

**THE RELATIONSHIP BETWEEN OCCUPATIONAL STRESS AND JOB
SATISFACTION AMONGST HIGH SCHOOL TEACHERS IN THE
NORTH METROPOLE DISTRICT IN THE WESTERN CAPE**

by

ADRIAN RUBEN MAXWELL

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FACULTY OF ECONOMICS AND MANAGEMENT SCIENCES
UNIVERSITY *of the*
WESTERN CAPE

Department of Industrial Psychology

University of the Western Cape

SUPERVISOR: RUKHSANA JANO

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DECLARATION

“I declare that **The relationship between occupational stress and job satisfaction amongst high school teachers in the North Metropole district in the Western Cape** is my own work and has not been submitted for any degree or any other examination at any other university. It has been submitted for the degree of Magister Commercii Industrial Psychology. All sources contained therein or quoted have been shown and acknowledged by means of complete referencing techniques.”



FULL NAME: **Adrian Ruben Maxwell**

DATE: **November 2012**

SIGNATURE: _____

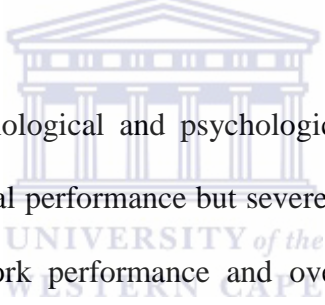
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ABSTRACT

Numerous studies have evaluated occupational stress and job satisfaction of teachers in South Africa (Jackson & Rothmann, 2006; Olivier & Venter, 2003; Steyn & Kamper, 2006; Rothmann & Coetzee, 2006; Schulze & Steyn, 2007; Van Tonder & Williams, 2009). Teachers in the Western Cape, like their counterparts in the rest of the country, face issues of transformation and uncertainty in the environment (Muller, 2008). In addition to stress which arise from the work itself, studies have indicated that lower job satisfaction leads to high staff turnover and less new entries into the profession (Steyn & Kamper, 2006).



Stress causes both physiological and psychological damage (McKenna, 2006). Stress can drive individual performance but severe stress lowers coping resources of staff and reduces work performance and overall job satisfaction (Stranks, 2006). Kauer (2011) showed that when teachers are dissatisfied with their work they are more likely to experience occupational stress. Staff who are frustrated in their work or have unsatisfied needs experience increased tension leading to lower work motivation (Robbins & DeCenzo, 2007). If stress levels are known it may be isolated and coping mechanisms may be developed to motivate teachers and create a healthy work environment (Arnold, 2005). It has been found that job stress and the lack of job satisfaction are associated with physical illness amongst teachers (Peltzer, 2009). Strategies to reduce occupational stress, techniques to build resistance to it and methods to alter the appraisal of workplace stressors may serve to enhance the job satisfaction of teachers.

It has been found that occupational stress in teaching is of severe proportions (Zurlo, Pes & Cooper, 2007) and that satisfaction in teaching is determined by the extent to which teachers are satisfied with certain job satisfaction determinants within their work environment (Andersen, 2011, Olulube, 2006, Weiqi, 2006, Drukpa, 2010). Monyatsi (2012), Yahaya and Husain (2011), Hanif, Tariq and Nadeem (2011), Klassen and Chiu (2010), Kauts and Saroj (2010) and Ngimbudzi (2009) found that biographical variables such as gender and tenure impact on the levels of job satisfaction reported by teachers.

The aim of this study is to investigate the relationship between occupational stress and job satisfaction of teachers in the North Metropole district in the Western Cape, to explore the factors that may contribute to these respective variables and to recommend ways to improve and enhance the delivery of quality education in the Western Cape. A non-probability sampling method in the form of convenience sampling was used to collect the sample. The sample comprised of 118 participants who were from seven schools in a particular geographically defined area within the North Metropole district of the Western Cape. Primary data was collected by means of a self-developed biographical questionnaire. The Occupational Stress Scale was administered to measure occupational stress and the Job Satisfaction Survey was used to measure job satisfaction in teachers. Both instruments have been proven reliable and valid. The data was analyzed in terms of descriptive statistics (namely the mean, standard deviation, frequencies and percentages) as well as inferential statistics (namely the Pearson Product Moment, and the T-Test).

The results of the current study indicated that: (i) an inverse relationship between occupational stress and job satisfaction exists (ii) statistically significant differences exist in how male and female teachers experienced occupational stress as well as job satisfaction (iii) there is a relationship between tenure, occupational stress and job satisfaction.

Limitations are identified and recommendations are put forth for consideration for future research as well as for school management bodies in education.



KEYWORDS

Occupational Stress

Job Satisfaction

Occupational Stress Scale

Job Satisfaction Survey

Teachers

Reward Satisfaction

Workload

Co-worker Satisfaction

Role Conflict

Supervision





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CHAPTER 1

INTRODUCTION

1.1.1 BACKGROUND

Extensive research has been conducted in South Africa and internationally investigating the causes and consequences of occupational stress amongst teachers, the impact of personality characteristics on the work-related stress of teachers and the differences in how stress manifests itself across the various hierarchical levels within the school organisation. Results have shown that the high levels of stress experienced by teachers have an impact on their performance but there are also differences shown amongst schools with different levels of expected performance (Milner & Khoza, 2008). As the South African education sector strives to meet the demands of a modern economy, its teachers are a critical and valuable resource that must be taken care of as the profession has already been identified as one of the “high stress” professions where occupational stress levels exceed average workplace stress levels (Coetzee, Jansen & Muller, 2008).

It has been reported by Milner and Khoza (2008) that teachers experience high levels of stress irrespective of school climate and success and that sources of stress at various schools did not differ significantly. The teaching environment could learn from the corporate world where stress has been identified as a high priority concern because of its effect on employee well-being and productivity. Corporate interventions to reduce stress have included job redesign, employee

empowerment in their ability to cope with stress, counseling and employee assistance programmes (EAP's).

Peltzer, Shisana, Zuma, Van Wyk and Zungu-Dirwani (2009) in their study on South African educators found that there was a link between job stress, lack of job satisfaction and stress-related illnesses like hypertension, heart disease, stomach ulcer, asthma, mental distress, tobacco and alcohol abuse. It has been pointed out that the climate in classrooms should be managed so that it does not deteriorate, the well-being of teachers should be promoted and the development of negative attitudes to learners and their jobs should be reduced so that they may continue to pursue and reach their goals (Jackson & Rothmann, 2005).

Stress has been identified as one of the biggest factors which cause job dissatisfaction. To improve job satisfaction, stress must be reduced. It has been postulated that changes introduced must be a result of planned action through consultation so as to bring about the desired growth and achievement needs that employees can achieve through their work efforts (Stranks, 2005).

1.2 PROBLEM STATEMENT

Teachers often complain that they are not adequately consulted regarding policy changes and that their rights are violated. This leads to frustration and dissatisfaction, and in turn, affects the commitment and productivity of teachers. Poor discipline in schools, the abolishment of corporal punishment, learners who are not motivated, redeployed teachers, the retirement and retrenchment packages

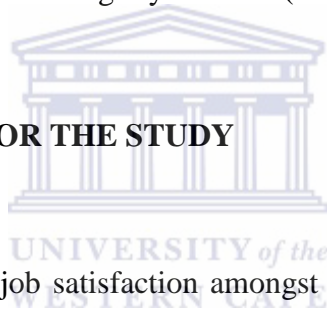
for teachers, large pupil-teacher ratios, and a new curriculum approach all contribute to higher occupational stress for teachers. Poor physical conditions, overcrowded classrooms, inadequate equipment and the lack of adequate facilities exacerbate the pressure on teachers who have to complete curriculum teaching, complete marking, and prepare classes and assessment tools in time (Ngidi & Sibaya, 2002).

Indicators of stress in teachers have been found to be problems in personal achievement, emotional exhaustion, the tendency to depersonalize others and low self-esteem, where long periods of working under stressful conditions lead to burnout (Coetzee et al., 2008). Ngidi and Sibaya's (2002) study showed relationships between stress and the nature of the stressors such as time pressures, poor working conditions, changes in education, and problems in administration and learner misbehaviour. Similarly, research by Jansen and Coetzee (2007) also found that bureaucracy, autocratic management styles, the lack of management and social support, interpersonal demands, classroom discipline, workload, time pressures, the lack of integrated planning and management, compensation, lack of professional recognition as well as fellow teaching staff failing to do their job, all contribute to occupational stress in teaching.

In 2008 Swartz, Head of the Western Cape Education Department, suggested that the exodus of teachers could be explained – teachers have always left the profession for “greener pastures”. He ascribes the exodus of teachers as “normal”, and that poaching of teachers is not unique to South Africa, but that it is an international trend, facilitated by the open labour market. However, of concern

to him was the exodus of teachers trained in the fields of Mathematics, Science, and the Languages, and the smaller number of young people enrolling for teaching. He is of the view that the province has sufficient teachers to fill the existing vacant posts and that with the projected growth levels the province should be able to meet the need for teachers in the future. However, Swartz acknowledges that he was aware that the Department needs to introduce retention strategies, market teaching as an attractive career to pursue, ensure that higher standards of teaching quality are set and met, that the workload of teachers be managed, that the working conditions of teachers be improved, that the salaries of teachers be reviewed and their dignity restored (Swartz, 2008).

1.3 RATIONALE FOR THE STUDY



Occupational stress and job satisfaction amongst teachers at high schools in the Western Cape have become a concern to all major stakeholders of education in the province including critics of education as well as teachers, the provincial administration, parents and governing bodies. Every year fewer tertiary students enroll for training in education which exacerbates an already crippled teaching staff component within the Western Cape. Adding to the shortage of teachers is the rapid exodus of teachers, which is starting to happen from the time they graduate, as they are made lucrative offers by international recruitment agencies. It has been reported that the actions of the international recruitment agencies in an attempt to draw away new teaching graduates include lucrative financial offers, recruitment campaigns at university campuses, posted letters and e-mail, presentations on campus, guaranteed work, long term teaching contracts, tax-free

salaries, a 13th cheque, fully-furnished rent-free accommodation, and assistance in processing visas and opening foreign bank accounts in host countries, and return tickets to South Africa (Samodien, 2008).

Williams and Gersch (2004) found that there is an increasing recognition of the link between mental and physical health and occupational stress, and that mechanisms need to be put in place to improve job satisfaction amongst teachers.

Findings of a study investigating stress-related illness amongst South African educators found that occupational stress and lack of job satisfaction were linked to stress-related illnesses like hypertension, heart disease, stomach ulcer, asthma, mental distress, and tobacco and alcohol abuse. Factors which contributed to illnesses included teaching methods, educational systems, low peer- support, the lack of career advancement and job insecurity. The large sample of South African public educators used in the study also reported that time pressures, educational changes, administrative problems, the educational system, professional distress and learner misbehaviour contributed to occupational stress experiences (Peltzer et al., 2009).

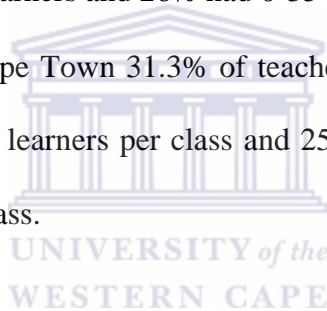
In another study conducted in England, the findings revealed that stress in teaching was the main cause of job dissatisfaction, job-related illness and retirement from the profession (Olivier & Venter, 2003).

Schulze and Steyn (2007) found that teachers' perceptions of potential stressors are influenced by gender, age and years of experience. Teachers in the 36 – 45

year-old age group, and those with between six and fifteen years of teaching experience were found to be more vulnerable to occupational stress.

A study was conducted by the Human Sciences Research Council in partnership with the Medical Research Council of South Africa, which investigated the factors affecting teaching and learning in South African public schools in 2005. Phurutse (2005) reported the following findings:

- In the Western Cape, 28% of teachers had more than 46 learners per class, 46% had 36-45 learners and 26% had 0-35 learners per class;
- In the City of Cape Town 31.3% of teachers had 0-35 learners per class, 42.9% had 36-45 learners per class and 25.9% of teachers had more than 46 learners per class.



The number of contact hours is an indication of an overall shortage of educators in the South African system. It has been surmised that in most cases the number of formal contact hours is dependent on the number of teachers at the school and that schools with insufficient number of teachers have more contact hours than schools in wealthier areas which can raise the funds or afford to pay for the required number of teachers.

In the Western Cape, 59.2% of teachers considered leaving high school teaching and 75% considered their salary inadequate. In the total sample of teachers, 75.7% considered their workload to be higher, 15.5% felt that it remained the same and 5.9% felt that their workload decreased (Nkomo, et al., 2005).

In post-apartheid South Africa the work environment of teachers is in a state of constant development and transition and occupational stress and job satisfaction of teachers will have to be revisited continually. Changes like new rules and policies, different organisational structures such as governing bodies, the abolishment of corporal punishment, the inclusion of learners with learning disabilities into mainstream classrooms and the search for and application of alternative ways to deal with discipline are some examples that may increase occupational stress and affect job satisfaction of teachers in South African classrooms. Furthermore, external factors that have been identified as contributors to occupational stress in teachers are the poor attitudes of both parents and learners to education, unemployment in communities, the effects of the poor quality of education in the previous dispensation and the consequences of HIV/Aids in communities. Changes introduced in education may motivate some teachers while it may cause distress to others (Schulze & Steyn, 2007).

Based on the background sketched, the aim of this study is to explore the link between occupational stress and job satisfaction amongst high school teachers in the North Metropole District in the Western Cape. The Occupational Stress Scale and the Job Satisfaction Survey were used to determine the relationship between the afore-mentioned variables.

1.4 RESEARCH OBJECTIVES

In light of the above, the aim of the current study is to investigate the relationship between stress and job satisfaction of high school teachers in the North Metropole district in the Western Cape.

The research endeavours to answer the following questions:

- What are the sources of occupational stress for high school teachers?
- Is there a relationship between occupational stress and job satisfaction amongst high school teachers?
- Is there a difference between gender and occupational stress experienced amongst high school teachers?
- Is there a difference between gender and job satisfaction experienced amongst high school teachers?
- Is there a difference between tenure and occupational stress experienced amongst high school teachers?
- Is there a difference between tenure and job satisfaction experienced amongst high school teachers?

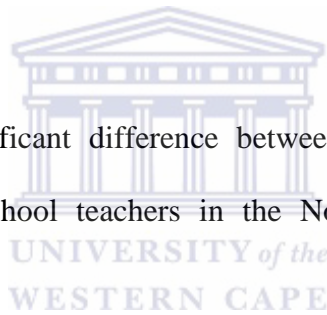
1.5.1 HYPOTHESES

The following hypotheses have been formulated for the current study:

H₁: There is a statistically significant relationship between occupational stress and job satisfaction amongst high school teachers in the North Metropole district in the Western Cape.

H₂: There is a significant difference between gender and occupational stress amongst high school teachers in the North Metropole district in the Western Cape.

H₃: There is a significant difference between gender and job satisfaction amongst high school teachers in the North Metropole district in the Western Cape.



H₄: There is a significant difference between tenure and occupational stress amongst high school teachers in the North Metropole district in the Western Cape.

H₅: There is a significant difference between tenure and job satisfaction amongst high school teachers in the North Metropole district in the Western Cape.

1.6 IMPORTANT DEFINITIONS DEFINED

Teacher: A teacher is a person who helps learners to understand and learn through classroom-based instruction (Hanks, 1990 in Olivier & Venter, 2003).

Occupational stress: Occupational stress is defined as the negative or unpleasant outcome of the demands of tasks that teachers face in carrying out their professional roles, duties and responsibilities (Steyn & Kamper, 2006).

Job satisfaction: Job satisfaction is a pleasurable or positive emotional state that comes about when ones job or job experiences are appraised by oneself (Arnold, Silvester, Patterson, Robertson, Cooper & Burnes, 2005).

Educator stress: According to Schulze and Steyn (2007), educator stress is the personal reaction of educators to extreme work demands or other types of work pressures put on them which may cause unpleasant and negative feelings like frustration, anger, anxiety and depression (Schulze & Steyn, 2007).

1.7 SUMMARY OF THE CHAPTER

In this chapter the variables being investigated namely, occupational stress and job satisfaction were placed in context with specific reference to the teaching environment in South Africa. Furthermore, the problem statement, rationale for the study and the hypotheses that will be investigated were delineated. The chapter concluded with defining the important constructs and providing an

overview of the study.

1.8 OVERVIEW AND ORGANISATION OF THE STUDY

Chapter two provides a comprehensive theoretical discussion of occupational stress and job satisfaction. Reference will be made to research conducted to explore the relationships between the variables. More specifically, definitions pertaining to occupational stress and job satisfaction will be discussed as well as theories of occupational stress and job satisfaction and their determinants will also be presented. The chapter concludes with various coping methods used by teachers to alleviate stress and increase job satisfaction.

Chapter three provides an overview of the research design utilized to execute the research. In particular, the selection of the sample, the procedure followed to collect the data, the data gathering instruments (and their psychometric properties) and the statistical techniques used to test the hypotheses are delineated.

Chapter four addresses the results emanating from the empirical analysis of the data obtained. The chapter specifically focuses on the results gathered from the analyses and findings that became apparent from the research study.

Chapter five discusses the most salient results emanating from the results obtained in the study. Conclusions are drawn based on the obtained results and integrated with existing literature. Moreover, practical implications of the research

findings are highlighted and recommendations for future research and for management bodies are outlined.

The next chapter provides a comprehensive literature review of occupational stress and job satisfaction with reference being made within the teaching environment where possible.

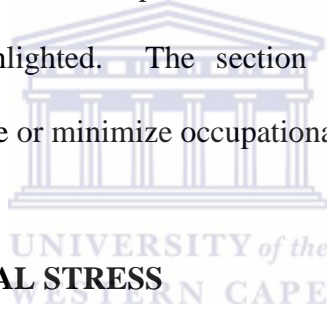


CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This section provides an overview of occupational stress. Models explaining occupational stress will be presented and discussed. Sources emanating from the organisation as well as sources faced by the individual will be addressed. Furthermore, the symptoms of occupational stress for the organisation and for the individual will be highlighted. The section concludes with strategies for consideration to eliminate or minimize occupational stress.



2.2 OCCUPATIONAL STRESS

2.2.1 Defining Occupational Stress

Occupational stress has been identified as certain unpleasant, negative manifestations such as anger, anxiety, tension, frustration or depression, which stem from individuals' perception that their work situation presents a threat to their self-esteem and well-being (Coetzee et al., 2008).

Milner and Khoza (2008) define stress as an event that affects the individual and is able to harm the individual. Werner (2007) put forth that occupational stress is

a state of being in which an individual interprets that their ability may not match what the job-related challenge or threat requires.

Occupational stress has been described as a result of a process that links the environmental stimulus, called a stressor, to that of job strain, which is the individual's response to the stimulus or event and the antecedent of stress (Warr, 2002). Selye (1956 as cited in Sutton & Huberty, 2001) differentiates between stress and a stressor where he describes stress as a stimulating condition and stress as the state of tension and anxiety in the human being which is brought about by the reaction to the stressor. Spector (2006) defines occupational stress as a condition or situation at work that needs an adaptive response from the employee, and job strain as a negative reaction by an employee to a stressor. Spector listed occupational stressors as role ambiguity, role conflict, workload, social stressors, organisational politics and the degree of control over work.

According to Greenberg and Baron (2000), occupational stress results when an individual is confronted by an opportunity, a constraint, or a demand of which the outcome is uncertain, but for which a particular reaction is required. This response is only aroused if the outcome of the stimulus is deemed important to an individual. On the other hand, the authors surmise that stress is a complex pattern of emotional states, physiological reactions and related thoughts in response to external demands referred to as stressors. They further define strain as the accumulated effect of stress, which results primarily in deviations from the normal states or performance and exposure to stressful events. Certain employees,

especially those representing minority groups, also experience stress if they face bias and discrimination.

Hitt, Miller and Colella (2006) highlight that there are different kinds of stress. Stress could be classified as *emotional stress* which is stress that manifests in emotions of people and *physiological stress* which is stress that affects the human body. Stress could also be either *acute* or *chronic*. *Acute stress* is a short-term reaction to a perceived threat and *chronic stress* is stress that endures over a long period of time and is a result of ongoing situations. *Eustress* is a type of stress that is considered to be a positive reaction to the demands of the work and has an energising and motivating effect on individuals as they strive to attain work goals.



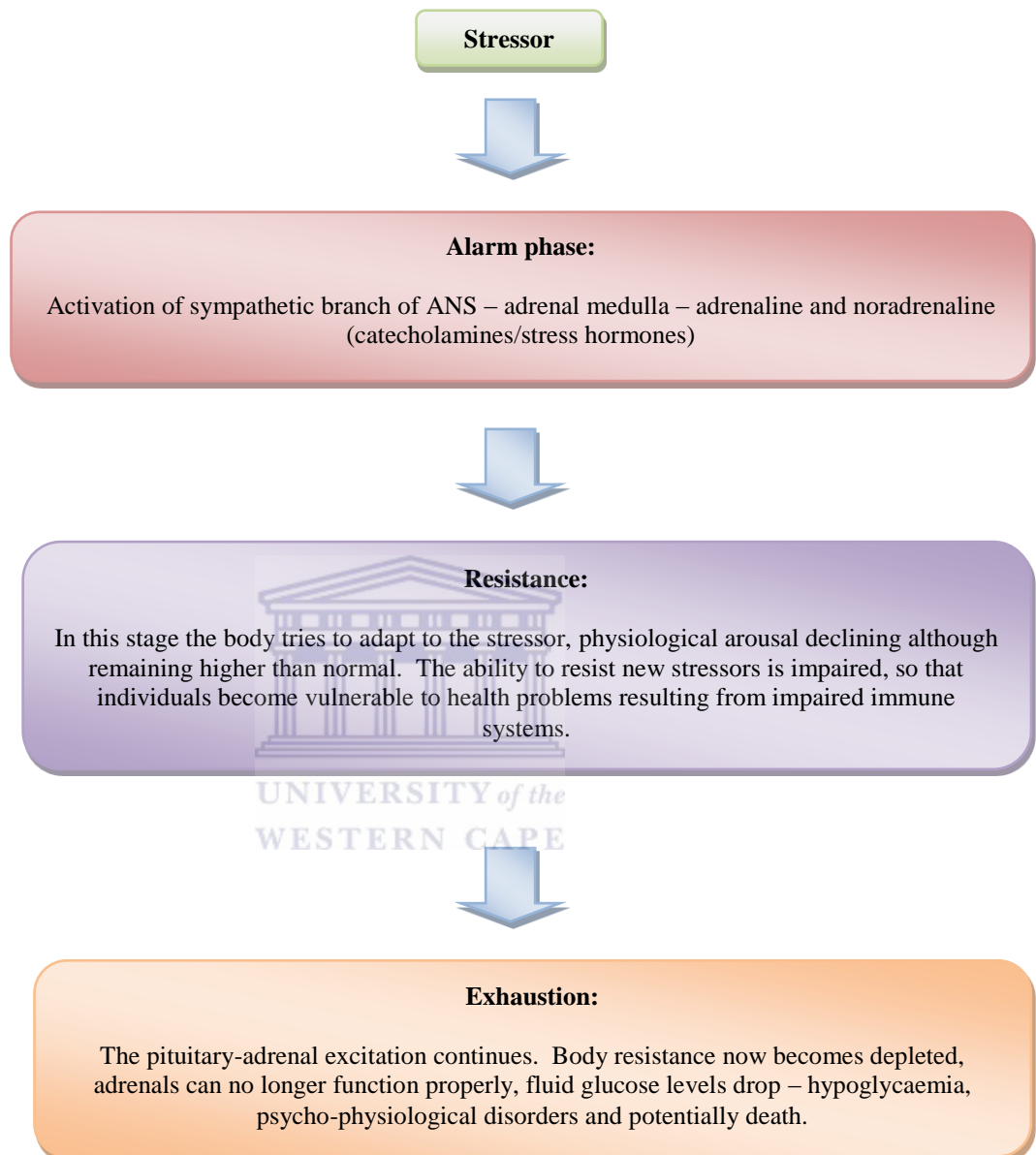
2.2.2 MODELS OF OCCUPATIONAL STRESS

There are numerous stress models but only a few will be presented to provide a context.

