Inferential statistics are methods of using the sample data to make statements about the population from which the sample was drawn. Sekaran (2000) explains that inferential statistics can be classified as parametric or no-parametric. It allows the researcher to draw inferences from the sample and indicate how justified the researcher is in concluding something about the population based on the data provided by the sample. The analytical process which allows this process of extrapolation from findings based on the data provided by the sample is known as inferential statistics.

In the present study, statistics was used to test the null hypothesis. The statistical techniques namely the Pearson Product Moment, ANOVA, Multiple Regression Analysis and T-tests were used in this study for purposes of testing the stated hypotheses. These statistical techniques aided in drawing conclusions with regards to the population from which the sample was taken and decisions were made with respect to the research hypotheses. Brief explanations of these inferential methods are provided in order to emphasize their use in the present study.

Table 4.8 on page 117 depicts whether there are significant gender differences in job stress, job satisfaction, job overload and job control amongst teachers at high risk secondary schools in the Western Cape. The results indicate that there are statistically significant differences in stress based on gender ($t = -.996, p < 0.01$). There are also statistically significant differences in job control based on respondents' gender ($t = 1.126, p < 0.05$). The null hypothesis is therefore rejected. There was however no statistically significant differences in job satisfaction or job overload, respectively based on the respondents' gender. Hence the null hypothesis is accepted.

Table 4.8: Independent Samples T-test to determine gender differences in job stress, job satisfaction, job overload and job control.

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	Df
Job Stress	Equal variances assumed	7.973	.006*	-1.064	127
	Equal variances not assumed			-.996	84.657
Job Satisfaction	Equal variances assumed	2.927	.090	.132	127
	Equal variances not assumed			.136	120.397
Job Overload	Equal variances assumed	3.705	.056	2.101	127
	Equal variances not assumed			2.048	99.649
p<0.01 **	Equal variances assumed	4.118	.045*	1.207	127
	Equal variances not assumed			1.126	83.230
p<0.01**					
p<0.05*					

Table 4.9: ANOVA illustrating differences in job stress based on the biographical variables.

		Sum of Squares	Df	Mean Square	F	Sig.
Gender	Between Groups	11.612	4	3.311	1.988	0.018*
	Within Groups	121.652	124	1.06		
	Total	135.264	128			
Age	Between Groups	13.712	4	3.428	3.175	0.016*
	Within Groups	133.885	124	1.08		
	Total	147.597	128			
Ethnic group	Between Groups	5.259	4	1.315	2.242	0.068
	Within Groups	72.709	124	0.586		
	Total	77.969	128			
Marital Status	Between Groups	5.679	4	1.42	2.34	0.059
	Within Groups	75.251	124	0.607		
	Total	80.93	128			
Number of Children	Between Groups	3.042	4	0.761	1.988	0.18
	Within Groups	47.438	124	0.383		
	Total	50.481	128			
Years of Experience	Between Groups	8.063	4	2.016	3.769	0.006*
	Within Groups	66.324	124	0.535		
	Total	74.388	128			
p<0.01 **						
p<0.05 *						

Table 4.9 provides the results for the ANOVA depicting differences in job stress based on the biographical variables of age, ethnical group, marital status, number of children and years' experience. The results indicate that there are statistically significant differences in stress based on the number of years experiences ($F = 3.769$, $p < 0.01$) as well as on gender ($F = 1.988$, $p < 0.01$) and the age of respondents ($F = 3.175$, $p < 0.05$). There were however, no statistically significant differences in stress based on the remaining biographical variables of ethnic groups, marital status and the number of children. The null hypothesis is therefore partially rejected.



Table 4.10: Inter-Correlation Matrix (job stress, job satisfaction, job control and job overload)

		Job Stress	Job Satisfaction	Job Overload
Job Satisfaction	Pearson Correlation	-.071		
	Sig. (2-tailed)	.422		
	N	129		
Job Overload	Pearson Correlation	.024	-.447**	
	Sig. (2-tailed)	.785	.000	
	N	129	129	
Job Control	Pearson Correlation	.002	.324**	.743**
	Sig. (2-tailed)	.985	.000	.000
	N	129	129	129
** Correlation is significant at the 0.01 level (2-tailed)				

Table 4.10 indicates the relationship between job stress, job satisfaction, job overload and job control. The results indicate that there are statistically significant relationships between job overload and job satisfaction ($r = -.447, p < 0.01$), between job overload and job control ($r = 0.743, p < 0.01$) and between job control and job satisfaction ($r = .324, p < 0.01$).

There was an inverse, although not significant relationship that was noted between job stress and job satisfaction ($r = -.071, p > 0.05$) and a direct, small and not significant relationship between job stress and overload ($r = .024, p > 0.05$) and between job stress and job control ($r = .002, p > 0.05$). The null hypothesis is therefore accepted.



Table 4.11: Multiple Regression Analysis with Job Stress as the Dependent Variable.

Model	R	R Square	Adjusted R Square		Std. Error of the Estimate	
1	.185 ^a	.034	.011		1.049	
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4.891	3	1.630	1.482	.223 ^a
	Residual	137.496	125	1.100		
	Total	142.388	128			
Model		Un-standardized Coefficients	Standardized Coefficients			
		B	Std. Error	Beta	T	Sig.
1	(Constant)	1.167	1.337		.873	.385
	Job control	.034	.031	.160	1.112	.268
	Job overload	.124	.186	.088	.666	.506
	Job satisfaction	-.017	.008	.208	-2.072	.040
a. Dependent Variable: Job Stress						

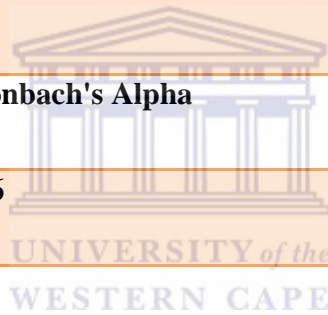
Table 4.11 depicts the variance in job stress as attributed to the three independent variables of job control, job overload and job satisfaction. It may be seen that the three independent variables entered into the equation only account for 34% of the variance in job stress experienced ($F = 1.482, p = .223$). With a negative Beta value of $-.017$, job satisfaction is the only variable which statistically significantly explains the variance in job stress. The null hypothesis is therefore rejected. The remaining 66% variance in job stress can be attributed to factors that were not explored in the current study.

4.2.3 RELIABILITY

The Cronbach's Coefficient Alpha in table 4.12 on page 124, was calculated to determine the reliability of the various instruments used to determine job stress, job satisfaction, job control and job overload. The results indicate that the Occupational Stress Inventory Revised (OSI-R) is a reliable instrument as the coefficient alpha is above 0.7. The job satisfaction measure employed has a coefficient alpha of 0.837 and the job control measure has a coefficient alpha of .786, all of which indicate that the instruments are reliable. Although the coefficient alpha is slightly below the 0.7 level (.692) for job overload, it also shows satisfactory reliability. The 4 instruments collectively demonstrated consistency, stability and freedom from error.