2.2.2.1 GENERAL ADAPTATION SYNDROME MODEL

Seyle's General Adaptation Syndrome has been described as a classic theory that identifies stress as the response to any form of stress, and which is known as a stressor (Milner & Khoza, 2008).

Figure 2.1 General Adaptation Syndrome



Source: Upton (2010, p. 186).

Seyle's model is the earliest model of stress and focuses on the body's reaction to a stressor (Kennedy, 2003). The bodily responses an individual feels is part of the

‘fight’ or ‘flight’ syndrome which prepares the body for dealing with stress through its nervous and endocrine system (Upton, 2010).

Scientific attempts at explaining the process of stress have included Hans Seyle’s (1946) model which states that an individual encounters three stages in stressful situations (McSchane & Von Glinow cited in Werner, 2007) which are:

(i) alarm reaction- once a threat has been perceived a biochemical reaction that brings about shock and reduces the individual’s ability to cope happens within the individual;

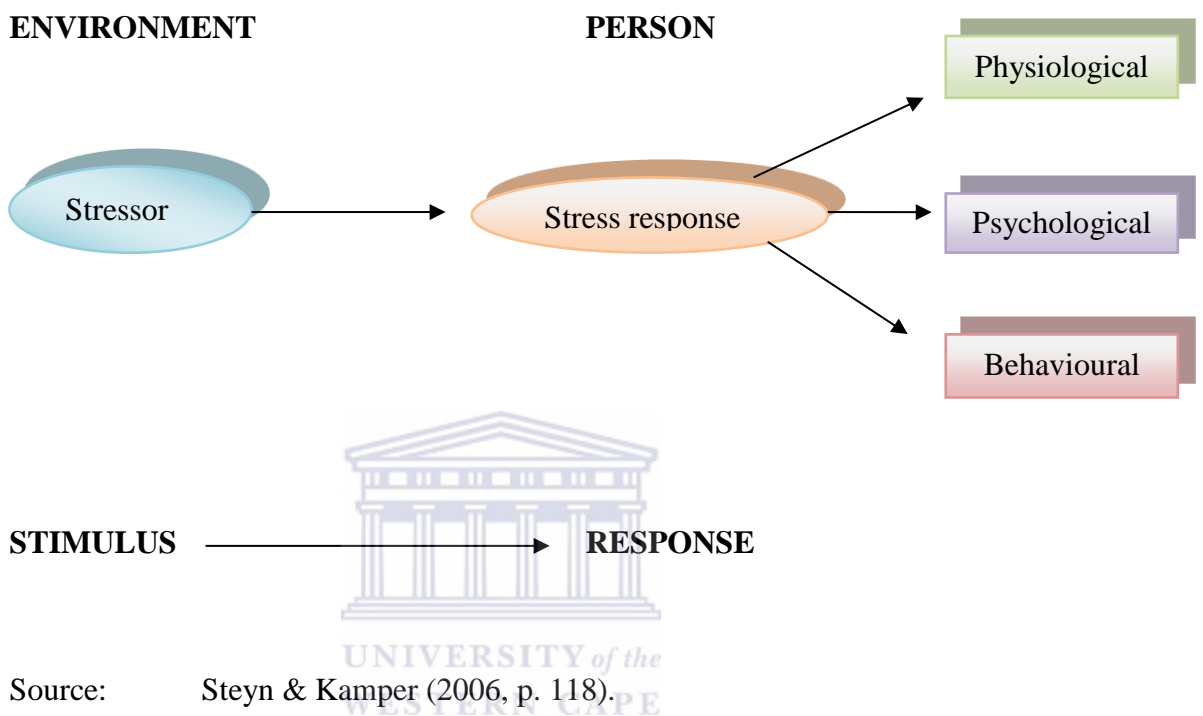
(ii) resistance – distinct biochemical and psychological responses are triggered which releases adrenaline and increase the individual’s ability to cope with the event; and

(iii) exhaustion – should the individual fail to cope with the stressor their resources are reduced without them being able to replenish them fast enough.

Stranks (2005) contends that according to the general adaptation syndrome, the strength of the individual’s constitution, their physiological strength, their perceived degree of control and their perception of an event affects the extent to which they will feel stressed. For an individual, unsuccessful adaptation to a stressor implies increased vulnerability, whereas successful adaption means greater resistance, growth and happiness of the individual.

2.2.2.2 RESPONSE-BASED MODEL OF STRESS

Figure 2.2 Response-based model of stress

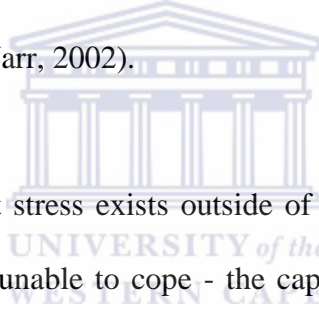


Source: Steyn & Kamper (2006, p. 118).

According to the response-based model, an individual's response to stress could be evaluated from a physiological, psychological or behavioural perspective. An individual's reaction to isolated or multiple events determines whether it is perceived as stressful. It has been said that teachers are passive recipients of stimuli and experience stress when under pressure at work (Wilson & Hall, 2002).

Stress is produced as a result of the impact of an environmental force on an object. The strain experienced may cause a reaction that may result in temporary distortion, but it could also lead to long-term distortion (McKenna, 2006).

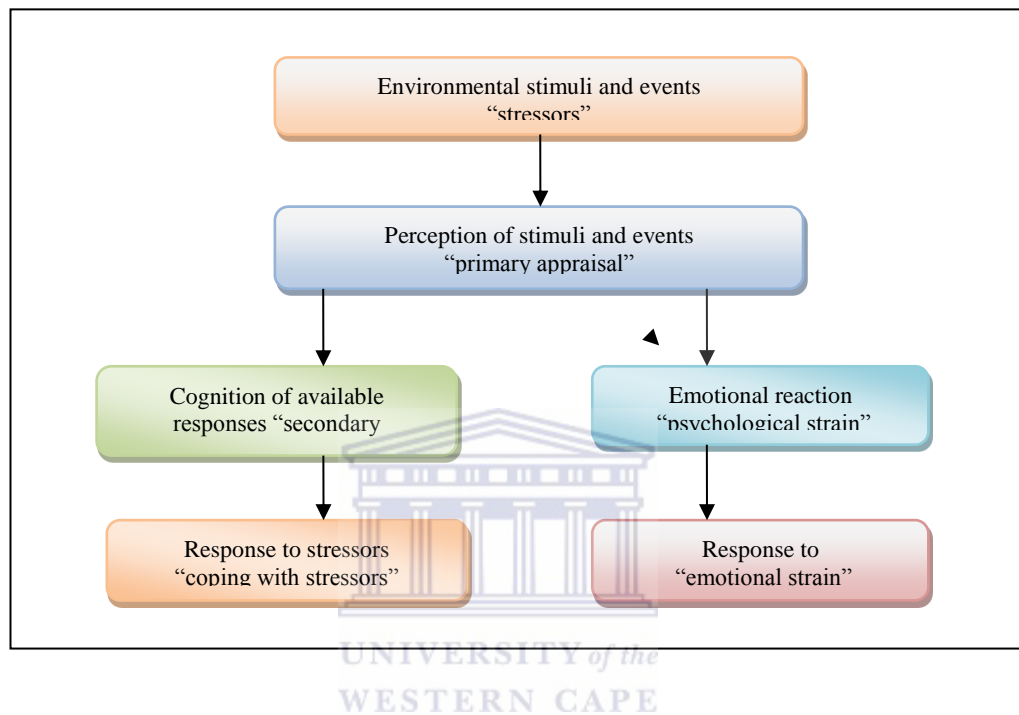
According to the response-based theory, stressors within an individual's environment could affect the well-being of an individual. However, it also stimulates coping responses that are aimed at addressing its causes. Through confronting a stressor, there is a higher chance that the issue may be resolved. This model purports that the effects of occupational stressors are a complex interplay of both the demands of a stressor and an individual's degree of control over it. Issues or events in an individual's life that cause stress, require them to adapt. When individuals are unable to adapt, they may experience strain if they perceive they have a lack of control over the stressor in their environment. The individual's ability and the internal or external resources at their disposal becomes a buffer against stress (Warr, 2002).



This model purports that stress exists outside of the individual, and disturbs the individual as they seem unable to cope - the capacity of the individual may not match demands of the stressor (Cooper, Dewe & O'Driscoll, 2001).

2.2.2.3 INTERACTIONAL MODEL OF STRESS

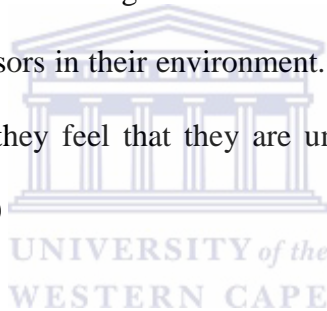
Figure 2.3 Variables in the stress-coping process



Source: Warr (2002, p. 205).

Lazarus and Folkman (1984; 1987 cited in Upton, 2010) contend that psychological variables interact between individuals and their external world. Stress responses are only elicited when an individual perceives that a potential stressor would become a source of stress (Upton, 2010). The interactional model presents the view that stress is situational and interactive singular occurrence and that individuals have their own distinct responses to stressors (Rout & Rout, 2002 cited in Steyn & Kamper, 2006).

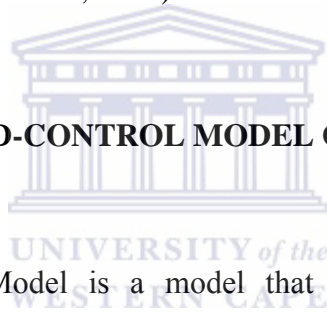
When an individual perceives, through a process of cognitive appraisal, that he lacks the resources or capabilities needed to cope with a situation his environment demands, then the outcome is stress. This process of *cognitive appraisal* comprises both primary and secondary phases (Warr, 2002). In the *primary phase* the strain is evaluated as a source of strain or a potential threat. If the potential stressor is deemed threatening it leads to a secondary stage. In the *secondary phase* the individual assesses his ability and the resources they have to cope with the stressor (Upton, 2010). In the re-appraisal of a stressor the specific evaluation of whether or not attempts at coping with it have been successful occurs (Warr, 2002). Good health and well-being is attained when individuals realize their own ability to cope with stressors in their environment. On the other hand, individuals may suffer ill-health if they feel that they are unable to cope with the stressor (Steyn & Kamper, 2006.)



Schulze and Steyn (2007) delineate that according to this model, individual differences and coping mechanisms determine whether the individual perceives an event or circumstance either as a stressor or as a stimulus that is able to enhance their performance. For those who interpret stress a state of distress may be experienced. The perception of stress could be both interactive and situational and the same event could be perceived differently by different individuals. A condition of stress is the result of how various stressors in an individual's environment interact, how they perceive it, and the subjective manner in which they respond to it. According to the authors, teachers may experience stress in different ways, and may respond in a variety of ways in the school environment (Schulze & Steyn, 2007).

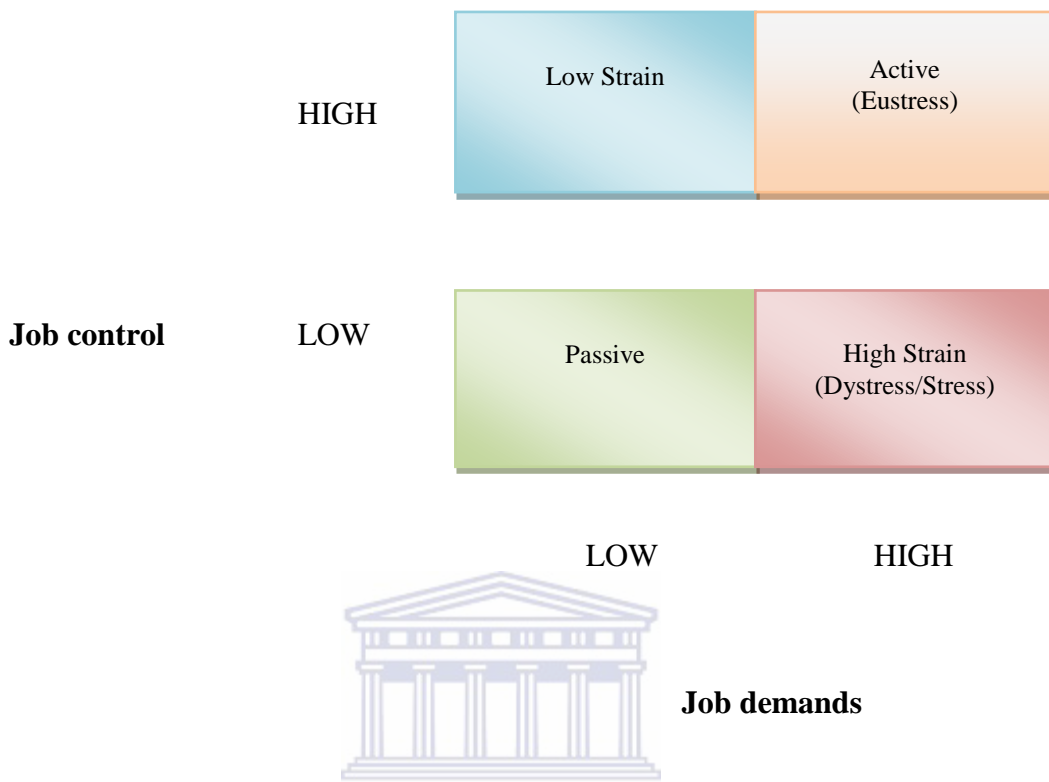
In the teaching environment an individual's resources may deplete as they constantly have to adapt in order to manage the demands of teaching, especially in the school situation where many events and instances are beyond their control. When stress is experienced in the workplace it is the end result of the imbalance between environmental demands and individual capabilities. The evidence of stress is dependent on the individual's *cognitive appraisal* of the events and circumstances and their *individual ability to cope*, and these factors determine their transaction with the environment. During the appraisal process individuals constantly adjust their coping strategy and resources to match the demands of the situation (Jackson & Rothmann, 2006).

2.2.2.4 DEMAND-CONTROL MODEL OF STRESS



The Demand-Control Model is a model that promulgates that individual's encounter job stress when they experience high strain and have low control of the demands of the work. An individual is in a state of *dystress* when they feel physiologically and psychologically overloaded (Hitt, Miller & Colella, 2006).

Figure 2.4 Demand-Control Model



Source: Hitt et al. (2006, p. 243).

In the Demand-Control Model decision latitude and job demands are the two main factors that determine job strain, and it portrays that individuals who have a sense of control over their work when confronted with a stressor are less affected by stress at work and perceive change and problems as challenges and not threats. From this model it can be concluded that greater stress will be experienced by types of work with high demands and low decision latitude (Harden, 1999). Jackson and Rothmann (2005) define a *high strain job* as one that has a very high degree of responsibility, but does not give the employees autonomy and control over their work. This situation leads to high levels of exhaustion and cynicism,

where cynicism is indicated by self-protection mechanisms that serve to prevent the frustration of not achieving work-related goals.

Warr (2002) contends that *job strain* is caused by a mismatch between the person and their environment, especially on the dimensions deemed important for the well-being of the individual. The person-environment relationship could be seen as a U-shaped curve where an individual's capabilities could reach optimal levels in response to the demands within an environment. When optimal levels are reached, the strain will be minimal, and likewise, when demands are too high or too low, strain on the individual increases.

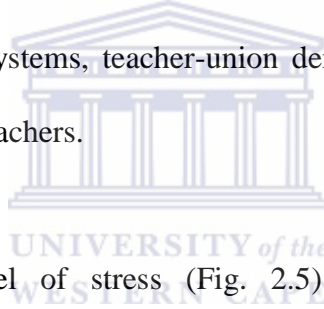
2.2.3 SOURCES OF OCCUPATIONAL STRESS

Steyn and Kamper (2006) categorize various sources of occupational stress faced by teachers. The categories they put forth are professional demands, interpersonal relationships, role-based stress, career development, school factors and the home-work interface.

In a study conducted in the North-West province it was found that job security, work overload, job characteristics, work relationships, pay, benefits and work-life balance, unsocial work hours, the lack of proper equipment, the lack of recognition for good work, fears of teaching position becoming redundant and the rate at which changes are introduced, all impact on reported stress in schools investigated. Further findings from the investigation revealed that (i) high school educators in their work with adolescents experienced high emotional overload and

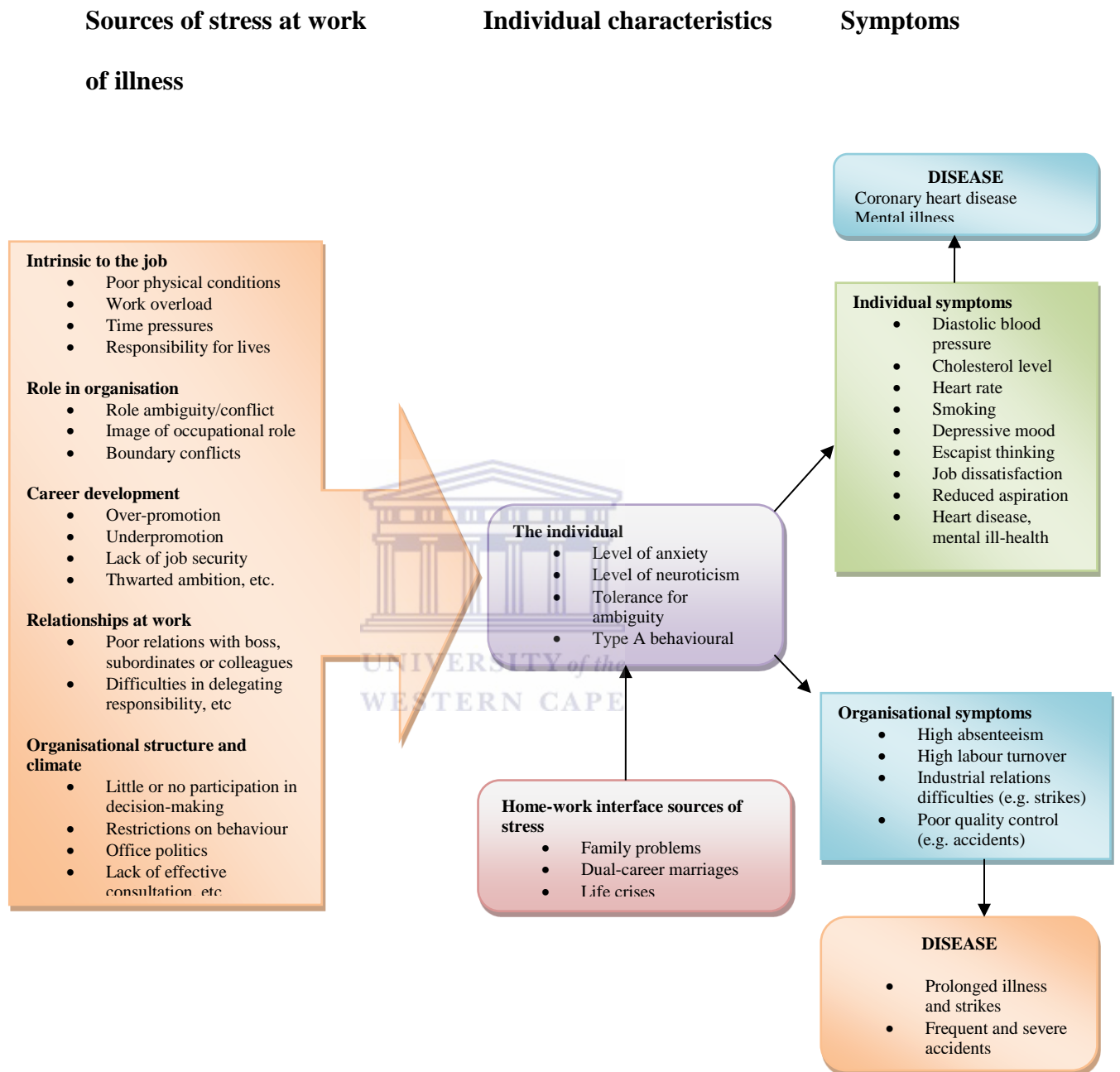
more stressful events, (ii) young educators in particular experienced more stress than their older counterparts, (iii) poor work relationships have an impact on reported stress, and (iv) a positive relationship was evident between occupational stressors and both physical and psychological ill-health (Jackson & Rothmann, 2006).

Mestry (1999 cited in Jackson & Rothmann, 2006) surmise that the rapid changes in education and society, in addition to population increases, diversity in school populations, an increase in the cost of living, crime and its effects on learner behaviour, conditions of service, new rules and regulations, curriculum changes, performance appraisal systems, teacher-union demands, and high workloads all contribute to stress for teachers.



The transactional model of stress (Fig. 2.5) outlines various sources of occupational stress and divides it into those that arise from within the organisation and those that stem from the individual's personal characteristics. The ensuing sections will discuss some of the aspects highlighted in the model.

Figure 2.5 Transactional Model of Stress



Source: Stranks (2005, p. 25).

2.2.3.1 WORK-RELATED SOURCES OF OCCUPATIONAL STRESS

2.2.3.1.1 The work itself

Work overload may result when too much is expected from employees (Landy & Conte, 2007). Nel, Gerber, Van Dyk, Haasbroek, Schultz, Sono and Werner (2001) distinguish between two types of work overload namely, *quantitative overload* and *qualitative overload*. *Quantitative underload* occurs when individuals have too little to do and spend time at work being idle (Greenberg & Baron, 2000). In an investigation on occupational stress and burnout, it was found that high workloads in teaching contributed significantly to levels of stress reported by high school teachers. Workload was indicated by administration, meetings, changing curricula and the marking of tests and assignments (Van Tonder & Williams, 2009).