Table 4.12: Cronbach's Coefficient Alpha

	Cronbach's Alpha	N of Items
OSI-R	.750	140
	Cronbach's Alpha	N of Items
Job overload	.692	11
	Cronbach's Alpha	N of Items
Job satisfaction	.837	36
	Cronbach's Alpha	N of Items
Job control	.786	10



4.3 SUMMARY OF THE CHAPTER

This chapter provided an overview of the most important findings which emerged from the empirical analysis. Statistical results were tabulated to illustrate the results of the current study. The next section presents a discussion of the findings obtained and compares these findings with other research conducted in this field.

CHAPTER 5

DISCUSSIONS OF RESULTS, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter deals with the findings of the research with regard to the relationship between job stress, job satisfaction, job overload and job control of teachers at high risk secondary schools in the Western Cape. In order to contextualize the research findings, comparisons are made with available research on teacher stress, job satisfaction, job overload and job control. Conclusions drawn from the research as well as recommendations for future research on teacher stress are provided.



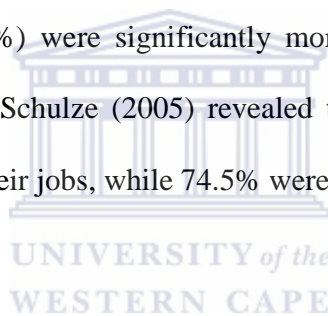
5.2 RESULTS

The results in the study indicate that males experience lower stress (Mean = 3.50, sd = 1.260) than females (Mean = 3.70, sd = 0.889) at high risk secondary schools in the Western Cape. The stress of these teachers pertaining to job satisfaction, job overload and job control is as follows.

5.2.1 Job Satisfaction and Teacher Stress

Job Satisfaction Survey of the current study, indicated the level of teacher stress as ($r = -0,71$, $p > 0,05$) therefore it can be concluded that there was an inverse, although not a significant relationship between the job satisfaction and the stress of teachers at high risk secondary schools in the Western Cape. Male teachers experience slightly higher job satisfaction (Mean = 3.79, sd = .848) compared to female teachers (Mean = 3.77, sd = .999).

In congruence with the present study, a study by Van der Bijl and Oosthuizen (2007), in Cape Town, revealed that females (32%) were significantly more dissatisfied with their jobs than males (18%). Another study by Schulze (2005) revealed that 12.7% of academics in higher education were dissatisfied with their jobs, while 74.5% were satisfied with their jobs.



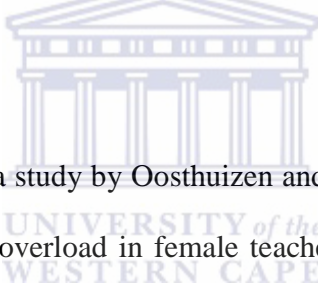
A study by Stimilo (2007) revealed that teachers felt dissatisfied with having an inadequate ability to influence policies (68%), an inadequate level of involvement in shaping school curriculum (44%), an inadequate ability to influence student promotion and retention (41%) and an inadequate level of involvement in teambuilding and problem solving (28%).

A study by Campbell et al. (2001) revealed that a secondary school with a school size of above 1500 had an adverse affect on job satisfaction and job stress of secondary school physical education teachers. Badenhorst et al. (2008) indicated that teachers' high performance

expectations and their emphasis on learner achievement, could contribute to their job dissatisfaction.

5.2.2 Job Overload and Teacher Stress

The Job Overload Survey indicated the level of teacher stress as ($r = 0.024$, $p > 0.05$) therefore it can be concluded that a direct, small and not significant relationship exists between job overload of teachers at high risk secondary schools in the Western Cape and the stress of these teachers. Job overload is experienced as more problematic for male teachers (Mean = 3.42, sd = .801) compared to female teachers (mean = 3.14, sd = .702).

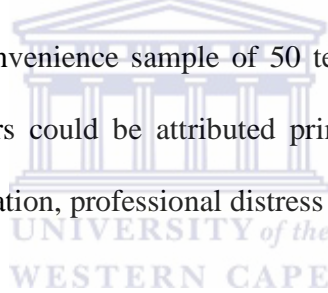


In contrast with the present study, a study by Oosthuizen and Van der Bijl (2007) in Cape Town indicated significantly more work overload in female teachers (nearly 90%) compared to male teachers (71%). Furthermore teachers viewed the Outcomes Based Education system (OBE) as unworkable and that it has increased their workload significantly, without the prospect of improved results.

Another study involving 459 teachers indicated that male teachers rated work overload, pupil behaviour, lack of standards and poor salary as being the most stressful aspects of their job (McEvan & Thompson, 1997). Forlin (1997) noted that 571 teachers attributed their stress to professional competence, administrative issues and issues related to the classroom.

The Association of University Teachers (2003) found that excessive overload and work-life imbalance were among the most frequently reported stressors by academics. A further study by Boyed and Wylie (1994) revealed that 80% of academics indicated that their workload had increased. Youngusband (2006) found that teachers spend more time on documentation and paper work, which increased their workload. Several studies indicated that a significant negative relationship exists between job overload and job satisfaction (Campbell, 2004).

Baglioni, Borg, Boyle and Falzon (1995) evaluated the dimensions of teacher stress and determined that workload and student misbehaviour were two major stressors. Austin, Muncer and Shah (2005) considered a convenience sample of 50 teachers from two high schools and found that stress amongst teachers could be attributed primarily to work-related stress, time management, discipline and motivation, professional distress and professional investment.



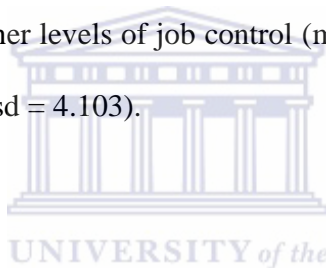
Olivier and Venter (2003) report that teachers viewed inadequate salaries, unmotivated learners, big classes and time demands as causing the most stress for them. This was also confirmed by the literature, according to Marais (1992).

Fogarty, Pithers and Sutherland (1995) indicated that unnecessarily large workloads and often few resources were the major causes of occupational stress for teachers. Learners' behaviour towards work and a heavy workload have been found to be the most intense sources of stress in

the majority of studies (Borg & Falzon, 1989). Disruptive behaviour was rated as a lower source of stress compared to workload. Gersch and Williams (2004) found that pressure from inspection and having too much work to do were perceived as being most stressful for teachers.

5.2.3 Job Control and Teacher Stress

The Job Control Survey of the current study indicated the level of job control as ($r = 0.002$, $p > 0.05$), therefore it can be concluded that a direct, small and not significant relationship exists between job control of teachers at high risk secondary schools in the Western Cape and their stress. Male teachers reported higher levels of job control (mean = 34.29, sd = 5.952) compared to female teachers (mean = 33.22, sd = 4.103).