Qualitative overload, on the other hand, occurs when the work to be done is too difficult for an employee. Work hours and work-load affect physical and psychological ill-health (Arnold, Silvester, Patterson, Robertson, Cooper & Burnes, 2005). It has also been described as work that may be very complex to do (Hitt et al., 2006). It has been found that this type of overload has caused deeper depression, less enjoyment, and more hostility as employees feel a total loss of control when they are unable to do the work (Hitt et al., 2006).

Work underload is experienced by employees when they feel a sense of boredom, alienation or depression as they may become dissatisfied at work even if they have too little to do (Werner, 2007). *Qualitative underload* occurs when there is a lack of mental stimulation derived from the work, and the individual finds the task at hand to be routine and repetitive (Greenberg & Baron, 2000).

In a study conducted in Malaysia a positive correlation was found between occupational stress and workload. The higher the workload, the higher the occupational stress reported. The work-load of teachers includes many tasks to be done within a limited time available during a school day. Teachers' activities include clerical tasks, nursing, counselling, parenting and imparting knowledge. In addition teachers have to deal with school administrators and parents. In the classroom itself there is often a large number of learners, a full timetable, extra-curricular activities, meetings, extra-classes, workshops, training and development and in addition, continual curriculum changes that require that they adapt swiftly (Hamdan, 2011).

Time-pressures may be experienced by employees when they have excessive work demands and when they feel that they are unable to cope with the demands made (Landy & Conte, 2007). The limited time available in which to complete work required is a significant factor that contributes to stress (Santavaria, 2007). Time-based conflict may arise in the life of an individual as they attempt to create balance between work, family and non-work related activities (Werner, 2007).

Role competence refers to the particular abilities, behaviours, attitudes and knowledge that are required by job incumbents (Hellriegel & Slocum, 2004). New competencies to be learned may cause stress if incumbents lack the ability to cope with the required level of performance. In a study amongst Italians it was found that the main sources of stress for teachers were linked to changes introduced with respect to new tasks expected concerning the management of the school, curriculum changes and the appraisal of teaching. All these factors have led to the perception of a higher number of stressors in the teaching environment as new competencies are demanded (Zurlo, Pes & Cooper, 2007).

Task autonomy refers to the extent of control employees have over their work (Landy & Conte, 2007). Situational control as a job-related moderator of stress is the extent to which individuals believe that they are able to exercise control over tasks in terms of work pace, procedures for task completion and task scheduling. In a study conducted, occupational stress was measured by items that addressed teachers' perceptions of their instructional load, paper work load and stress from the environment, and these factors were found to be lower in teachers who perceived that they had control over their work environment (Pearson & Moomaw, 2005).

Working conditions refer to the conditions within an employee's work environment. Conditions that people work in have a strong effect on their work attitudes and their reactions to their work. These conditions affect the mood and mental state of employees, and each occupation has its own unique requirements that are essential for efficient work performance. If working conditions are

unpleasant it may cause stress at work as it could become uncomfortable for workers to execute tasks and they under pressurized conditions (Hitt et al., 2006). Conditions that may become stressors in the work environment are the extent of crowding, the level of noise, the lack of privacy, and the lack of control over aspects of the work environment (Jackson & Schuler, 2003).

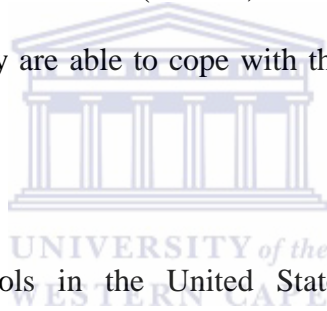
Research conducted by Ngidi and Sibaya (2002) investigated the situation in South Africa and found that the conditions under which Black teachers work were demoralizing. Black teachers, in particular, had to cope with poor physical conditions such as overcrowding, inadequate equipment and the lack of adequate facilities, and the authors maintain that this is a consequence of disparities in financial provisions during the apartheid era in South Africa. Poor physical conditions such as overcrowding may have exacerbated problems such as teachers having to cover the syllabus in little time available, as well as a lack of time for marking and preparation.

The researchers also found that certain working conditions in schools, such as the lack of discipline, the abolishment of corporal punishment, unmotivated learners, redeployment of teachers, retrenchments and retirement packages offered to teachers all contributed to occupational stress in the profession.

Resource inadequacy is experienced when employees lack the resources they need to do their work and it becomes difficult for them to reach objectives effectively. Resource constraints increase the demands of the work placed on employees and reduce the control they have over their work.

2.2.3.1.2 Relationships at work

Relationships with co-workers refer to the relations between employees. Co-worker support is support that is needed by employees at difficult times, and that they receive from others within the organisation. Stress may be experienced due to poor relationships with co-workers if: (i) there is a lack of understanding of the roles and the responsibilities of others, (ii) management delegates authority poorly in order to get work completed on time and (iii) there is a lack of feedback from colleagues or management with regard to their performance all, of which may lead to feelings of despair and isolation (Stranks, 2005). When employees have good support from others, they are able to cope with the stressors at work (Hitt et al., 2006).



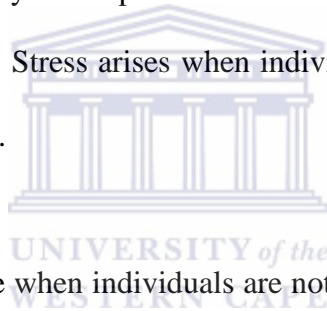
Teachers at high schools in the United States of America reported that relationships with co-workers provided personal and professional support, such as discussions about goal-setting, sharing of materials and curriculum design. However, relationships with co-workers were found to become less important over time as teachers grew older (Marston, Brunetti & Courtney, 2005).

Relationships with leaders and others refer to relations between employees and the people who govern the activities of the organisation. Support from leaders in the organisation help employees react to stressors in an appropriate way. Leaders help employees cope with negative emotions, stress and pain in the workplace (Hitt et al., 2007). It has been found that teachers value and desire good relationships with their leaders. Teachers indicated that they expect school

leaders to provide strong leadership, set the climate of the school, provide support for teachers, get rid of incompetent teachers, participate in classrooms and serve as a buffer between teachers, parents and the community (Marston, Brunetti & Courtney, 2005).

2.2.3.1.3 Role in the organisation

Role theory views an organisation as a set of interlocking roles. The roles within organisations explain what people are to do and what others could expect from them. Individuals identify with specific roles according to the duties and rights associated with the role. Stress arises when individuals experience difficulties in their role (Stranks, 2005).



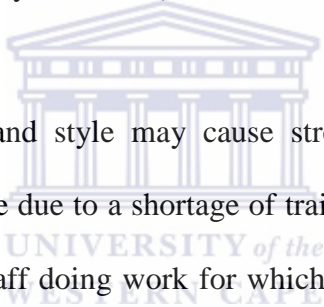
Role ambiguity may arise when individuals are not certain of work objectives, co-workers expectations or the scope and responsibilities of the job and of what is expected of them (Landy & Conte, 2007; Wagner & Hollenbeck, 2005). Unclear or confusing expectations about the scope of work duties, the level of authority and the social expectations and requirements of the job also cause individuals to experience role ambiguity (Pearson & Moomaw, 2005).

Role conflict may arise when work and non-work demands within an individual's life are incompatible and their expectations are in conflict with each other (Greenberg & Baron, 2000; Hitt et al., 2006; Landy & Conte, 2007). This form of conflict has been found to cause lower job satisfaction and higher anxiety levels,

and it may also lead to ill health risks like elevated blood pressure and unusual blood chemistry (Ivancevich & Matteson, 1980 cited in Arnold et al., 2005).

2.2.3.1.4 Organisational structure and climate

The policies, procedures, culture and style in which an organisation operates could be a source of stress for teachers (Stranks, 2005). *Policy influence* may be a source of stress for teachers if there is conflict between achieving results on the one hand, and the need to maintain school organisational policies and structure on the other (Kaiser & Polczynski, 1982).



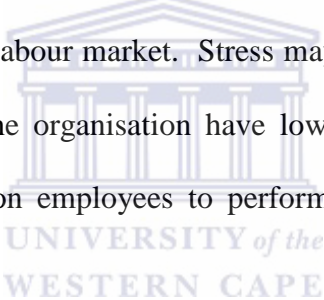
Organisational culture and style may cause stress if there are: (i) excessive requests to work overtime due to a shortage of trained staff, (ii) a high number of vacant posts results in staff doing work for which they have not been appointed, (iii) poor coordination between departments, (iv) a lack of staff training which leads to a lack of confidence, (v) poor communication with staff regarding their work, (vi) too many strict rules, (vii) a lack of control over the workload to be completed or (viii) rapid and frequent changes that take place across all levels of the organisation.

The organisation's management style is manifested in its philosophy, operations system and technical approaches and its objectives may cause stress on employees if: (i) it is inconsistent, (ii) it is driven by competitive goals that do not regard the health and well-being of employees, (iii) it responds to challenging crises caused

by a lack of planning or in response to sudden requests from clients or (iv) it is always amended (Stranks, 2005).

2.2.3.1.5 Career development and transition

Career development concerns may cause stress in employees if there is a lack of job security due to current and planned future changes within the organisation. Over-promotion of employees result when there are poor selection methods or criteria used to select new employees, when there is a lack of employees available for promotion within the organisation, or if there is a shortage of trained staff available in the external labour market. Stress may be experienced by employees when positions within the organisation have low status, is poorly rewarded or when there is pressure on employees to perform at very high levels (Stranks, 2005).

The logo of the University of the Western Cape is centered in the background of the text. It features a stylized building with columns and a pediment, with the text 'UNIVERSITY of the WESTERN CAPE' below it.

Career transitions may lead to stress when the change is undesirable and when: (i) it involves extensive change, (ii) it is unexpected, (iv) it is accompanied by other life transitions, (v) it is forced on an individual or (vi) requires personal resources like self-esteem and tolerance for ambiguity to deal with transition. When an individual lacks support from family, friends or the organisation, or when they lack the ability to cope with transition, the process may become unmanageable and lead to stress (Greenhaus, 2000).

Job insecurity is experienced by employees when they perceive that their jobs are not protected from being severed (Jackson & Schuler, 2003). Job insecurity may

cause high levels of stress at work if people are preoccupied with concerns over the effects of mergers, acquisitions, down-sizing or restructuring (Hitt et al., 2006).

2.2.3.2 PERSONAL SOURCES OF OCCUPATIONAL STRESS

2.2.3.2.1 Individual characteristics

Personal factors that vary the extent of stress experienced by individuals are personality type, tolerance for ambiguity, personal characteristics, gender, self-esteem, self-efficacy, health and exercise, work and sleep patterns, financial trouble, social support, divorce, individual coping strategies and sickness (Nel et al., 2001; Steyn & Kamper, 2006). *Personal characteristics* such as personality type, negative affectivity and self-efficacy are argued to predispose the individual to displaying particular behaviour which may moderate stress (Warr, 2002).

Personality type A predisposes individuals to stress. Individuals with distress-prone personalities are more likely to experience negative events in their lives (Werner, 2007). Individuals with Type A personalities strive to achieve higher levels of performance and often until they become frustrated, irritated, anxious and hostile (Hitt et al., 2006). They have been found to be set in their way of doing things and are determined to persist in doing things their way (Schafer 1996 cited in Werner, 2007). They have also been found to be more prone to experience stress due to being highly competitive, being impatient, being fast-paced, preferring to perform multiple tasks simultaneously and striving for

perfection, but they are also known to be highly productive, they have high self-confidence, they handle high work volumes and they develop high performance goals (Greenhaus, 2000). Individuals with *Personality Type B* behaviour on the other hand, have been described as ambitious and achievement-orientated, but in a less competitive way than the Type A personality. Individuals with this personality type have been reported to experience lower stress and insecurity (Schafer 1996 cited in Werner, 2007).

2.2.3.2.2 Home-work interface

Dual-career responsibilities are a source of stress as it is strain-based conflict that stems from an imbalance between work and non-work demands. These demands may affect each other when events in an individual's personal life conflict with that of their work life, for example, events in the life of a spouse, or personal illness may cause fatigue and tension at the workplace (Werner, 2007). When the needs of an individual's family or other non-work demands conflict with work demands it creates additional stress. The individual may want to spend more time with their families instead of being at work (Hellriegel & Slocum, 2004).

Work-life balance is an area of research that investigates the level of satisfaction or conflict individuals experience between their work and non-work demands. The contemporary family could take on any variety of forms namely, single-parent, two-earner families, families with ageing parents in need of care or non-traditional family units (Landy & Conte, 2007). Werner (2007) reports that it may be more difficult for women to balance work demands with that of the traditional

feminine home duties such as cooking, cleaning and caring for children, which are more immediate than the traditional male role of scheduled maintenance around the house and garden that they are able to do at their leisure on a routine basis.

2.2.4 DEMOGRAPHIC VARIABLES IMPACTING ON STRESS

There are various demographic variables that impact occupational stress namely gender, age, marital status and tenure, amongst others. However, only gender and tenure will be discussed as they are the only two variables relevant for the purpose of this study.

2.2.4.1 Gender



Gender has been found to influence perceived stress in a significant way. In the workplace women are more likely to be under-paid and more likely to experience discrimination, stereotyping and work-family conflict. Due to this, it has been found that women experience more stress at work. It has also been found that women experience more stressors of a different nature than those experienced by men, for example, work-related stressors such as a lack of entry into social and political networks dominated by men, receiving lower pay, and higher supervision and monitoring by management. Work-family conflict is also experienced more by women than men, due to the traditional roles they have in the family and at home. Due to this, women are more prone to experience work overload and role conflict (Hitt et al., 2006). In a study investigating teacher stress in South Africa

females reported that finding the time to accomplish goals as a cause of stress as well as feeling a lack of confidence as a professional (Schulze & Steyn, 2007).

Female teachers in the George region in South Africa reported higher than average levels of stress (Olivier & Venter, 2003). The presence of women have become more prominent in workplaces in South Africa, however, they have reported significantly high levels of stress (Ngidi & Sibaya, 2002). Rout and Rout (2002) put forth that the role of women at home, conflicting work and family demands could contribute to the higher levels of stress that they experience. In an exploratory study of teachers conducted by Coetzee et al. (2009) investigating stress, coping resources and personality types it was found that female teachers (especially the intuitive, feeling types and introverted types) were more likely to pursue or have social networks that provide support during times of stress. However, in a comparative study conducted in Macedonia it was found that male teachers reported higher occupational stress than female teachers whereas in Turkey no significant differences were found (Eres & Atanasoska, 2011).

A study conducted in Hong Kong showed that male teachers found educational reforms and external reviews as major sources of stress and that female teachers reported further training, language proficiency requirements implementation, relationships with colleagues and deductions in salary as the main potential work stressors. It was found that male teachers were more likely than female teachers to report financial stress and their children's education as sources of life stress (Chan, Cheng & Chong, 2010). Similarly, Kauer (2009) found that female teachers reported a higher level of occupational stress than male teachers.

2.2.4.2 Tenure

In a study investigating stress in teachers in South Africa it was found that there were significant differences reported amongst teachers with different lengths of service in teaching. Younger teachers with 6 to 15 years of experience reported higher levels of stress. Significant differences were found with regard to change, lack of time to reach goals and lack of professional support between teachers with different years of experience. It was suggested that a reason for the higher stress reported by teachers with longer lengths of service was that more is expected from them than what is expected from teachers with less years of teaching experience (Schulze & Steyn, 2007).



In another study on teachers in the George region it was found that teachers with less than 10 years of experience reported significant levels of stress (Olivier & Venter, 2003). In Macedonia teachers with longer than 21 years of experience or more reported higher occupational stress (Eres & Atanasoska, 2011).

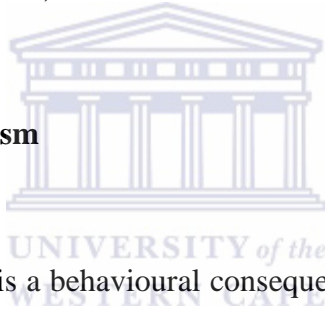
However, Chan, Cheng and Chong (2010) found no significant difference between the perceived level of occupational stress between teachers with different lengths of service.

2.2.5 SYMPTOMS OF OCCUPATIONAL STRESS

2.2.5.1 ORGANISATIONAL SYMPTOMS

The symptoms experienced by the organisation could be attributed to the effects of stress experienced by the individuals within the organisation. The effects amongst others on the organisation are: low motivation, job dissatisfaction, poor job performance, high absenteeism, high staff turnover, and low quality of co-worker relationships. It has been found that there is a strong relationship between job stress, job dissatisfaction, turnover and healthcare costs (Hitt et al., 2006).

2.2.5.1.1 Absenteeism



Absenteeism from work is a behavioural consequence of stress (Hitt et al., 2006). Nel et al. (2001) associate high absenteeism, labour turnover, low commitment, and low organisational citizenship behaviour to high stress levels. Dissatisfaction with the conditions at work is also a major reason for absenteeism from work, which is a very high cost for the organisation (Wagner & Hollenbeck, 2005). Frequent time off work due to short-term illness and an increase in overall sickness of employees' is an indication that the organisation as a whole is experiencing stress (Stranks, 2005)

2.2.5.1.2 Turnover

Stress may lead to high turnover within organisations. Turnover refers to the rate at which employees leave the organisation. The cost of replacing staff is very expensive for organisations. When employees leave the organisation investments made in their training and development are lost. Frustrated employees may take up job offers from competing firms in which case competitors gain from an investment in training and knowledge of the organisation's methods and operations (Wagner & Hollenbeck, 2005).

2.2.5.1.3 Low organisational citizenship and behaviour

When employees are not coping with the demands of their own work they may not display ideal organisational citizenship behaviour, for example, they may not (i) volunteer to do additional tasks that are not part of their scope of duties, (ii) persevere to achieve success at tasks, (iii) help others, (iv) adhere to the rules, regulations and policies of the organisation or (v) agree with or approve of the organisation's objectives (Hitt et al., 2006; Jackson & Schuler, 2003).

2.2.5.1.4 Poor performance

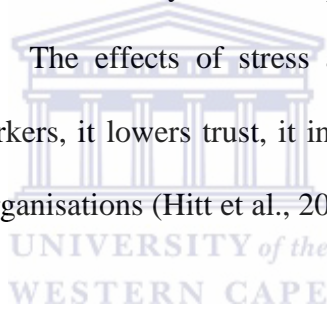
Deteriorating work performance and poor relations with co-workers and leaders are the end result of stress amongst employees (Jackson & Schuler, 2003). Employees who are experiencing stress often deliver poor work performances. Evidence of poor performance standards may be found in housekeeping standards,

frequent errors, high levels of wasted resources, poor decision-making, low motivation to work, low commitment and poor time-keeping (Stranks, 2005).

Hanif, Tariq and Nadeem (2011) investigated stress and job performance amongst teachers and found that stress in teaching decreases levels of performance.

2.2.5.2 PERSONAL SYMPTOMS OF OCCUPATIONAL STRESS

The effects of stress on individuals have a direct impact on the organisation. Stress in individuals manifest in ways such as physiological, behavioural and psychological problems. The effects of stress at work reduce the quality of relations between co-workers, it lowers trust, it increases animosity and it harms communication within organisations (Hitt et al., 2006).



2.2.5.2.1 Physiological symptoms

Jackson and Rothmann (2006) contend that long and short-term physical strain manifests in illnesses like heart disease, and in addition, short-term strain has been found to lower immunity to infections.

Stranks (2005) delineates that there are three stages to stress response namely, *Stage 1* - speeding up, rapid speech, fast walking, fast eating and drinking, working at high speed and for long periods of time without tiring. *Stage 2* - irritability, gastric symptoms, tension headaches, migraine, insomnia, loss of energy, comfort seeking through alcohol and smoking and increased intake of

food and drink, and *Stage 3* - gastric ulceration, palpitations, chest pain, cardiac incident, depression, anxiety, tiredness, lack of energy, and physical and mental breakdown.

2.2.5.2.2 Behavioural symptoms

Occupational strain has been found to lead to dysfunctional behaviour which has implications for teachers in terms of their well-being, health and learners in the classroom (Santavirta, Solovieva & Theorell, 2007). Sickness, absence, lateness, staff turnover, accident investigations and disciplinary matters may all lead to stressors in the workplace being identified (Stranks, 2005).

Behavioural indicators have been labeled into five categories namely: work disruptions, job flight, aggressive behaviour, disruptions to non-work and self-damaging behaviours. Caution must to be taken when assessing whether the behavioural indicator is related to occupational stressors or whether it is a response triggered by off-the job factors or dispositional tendencies (Warr, 2002).

2.2.5.2.3 Psychological symptoms

Psychological ill-health is surmised to stem from high levels of stress and even attacks of anxiety, irritability, difficulty in decision-making, loss of sense of humour, constant tiredness, feelings of not coping, avoiding contact with other people, mood swings and the inability to listen to others (Jackson & Rothmann, 2006).

Anxiety and *phobias* are typical manifestations of stress. It has been defined as a condition in which an individual experiences tension along with feelings of apprehension, guilt, worry, and insecurity. There are many forms of anxiety disorders which vary in intensity. Disruptive events within a person's life, the individual's genetic features, changes in neurological chemistry and physical strain may lead to forms of anxiety such as panic disorders, phobias, post-traumatic stress disorder, obsessive compulsive disorder, separation anxiety or social anxiety disorder (Stranks, 2005).

Oliver and Venter (2003) posit that stress is an occurrence that must be recognized and addressed within various professions and that the teaching profession is no exception. Their study found that twenty percent of teachers in the George region in South Africa were suffering from a stress syndrome known as *job compassion fatigue*, which is psychological fatigue brought about by work-related stressors in the teaching profession (Cordes & Dougherty, 1993 cited in Olivier & Venter, 2003).

2.2.5.2.4 Burnout

Spector (2006) defines burnout as a distressed psychological state that an employee experiences after a prolonged period of time at the same job, and that the condition of burnout shows symptoms of low motivation, emotional exhaustion, low energy and low enthusiasm for the job.

According to Montgomery, Mostert and Jacskon (2005), it is a reaction that develops in response to certain job characteristics which are linked to the performance of certain specific work functions that comprise the job. Work complexity, the variety of tasks, the amount of precision and control that individuals have over their work, the pace and timing of the work and the physical environment that the work happens in are examples of the kind of job characteristics that could cause burnout if individuals are no longer able to meet their demands.

Friedman (1995 cited in Jackson & Rothmann, 2001) describes educator burnout as the result of lengthened stress related to poor time demands, inadequate relationships with colleagues, large classes, a lack of resources, isolation, a fear of violence, role ambiguity, limited promotional opportunities, a lack of support and involvement in decision-making and student behavioural problems. Difficult children, behavioural problems, shortages of equipment, too much paperwork and demands on extra-mural activities also contribute to educator burnout.

2.2.5.3 COPING STRATEGIES FOR OCCUPATIONAL STRESS

2.2.5.3.1 Organisational strategies

Various organisational interventions and personal strategies can be used to help employees cope with stress at work. Organisational strategies could provide stress relief and support to employees by clarifying employee roles, allow them to assist in goal-setting and provide performance feedback (Werner, 2007). Pearlin

and Schooler (1978 cited in Olivier & Venter, 2003) maintain that preventative measures attempting to avoid or control emotional stress are all means of coping with stress in life.

Management of organisations should strive to eliminate the stressors that cause anxiety, for example, through matching the right people to the right jobs and improve communication in the workplace. Training interventions could include programmes that aim to improve the response of employees in diverse contexts and within teams (Werner, 2007). Furthermore, management should attempt to set goals that are clear, measurable, and attainable. Communication at all levels within the organisation should be improved, employee involvement encouraged through consultation processes, access to information granted and training opportunities must be offered to develop employees skills. Managers should support and give recognition to employee initiatives taken in work activities that enhance productivity, and discuss individual performance with employees. Individuals should be carefully monitored and those most affected by stress should be identified and their issues should be addressed (Stranks, 2005).

Wellness programmes aim to improve the emotional, physical and spiritual wellbeing of staff, and are part of the occupational health-care programmes. Emotional wellness as a product of overall well-being is encouraged, as well as salutogenic behavior. Salutogenic behaviour promotes goal-directed behaviour, good productivity, acceptance of responsibility, being flexible and dynamic, taking initiative, concentrating on tasks, being creative in work assignments and managing time effectively (Werner, 2007). The development of wellness

programmes within organisations is a proactive measure aimed at preventing healthcare problems (Jackson & Schuler, 2003).

Team building is used by modern organisations to improve the quality of tasks. The performance is a product on the sum of creativity, skills and talents of members of the team, not on those of individual members. A team as a whole is held responsible for the delivery of work outcomes. Teams are a distinctive part of modern organisations as they are an excellent mechanism to manage workplace stress as it provides the social support network needed to share concerns and it allows for multiple, complex tasks to be shared by team members (Jackson & Schuler, 2003). By using teams, organisations are better able to increase their competitiveness, improve their product or service offering, respond to technological and knowledge changes in industry and increase the meaningfulness of the work itself. Employees may engage more and become more committed to achieve the goals of the organisation (Hitt et al., 2006).

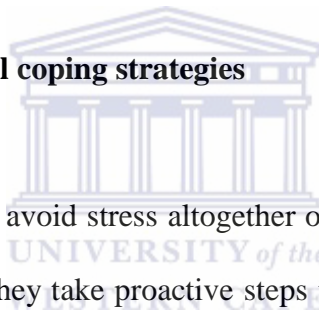
According to Upton (2010), *stress management programmes* may be used to empower people and train them in stress management techniques. The author surmises that stress management programmes should strive to reduce the impact of stress by teaching individuals to:

- deal with the stressor and avoid it as much as possible,
- reappraise the situation through cognitive-behavioural interventions and assertiveness training,

- teach people to cope with the stress itself by adapting to it and learning how to live with it in the best way possible, and
- treat responses to stress through relaxation methods, biofeedback, mental imagery and meditation techniques.

Jackson and Schuler (2003) also purport that stress management programmes provide employees with training material, information, skills and role definition with the aim of equipping staff with the tools they need to reduce the ambiguity associated with dynamic changes in the workplace.

2.2.5.3.2 Individual coping strategies



Individuals are unable to avoid stress altogether or eliminate the stressors in their lives thus it is best that they take proactive steps to manage and cope with it in a healthy way using multiple strategies (Hitt et al., 2006).

Cognitive and behavioural strategies are used by teachers in dealing with stress namely, direct action strategies or palliative strategies (Coetzee et al., 2008).

Direct action strategies include things over which teachers have direct control and which they can improve for example, the management of resources, the organisation of themselves and their work in improved ways, the engagement in professional development programmes and the attainment of new knowledge, skills and work practices. **Palliative strategies** are psychological which includes the appraisal of the stressor, and **physical strategies** which include relaxation techniques.

Time management could be used by individuals to deal effectively with personal goals (Jackson & Schuler, 2003). Managing one's time could be a tool used to reduce stress. Stranks (2005) purport a list of ideas for managing time more efficiently namely, allocating time for planning goals and organising urgent work, setting goals, making a list of priorities, being flexible, learning to say 'no', not procrastinating, focusing on urgent work, doing the right thing right and rewarding oneself.

Relaxation techniques may be used to relieve situations such as chronic pain, insomnia, stress or anxiety, amongst others. Deep relaxation methods include autogenic training, mindfulness meditation, yoga, walking meditation, progressive muscular relaxation, transcendent meditation or biofeedback (Stranks, 2005). Other relaxation techniques that could be used are guided imagery and meditation. All relaxation techniques modify the physiological reactions that are caused by stress by reducing heart rate, muscle tension and blood pressure (Taylor, Peplau & Sears, 2006). Relaxation techniques empower individuals to become resilient by learning to take control over situations that may affect them, and minimize the consequences of negative events and stressors in their lives (Greenberg & Baron, 2000).

In a study of occupational stress of teachers in Italy it was reported that the main coping strategies used by teachers were ones linked to strategies which embrace innovation and effective time management and that the least used coping strategies were ones which mobilize social support and delegation (Zurlo et al., 2007). Differences were found in the way male and female teachers manage

stress. Female reported that sleeping, talking to neighbours and friends, watching television and shopping were ways in which they managed stress whereas males chose to focus on making healthy lifestyle choices as a way to cope with stress (Chan, Cheng & Chong, 2010).

2.2.5.4 CONCLUDING REMARKS ON OCCUPATIONAL STRESS

Organisations should engage with employees on issues that may lead to stress in the workplace. The approach taken should aim to identify the sources of dissatisfaction and disillusionment in their work (Stranks, 2005). Researchers have found that teachers remain committed to their work regardless of the increased stress at work that they may be experiencing (Wilson & Hall, 2002).

In post-apartheid South Africa the work environment of teachers is in a state of constant development and transition and occupational stress and job satisfaction of teachers will have to be revisited continually. Changes like new rules and policies, different organisational structures like governing bodies, the abolishment of corporal punishment, the inclusion of learners with learning disabilities into mainstream classrooms and the search for and application of alternative ways to deal with the discipline are some examples of what may increase occupational stress and affect job satisfaction of teachers in South African classrooms (Schulze & Steyn, 2007).

After conducting an intensive study of teacher stress, personality types and coping resources in South Africa, researchers suggested that school principals take

cognizance of the various situations that bring about stress, the conditions in the teachers' work environment and their socio-psychological requirements. Teaching staff must be encouraged to garner the participation of teachers in creating a supportive work environment that lowers stress for both the individual and the organisation as a whole to attain a healthy functioning work environment (Coetzee, Jansen & Muller, 2009).

By managing employee stress, organisations benefit by having employees with improved health, less absenteeism due to less illness, improved performance, lower employee turnover, improved relationships between co-workers and more satisfied clients (Stranks, 2005).

2.3 JOB SATISFACTION



2.3.1 INTRODUCTION

The focus of this section of the literature review will be on job satisfaction as a motivating force and how it gets employees to intensely persist with direction at achieving work goals. Moreover, models explaining job satisfaction will be presented and discussed as well as organisational and personal determinants will be explored.

2.3.2 DEFINING JOB SATISFACTION

Job satisfaction has been specifically defined as a personal appraisal of a job and the psychological experience of a specific individual to a number of aspects related to their work (Werner, 2007). Job satisfaction has been described as an *attitude* to work. An *attitude* refers to the consistency that exists in the feelings, thoughts and predisposition individuals have and how they react to the stimuli in their environment (Arnold, 2005). An attitude has intra-attitude consistency when there is coherence between their cognitive (belief) states, affective (feeling) states and their conative (action) dispositions, where positive and negative affectivity are the two affectivity sets on either side of the spectrum (McKenna, 2006; Stranks, 2005). Overall job satisfaction can also be separated into *facet satisfaction*, which is information that relates to specific aspects of the particular job (Landy & Conte, 2007).

Stranks (2005) further alludes that an attitude is a characteristic of human behaviour that consists of response sets that is the result of previous experiences, a tendency to view things and respond to things in a certain way, a mental and neural condition of readiness that is set by experiences and that influences certain responses, and is a learned response to an object or situation. According to Stranks, the functions of attitudes have been found to be a social adjustive mechanism, a way to express value, a knowledge function and a self-defensive function.

Similarly, Spector (2006) views job satisfaction as an attitudinal variable that reflects how people feel about their jobs, and the various facets of which are pay, opportunities for promotion, fringe benefits, supervision, co-workers, security, job conditions, the nature of the work itself and communication.

Greenberg and Baron (2000) define job satisfaction as the positive or negative attitudes held by individuals toward their jobs and contend that the dispositional model of job satisfaction postulates that some individuals are always more satisfied with their jobs than others, and that job satisfaction is a personal disposition.

According to Arnold et al. (2005), job satisfaction is an emotional state that is pleasurable and derived from the appraisal of the experiences derived from one's job. Arnold et al. (2005) purport that it is important because it is a sign of a person's mental health; it has been assumed that it can lead to good work performance but depends on how important the job is to a person and how well it fits into the individual's long-term goals.

2.3.3 MOTIVATION

Motivation is a force within an individual that arouses, directs and sustains their behaviour. A well-motivated individual would be stimulated to reach a particular goal, choose the kind of behaviour that aims to achieve it, and persist until the goal is reached. Importantly, an individual's motivation is inferred from their behaviour. Their actions are observed so that their motivation may be understood.

Motivation and performance are linked as employees work performance can be measured by the extent to which they contribute to the overall objectives of the organisation. Motivation forms part of a spectrum of factors that lead to productive behaviour. Other factors that lead to productive behaviour of employees are their inherent ability to perform, well-developed competencies, and the opportunity to show their ability and through adequate performance (Werner, 2007).

Motivational forces direct individual behaviour so that individual's pursue their goals with the necessary intensity and persistence needed for achievement thereof. Motivation is not dependent on individual ability or the demands of the environment (Hitt et al., 2006). Situational forces, together with forces that emanate from within persons influence levels of motivation and determine the strength with which both personal and organisational goals are pursued (Lawson & Shen, 1998).

2.3.4 MOTIVATIONAL THEORIES

Motivational theories are based on the assumptions that (i) behaviour has a beginning, a specific direction and an end, (ii) behaviour is voluntary and can be controlled by individuals, (iii) behaviour has certain goal-directed purpose and direction, (iv) the application of motivation theories will result in motivated employees and that (v) human behaviour is motivated by something (Jackson & Schuler, 2007).

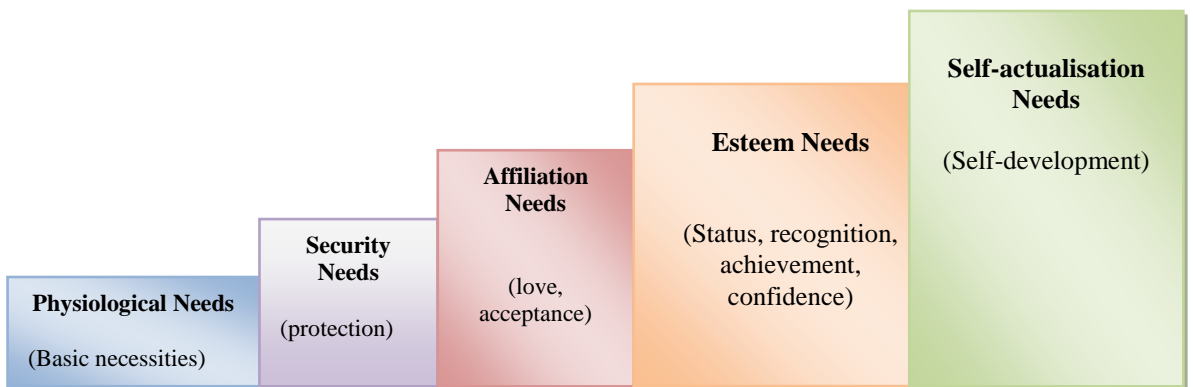
Various content and process theories of motivation exist. Only a few of these theories will be discussed to provide a context.

2.3.4.1 CONTENT THEORIES

Content theories focus on the things that motivate individuals (Werner, 2007) and it assumes that individuals are intrinsically motivated to perform work in a particular way (Ololube, 2006). These theories describe the psychological needs that originate from human behaviour and that is based on the belief that tension is experienced when human needs are not satisfied (Arnold et al., 2005). The content theories that will be explored are Maslow's Hierarchy of Needs, Herzberg's Two-Factor Theory and McClelland's Learned Needs Theory.

2.3.4.1.1 Maslow's Hierarchy of Needs

Figure 2.6 Maslow's Hierarchy of Needs



Source: Ololube (2006, p. 4).

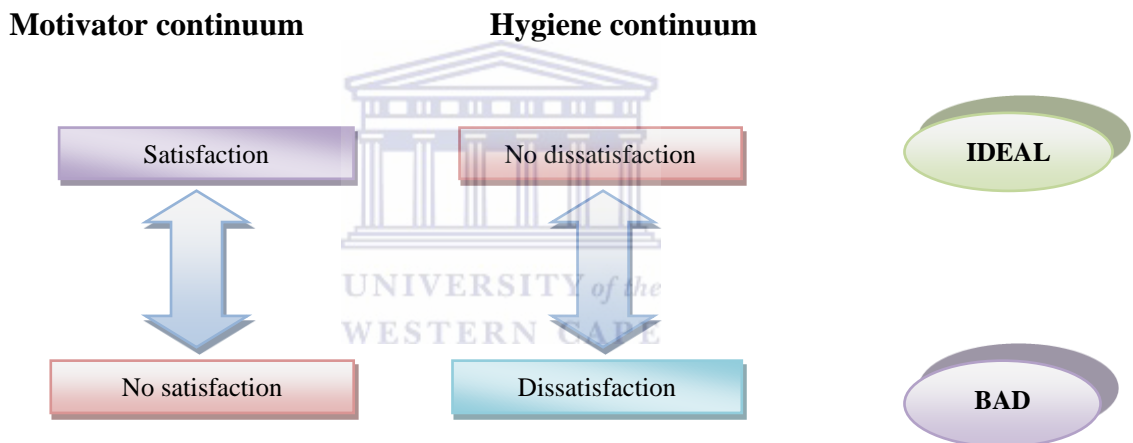
Maslow's needs theory has been described as a general theory of human functioning and consists of five classes, namely: (i) *physiological needs* (for example, pay, food, shelter and clothing), (ii) *security needs* (for example, the need for safety, fair treatment, protection against threats, job security), (iii) *affiliation needs* (for example, the need for being loved, accepted, the need to be part of a group), (iv) *Esteem needs* (for example, the need for recognition, respect, achievement, autonomy, independence, etcetera.), and (v) *Self-actualisation needs* (for example, the need for realizing one's full potential or self-development). The theory operates on the principle that as one need is adequately satisfied, the next need becomes the driving force of one's behaviour (Arnold et al., 2005). According to the theory, man strives to satisfy a need, by achieving this he discovers more unsatisfied needs, wherefore he then strives for one after another in order of importance. Once a need has been satisfied, individuals are no longer motivated by it, and move on to the next level of need. These needs may vary in strength and influence upon individuals at any given time. The workplace must attempt to understand and satisfy all these needs in order to motivate people at work through incentives and should seek to satisfy not only lower needs, but also higher, more dominant needs from those that exist amongst employees (Olulube, 2006; Stranks, 2005).

Drenth (1998) however, criticizes Maslow's *needs gratification theory* stating that often it appears that an individual's behaviour is aimed at gratifying various categories of needs simultaneously, and that the theory does not recognize the role of a whole range of individual-linked variables such as personality traits, biographical data and skill levels.

2.3.4.1.2 Hertzberg's Two-Factor Theory

Hertzberg sought to discover the factors that motivate employees at work. Through his investigation he produced an analysis of two distinct factors namely, *hygiene factors* and *motivators* (Werner, 2007). The two-factor theory also known as the motivator-hygiene theory of job satisfaction.

Figure 2.7 Hertzberg's Two-Factor Theory



Source: Werner (2007, p. 82)

- (i) *Hygiene* factors are factors that must be in place if employees are not to feel dissatisfied. Examples of such factors could be pay, the quality of supervision, job security, the company policies, the physical working conditions, and relations with others. These factors themselves do not lead to job satisfaction but avoid job dissatisfaction. According to Hertzberg,

the hygiene factors must be satisfied before motivators can be sought (Werner, 2007).

- (ii) *Motivators* on the other hand, are factors that may lead to job satisfaction (Werner, 2007). Examples of motivators are opportunities for promotion, recognition for work, achievement, responsibility and the chance for personal growth (Greenberg & Baron, 2000).

There is no single factor found to contribute to job satisfaction, but the job itself was found to provide the most powerful determiner of job satisfaction (Stranks, 2005). Greenberg and Baron (2000) postulate that the two-factor theory of Herzberg is one of the most influential theories of job satisfaction.

According to the two-factor theory, job satisfaction depends on how well the outcomes that individuals value, match their perceptions of the availability of such outcomes being realized (Greenberg & Baron, 2000). If employees do not have even the minimum levels of job satisfaction at the workplace, then poor work performance, high employee turnover and high absenteeism can be expected (McKenna, 2006).

In a study investigating job satisfaction of high school teachers in China, Weiqui (2007) found that teachers receive high social recognition for their work, but the hygiene factors such as teacher involvement aspects that govern their work environment and conditions, income and welfare, leadership and administration, income, and welfare which are all extrinsic to the work have a rewarding but not

stimulating effect on teachers. Furthermore, factors like work achievements and work pressure were not able to increase morale and retention (Weiqui, 2007).

Rahim (1986) is of the opinion that Herzberg's theory is based on the assumption that job enrichment increases job satisfaction, which in turn, increases motivation and energizes better job performance. On the other hand, the improvement in hygiene factors do not lead to an increase in the employee motivation and better performance. According to Rahim (1986), the theory has been criticized on the grounds of its failure to provide the evidence of existence of the two factors, the assumption that motivating factors increase motivation of all employees and its failure to specify how motivating factors can be measured for existing jobs.

Drenth et al. (1998) have also criticized Herzberg's theory in saying that people put reasons for satisfaction down themselves ("intrinsic reasons") and reasons for dissatisfaction is attributed to the environment ("extrinsic reasons"). The two-factor theory states that job satisfaction depends on how well the individual values that outcome and match their perceptions of the availability of such outcomes being realized (Greenberg & Baron, 2000).

Werner (2007) is nonetheless of the opinion that the two-factor theory has value as it could serve as an aid to guide leaders so that they are better able to remove the factors that may cause dissatisfaction at work and strengthen the factors that lead to job satisfaction.

2.3.4.1.3 McClelland's Learned Needs Theory

McClelland put forward a theory of motivation which stated that people are not born with a set of needs but rather the needs that they have are ones that they have learned about through their particular culture and in their society. According to McClelland's theory, the three needs that people have are:

(i) The need for achievement: The need for achievement stimulates individuals who enjoy challenging, attainable goals and take responsibility for the results they obtain (Werner, 2007) and prefer to set their own goals (Hitt et al., 2006).

Individuals with high achievement needs react to competitors with a standard of excellence so as to improve their chances of delivering better and more efficient performances than others may have done before. These individuals set moderate goals that are within their reach, they enjoy solving problems, they focus on the goal and not only on the reward available, they enjoy being given regular, valuable feedback and they are positive thinkers. People with a high need for achievement take responsibility for their work outcomes, they need short-term feedback and they do not easily delegate work to others (Hitt et al., 2006).

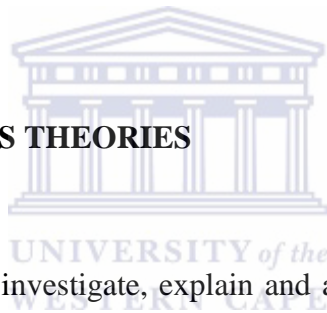
(ii) The need for affiliation: People with a strong need for affiliation seek to establish and maintain healthy relationships with other people based on mutual respect. Friendship is important to people with a high need for affiliation and they strive for harmony and cooperation in teamwork within the organisations they work for (Werner, 2007). It has also been found that the need for affiliation in

individuals stimulate them to behave in ways that ensure that they become and remain well-liked and sustain good relationships with others (Hitt et al., 2007).

(iii)The need for power: Individuals with a high need for power tries to exert influence over the behaviour of others. Often they attempt to use external rewards to excite and drive people to act in the way they prescribe (Werner, 2007).

Each need is different with its own distinctive behaviours and has also been described as interdependent as an individual could be high or low in any of the needs (Werner, 2007).

2.3.4.2 PROCESS THEORIES



Process theories seek to investigate, explain and analyse what arouse, direct and sustain the behaviour of individuals (Werner, 2007). They emphasize the cognitive processes when determining the level of motivation and need satisfaction individuals have. The process theories that will be explored are Vroom's Expectancy Theory, Adam's Equity Theory and Hackman and Oldham's Job Characteristics Model.

2.3.4.2.1 Vroom's Expectancy Theory

Vroom's theory stipulates that the tendency to behave in a particular way depends on the strength of the expectation that the behaviour will be followed by a specific outcome, that the outcome will be attractive to the employee and thus sustain a productive level of effort at work (Robbins & Judge, 2007).

Figure 2.8: Three relationships in Expectancy Theory



Source: Werner (2007, p. 90)

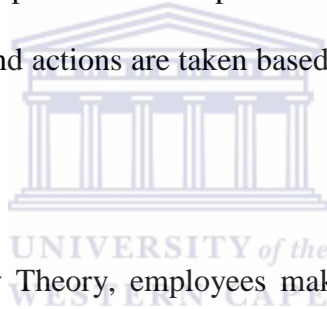
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According to Arnold et al. (2005), Vroom's theory is described as a need theory that focuses on the process of work motivation where Vroom intended to describe the way in which individuals choose an action from a list of possibilities, indicating a cognitive process wherein risks are calculated and appraised according to its *expected consequence* (ability to perform), its *instrumentality* (identifiable outcome) and its *valence* (value). Vroom's theory put forward that expectancy and instrumentality are based probabilities and that valence is a subjective value for example, employees who believe that they have the skills to do the work (*expectancy*), employees who believe that their hard work will be rewarded (*instrumentality*) and employees who view rewards as appealing and valuable (*valence*).

Vroom believed that expectancy, when combined with valence, activates and sustains human behaviour (Bergh & Theron, 2003). However, Werner (2007) suggests that leaders should understand how employees will perceive rewards and that each employee's set of expectancies are unique.