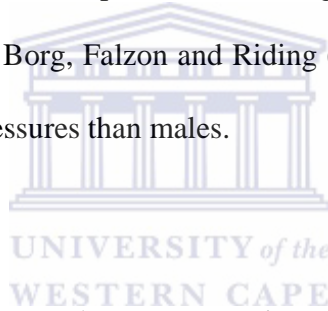
Nelson and Quick (2006) found that males in jobs with low autonomy (lack of job control) and high demands (heavy workloads) experience more heart attacks than female workers. Younghusband (2006) found that teachers experience stress due to having a lack of control in their work since they do not possess adequate control over their huge classes and consequently encounter discipline problems. Research indicates high levels of stress relating to control, work relationships, resources, communication as well as job insecurity (Tytherleigh, 2003).

BIOGRAPHICAL FACTORS

Research has indicated that biographical variables have a direct effect on job stress (Borgen & Decker, 1993).

5.3.1 Gender and Job Stress

The results of the present study indicate that there is a statistically significant relationship between gender and the stress of teachers at high risk secondary schools in the Western Cape. Many female teachers are considered to experience the changes in the South African educational system as traumatic. Research by Borg, Falzon and Riding (1991) indicate that females tend to report greater stress due to time pressures than males.

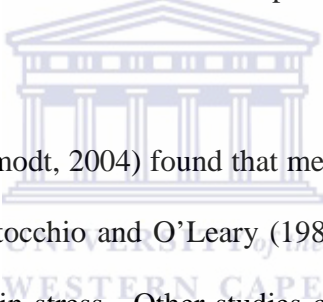


Research evidence indicates that men and women experience stress differently. The adjustments associated with changes in the South African education system, together with female teachers' normal duties and busy work schedules, cause continuous stress (Van der Linde, Van der Westhuizen & Wissing, 1999).

Many researchers suggest that women have more stress than men (Aamodt, 2004; Van Zyl, 2002). This could be due to females being more committed to their jobs and them having more

barriers to overcome to attain their positions (Van Zyl, 2002). Van den Bergh (2001, as cited in Van Zyl, 2002) found that many Black women find themselves in managerial positions, often without the necessary skills, experience and support. This causes high levels of stress for these women.

Aamodt (2004) maintains that role conflict and ambiguity in female employees are some of the factors that can contribute to higher stress levels amongst women. He noted that when females have competing roles, it can cause tremendous stress. Conversely, Cooper and Marchall (1980) found that women experienced lower levels of stress compared to men.



Cooper and Davidson (1983 in Aamodt, 2004) found that men and women responded differently to various types of stressors. Martocchio and O'Leary (1989 in Aamodt, 2004) could not find any significant gender differences in stress. Other studies claim gender has no contribution to stress in female employees.

A study by Ngidi and Siyaba (2002) revealed that female teachers experienced more stress than males, regardless of qualifications and teaching experience. A study by Oosthuizen and Van der Bijl (2007) in Cape Town indicated that significantly more female teachers are likely to report symptoms of anxiety and depression (80%) than males (67%). A study by Osipow, Doty and Spokane (1985) using the Occupational Stress Inventory revealed that gender was a major

contributor to strain and coping (Cope, 2003). Bertini et al. (2003) conducted research to determine the relationship between gender and stress amongst a sample of 2182 secondary school teachers in Italy and found an insignificant relationship between stress and gender.

5.3.2 Age and Job Stress

The current study indicates that there is a statistically significant relationship between age and the stress of teachers at high risk schools in the Western Cape.

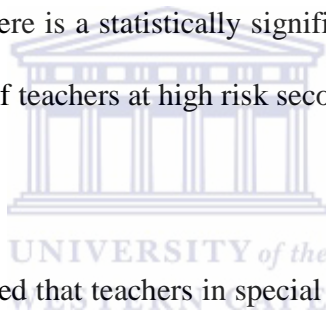
Research regarding stress levels of different age groups tend to be contradictory. Naylor (2001) reported that relatively young teachers experienced high levels of stress and anxiety to the extent that they contemplated suicide. Research by Karasek and Theorell (1996) suggest that age is associated with stress amongst teachers. However, research by Bertini, Gagliardi, Pisanti and Razzino (2003) amongst secondary school teachers in Italy could not provide evidence of a relationship between the age of teachers and the level of stress experienced.

Maslach (1982 in Williams & Van Tonder, 2009) found age, marital status and gender to be related to stress and burnout. This is in contrast with a study by Calvert, Flynn, Fraser and Long (1991), which could not produce a significant relationship between age, stress and burnout. Karasek and Theorell (1990) investigated the relationship between selected demographic variables and stress. They did not find evidence of a significant relationship between age and stress amongst a sample of teachers.

Literature suggests that younger teachers experience lower levels of stress due to the absence of family responsibilities, while older respondents are more likely to experience higher levels of stress due to being less mobile as an employee and more loyal to their profession (Van Zyl, 2002). A study by Emsley et al. (2009) revealed that younger disabled teachers are more likely to note unfavorable work circumstance (30%) and work overload 40% as factors contributing to the psychiatric illness due to stress.

5.3.3 Years of Experience and Job Stress

The present study indicates that there is a statistically significant relationship between the years of work experience and the stress of teachers at high risk secondary schools in the Western Cape.

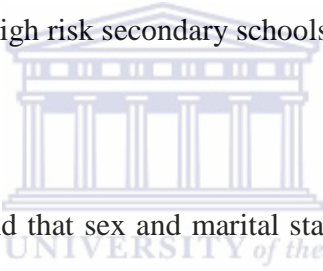


A study by Trendall (1989) indicated that teachers in special schools reported being less stressed in their working environment than their mainstream colleagues. Gender differences, level of qualifications and length of teaching affected the amount of stress experienced. Teachers with five to ten years' experience felt more stressed than male teachers and older teachers with more experience. The majority of teachers in the study viewed teaching as either very stressful or stressful (Gersch & Williams, 2004). Ngidi and Siyaba (2002) also found that male teachers with 5-9 years of experience reported greater stress due to administrative problems than those with 0-4 and 10 years and more experience in teaching.

Ngidi and Siyaba (2002) revealed that more inexperienced qualified female teachers experience stress resulting from time pressures than experienced qualified females. A Cape Town study by Emsley et al. (2009) revealed that disabled teachers with fewer years of experience were more likely to mention work overload, working conditions, and issues related to re-structuring as contributors to their psychiatric illness and stress.

5.3.4 Marital Status and Job Stress

The present study indicates that there is no statistically significant relationship between marital status and the stress of teachers at high risk secondary schools in the Western Cape.



Pietersen and Van Zyl (1999) found that sex and marital status play a significant role in stress, however, they found that age, number of dependents, length of service, qualifications, job level, did not significantly correlate with stress levels amongst a sample of 59 secondary school teachers. Married female teachers in particular experience high levels of stress (Pietersen & Van Zyl, 1999).

Emsley et al. (2009) found linkages between psychiatric history and marital status of 81 occupationally disabled teachers in Cape Town. Married teachers amounted to 79% single teachers 7%, divorced teachers amounted to 9% and widowed teachers amounted to 5%. A Cape Town study performed by Oosthuizen and Van der Bijl (2007) revealed that female doctors have a higher rate of divorce than male doctors.