2.3.4.2.2 Adams' Equity Theory

Adam's Equity Theory promulgates that an individual's motivation originates from their assessment of the ratio of the outcomes or rewards they receive for their input at work, compared to the input and output ratio of other workers. Choices are then made and actions are taken based on the comparisons made (Hitt et al., 2006).



According to the Equity Theory, employees make social comparisons between themselves and others in terms of inputs (for example, effort, time, training received) and outputs (for example, pay, recognition). It states that employees accept conditions to be fair and equitable if the ratios of their inputs to outputs are equal to those of others (Werner, 2007). Where inequity is perceived, individuals may alter their referent or may exclude other benefits received by themselves or others in order to establish equity (Bergh & Theron, 2003).

In rewarding groups for successful performance, rewards should be divided equally so every group member receives the same reward. When individuals receive equitable rewards for their work it is a source of encouragement for them to continually improve their performance levels. Successful group performances

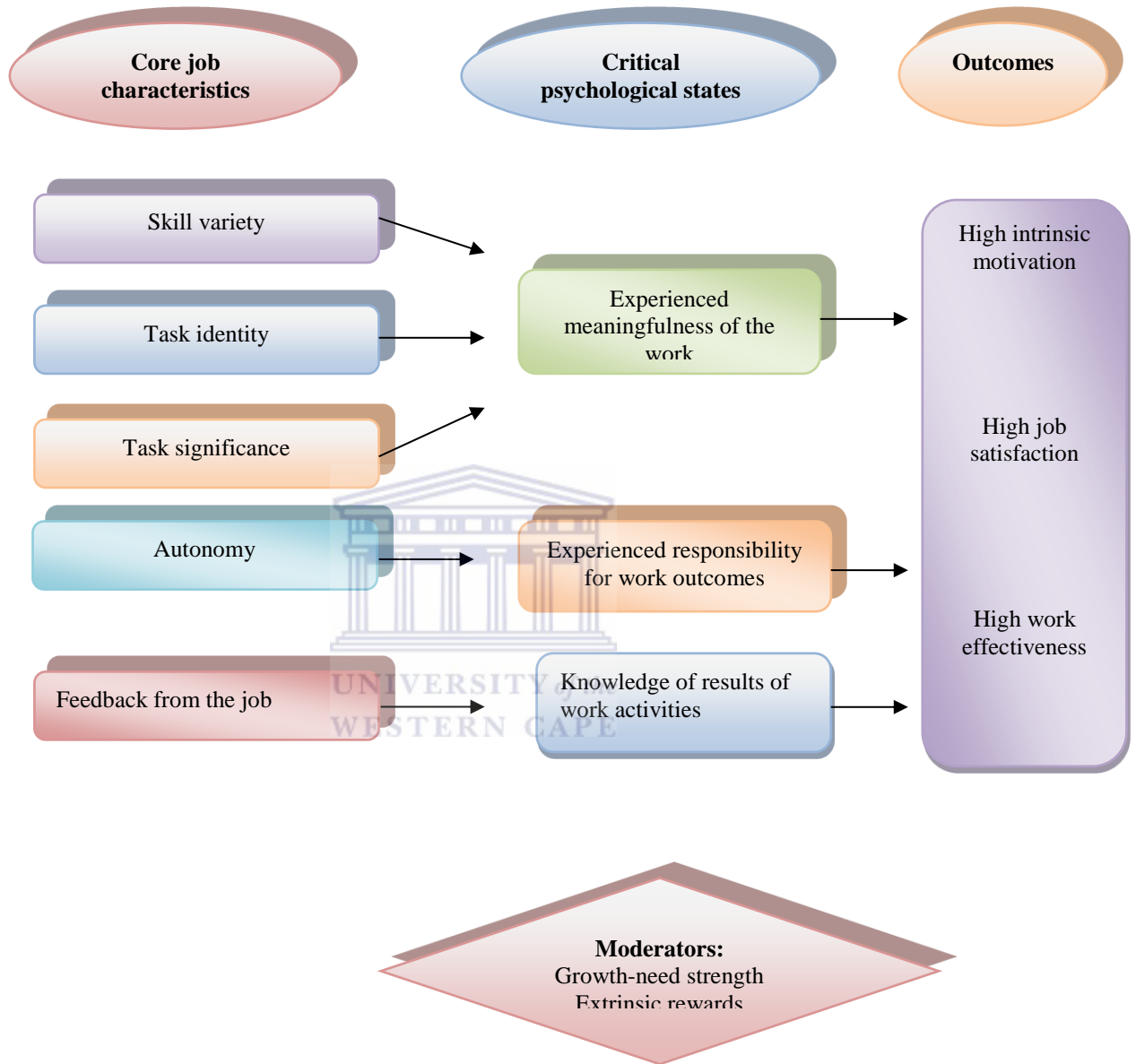
should recognise and reflect the variation in individual performance levels and reward this behaviour so that it becomes a source of motivation for individuals (Wagner & Hollenbeck, 2005).

2.3.4.2.3 Hackman and Oldham's Job Characteristics Model

Hackman, Oldham Janson and Purdy (1975 cited in McKenna, 2006) proposed that to increase the motivating potential of a job the tasks must be combined, natural work units must be formed, client relationships must be established, vertical loading must take place and feedback channels must be kept open (McKenna, 2006).



Figure 2.9 Hackman and Oldham’s Job Characteristics model



Source: McKenna (2006, p. 97)

Hackman and Oldham’s theory suggest that skill variety, task variety, task significance, autonomy and feedback affect three psychological states, namely: (i) feeling a sense of work meaningfulness, (ii) feeling a sense of responsibility for

the work to be done, and (iii) knowledge of results of their own performance. Skill variety, task identity and task significance have been found to influence the feeling of meaningfulness of the work, autonomy affects the sense of responsibility for the work and knowledge of results is affected by feedback given (Hitt et al., 2006). To increase the meaningfulness of work, task significance, identity and variety must be increased (McKenna, 2006).

To develop strategies that increase work motivation using techniques such as job enrichment, job enlargement and job rotation in conjunction with employee motivation schemes, strategists must study the tasks that individuals engage in so that they are able to identify and develop factors that may stimulate interest, challenge and responsibility for employees through participative management practices that strives to achieve group cohesion and effectiveness. Jobs can be enriched through giving employees more freedom to choose their own methods of work, it can be enlarged through increasing work tasks, it can be rotated by making changes to routines and increasing variation, and employee participation can be increased by involving employees as much as possible in decisions and challenges that relate to issues of discipline, their own welfare, health and safety, working hours, rest periods, methods of producing work, work planning and control, expansion and contraction (Stranks, 2005).

Feedback is detailed information about performance (Taylor et al., 2006). Feedback could be used to increase motivation as individuals with a high need for achievement need it; it helps in goal-setting, it influences perceptions of fairness as work performance is discussed and explanations for decisions are heard, and

individuals expectations and rewards can be clarified. Knowledge of results is necessary for individuals to adapt and refine their behavioural strategies (Arnold et al., 2005).

2.3.5 DETERMINANTS OF JOB SATISFACTION

The antecedents of job satisfaction are grouped according to personal determinants and organisational factors that contribute to job satisfaction. The personal determinants of job satisfaction are race, gender, educational level, tenure, age and marital status. Organisational determinants include the work itself, pay, supervision, opportunities for promotion, relationship with co-workers, job status and job level held. The personality of the individual and his or her tendency to experience negative emotions, perceptions of justice, the extent to which individuals have control over their work and the individual's cultural and ethnic differences may also affect job satisfaction within occupations (Spector, 2006).

2.3.5.1 ORGANISATIONAL DETERMINANTS OF JOB SATISFACTION

2.3.5.1.1 The Work Itself

The work itself can be a source of motivation if the leaders seek to (i) combine fractionalized work task into larger modules wherein employees are able to use a variety of skills, (ii) create natural work units that are designed to form an

identifiable and meaningful whole, (iii) expand jobs vertically by granting employees to monitor and control the quality of their work, and (iv) open feedback channels to inform employees about their performance. Formal appraisal procedures are legal processes that may be used to evaluate and develop employees and present to them a detailed plan to improve their future performance through training interventions and may, if necessary, serve as evidence to support employee performance levels (Robbins & De Cenzo, 2007).

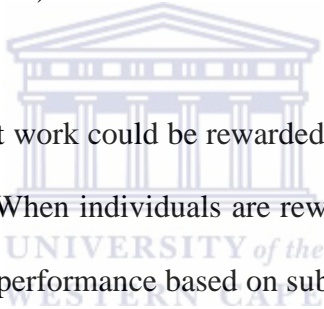
Teachers in the Thimpu district of Bhutan indicated a generally moderate to high level of satisfaction with job satisfaction factors such as educational policy, supervisors' capacity to lead and manage staff, interpersonal relationships between colleagues, working conditions, autonomy and the intrinsic rewards of the work. Moderate satisfaction was reported for income and low satisfaction with the demands of prescribed extra-curricular activities. It was found that teachers in the region suffer low self-esteem and low levels of respect in their community. The reasons put forth for the generally moderate to high levels of satisfaction were that (i) teachers really enjoyed the work, (ii) education policy on the training of school supervisors and principals and the leaders were based on merit and performance standards, (iii) teachers were granted the opportunity of using their skills and knowledge creatively to enhance their work, and that (iv) there has been sufficient investment by government in school resources, equipment, buildings and learning materials (Drukpa, 2010).

Task complexity has been found to increased job satisfaction if the work is found to be mentally challenging and when goals are attainable and realistic (Wagner &

Hollenbeck, 2005). Complex tasks are ones that need complex decision-making for employees to complete them successfully and lead to employee satisfaction when achieved (Hellriegel & Slocum, 2004).

2.3.5.1.2 Pay

Pay is determined by the kind of work that is performed by employees and the various skills, knowledge and abilities they bring to the organisation. The more responsibility an employee has, the higher the pay they receive should be (Robbins & De Cenzo, 2007).



Individual performance at work could be rewarded for their performance based on merit, or on incentives. When individuals are rewarded on merit, programmes are used to assess individual performance based on subjective supervisor ratings and a fixed financial reward is allocated to wage increases. When individuals are rewarded by incentivised plans then the organisation calculates individual rewards based on individual performance (Wagner & Hollenbeck, 2005).

Skill-based pay rewards employees for the skills and competencies they bring to the organisation, *profit-sharing* plans grant employees a portion of the organisation's operating profit and *gain-sharing* rewards employees for productivity gains (Hellriegel & Slocum, 2004).

2.3.5.1.3 Benefits

A benefit has been defined as an in-kind reward that is granted by employers to employees for their membership of and participation in the activities of the organisation. Secure and affordable health-care insurance plans, paid sick leave, assured pension and retirement benefits are some of the valued in-kind rewards that employees could expect to receive from organisation's they work for (Jackson & Schuler, 2003).

Employee benefits are non-financial rewards that are designed to enrich employees' lives. These varied benefits are provided by organisations employees work for, and seek to provide an offering that all employees would like to receive. Unemployment compensation, medical insurance, paid time off from work, life and disability insurance, retirement policies and financial policies are also examples of employee benefits. Supervisors should attempt, where possible, to link rewards directly to performance and increase the visibility of rewards, for example, through publicizing performance bonuses to motivate all employees (Robbins & De Cenzo, 2007).

Flexible benefit plans allow employees to choose the benefits they would like to have from a list of offers made by the employer. This gives employees the opportunity to consider their own financial position and personal needs (Hellriegel & Slocum, 2004).

2.3.5.1.4 Supervision

Supervisors facilitate the effective socialization procedures of new employees whereby knowledge and skills needed by employees are acquired and their roles and functions within the organisation are made known to them (Waner & Hollenbeck (2005).

It is a challenge for supervisors to ensure that employees are well-matched to the tasks that they are assigned to. Supervisors must communicate to employees what is expected of them in their particular role. Job redesign could be used by supervisors to reduce role overload, and techniques to increase employee participation in decision-making processes could serve to personalize work assignments in recognition of individual differences. Work performance may be enhanced by the personalization of work and the rewards linked to it. Furthermore, supervisors should set work goals that are tangible, measurable, and verifiable, and give performance feedback to employees (Robbins & De Cenzo, 2007).

2.3.5.1.5 Autonomy and Empowerment

Autonomy refers to the degree to which an individual is able to freely choose scheduling and goals that pertain to work that is to be completed. Autonomy is important for individuals who value independence and enjoy being free of rules and restrictions on the way in which they conduct their work activities, dress code, work hours and so on (Arnold et al., 2005).

Pearson and Moomaw (2005) found that as teachers were granted autonomy in curriculum delivery, feelings of empowerment and professionalism job satisfaction increased. They also found that (i) as job satisfaction, perceived empowerment and professionalism increased, occupational stress decreased, and (ii) respondents associated greater job satisfaction with a high degree of professionalism and empowerment. A very strong relationship was also found between perceived empowerment and professionalism which may mean that teachers who perceived themselves as empowered perceived that their occupation was an authentic one. Other findings reported were that general teaching autonomy was needed for teachers to have control over their work environment and to be able to have authority to address matters that concern them and school-life as well as have decision-making power over the development of policies that affect their work. This has been put forward as important criteria to enhance teacher's commitment to the profession.

2.3.5.1.6 Promotion

An individual's career development are a sum of all the activities in which they engage that enable them to make decisions about the scope of their occupation and how they are able to attain career goals (Hellriegel & Slocum, 2005).

Career planning and development programmes encourage employees to identify potential career advancement opportunities available for them. Informing employees about opportunities for promotion ensures that interested individuals are considered for new positions and is a source of motivation that indicates that

good work performance is rewarded in the organisation. Promotion opportunities serve to increase employees' self-worth. Encouraging employee career development has short-term and long-term benefits such as productivity, employee retention and job satisfaction (Cummings & Worley, 2009).

2.3.5.1.7 Co-workers

When people are arranged into teams or groups it has the common objective of working together to reach a specific goal. Members should collaborate and coordinate interdependent activities so that they are able to reach common goals or objectives. When job autonomy, skill variety and good feedback mechanisms are in place groups are better able to have a positive impact (Stranks, 2005).

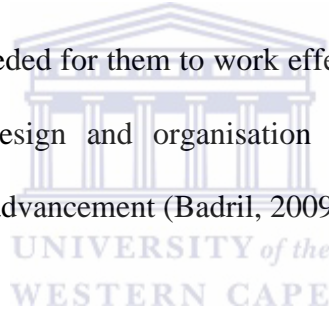
Working in a group also satisfies the human need to belong as it gives individuals the chance to form close, powerful, fundamental relationships with others. Relational bonds in addition maintain group cohesion and enhance job satisfaction and productivity (Harns, 1979 cited in Lawson & Shen, 1998). Findings of a study conducted by Weiqi (2007) found that satisfaction with good co-worker relationships were reported even in circumstances of low incomes earned and high workloads.

It has been found that specific, clear goals have a strong, motivating effect on group performance (Wagner & Hollenbeck, 2005). Work groups enhance socialization processes when more experienced members demonstrate to new members what the organisation expects of them (Wagner & Hollenbeck, 2005).

2.3.5.1.8 Working Conditions

Favourable working conditions may raise levels of motivation if it encourages employees to remain in the organisation and allows individuals to deliver the tasks for which they were employed. Favourable working conditions could stimulate employee creativity and innovation. On the other hand, unfavourable working conditions lower work motivation (Hellrigel & Slocum, 2004).

It has been found that working conditions in teaching have been poorly addressed as teachers are isolated in classrooms behind closed doors, they have poor access to the basic materials needed for them to work effectively, they lack opportunities to participate in the design and organisation of the school and they lack opportunities for career advancement (Badril, 2009).



The importance of school design has been found to foster positive outcomes in the work environment of teachers. The challenges for school leaders include the provision of suitable school buildings, resources and facilities as working conditions have been found to contribute to job satisfaction (Darmody & Smythe, 2011).

2.3.5.2 PERSONAL DETERMINANTS OF JOB SATISFACTION

There are various demographic variables that impact job satisfaction. However, only gender and tenure will be discussed as these are what are being investigated in the current study.

2.3.5.2.1 Gender

A study that assessed the differences and relationship between the level of teachers' job satisfaction, motivation and teachers performance in Nigeria found significant differences between respondents' job satisfaction levels based on their gender. The findings showed that female teachers reported higher job satisfaction ($f = 13.26, p < .000$) than their male counterparts.

On the other hand, findings of an investigation of high school teachers' job satisfaction in Tawau showed a significant relationship between job satisfaction and gender. Male teachers reported higher job satisfaction than female teachers (Abdullah et al., 2009). Similarly, Bishay (1996) found that female teachers reported low satisfaction scores across all job satisfaction categories such as income, work itself, autonomy, and benefits. Bishay (1996) purport that female teachers reported that they were unhappy with certain aspects of the work such as marking and administration. Female teachers are more likely to experience the dual pressures of home and work in their lives.

Drukpa (2010) investigated job satisfaction based on certain demographic characteristics of secondary school teachers in the Thimpu district of Bhutan revealed and found that gender accounted for a significant difference in job satisfaction of the teachers in the region. Male teachers reported higher job satisfaction than female teachers despite there being 177 female teachers and only 99 male teachers in the sample. Drukpa surmised that a possible reason for this could be that they have become more ambitious.

In a study conducted in Sabah significant differences were found between overall job satisfaction and gender. Male teachers reported significantly higher job satisfaction than female teachers (Abdullah, Uli & Salahudin, 2008).

2.3.5.2.2 Tenure

A significant difference was found between tenure and job satisfaction in the Tawau region of Sabah. Longer serving teachers reported higher job satisfaction than teachers with shorter periods of service. Teachers with 21 or more years of experience reported higher job satisfaction. It has been surmised that teachers with longer years of service are the ones who have remained behind in the field and who are satisfied with the work (Abdullah, Uli & Salahudin, 2008). Similarly, the results of a study conducted by Bishay (1996) indicated that job satisfaction increased with years of experience.

George, Louw and Badenhorst (2008) conducted an exploratory study on the role of extrinsic and intrinsic factors determining job satisfaction amongst a sample of 337 high school teachers from 17 randomly selected government schools in Windhoek, Namibia. The Minnesota Satisfaction Questionnaire (MSQ) mean subscale scores for teachers with different years of experience showed no significant difference in job satisfaction.

2.3.6 CONCLUDING REMARKS ON JOB SATISFACTION

It has been established that employees consider fringe benefits, salaries and challenging tasks as rewards from employers. The ability to perform competently will not necessarily lead to high levels of performance if the individual is not motivated (Hellriegel & Slocum, 2004).

Researchers have focused on environmental and personal factors as independent influences on job satisfaction and found that they are moderators of the relationship between the job variables and job satisfaction. *Growth-need-strength* is a characteristic that refers to a person's desire for the satisfaction of higher order needs like autonomy and achievement and meta-analysis have shown that this characteristic also moderates the relationship between job characteristics and job satisfaction (Spector, 2006).

2.4 CONCLUSION

The consequences of job satisfaction for the organisation are good job performance, low employee turnover and low absenteeism (McKenna, 2006).

The consequences of job dissatisfaction are employee withdrawal, which manifests itself in chronic absenteeism and voluntary turnover as well as poor work performance (Greenberg & Baron, 2000).

The link between low job satisfaction and that of the outcomes of stress are that individuals experience threats to mental and physical health, physiological strain,

high job-related tension, intentions to leave the work, low self-confidence, life dissatisfaction, low motivation to work and depression (Arnold et al., 1998).

Greenhaus et al. (2000) found that there is a relationship between occupational stress and job satisfaction. According to the researchers, the organisational characteristics, job demands, role characteristics of the individual, interpersonal relationships at work, working conditions, the career transitions that occur, and the work and non-work pressure contribute to the perceived stress of the individual. They concluded that when stress is perceived by the individual, the effects are physical, emotional and behavioural and the outcomes are measurable in the individual's work outcomes, level of job involvement, level of absenteeism, turnover, work effectiveness and level of job satisfaction but that the moderating variables are the personal characteristics of the individual, the way that the individual appraises the stressor in the environment and the way that the individual copes with the stressor as well as the kind of organisational support given.

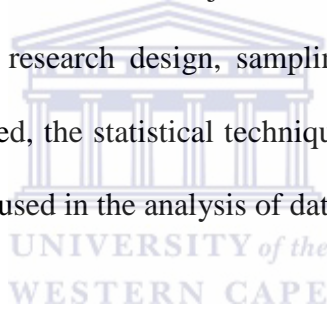
The next chapter will focus on the research methodology to be followed to collect data from within the selected sample.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter provides a framework of the research design used to investigate the research questions. A detailed exploration is presented with regard to the selection of the sample and psychometric properties of the measuring instruments used to collect occupational stress and job satisfaction data. The chapter will provide insight into the research design, sampling method employed, the data gathering instruments used, the statistical techniques applied and it will delineate the statistical techniques used in the analysis of data.



3.2 RESEARCH DESIGN

For the purpose of this study a quantitative, non-probability convenience sampling design and a scientific approach was followed to collect data from the selected sample. Data was used to measure occupational stress and job satisfaction of high school teachers in the North Metropole district in the Western Cape.

Self-report methods were applied as questionnaires were used to collect data and quantitative methods were used to interpret results (Rosnow & Rosenthal, 2002). Primary data was gathered about occupational stress and job satisfaction of high school teachers using the Occupational Stress Scale (OSS) and Job Satisfaction

Survey (JSS) questionnaires. Questionnaires are a form of self-report whereby individuals report their behaviour, thoughts and emotions (Arnold et al., 2005) and is a form of non-experimental research design (Landy & Conte, 2007).

3.2.1 The research method

The convenience sampling method was chosen and considered as an appropriate way to gather the data as the available respondents were easily accessible once requested to participate. The method was also found to be less time consuming and as expensive as other methods (Howitt & Cramer, 2011).

Convenience sampling is less complicated than other methods and was the most economical way to gather data from a sample. However, it has been found that this method is not as representative of the population and thus the results are not generalizable to all groups, thus compromising the external validity of studies employing this way of data collection (Leedy, 1993).

3.2.2 The advantages of questionnaires

The advantages of using this method is it can be used to collect data from members of a sample who are near, available and ready to partake in research (Welman & Kruger, 2001).

Questionnaires were used to collect data as it is a quick and efficient way to collect information from a large number of individuals and a large number of

variables (Howitt & Cramer, 2000). It is less costly than approaching and interviewing individuals and it protected the anonymity of respondents more than other methods (Dessler, 2000; Howitt & Cramer, 2000). In addition, data is usually easily processed for statistical analysis.

3.2.3 Disadvantages of questionnaires

The disadvantages of using this form of measurement instrument however, is that it is susceptible to measurement reactivity, inaccurate reporting, withholding of co-operation and deliberate deception through false reporting (Welman et al., 2005).

Another disadvantage of using a survey was that it did not allow data to be exposed to manipulation so it becomes difficult to determine cause and effect. Using questionnaires provide little chance for the researcher to engage and probe further into the experiences of respondents (Arnold et al., 2005).

3.2.4 Population

A population is the total collection of all units of analysis about which the researcher wants to draw conclusions about. Goddard and Melville (2001) define a population as the subject of research.

The high schools in the Western Cape are not all managed by the same administrative centre. High schools across the province are divided into education

districts of which the schools in the North Metropole district form part of the Western Cape Education District. The population for this study included teachers at high schools situated in the North Metropolitan district in the Western Cape. The total population of teachers in the district in the North Metropole district included permanent, contract and intern teachers. There are 9 high schools in the North Metropole district of which only 7 schools were willing to participate in the study. The total population of teaching staff at the school in the district was 194.

A unit of analysis in behavioural science could typically be individuals, groups, institutions, products or events (Welman et al., 2005). In this study the subject of interest are teachers at the selected high schools in the North Metropole in the Western Cape.



3.2.5 Sample

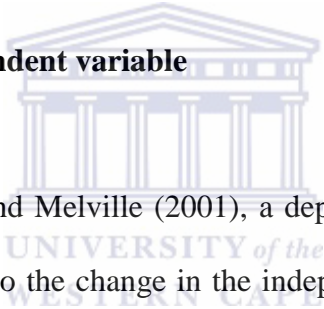
According to Goddard and Melville (2001), the sample size being used should be large enough to be representative of the entire population. A representative sample is one that has the exact properties in the exact same proportions as the population from which it was drawn but in smaller numbers, and that it has the likeness of the population (Welman et al., 2005).

A specified geographic area within the demarcated North Metropole school district was selected so that schools within the identifiable boundary of that locality could be approached to participate in the study.

The sample (N=118) comprised of contract and permanent qualified teachers, who were currently employed at the selected high schools in the Western Cape. The sample staff was from intermediary and senior teaching phases. According to Sekaran (2003), a response rate of 30% is considered acceptable for research purposes.

One hundred and twenty nine questionnaires were handed out to teachers who were willing to participate. One hundred and eighteen questionnaires were completed and returned yielding a 92% response rate.

3.2.5.1 The dependent variable



According to Goddard and Melville (2001), a dependent variable is the one that will change in response to the change in the independent variable. A variable is an attribute or characteristic in people that vary, and the category of dependant variables are those that are being assessed in response to the independent variable (Spector, 2006). Bless and Higson-Smith (2000) clarify that a variable is the property that can take on two or more values and that if it can only take on one value, it is called a constant.

In this study, job satisfaction was the dependent variable which was of primary interest in the study to be conducted amongst teachers at high schools in the North Metropole Education district of the Western Cape Education Department. The research was conducted to investigate whether there is a statistically significant

causal relationship between levels of job satisfaction and levels of occupational stress experienced amongst teachers at high schools in the district.

3.2.5.2 The independent variable

According to Goddard and Melville (2001), the independent variable is the variable that is being manipulated.

In the current study, occupational stress was investigated as the independent variable as it is the variable which is different for all teachers and as it was expected to affect the level of job satisfaction (the dependent variable) experienced by teachers. The aim of the investigation was to measure the level of occupational stress experienced amongst teachers at high schools in the Western Cape and to determine whether a statistically significant causal relationship between levels of occupational stress and levels of job satisfaction (the dependent variable) was experienced by them.

3.2.6 Sampling procedure

The Western Cape Education Department was approached to obtain permission to engage with the school principals of the high schools in the North Metropole district.

Once permission was granted the researcher liased directly with the respective school principals in the district. The reason for the study, its aims and purpose

was explained to the principals in a meeting scheduled by the school secretary. Access to the teachers in order for them to participate in the survey was requested (and also included in a letter to the principal).

A two-pronged process was followed to collect the data. For some of the schools, questionnaires with envelopes were delivered to the school secretaries who were asked to disseminate the questionnaires on behalf of the researcher. A cover letter was attached to the questionnaires. Upon completion, respondents were informed to return their questionnaires in a sealed envelope, to the school secretary.

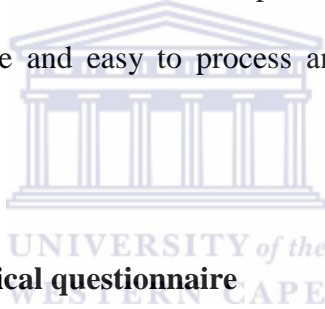
Where possible the researcher scheduled a meeting with staff. A brief overview of the purpose of the study was presented to the staff before they were asked to complete the questionnaires. Teachers were asked to place the completed questionnaires in the envelopes to ensure confidentiality of information. The envelopes were collected immediately after completion.

All the respondents who partook in the research were also assured that their responses will be anonymous as no identifying information was requested.

3.3 NATURE AND COMPOSITION OF RESEARCH QUESTIONNAIRES

3.3.1 Data gathering instruments

The data collection instruments used included a biographical questionnaire and two self-administered questionnaires, namely the Occupational Stress Scale and the Job Satisfaction Survey. Questionnaires were used as it allows a researcher to gather the information. Questionnaires protect the anonymity of respondents, it reduces the influence of the researcher on responses and they are usually designed to be simple to complete and easy to process and analyse (Howitt & Cramer, 2000).



3.3.2 Biographical questionnaire

The biographical questionnaire was self-developed and was designed to collect the demographic information relating to the teachers' age, race, gender, language, level of education, teaching post held and tenure. This information will be used to describe the characteristics of the sample participating in the current study.

3.3.3 Occupational Stress Scale

3.3.3.1 Nature and composition

Items that contribute to job stress and were measured in the Occupational Stress Scale questionnaire were responsibility pressure, quality concerns, role conflict, job versus non-job conflict and the workload involved in the work (Kanner, Kafry & Pines, 1978).

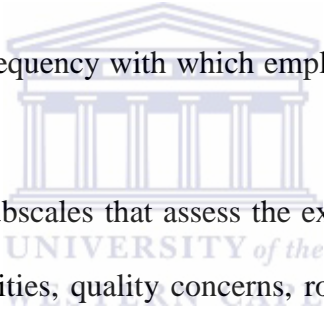
According to Warr (2002), job-stress can be measured in three ways, firstly, by the individual self-reporting psychological strain like exhaustion, depersonalization, and reduced personal accomplishment, secondly, by assessing the physiological well-being of the individual in terms of blood pressure, cortisol levels, biochemical reactions, gastrointestinal symptoms, serum cholesterol, urinary catecholamines and cardiovascular symptoms and thirdly, by observing individual reactions to work-related stressors.

The response format will be the Likert Scale, also called the summated scale, which can be used to measure multidimensional attitudes, for example, the five-point scale, ranging from strongly differ, differ, undecided, agree, and strongly agree (Welman, Kruger & Mitchell, 2005). A scale refers to the set of scores that might be reported on a test (Murphy & Davidshofer, 2005).

The Likert scale is an interval measurement which Welman et al. (2005) define as an interval measurement which uses the property of equal differences between

consecutively higher numbers. The characteristics of the Likert-Scale are that the attitude of the respondent is being measured in forms of extremes in both direction namely either 'very good' or 'very bad' or to 'agree' or to 'disagree'. A scale of 1 – 6 reduces the effects of central tendency, where respondents select the central option of 3, when unsure (Welman et al., 2005).

To measure occupational stress, the Occupational Stress Scale was administered. House, McMichael, Wells, Kaplan and Landerman (1979) provide specific characteristics of the test namely, that:

- 
- it measures the frequency with which employees are bothered by stressful occurrences;
 - it contains five subscales that assess the extent of occupational stress due to job responsibilities, quality concerns, role conflict, job versus non-job conflict, and workload;
 - reliability data are coefficient alpha values ranging from 0.59 to 0.76 for responsibility pressure, and from 0.56 to 0.76 for job versus non-job conflict;
 - the co-efficient alpha for quality concerns was 0.72;
 - the co-efficient alpha was 0.70 for role conflict and 0.73 for workload stress;
 - the five stress dimensions (responsibility pressure, role conflict, work load, quality concerns, and job versus non-job conflict) interrelated positively;
 - all five dimensions correlated negatively with job satisfaction and extrinsic rewards;

- all five dimensions correlated positively with employee Type A personality and
- work-load, quality concerns and job versus non-job conflict correlated negatively with intrinsic job rewards.

The Occupational Stress Scale measures task variety, complexity, autonomy, significance, success, feedback, self-expression, self-actualization, policy influence and tangible rewards.

3.3.3.2 Reliability of the Occupational Stress Scale

Reliability of a measuring instrument refers to its consistency, stability and dependability in repeating and confirming a result (Landy & Conte, 2007; Rosnow & Rosenthal, 2002). Goddard and Melville (2001) define reliability as measurements made that are consistent.

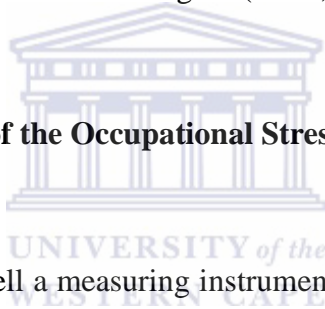
The Cronbach Alpha was used to calculate reliability of the responses of the participants. The reliability of the responses on the Occupational Stress Scale was calculated at 0.903. These numbers are close to 1, indicating a very high level of reliability.

Welman et al. (2005) explain that reliability refers to the extent to which the obtained scores may be generalized to different measuring opportunities, measurement forms, and measurement administrators and repeating research for the aim of establishing reliability is termed replication. Reliability measures and

indicate the consistency or stability of a measurement tool (Landy & Conte, 2007).

Holder and Vaux (1999), state that in the Occupational Stress Scale occupational stress was correlated negatively with social support at work, internal locus of control and job satisfaction, and stress correlated positively with role ambiguity, role conflict and personal discrimination. The OSS showed satisfactory internal consistency and reliability with Cronbach's alpha coefficient greater than 0.90 for the total scale and ranging from 0.72 to 0.91 for the nine subscales, all meeting the criterion of an alpha value of 0.70 or higher (Chen, Wong & Yu, 2001).

3.3.3.3 Validity of the Occupational Stress Scale



Validity refers to how well a measuring instrument measures what it proclaims to measure (Landy & Conte, 2007; Rosnow & Rosenthal, 2002). Validity refers to the degree of accuracy of the inferences made based on data obtained from the questionnaire (Landy & Conte, 2007).

Goddard and Melville (2001) define validity as how correctly the data is being measured. This means that the instrument should measure what it is intended to measure and not something else. Murphy and Davidshofer (2005) define the validity of a measurement as when it adequately measures what it aims to measure. "The validity of a measurement can be investigated by comparing the rating results with the results obtained by other measuring instruments for the same construct" (Welman et al., 2005, p.173).

Van Zyl and van der Walt (1994) state that a questionnaire has construct validity when it measures a specific theoretical construct or trait and nothing else. The Occupational Stress Scale showed satisfactory internal consistency and reliability. The instrument was found to have good construct validity in accordance with occupational stress theory and could be used to detect different sources of stress amongst groups of workers with different job titles. In a group of off-shore oil installation workers an association was established between the score of the instrument and the mental health of the workers (Chen, Wong & Yu, 2001).

3.3.4 Job Satisfaction Survey

3.3.4.1 Nature and composition



The Job Satisfaction Survey measures employee satisfaction with the pay, promotion opportunities, supervision, benefits, rewards, operating procedures, co-workers, work itself and communication (Spector, 1997). Spector (cited in Watson, Thompson & Meade, 2007) states that organisations often use job satisfaction data to diagnose problem areas and gauge the effectiveness of interventions.

There are two approaches that could be used when measuring job satisfaction namely, a global rating which would be gathered by asking individuals to respond to one question about their general satisfaction with their work and the alternative is the summation-of-job-factors which would look at individual facets of the work separately namely, questions about the nature of the work, supervision, present

pay, promotion opportunities, and relations with co-workers (Robbins & Judge, 2007). Using summation-of-job-factors is a better guide for managers to become aware of where problems may exist.

The Job Satisfaction Survey has been described as a suitable instrument with which to measure job satisfaction for human service, public and non-profit sector organisations. When Job Satisfaction scores were correlated with criteria of employee perceptions and behaviours for multiple samples they were found to be consistent with findings from the private sector (Spector, 1985). The Job Satisfaction Survey uses 36 items that describe 9 job facets which include pay, promotion, supervision, benefits, contingent rewards, operating procedures, co-workers, nature of the work, and communication (Blau, 1999).

The results of a study by Weiqi (2007) found that teacher job satisfaction is constructed of ten components and that this is consistent with the model put forward by Lock et al. (1976) and that teachers at secondary schools are dissatisfied with their jobs as a whole and with the dimensions of the job such as the educational system, student quality, leadership and administration, work achievements, working conditions, salaries and welfare and work stress and that overall teacher job satisfaction and satisfaction with the educational system, income and welfare, leadership and administration, status, and the work environment and conditions are closely related to work involvement and teacher retention.

3.3.4.2 Structure and composition

Factors considered to contribute to job satisfaction and measured in this study by means of the questionnaire Job Satisfaction Survey were pay satisfaction, promotion satisfaction, supervision satisfaction, benefits satisfaction, rewards satisfaction, operating procedure satisfaction, co-worker satisfaction, work itself satisfaction and communication satisfaction (Spector, 1997).

The specifications of the Job Satisfaction Survey developed in 1985 has the following features namely (i) 36 items used to describe nine job facets (four items per facet), (ii) job facets which include pay, promotion, supervision, benefits, contingent rewards, operating procedures, co-workers, nature of work, and communication, (iii) utility to assess job satisfaction in human service, nonprofit and public organisations, (iv) nine facets which inter-correlated positively (Spector, 1997).

Each subscale of the 9 job facets assessed by the Job Satisfaction Survey consists of 4 items. All 36 items are summated to compute an overall satisfaction score. It has been found that Spector's Job Satisfaction Survey assesses the three most frequently measured job dimensions of promotion, supervision and the nature of the work very well may be used in research among teachers (Astraukaite, Vaitkevicius & Perminas, 2010).

3.3.4.3 Reliability of the Job Satisfaction Survey

Spector (1997 cited in Astrauskaite et al., 2010) presented the following test-retest reliability data for the Job Satisfaction Survey, namely the pay 0.45, promotion 0.62, supervision 0.55, fringe benefits 0.37, contingent rewards 0.59, operating conditions 0.74, co-workers 0.64, nature of work 0.54, communication 0.65.

The reliability of the Job Satisfaction Survey was 0.884. This number is close to 1, indicating a very high level of reliability of the data.

3.3.4.4 Validity of the Job Satisfaction Survey

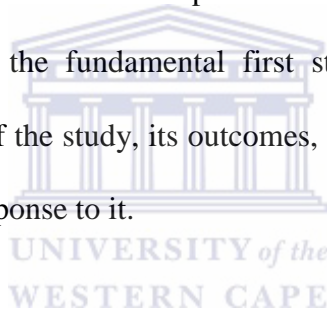
Spector (1997 cited in Astrauskaite et al., 2010) presented the following coefficient alpha data for the Job Satisfaction Survey, namely the pay 0.75, promotion 0.73, supervision 0.82, fringe benefits 0.73, contingent rewards 0.76, operating conditions 0.62, co-workers 0.60, nature of work 0.78 and communication 0.71.

An average of 0.70 for internal consistency was obtained out of a sample of 3067 individuals and an internal consistency of 0.37 – 0.74 was obtained when a smaller sample of 43 employees were used. The validity of the Job Satisfaction Survey on a single employee was obtained when using various scales for job satisfaction (Spector 1985).

Blau (1999) found that the Job Satisfaction Survey had a coefficient alpha of 0.89. In a longitudinal study, job satisfaction correlated positively with expected job utility and professional commitment in the preceding study, and the extent of downsizing, shift assignment and professional commitment in the year the study was conducted in.

3.3.4.5 Rationale for inclusion of selected measuring instruments

The importance of selecting the correct measure or questionnaire when doing organisational research is of critical importance. Researching the reliability and validity of measures is the fundamental first step, which will determine the success of the findings of the study, its outcomes, its feedback and the resolutions made, or not made in response to it.



The Occupational Stress Survey and the Job Satisfaction Survey were selected to be included in the research package as both measures have high reliability and validity data of the constructs which they measure. Both instruments have been standardized for South African conditions and do not need a high level of reading ability to complete.

The rationale for the use of the Occupational Stress Scale is that it measures the frequency with which employees are perturbed by stressful occurrences using five sub-scales that assess the extent of occupational stress that arise from occupational responsibilities, quality concerns, role conflict, job versus non-job conflict, and workload (Holder & Vaux, 1999).

3.4 DATA ANALYSIS TECHNIQUES

3.4.1 DESCRIPTIVE STATISTICS

Quantitative empirical methods were used to analyse and interpret the data statistically. The data collected was processed with the Statistical Package for Social Science (SPSS) software. Data is the unprocessed feedback that is collected by way of questionnaires, interviews, observations, or secondary databases and by arranging data in a specific way, analyzing the data and making sense of the results, the answers to the questions posed at the formulation of the hypotheses, are obtained (Sekaran, 2003).

By using descriptive statistics data could be presented in a structured, accurate and summarized way (Huysamen, 1990). The descriptive data employed in the presentation of the data collected in the survey includes descriptive statistics which look at the frequencies (how frequently certain phenomena occurs), percentages, the mean (average) score of a set of data collected, the extent of the variability in the set namely the central tendencies and the dispersions of the dependent and the independent variables (Sekaran, 2003).

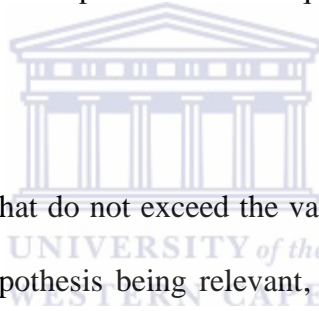
3.4.2 INFERENCE STATISTICS

Inferential statistical methods are used to test hypotheses and investigate relationships between variables. Inferential statistics enables inferences to be made from data through analysis (Landy & Conte, 2007).

The data analysis techniques employed to test the hypotheses were the Pearson Product Moment Coefficient, T-Test and Analysis of Variance (ANOVA).

3.4.2.1 The Pearson Product Moment Correlation Coefficient

The Pearson Product Moment Correlation matrix is used to indicate the nature, direction and the significance of the bi-variate relationships of the variables used in the study, and is derived when an assessment of the variation in one variable is linked to the variation in another variable (Sekaran, 2003). It is used to indicate the strength of the relationship between two quantitative variables (Howitt & Cramer, 2011).



Correlation coefficients that do not exceed the value of +1, where a value of 0 is indicative of the null hypothesis being relevant, would indicate that there is no relationship between the two variables being studied.

The Pearson Product Moment Correlation Coefficient was used to test if there was a statistically significant relationship between occupational stress and job satisfaction amongst high school teachers in the North Metropolitan district in the Western Cape.

3.4.2.2 Analysis of Variance (ANOVA)

Analysis of Variance investigates whether the variance of a particular effect differs from the variance expected by chance (Howitt & Cramer, 2011). The

ANOVA provides statistical estimates of the variability in test scores associated with systematic differences in the rating assigned and differences in the ratings obtained, and generalization of ANOVA scores can be achieved over time (Murphy & Davidshofer, 2001). Hinkle, Wiersma and Jurs (1982) state that the hypothesis in the ANOVA is that the mean performance in the population is the same across all groups.

For the current study ANOVA was used to determine if statistical significant differences exist between tenure and occupational stress and between tenure and job satisfaction.

ANOVA allows researchers to categorise data into ranges or groups of scores. Using ranges is particularly useful as it involves a non-linear relationship between the subject variable and the dependent variable (Howitt & Cramer, 2011).

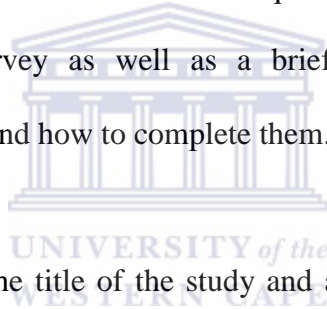
3.4.2.3 T-Test

A T-Test is used to determine the significance of an effect with regards to whether the mean score of two groups differ. The t-test measures the difference in the means between two groups by splitting the nominal variable into two subgroups (for example, male and female, or between departments) and the data is tested to see if there is a significant mean difference between the two split groups on a dependent variable measure on an interval or ratio scale (Sekaran, 2003).

The T-Test was used to compare the difference in the means between two groups namely, between gender and occupational stress and between gender and job satisfaction amongst high school teachers in the North Metropole district in the Western Cape.

3.5 ETHICAL ISSUES

Ethical values were upheld during the research process. Participation was voluntary and respondents were not physically or mentally harmed. All participants received a cover letter with the questionnaire. The letter explained the purpose of the survey as well as a brief explanation as to what the questionnaires measure and how to complete them.

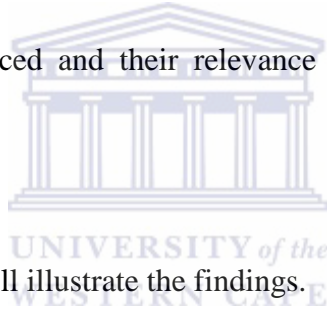


The cover letter stated the title of the study and also mentioned that permission had been granted by the Western Cape Government Research Directorate's office for the commencement of data collection from teachers at high schools in the district.

Participation in the study was voluntary as teachers were invited to complete questionnaires but exercised their autonomy in decision-making. Informed consent was also obtained before questionnaires were issued to the respondents. Confidentiality and anonymity of participants were protected as they were not asked to put their names on their completed questionnaires.

3.6 CONCLUSION

The chapter provided an overview of the research design used in this research study. A description of the sample's characteristics as well as the procedure that was followed in the execution of the research question was presented together with the descriptions of the research instruments used. The advantages and disadvantages of the selected research instruments were highlighted and its reliability and validity discussed. Statistical analyses employed involved both descriptive and inferential techniques. The techniques employed were the ANOVA, T-Test and the Pearson Product Moment Correlation Coefficient. The techniques were introduced and their relevance in testing the hypotheses was explained.



The following chapter will illustrate the findings.

CHAPTER 4

RESULTS AND DISCUSSION OF RESULTS

4.1 INTRODUCTION

The current chapter concludes the research investigation by outlining the results obtained in the study and providing a detailed discussion of these results. The descriptive statistics computed for the study are presented first 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 satisfaction and occupational stress, are presented with the aid of inferential statistical procedures. The information provided and discussed in the previous chapters will serve as a background against which the contents of this chapter will be presented and interpreted.

4.2 DESCRIPTIVE STATISTICS

The descriptive statistics calculated for the sample are provided in the sections that follow. That is, the data pertaining to the variables included in the study, as collected by the three measuring instruments employed, are summarised by means of a 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.

4.2.1 RESULTS OF THE BIOGRAPHICAL QUESTIONNAIRE

This section outlines the descriptive statistics calculated on the basis of the variables included in the biographical questionnaire. The demographic variables that received attention are:

- Occupational Class
- Gender
- Tenure
- Marital Status
- Race
- Educational Level
- Age
- Job Status
- Number of learners per class and
- Teaching phase



Descriptive statistics in the form of frequencies and percentages are subsequently presented graphically for each of the above-mentioned variables.