5.3.5 Number of Children and Job Stress

The present study indicates that there is no statistical significant relationship between the number of children and the stress of teachers at high risk secondary schools in the Western Cape.

Oosthuizen and Van der Bijl (2007) found in their study of teachers in Cape Town, that teachers were more likely to have children than doctors. Of the female teachers, 76% had children, while only 28% of doctors had children. Futhermore, female doctors in Cape Town have fewer children than male doctors. This study could indicate that more teachers than doctors have stress brought about by the number of children they have.



5.3.6 Ethnic Group and Job Stress

The present study indicates that there is no statistically significant relationship between ethnic group and the stress of teachers at high risk secondary schools in the Western Cape.

Research on race and stress is unequivocal. A study by Bester and Van Zyl (2001) indicated that Black semi-skilled and illiterate employees' levels of stress were significantly higher than the skilled and literate group. Dressler (1989) links high levels of stress in senior Black employees

to the broad social context within which these individuals function. Typical examples include, personal home life affected by devoting extra time to work, physical threats in townships, inadequate housing facilities, family problems, poor health, social problems and insufficient recreation facilities.

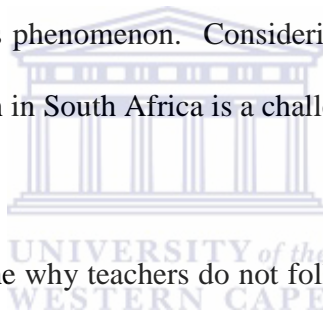
A study by Ngidi and Siyaba (2000) revealed that Black teachers' working conditions are frustrating and demoralizing and cause high levels of stress due to physical conditions such as overcrowding, inadequate equipment and lack of facilities. This is a consequence of the disparities in financial provisions of the apartheid era in South Africa. Empirical research revealed that township or previously disadvantaged Black school teachers experience moderate to high levels of stress (Ngidi & Siyaba, 2002). Prins (1995) believes that Black employees experience a variety of difficulties in the workplace, such as work overload, time pressures, inadequate training opportunities, poor communication, little participation in decision-making and stereotypical prejudice.

Finley, Iverson, Mueller and Price (1999) studied the effects of group, racial composition on job satisfaction of teachers in the USA. This study revealed that reduced levels of job satisfaction existed among predominantly White teachers and predominantly Black learners. Jonas (2001 in Kamper & Steyn, 2006) studied the relationship between perceived social support, stress levels and general health of fourteen Black educators in Pietersburg and found that a direct relationship

exists between the stress of teachers and their general health. Research findings of Van der Westhuizen and Du Toit (1994 in Badenhorst et al., 2008) revealed that factors influencing job satisfaction among Black female teachers in South Africa involved learners, teaching and own security.

5.3 CONCLUSIONS

According to Kamper and Steyn (2006), when future studies on teacher stress are considered, it is important to take into account possible focuses of research that could lead to a deeper understanding of the teacher stress phenomenon. Considering the extensive research on stress, suggesting areas for future research in South Africa is a challenge.



Research on coping should examine why teachers do not follow coping strategies when they are aware of their existence (Ahrendse, 2008). Stress-coping research should adopt a holistic approach that considers the totality of the teacher's life space, rather than simply assessing one domain in isolation from others (Cooper et al., 2001). It is always important to continue exploring the occurrence of teacher stress, the sources of teacher stress and the coping mechanisms employed by teachers (Kyriacou, 2001). Research is required into the role of successful coping mechanisms in teachers' careers (Kyriacou, 2001). Studies should assess the effectiveness of intervention strategies to assist teachers and schools to alleviate stress (Kyriacou, 2001). Research should examine stress management systems that would yield benefits for teachers, schools and education as a whole (Cooper, Dewe & Driscoll, 2001).

Investigating the impact of teacher-learner relationships and classroom climate on teacher stress is crucial (Kyriacou, 2001). Primary interventions, which are directed at the workplace or coping capacity of teachers, are required to prevent or reduce their stress. Secondary-level interventions could prevent employees who are already showing signs of stress, from getting sick and could increase their coping capacity. Tertiary-level interventions should deal with the rehabilitation of individuals who have suffered ill- health as a result of strain or stress (Jackson & Rothman, 2006).

In order to generalize findings in the multi-cultural South African context, findings should be validated through equal comparison of the perceived strain/stress construct across cultural groups. In order to motivate teachers and to build credibility and co-operation at schools, interventions should be aimed at maximizing group effectiveness, increasing a sense of belonging, shared vision, rebuilding trust relationships as well as teachers' commitment to fairness and equity and the implementation of career and personal development programmes (Mahommed & Naudé, 2006).

Future studies should ensure sufficient representation of the different groups in the total population and the focus should be on developing longitudinal designs where inferences in terms of the cause and effect of stress can be drawn (Coetzee & Rothmann, 2005). Possible future interventions could also include the provision of a more supportive school climate and the creation of flexible working conditions.

Research is required into the role of successful coping mechanisms in teachers' careers according to Kariacou (2001). 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 teacher's life span, rather than just assessing one domain in isolation (Cooper et al., 2001).

5.5 RECOMMENDATIONS

Turning public schools into independent self-managed schools remain a challenge and future research should focus on determining the impact of this on teachers' stress at high risk secondary schools. The Western Cape Education Department could assist in reducing the stress of these teachers by increased interventions such as:

Relevant coping programmes that are built into the teachers' daily schedules to assist teachers at high risk secondary schools in coping with stress on a daily basis.

Professional training and development could be provided to assist teachers in providing quality education. HIV/AIDS, First Aid and other training could be provided to assist teachers in

dealing with learners and staff. Valid and reliable procedures to monitor the stress of teachers could also be provided (Van Wyk, 1998).

Setting up trauma rooms with professional trauma counselors at schools, could assist traumatized learners and teachers (Becker & Reckson, 2005).

Future research should be conducted to develop a human resources costing and accounting model for the South African environment, to effectively determine the financial implications of absenteeism, presenteeism and turnover intentions, due to occupational stress (Mostert, et al., 2008).

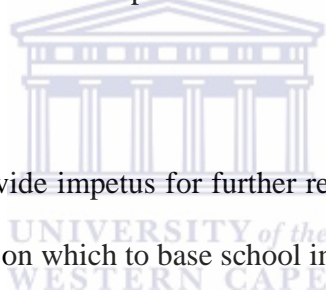
Future studies in South Africa should determine the suicide tendencies, teacher victimization and the relationship of these factors to teacher stress, since statistics with regard to this is limited (Oosthuizen & Van der Bijl, 2007).

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

The Western Cape Department of Education is in the process of drafting a Cape Provincial Education Amendment Bill, which will prohibit dangerous and illegal objects as well as liquor on schools grounds. This will enable the police to conduct random searches on school grounds in an attempt to ensure safety at schools (WCED, Media Release, March 3, 2010).

More drastic measures are required to assist in combating crime, as well as reduce the existence of high risk secondary schools in the Western Cape. Stringent interventions could ensure that South African schools meet the demands of the 21st century. A reduction in teacher stress could promote a positive school climate and school performance.

It is hoped that this study will provide impetus for further research on teachers stress as well as provide critical empirical evidence on which to base school interventions in South Africa.



6. REFERENCES

Aamodt, M.G. (1996). Applied Industrial/Organisational Psychology (2nd ed.). USA: Brooks/Cole Publishing Company.

Ahrendse, G.C.F.J. (2008). Learning to manage workplace stress as practiced by teachers at three under resourced Western Cape High Schools. Unpublished master's thesis. University of the Western Cape, Cape Town.

Asonibare, B. (1984). The Nigerian science teacher and stress management. Journal of Stanford, 22(2), 14-19.



Association of University Teachers (2003). Survey of members. London: AUT.

Austin, V., Muncer, S., & Shah, S. (2005). Teacher stress and coping used to reduce stress. Occupational Therapy International, 12(2), 63-80.

Babbie, E., & Mouton, J. (2007). The practice of social research. Cape Town: Oxford University Press.

Badenhorst, G., George, E., & Louw, D. (2008). Job satisfaction among urban secondary school teachers in Namibia. South African Journal of Education, 20, 135-154.

Baglioni, A.J., Borg, M.G., Boyle, G.J., & Falzon, J.M. (1995). A structural model of the dimensions of teacher stress. British Journal of Psychology, 65, 49-67.

Barkhuizen, N., & Rothmann, S. (2008). Occupational stress of academic staff in South African higher education institutions. South African Journal of Psychology, 38(2), 321-336.

Becker, B., & Reckson, L. (2005). Exploration of the narrative accounts of South African teachers working in a gang-violent community in the Western Cape. International Journal of Social Welfare, 14, 107-115.

Benjamin, L. (2001). Proposed plan for training of trauma room staff at Hanover Park cluster. Cape Town: South African Trauma Centre.

Berndt, A.D., & Oosthuizen, T.F.J. (2008). Stress management behaviour among academic employees. Journal of Contemporary Management, 5, 90-105.

Bertini, M., Gagliardi, M.P., Pisanti, R., & Razzino, S. (2003). Occupational stress and wellness among Italian secondary school teachers. Psychology and Health, 18, 523-536.

Bertoch, M.R., Borg, W.R., & Nielsen, J.R. (1988). Reducing teacher stress. Journal of Experimental Education, 57(1), 117-128.

Bester, C., & Van Zyl, E. (2001). 'n Vergelykende studie na die vlak en oorsake van werkstress by n groep geletterde en ongeletterde swart werknemers. SA Journal of Industrial Psychology, 27(3), 19-23.



Bisshoff, T., Hendricks, I., & Mestry, R. (2009). Perceptions of teachers on the benefits of teacher development programmes in one province of South Africa. South African Journal of Education, 29, 475-490.

Boone, L., & Kuntz, D. (1992). Contemporary marketing. Texas: Dryden Press.

Borg, M.G., & Falzon, J.M. (1989). Stress and job satisfaction amongst primary school teachers in Malta. Educational Review, 32, 50-58.

Borg, M.G., Falzon, J.M., & Riding, R.J. (1991). Stress in teaching: A study of occupational stress and its determinants, job satisfaction and career commitment among primary school teachers. Educational Psychology, 11, 59-75.

Borgen, F.H., & Decker, P.J. (2003). Dimensions of work appraisal: Stress strain, coping, job satisfaction, and negative effectivity. Journal of Counselling Psychology, 40(4), 470-478.

Boyed S., & Wylie, C. (1994). Workload and stress in New Zealand universities. Wellington: New Zealand Council for Educational Research and the Association of University Staff of New Zealand.



Brown, D. R. & Harvey, (2006). Organization Development. 7th ed. New Jersey: Pearson Education, Inc.

Bull I.H.F. (2005). The relationship between job satisfaction and organisational commitment amongst high school teachers in disadvantaged areas in the Western Cape. Unpublished masters thesis, University of the Western Cape, Cape Town.

Burden, P.R. (1982). Implications of teacher career development: New roles for teachers, administrators and professors. Manhattan: Kansas State University, Department of Curriculum and Instruction.

Buys, C., Mostert, K., & Wentzel, L. (2009). Work and personal life: Which strategies do secondary school educators use to deal with the interaction. SAJHRM, 7(1), 1-9.

Calvert, G.M., Flynn, R., Fraser, P., & Long, J. (1991). Volunteers' motion and the Terrence Higgins Trust. Paper presented at the British Psychological Society Conference, London.

Cammilli, K.A. (2004). Teacher job satisfaction and teacher burnout as a product of years of experience in teaching. Unites States of America: Sage Publications.

Campbell, W.A., Green-Reese, S., & Johnson, D.J. (2001). Teacher job satisfaction and teacher job stress: School size, age and teaching experience. Education, 112(2), 247-252.

Campbell, N. (2004). Conflict, stress and the workplace. University of Western Sydney, Employment Relations Program, Western Sydney.

Cartwright, S., & Cooper, C.L. (1997). Managing workplace stress. Unites States of America: Sage Publications.

Cartwright, S., & Cooper, C.L. (2002). Asset: An organisational stress screening tool. The management guide. Manchester, UK: RCL Ltd.

Cartwright, S., & Cooper, C.L. (2008). The Oxford handbook of personnel psychology. New York: Oxford University Press.

Chang, S.L. (2005). The effects of facilitation on cognitive restructuring in online discussion. Journal of Interactive Online Learning, 3(3), 1-30.



Chien, P.Y., & Kariacou, C. (2004). Teacher stress in Taiwanese primary schools. Journal of Educational Enquiry, 5, 86-104.

Cinamon, R.G., Rich, Y., & Westman, M. (2007). Teacher's occupation-specific work-family conflict. The Career Development Quarterly, 55, 249-261.

Coetzee, S.E., & Rothmann, S. (2004). An adapted model of burnout for employees at a higher education institution in South Africa. South African Journal of Industrial Psychology, 30(3), 29-40.

Coetzee, S.E., & Rothman, S. (2005). Occupational stress, organisational commitment and ill-health of employees at a higher education institution in South Africa. South African Journal of Industrial Psychology, 31(1), 47-54.

Cope, C.M. (2003). Occupational stress, strain and coping in a professional accounting organization. Unpublished masters thesis, University of South Africa, South Africa.



Corey, G. (2005). Theory and practice of counseling and psychotherapy. USA: Thompson Brooks.

Cooper, C.L., Dewe, P.J., & O' Driscoll, M.P. (2001). Organizational stress: A review of critique of theory, research and, applications. Sage: Thousand Oaks, CA.

Cooper, C.L., Pes, D., & Zurlo, M.C. (2007). Stress in teaching: A study of occupational stress and its determinants among Italian school teachers. Stress and Health, *23*, 231-241.