4.2.1.1 Occupational class of respondents

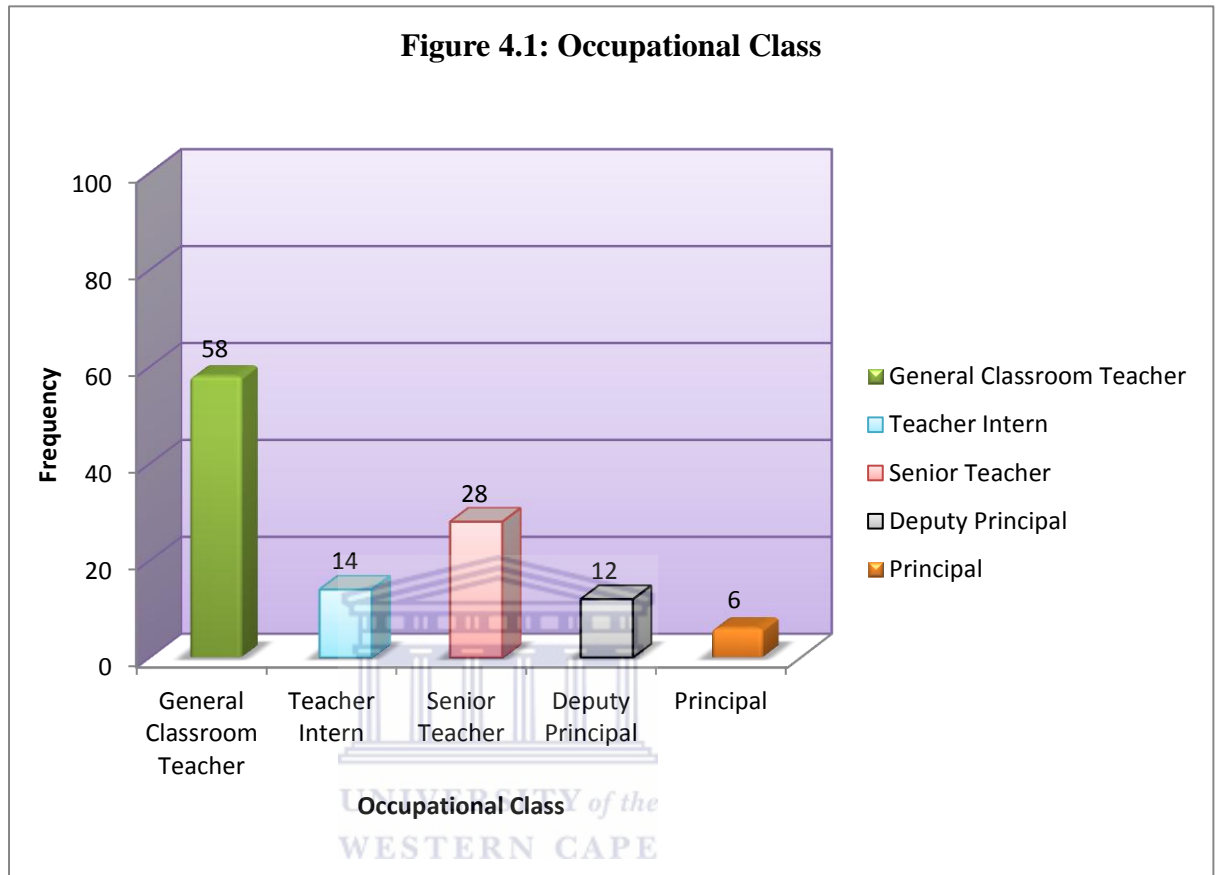


Figure 4.1 presents a graphical representation of the occupational class of the selected sample. As can be seen, the majority of the respondents, that is 49%, are occupied as General Classroom Teachers (n=58). Senior teachers constituted 24% of the sample (n=28), 12% are Teacher Interns (n=14), 10% are Deputy Principals (n=12) and Principals comprised 5% of the respondents (n=6).

4.2.1.2

Gender distribution of respondents

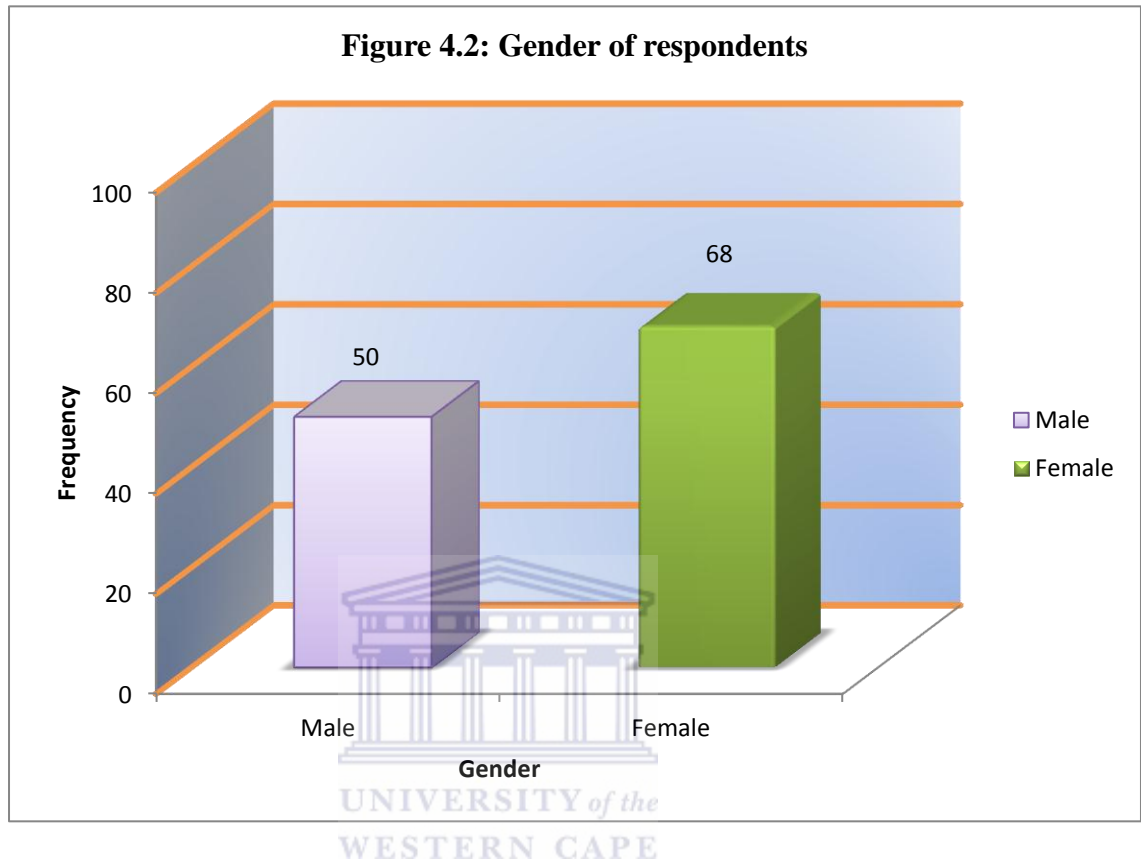


Figure 4.2 reveals that 58% of the respondents are female (n=68), with the remaining 42% being male (n=50).

4.2.1.3 Tenure of respondents

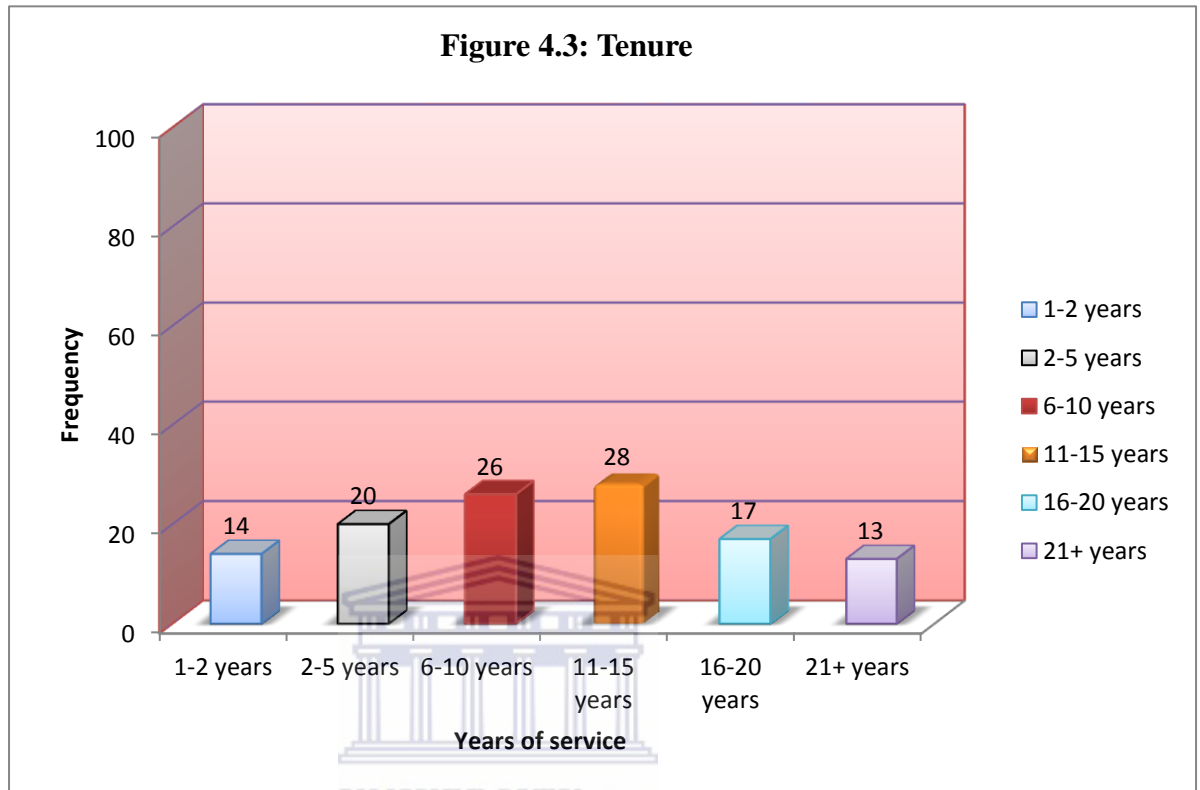
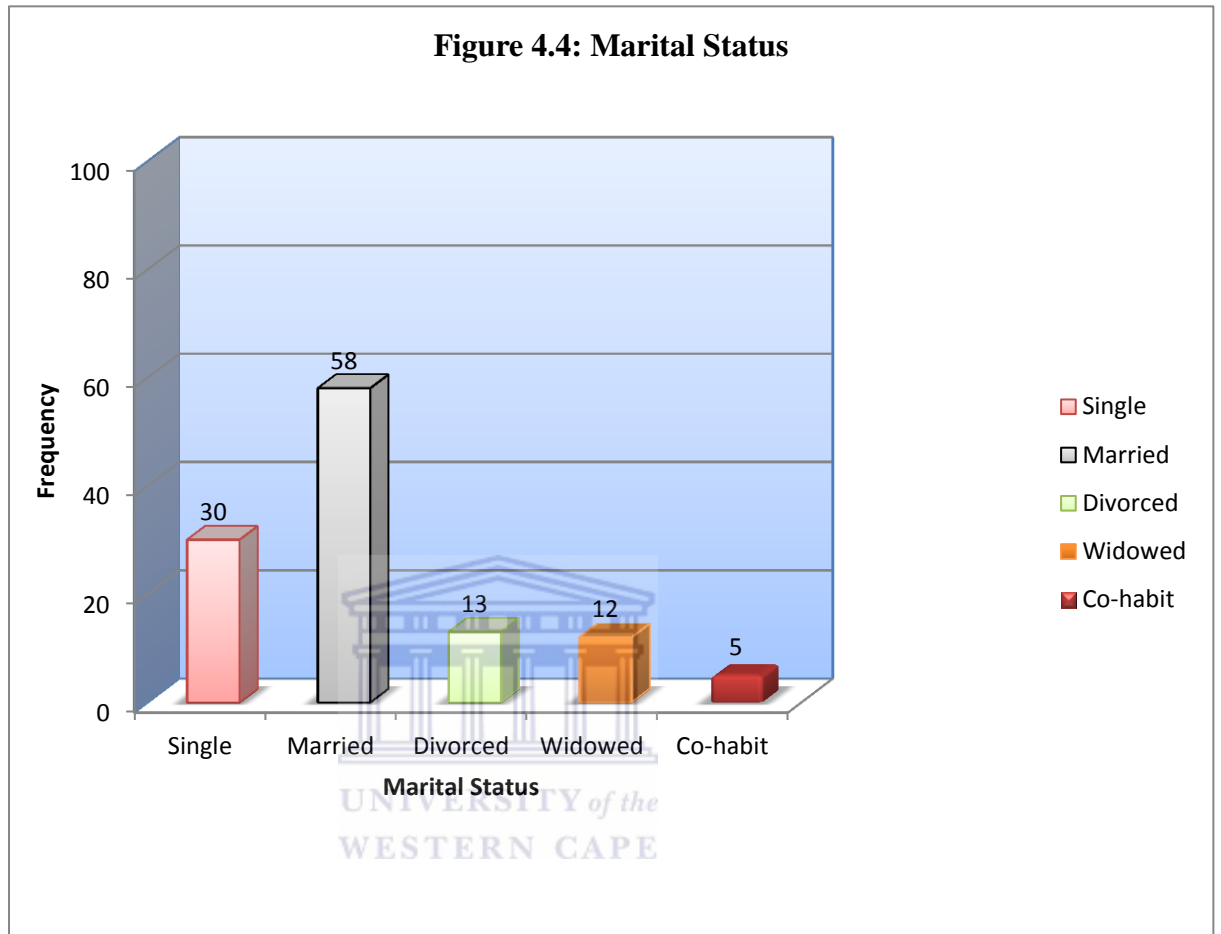


Figure 4.3 indicates that 24% of the sample have served between 11 and 15 years in the organisation in question (N=28). Furthermore, 26% of the sample have worked for their organisation between 6 and 10 years (n=26), 17% had worked between 2 and 5 years (N=20), and 14% had worked for the organisation between 16 and 20 years (n=17). Those that had worked for the organisation between 1 and 2 years constituted 12% of the sample (n=14), with those serving more than 21 years comprising of 11% of the sample (n=13).

4.2.1.4 Marital status of respondents



In terms of Figure 4.4, the majority of the sample subjects ($n=58$ or 49%) are married, with 25% being single ($n=30$) and a further 11% being divorced ($n=13$). Moreover, 11% of the respondents ($n=12$) are widowed and 4% ($n=5$) co-habit.

4.2.1.5 Race of respondents

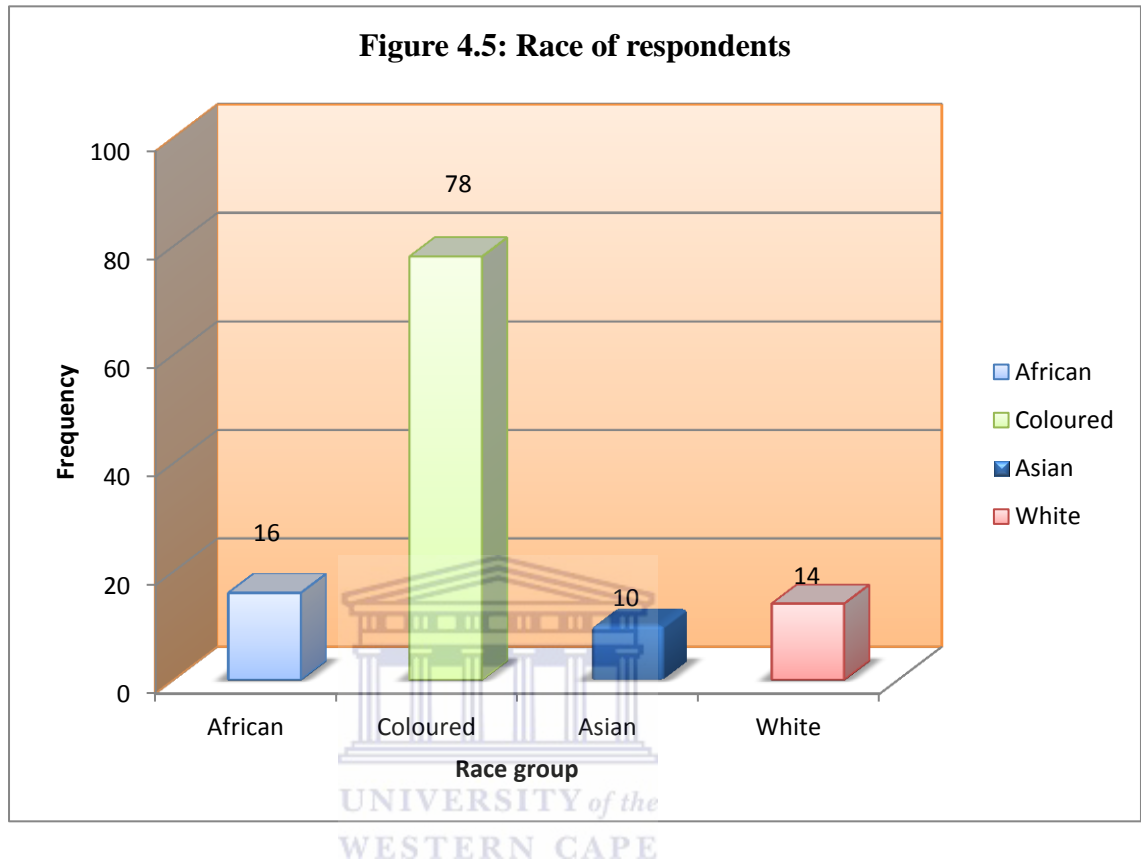


Figure 4.5 indicates that the majority of the respondents, that is, 66% of the sample are Coloured ($n=78$), with 14% of the sample being African ($n=16$). White respondents comprised 12% of the sample ($n=14$) and Asian teachers represented the smallest proportion of respondents, comprising 8% of the sample ($n=10$).

4.2.1.6 Education level of respondents

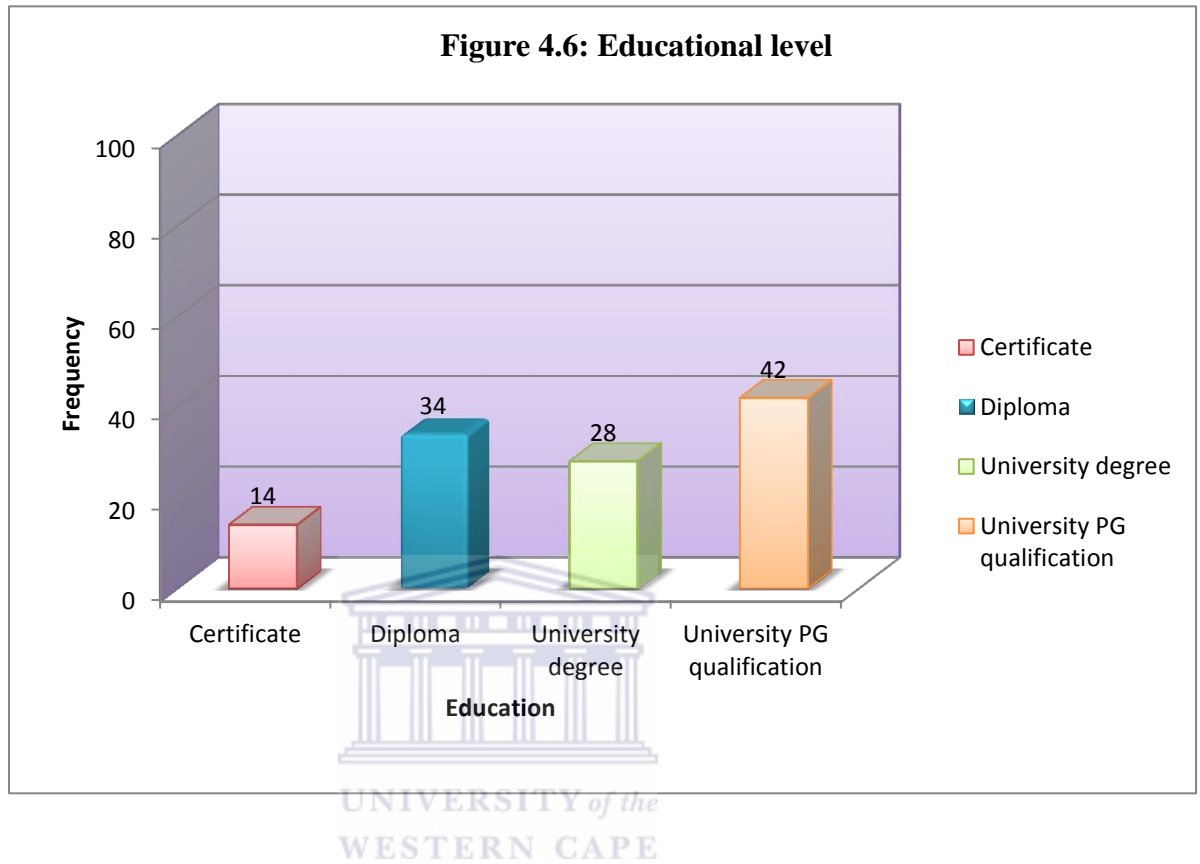


Figure 4.6 indicates that 36% (n=42) of the sample have a University postgraduate qualification, with 29% having completed a Diploma (n=34). Teachers who had completed Certificates comprised 12% of the sample (n=14) and those that had completed university degrees represented 24% of the sample (n=28).