Cooper, C.L., & Rothmann, I. (2008). Organisation and Work Psychology. UK: Hodder Education Publishers.

Cooper, D.R., & Schindler, P.S. (2003). Business research methods. New York: McGraw-Hill.

Cooper, C.L., & Sutherland, V.J. (2000). Strategic stress management. London: Palgrave Publishers.



Cooley, E., & Yavanoff, P. (1996). Supporting professionals-at risk: Evaluating interventions to reduce burnout and improve retention of special educators. Exceptional Children, *4*, 336-355.

Cottrell, D., Grahan, D., & Timms, C. (2007). "I just want to teach". Journal of Educational Administration, *45*(5), 569-586.

Crafford, A., Moerdyk, A., Nel, P., O’Niel, C., Schlechter, A., & Southey, L. (2006). Industrial Psychology fresh perspectives. South Africa: Pearson Prentice Hall.

Creswell, J.W. (2005). Educational research planning, conducting and evaluating, quantities and qualitative research (2nd ed.). New Jersey: Pearson Education International.

De Bruin, G., & Taylor, N. (2006). The job demand-control model of job strain across gender. South African Journal of Industrial Psychology, 32(1), 66-73.

Der Kinderen, S., & Greef, A.P. (2003). Resilience among families where a parent accepted a voluntary teacher’s retrenchment package. South African Journal of Psychology, 33(2), 86-94.

De Wet, C. (2003). Eastern Cape educators’ perceptions of the causes and scope of school violence. Acta Criminologica, 16(3), 89-106.

Douglas, J. (2005). Transformation of the South African schooling system. Braamfontein: Center for Educational Policy Development.

Dressler, W.W. (1989). Stress and adaptation in the context of culture depression in a Southern Black community. Albany: State University of New York Press.

Eloff, I, Engelbrecht, P., Forlin, C., & Swart, E. (2001). Developing a support programme for teachers involved with inclusion in South Africa. International Journal of Special Education, 16(1), 1-6.

Eloff, I., Engelbrecht, P., & Swart, E. (2002). Including a learner with physical disabilities: Stressful for teachers? Koers, 76(1), 77-99.

Emsley, R., Emsley, L., & Seedat, S. (2009). Occupational disability on psychiatric grounds in South African school-teachers. African Journal of Psychiatry, 12, 223-226.

European Commission. (2008). European framework agreement on work-related stress: A draft implementation guide. Industrial Relations, 1, 1-17.

Everly, G.S., & Rosenfeld, R. (1991). The nature and treatment of the stress response. New York: Plenum Press.

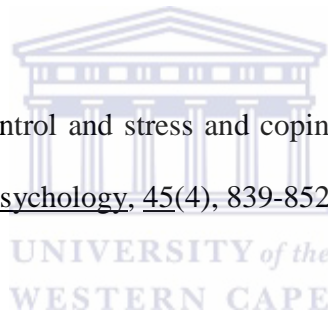
Ewen, N. & Steffgen, G. (2007). Teachers as victims of school violence. The influence of strain and school culture. International Journal on Violence and School, 3, 81-93.

Fields, D.L. (2002). Taking the measure of work: A guide to validated scales for organisational research and diagnosis. United Kingdom: Sage Publications Incorporated.

Finley, A., Iverson, R.D., Mueller, C.W., & Price, L. (1999). The effects of group racial composition on job satisfaction, organisational commitment, and career commitment. Work and Occupations, 26, 187-219.

Fogarty, G.J., Pithers, R.T., & Sutherland, L.F. (1995). Congruence as a predictor of occupational stress. Journal of Vocational Behaviour, 46, 292-309.

Folkman, S. (1984). Personal control and stress and coping processes: A theoretical analysis. Journal of Personality and Social Psychology, 45(4), 839-852.



Folkman, S., & Lazarus, R.S. (1984). Stress, appraisal and coping. New York: Springer-Verlag.

Forlin, C. (1997). Inclusive education in Australia. Special Education Perspectives, 6(1), 21-26.

Foxcroft, C., & Roodt, G. (2005). An introduction to psychological assessment in the South African context (2nd ed.). Cape Town: Oxford University Press.

Friedman, I.A. (1991). High and low burnout schools: School culture aspects of teacher burnout. The Journal of Educational Research, 4(6), 325-333.

Gallagher, T. & Murphy, K. (2009). Reconstruction after violence: How teachers and schools can deal with the legacy of the past. Perspectives in Education, 27(2), 1-11.

Gersch, I. & Williams, M. (2004). Teaching in mainstream and special schools: Are the stresses similar or different? British Journal of Special Education, 31(3), 157-162.

Goetz, L., & Soto G. (1998). Self-efficacy beliefs and the education of students with severe disabilities. JASH, 23(2), 134-143.

Grimsrud, A.T., Myer, L., Seedat, S., Stein, D.J., Van Heerden, M.S., & Williams, D.R. (2009). Patterns of substance abuse in South Africa: Results from South African Stress and Health study. SAMJ, 99(5), 359-361.

Hirschfield, R.R. (2000). Validity studies. Does revising the intrinsic and extrinsic subscales of the Minnesota Satisfaction Questionnaire Short Form make a difference? Educational Psychological Measurement, 60(2), 255-270.

Hoy, W.K., & Miskel, C. (1991). Educational Administration: Theory and Research Practice (4th ed.). New York: McGraw-Hill.

Hoy, W.K. & Smith, P.A. (2007). Academic optimism and student achievement in urban elementary schools. Journal of Educational Administration, 45, 556-558.

Isaacs, A.S.A. (2008). Stress, coping strategies and social support amongst grade 11 students in historically disadvantaged schools. Unpublished master's thesis, University of the Western Cape, Cape Town.

Ivancevich, J.M., & Matteson, M.T. (1980). Stress at work: A managerial perspective. Glenview I.L. Schott, Foreman & Company.

Ivancevich J.M., Konopske, R., & Matteson, M.T. (2002). Organisational Behavior and Management USA: McGraw-Hill, Irwin, International Edition.

Jackson, L.T.B., & Rothmann, S. (2005). An adapted model of burnout for educators in South Africa. South African Journal of Education, 25(2), 100-108.

Jackson, L.T.B., & Rothmann, S. (2006). Occupational stress, organisational commitment and ill-health of educators in the North West Province. South African Journal of Education, 26(1), 75-95.



Johns, G. (1996). Organisational Behavior: Understanding and managing life at work (4th ed.). USA: Harper Collins College Publishers.

Johnson, D.J., & Parkhouse, B.L. (1980). Job satisfaction of high school physical education faculty. Abstracts of Research Papers. Paper presented at the AAHPERD conference of the American Alliance for Health, Physical Education, Recreation and Dance: Washington D.C.

Jones, L. (2002). Supervisory beliefs and behaviours associated with veteran teacher motivation. Doctoral Dissertation, University of Oklahoma, 2000. Dissertation Abstracts International 61(02) 441 (UMI Microfilms AAT 9962960).

Jones, J.R., Schaubroeck, J., & Xie, J.L. (2001). Individual differences in utilizing control to cope with job demands: Effects on susceptibility to infectious disease. Journal of Applied Psychology, 86(2), 265-278.

Jorgensen, L.I., & Rothmann, S. (2008). Occupational stress, ill health and organisational commitment of members of the South African Police in the North Western Province. Acta Criminologica, 21(2), 1-15.



Josias, B. (2005). The relationship between job satisfaction, and absenteeism in a selected field services section within an electricity utility in the Western Cape. Unpublished master's thesis, University of the Western Cape, Cape Town.

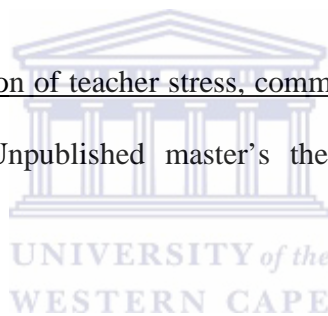
Kamper, G.D., & Steyn, G.M. (2006). Understanding occupational stress among educators: An overview. African Education Review, 3(1), 113-133.

Karasek, R.A. (1979). Job demands, job decision latitude and mental strain: Implications for job design. Administrative Science Quarterly, 24, 285-308.

Karasek, R.A., & Theorell, T. (1990). Healthy work, stress, productivity, and the reconstruction of working life. New York: Basic books.

Karasek, R.A., & Theorell, T. (1996). Current issues relating to psycho-social job strain and cardiovascular disease research. Journal of Occupational Health Psychology, 1, 9-26.

Khoza, H.R. (2004). A comparison of teacher stress, commitment and school climate in schools with different success rates. Unpublished master's thesis, University of Witwatersrand, Witwatersrand.



Khoza, H., & Milner, K. (2008). A comparison of teacher stress and school climate across different matric success rates. South African Journal of Education, 28, 155-173.

Cooper, C.L. & Marchall, J. (1980). White Collar and Professional Stress. John Wiley & Sons: Chichester.

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

Lewis, R. (1999). Teachers coping with the stress of classroom discipline. Social Psychology of Education, 3, 155-171.

Lorgat, H. (2003). How to beat the beating. New York: City Press.

Lui, J., Rovia, A.P., & Wighting, M.J. (2005). School climate: Sense of classroom and school. The Quarterly Review of Distance Education, 6, 361-374.

Luthans, F. (1998). Organisational Behavior. New York: Mc Graw-Hill.

Maile, S. (2005). The experiences of redeployed educators from down-sized schools. Acta Academia, 37(2), 172-190.

Makie, V.V. (2006). Stress and coping strategies amongst registered nurses working in a South African tertiary hospital. Unpublished master's thesis, University of the Western Cape, Cape Town.

Martin, J. (2001). Organisational Behaviour (2nd ed.). London: Thomson Learning.

Maslach, C., Schaufeli, W.B., & Leiter, M.P. (2001). Job burnout. Annual Review of Psychology, 52, 397-422.

Masuda, A.D., Mcnall, L.A., & Nicklin, J.M. (2010). Flexible work arrangements, job satisfaction, and turnover intentions: The mediating role of work-to-family enrichment. The Journal of Psychology, 144(1), 61-81.

McEvan, A., & Thompson, W. (1997). After the national curriculum. Teacher stress and morale. Research in Education, 57, 57-67.



McEvoy A.W.R. (2000). Antisocial behaviour, academic failure and school climate: A critical review. Journal of Emotional and Behavioural Disorder, 8, 130-141.

McWatts, S. (2005). Job satisfaction and organisational commitment: A comparative study between academic support staff at a higher education institution in the Western Cape. Unpublished master's thesis, University of the Western Cape, Cape Town.

Milner, K., & Thatcher, A. (2003) Stress-(Stress)–Strain: Exploring on a name. Ergonomics South Africa, 2, 53-56.

Miner, J.B. (1992). Industrial Organisational Psychology. New York: McGraw-Hill.

Moomaw, W., & Pearson, L.C. (2005). The relationship between teacher autonomy and stress, work satisfaction, empowerment, and professionalism. Educational Research Quarterly, 29(1), 37-53.

Mohamed, F.E., & Naudé, J.L.P. (2006). Occupational stress and strain of support staff at a higher education institution in the North West Province. South African Journal of Higher Education, 20(1), 91-104.



Montgomery, C., & Rupp, A.A. (2005). Meta-analysis for exploring the diverse causes and effects of stress in teachers. Canadian Journal of Education, 28(3), 458-486.

Morell, R. (2002). A calm after the storm? Beyond schooling as violence. Educational Review, 4(1), 37-46.

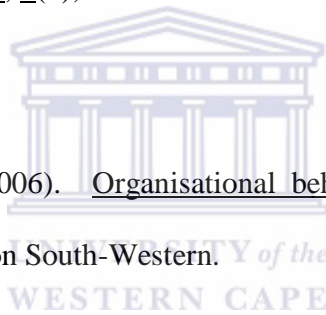
Mostert, F.F, Mostert, K., Nell, K., & Rothmann, S. (2008). Outcomes of occupational stress in higher education. South African Business Review, 12(3), 102-127.

Mwamweda, T.S. (1995). Job satisfaction among secondary school teachers in Transkei. South African Journal of Education, 15(2), 84-86.

National Department of Education (2001). Education White Paper 6. Special needs education. Pretoria: Department of Education.

Naylor, C. (2001). Teacher workload and stress: An inter-perspective on human costs and systematic failure. BCTF Research, 3(1), 1-8.

Nelson, D.L., & Quick, J.C. (2006). Organisational behaviour: Foundations, realities and challenges (5th ed.). USA: Thomson South-Western.



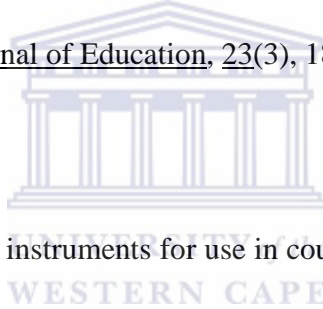
Newell, S. (2004). Emotional support for stressed-out secondary teachers on placement. A study of the causes of stress in the teaching of modern foreign language: The job, the subject or the individual's personality? Institute of Education, 1, 1-15.

Ngidi, D.P., & Siyaba, P.T. (2002). Black teachers personality dimensions and work-related stress factors. South African Journal of Psychology, 32(3), 7-15.

Oosthuizen, J. (2005). The relationship between stress and salutogenic functioning amongst employees in a state owned enterprise. Unpublished master's thesis, University of the Western Cape, Cape Town.

Oosthuizen, J., & Van Der Bijl, D.J.L. (2007). Anxiety, depression, health attitudes and coping strategies in doctors and teachers in a Cape Town setting. SAJP, 13(2), 46-51.

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



Osipow, S.H. (1981). Developing instruments for use in counselling. Journal of Counselling and Development, 70, 322-326.

Osipow, S.H. (1998). Occupational Stress Inventory – Revised (OSI-R). Professional Manual Odessa, FL: Psychological Assessment Resources.

Osipow, S.H., Doty, R.E., & Spokane, A.R. (1985). Occupational stress, strain and coping across the life span. Journal of Vocational Behavior, 27, 98-108.

Ostroff, C. (1992). The relationship between satisfaction, attitudes and performance: An organizational level analysis. Journal of Applied Psychology, 77, 963-974.

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

Pickering, C. (2008). Challenges in the classroom and teacher stress. British Columbia: Provincial Health Services.



Pienaar, J., & Van Wyk, D. (2006). Teacher burnout: Construct equivalence and the role of union membership. South African Journal of Education, 26(4), 541-551.

Pieterse, J., & Rothmann, S. (2007). Predictors of work-related well-being in sector education training authorities. SAJEMS, 10(3), 298-312.

Pietersen, C., & Van Zyl, E. (1999). An investigation into work stress experienced by a group of secondary school teachers. South African Journal of Education, 19(1), 74-78.

Reiman, L. (2008). Sports for learners with physical disabilities in ordinary schools in the Western Cape, Unpublished master's thesis, University of the Western Cape, Cape Town.

Risks, (2006, April, 30). Tragedy highlights deadly teacher stress. East Anglian Daily Times, Daily Mail, 1-15.

Rothmann, S., & Viljoen, J.P. (2009). Occupational stress, ill health and organisational commitment of employees at a university of technology. SAJIP, 35(1), 1-11.

Rotter, J. (1990). Internal versus external control reinforcements. A case history of a variable. American Psychology, 45(4), 489-493.



Rout, U.R., & Rout, J. K. (2002). Stress management for primary health professionals. New York: Plenum Publishers.

RSA, (1996a). The constitution of the Republic of South African Act, 108 of 1996. Republic of South Africa. Pretoria: Government Printers.

Salie, H. (2002). Strategies for teaching children with special educational needs. Ankara: Regema Yayinlari.

Salie, N. (2005). Utilizing of a partnership to provide quality education to a historically disadvantaged primary school in the Western Cape. Unpublished masters' theses, University of the Western Cape, Cape Town.

Saptoe, C.W. (2000). Factors which cause stress to teachers in the South Cape. Unpublished master's thesis, University of Port Elizabeth, Port Elizabeth.

Sarie, H. (2004). An analysis of burnout and job satisfaction among Turkish special school head teachers and teachers, and the factors effecting their burnout and job satisfaction. Educational Studies, 30(3), 291-306.

Schaufeli, W.B., Scheurs, J.G., Taris, T.W., & Van Horn, J.E. (2004). Inequity, burnout and psychological withdrawal among teachers: A dynamic exchange model. Anxiety, Stress and Coping, 17(1), 103-122.

Schulze, S. (2006). Factors influencing the job satisfaction of academics in higher education. SAJHE, 20(2), 318-335.

Schulze, S., & Steyn, T. (2007). Stressors in the professional lives of South African secondary school educators. South African Journal of Education, 27, 691-707.

Sekaran, U. (2000). Research methods for business. (2nd ed.). New York: Wiley.

Sekaran, U. (2001). Research methods for business. A skills building approach (2nd ed.). New York: John Wiley and Sons Inc.



Sigma Assessment Systems. (2007). Occupational Stress Inventory- Revised. USA: Michigan.

SA Government Information. (2009). MEC Grant condemns shooting at Sithembele Matiso Secondary School. South African Government, p

Spector, P. (1997). Job satisfaction. Thousand Oaks, CA: Sage Publications.

SPSS Inc. (2007). SPSS 17.0 for Windows. Chicago, IL: SSPS Inc.

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

Stimilo, B. (2007). Teacher satisfaction at 20 year high. NSSEA: Essentials Marketing Side.

Swanson, J.L. (1991). Occupational Stress Inventory (Research Version). In D.J. Keyser, & RC. Sweetland (Eds.), Test critiques, 1-36, Kansas City, MO: Test Corporation of America.

The Democratic Alliance. (2007). Violence in Schools. The DA's 26 point plan to turn schools around. South Africa.

Trendall, C. (1989). Stress in teaching and teacher effectiveness: A study of teachers across mainstream and special education. Educational Research, 31, 52-58.

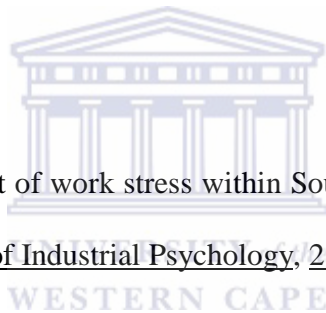
Tytherleigh, M.Y. (2003). What employers may learn from higher education institutions. A fortigenic approach to occupational stress. South African Journal of Industrial Psychology, 4, 101-106.

Van der Linde, A.H., Van der Westhuizen, P.C., & Wissing, M.P. (1999). Burnout in female educators. South African Journal of Education, 19, 192-204.

Van Tonder, C.L., & Williams, C. (2009). Exploring the origins of burnout among secondary educators. SA Journal of Industrial Psychology, 35(1), 1-15.

Van Wyk, J. (1998). Stresbeleding by onderwysers. Ongepubliseerde DEd proefskrif, Universiteit van Port Elizabeth, Port Elizabeth.

Van Zyl, E. (2002). Measurement of work stress within South African companies: A luxury or necessity? South African Journal of Industrial Psychology, 28(3), 26-31.



WCED Media Release: 8 January 2010. Underperforming schools-Minister's Comment. Western Cape Education Department Online.

WCED Media Release: 11 January 2010. Reports reveal a drop in vandalism incidents in schools. Ministry of Education, Provincial Government of the Western Cape.

WCED Media Release: 2 February 2010. Minister Grant reveals strategy to increase the Grade 12 pass rate. Ministry of Education, Provincial Government of the Western Cape.

WCED Media Release: 3 March 2010. Minister Grant condemns senseless killing. Ministry of Education, Provincial Government of the Western Cape.

Wilson, V. (2002). Feeling the strain: An overview of the literature on teacher's stress. The Scottish Council for Research in Education, 109, 1-43.

Xaba, M.I. (2003). Managing teacher turnover. South African Journal of Education, 23(4), 287-291.

Younghusband L. (2003). High school teachers' perceptions of their working environment in Newfoundland: A grounded theory study. Newfoundland, Canada: Memorial University of Newfoundland.

Younghusband, L. (2005). High school teachers' perceptions of their working environment in Newfoundland: A grounded theory study. Newfoundland, Canada: Memorial University of Newfoundland.

Younghusband, L. (2006). Teacher stress and working environment: Implications for teaching and learning. Newfoundland, Canada: Memorial University of Newfoundland.

Zhang, Y. (2005). Work-related stress for female English teachers. School of Foreign Languages. SINO-US English Teaching, 2(11), 1-7.

Zhang, Q., & Zu, W. (2006). Teacher stress, burnout and social support in Chinese secondary education. Human Communication, 10(4), 487-496.