4.2.1.7 Age of respondents

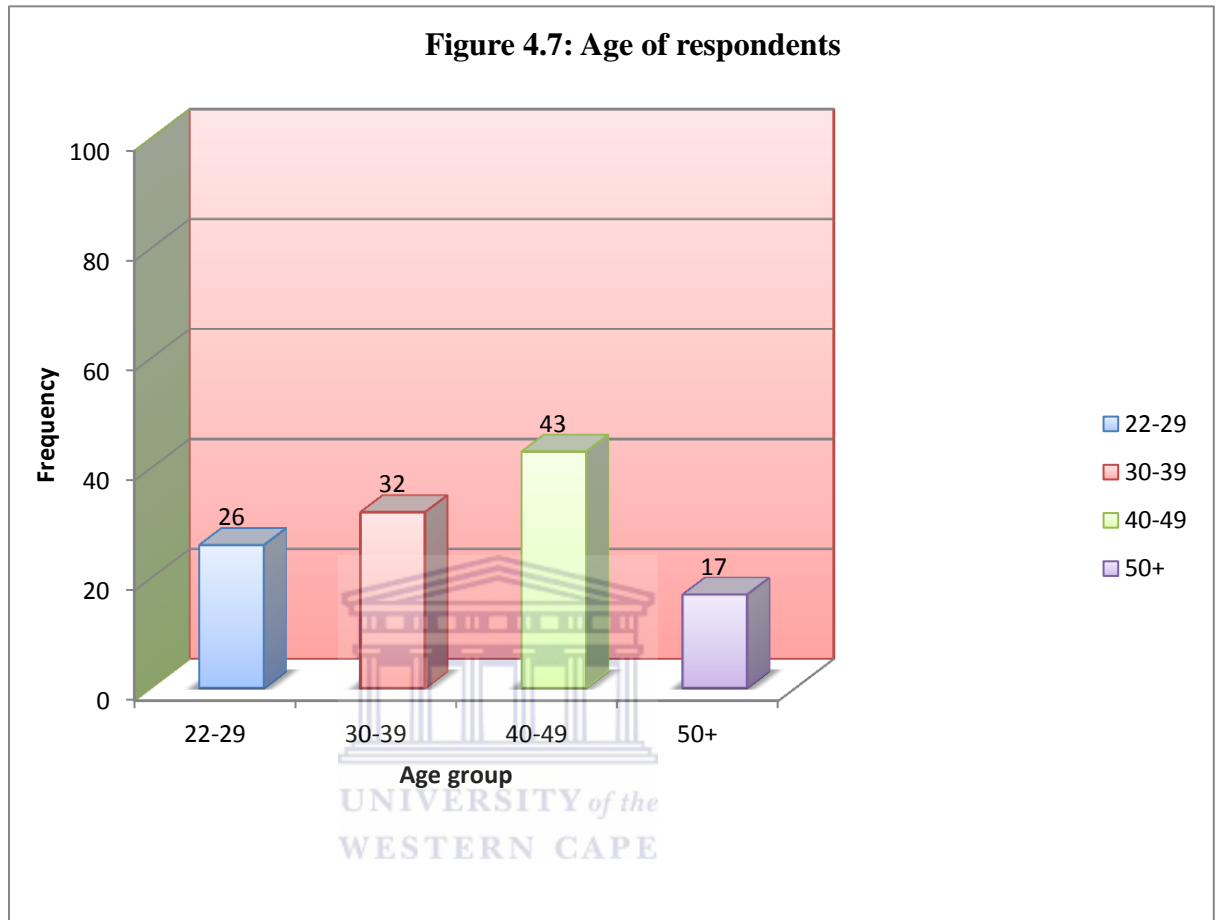
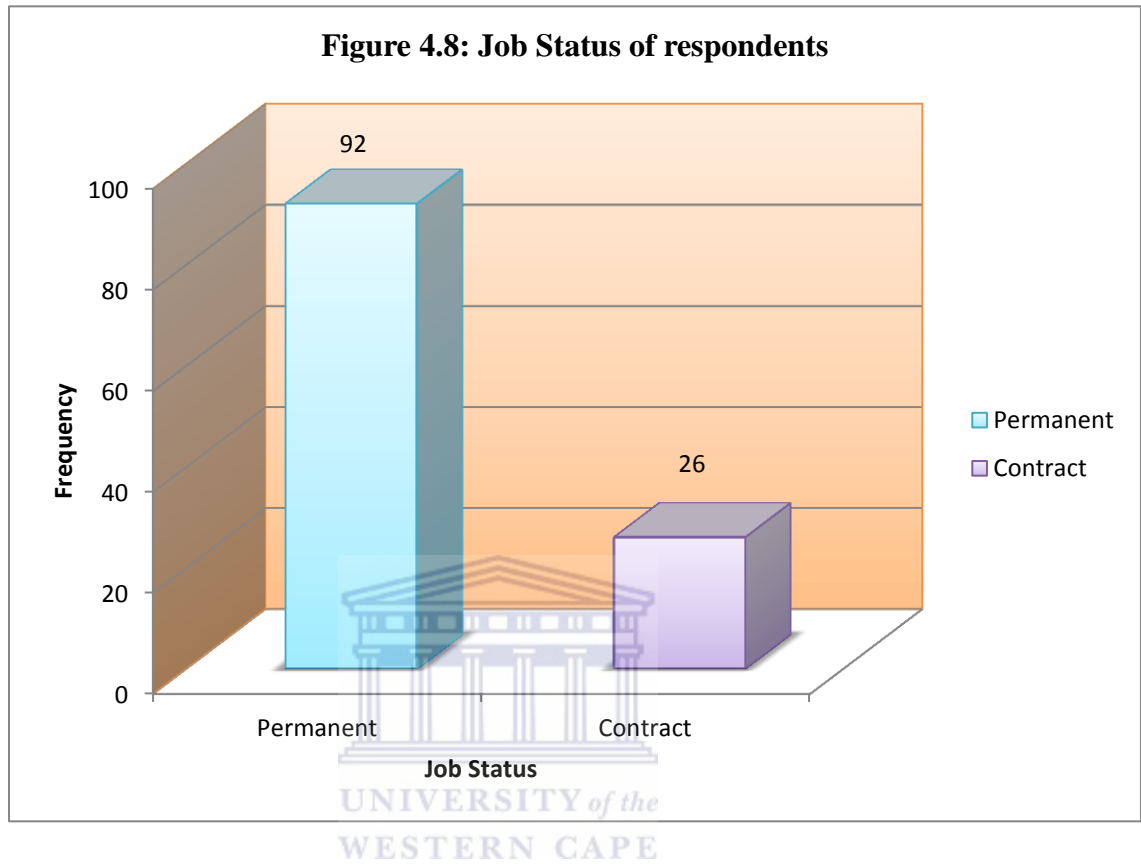


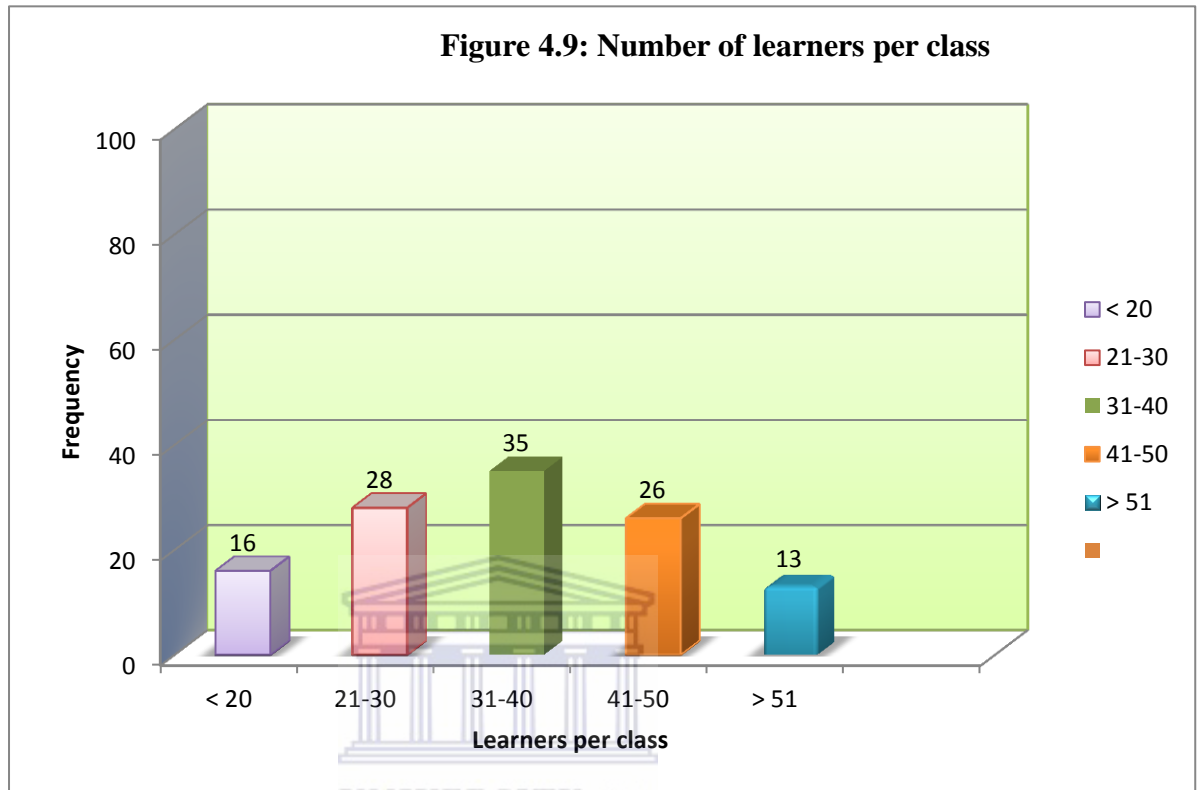
Figure 4.7 indicates that 36% of the respondents are in the age group 40-49 (n=43), with 27% being 30-39 years of age (n=32). Teachers between 22-29 years of age represented 22% of the sample (n=26) and 14% of the respondents were 50 years and older (n=17).

4.2.1.8 Job status of respondents



In terms of figure 4.8, it may be seen that 78% of the respondents were employed in a permanent capacity (n=92), with 22% working on a contractual basis (n=26).

4.2.1.9 Number of learners per class of respondents



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Figure 4.9 indicates that 30% of the teachers had 31-40 learners per class ($n=35$), with 24% having 21-30 learners per class ($n=28$). Teachers that had 41-50 learners per class constituted 22% of the sample ($n=26$), 14% had less than 20 learners per class ($n=16$) and those with more than 50 learners per class comprised 11% of the sample ($n=13$).

4.2.1.10 Teaching phase of respondents

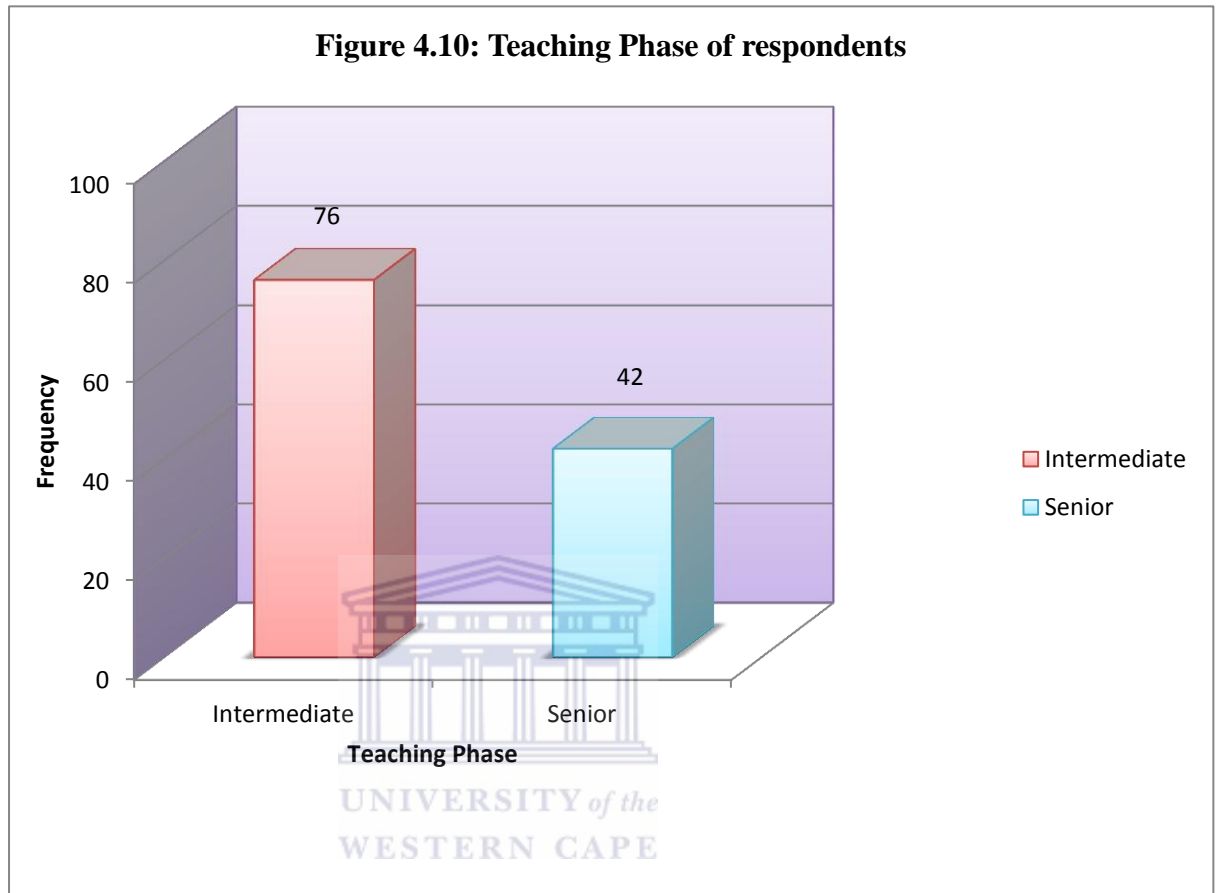


Figure 4.10 indicates that 64% of the sample were teaching in the Intermediate Phase (n=76) and 36% of the respondents were teaching in the Senior Phase (n=42).

4.2.2 DESCRIPTIVE STATISTICS FOR THE JOB SATISFACTION SURVEY

Table 4.1 indicates that the arithmetic mean for the total job satisfaction of the sample is 87.31 with a standard deviation of 9.62. Based on the fact that an average level of job satisfaction would be represented by a mean of approximately 136.5, it may be concluded that the overall job satisfaction of the sample is relatively low. The standard deviation for the overall level of job satisfaction is also not high, indicating that most respondents are in agreement with respect to job satisfaction.



Table 4.1: Descriptive statistics for the dimensions of job satisfaction

VARIABLE	CASES (N)	MEAN	SD
Benefits	118	7.26	4.21
Pay	118	6.93	2.62
Supervision	118	12.65	1.43
Promotion	118	9.88	1.81
Contingent rewards	118	10.21	2.10
Operating procedures	118	14.14	2.58
Coworkers	118	17.68	1.55
Nature of work	118	7.58	1.92
Communication	118	11.67	3.69
Total Job Satisfaction	118	87.31	9.62

With respect to the dimensions of job satisfaction assessed by the JSS, Table 4.1 indicates that the arithmetic means for pay, promotion, supervision, benefits, contingent rewards, operating procedures, coworkers, nature of work and communication vary from a mean of 6.93 to 17.68. When measured against the table norms for the JSS conducted by Spector (1997), it can be seen that the employees at the organisation where the current research was undertaken, indicated below average levels of job satisfaction with the various dimensions assessed by the JSS. While the mean values obtained indicated that most

employees experienced average to above average satisfaction with communication, supervision, coworkers and operating procedures, the remaining dimensions (pay, promotion, nature of the work, benefits and contingent rewards) were experienced as less satisfactory.

Moreover, it may be concluded from Table 4.1 that respondents are most satisfied with their coworkers, followed by supervision they receive, operating procedures and communication. They appear, however, to be least satisfied with the nature of their work, their compensation and with their opportunities for promotion. The standard deviations for all the dimensions of the JSS are relatively low, indicating similarity in responses obtained on the JSS from the sample.



Table 4.2: Descriptive statistics for the Occupational Stress Questionnaire

VARIABLE	CASES (N)	MEAN	SD
Occupational Stress	118	57.28	8.37
Responsibility pressure	118	10.62	3.18
Role Conflict	118	13.12	1.63
Work Load	118	11.34	2.64
Quality Concerns	118	10.21	2.10
Job vs Non-Job Conflict	118	10.39	3.01

With respect to occupational stress, Table 4.2 indicates that teachers are experiencing very high levels of stress (mean = 57.28, s.d = 8.37), considering

that average stress would be classified as being at a mean level of 45. The dimensions all suggest that teachers in the North Metropole district are experiencing role conflict (mean = 13.12, s.d = 1.63), work load pressures (mean = 11.34, s.d = 2.64), responsibility pressure (mean = 10.62, s.d = 3.18), job versus non-job conflict (mean = 10.39, s.d = 3.01) and quality concerns (mean = 10.21, s.d = 2.10), which all exceed average levels of 9 per dimension.

4.3. INFERENCE STATISTICS

In the sections that follow the results of the inferential statistics employed in the study are presented. For the purposes of testing the stated research hypotheses, Pearson's Product Moment Correlation Coefficient was calculated, t-tests and ANOVA were performed. With the aid of these statistical techniques conclusions are drawn with regards to the population from which the sample was taken and decisions are made with respect to the research hypotheses.

Hypothesis 1:

There is a statistically significant relationship between occupational stress and job satisfaction amongst high school teachers in the North Metropole district in the Western Cape.

Table 4.3: Relationship between Job satisfaction and Occupational Stress

	Job Satisfaction	
	Pearson correlation	Sig. (2-tailed)
Occupational Stress	-0.522	.000**
Responsibility pressure	-0.437	.000**
Role Conflict	-0.613	.000**
Work Load	-0.594	.000**
Quality Concerns	-0.339	.000**
Job vs Non-Job Conflict	-0.441	.000**

**p < 0.01

In order to determine whether there is a statistically significant relationship between occupational stress and job satisfaction, Pearson's Product Moment Correlation was computed. The results indicated in Table 4.3 indicate that the correlation coefficient for the relationship between job satisfaction and occupational stress suggests an inverse relationship ($r = -0.522$, $p < 0.01$). Hence, higher levels of occupational stress are likely to produce lower levels of job satisfaction, with the converse also being true.

When the dimensions of the Occupational Stress Questionnaire are examined in closer detail, it clearly emerges that there are statistically significant, inverse relationships between all the dimensions of the Occupational Stress Questionnaire (responsibility pressure, quality concerns, work load, job versus non-job conflict and role conflict) ($p < 0.01$).

Hypothesis 2:

There is a statistically significant gender difference in occupational stress amongst high school teachers in the North Metropole district in the Western Cape.

Table 4.4: T-Test Occupational stress by Gender

	Male	Female		
	Mean	Mean	T	P
Stress	54.25	61.74	-3.227	0.000**

**p<0.01

Table 4.4 depicts the t-test with respect to job stress based on the gender of respondents. The results indicate that there are statistically significant differences, ($t = -3.227$, $p < 0.01$), in the stress levels of educators based on their gender. The results furthermore indicate that female teachers experience significantly higher levels of stress (Mean = 61.74).

Hypothesis 3:

There is a statistically significant gender difference in job satisfaction amongst high school teachers in the North Metropole district in the Western Cape.

Table 4.5: T-Test Job satisfaction by Gender

	Male	Female		
	Mean	Mean	T	P
Job Satisfaction	79.63	94.20	-1.387	0.000**

**p < 0.01

Table 4.5 depicts the t-test with respect to job satisfaction based on the gender of respondents. The results indicate that there are statistically significant differences, (t = -1.387, p < 0.01, in the job satisfaction of educators based on their gender. The results furthermore indicate that female teachers experience significantly higher levels of job satisfaction (Mean = 94.20).

Hypothesis 4:

There is a statistically significant difference in job stress amongst high school teachers in the North Metropole district in the Western Cape based on tenure.

Table 4.6: ANOVA: Occupational stress by Tenure

	Sum of squares	df	Mean square	F	P
Between groups	1324.934	4	220.822	0.574	0.000**
Within groups	34231.354	112	384.622		
Total	35556.288	116			

**p < 0.01

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Table 4.6 depicts the ANOVA with respect to job stress based on the tenure of the respondents. The results indicate that there are statistically significant differences, (F = 0.574; p < 0.01), in the stress levels of educators based on their tenure.

Hypothesis 5:

There is a statistically significant difference in job satisfaction amongst high school teachers in the North Metropole district in the Western Cape based on tenure.

Table 4.7: ANOVA: Job satisfaction by Tenure

	Sum of squares	Df	Mean square	F	P
Between groups	1546.924	5	386.731	0.810	0.001**
Within groups	42501.552	113	477.546		
Total	44048.476	118			

**p < 0.01

Table 4.8 shows the ANOVA with respect to job satisfaction based on the tenure of respondents. The results indicate that there are statistically significant differences, (F = 0.810; p < 0.01), in the job satisfaction levels of educators based on their tenure.

4.4 RELIABILITY ANALYSIS

Cronbach's Alpha is viewed as an index of reliability associated with the variation accounted for by the true score of the underlying construct (Cronbach, 2004).

Alpha coefficients range in value from 0 to 1 and may be used to describe the

reliability of factors extracted from dichotomous and or multi-point formatted questionnaires or scales. However, there is no lower limit to the coefficient, however, the closer Cronbach's coefficient alpha is to 1, the greater the internal consistency of the items of the scale (Cronbach, 2004).

TABLE 4.8: Reliability of the Job Satisfaction Survey and the Occupational Stress Questionnaire

RELIABILITY COEFFICIENTS			
JOB SATISFACTION		OCCUPATIONAL STRESS	
No. of cases	118	No. of cases	118
Alpha	0.915	Alpha	0.865
No. of items	36	No. of items	15

According to research, such a score can be regarded as excellent in terms of the reliability of the instrument. George and Mallery (2003) argue that coefficients above 0.8 can be considered to be good indicators of the reliability of an instrument. Hence, with the current study, this was exceeded indicating a high degree or reliability.

4.5. CONCLUSION

This chapter presented the most salient findings which emerged from the study investigating occupational stress and job satisfaction amongst a sample of teachers in the North Metrople district of the Western Cape. The results were graphically presented and descriptive and inferential statistical analyses were tabulated and discussed. The next chapter provides a discussion of the results, and presents the findings in relation to previous research. Conclusions which can be drawn are presented and recommendations to individuals and organisations are highlighted.

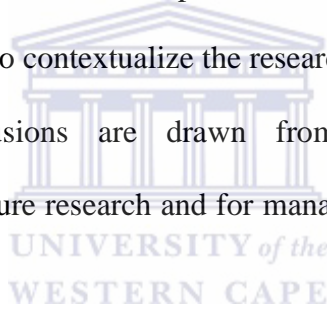


CHAPTER 5

DISCUSSION, RECOMMENDATIONS AND CONCLUSION

5.1 INTRODUCTION

In this section the prominent findings of the research will be discussed and reference will be made to relevant research findings available. The discussion focuses on the salient findings that emanate from the research. Comparisons are drawn with available literature on occupational stress and job satisfaction amongst teachers at high schools to contextualize the research. The limitations of the study are mentioned, conclusions are drawn from the results obtained and recommendations for future research and for management bodies in education are suggested.



5.2 THE RELATIONSHIP BETWEEN OCCUPATIONAL STRESS AND JOB SATISFACTION

H₁: There is a statistically significant relationship between occupational stress and job satisfaction amongst high school teachers in the North Metropole district in the Western Cape.

A correlation coefficient for the relationship between job satisfaction and occupational stress suggests an inverse relationship ($r = -0.522$, $p < 0.01$). Hence, the higher the levels of occupational stress are the lower the levels of job

satisfaction can be expected to be. **Hence, the null hypothesis is therefore rejected.**

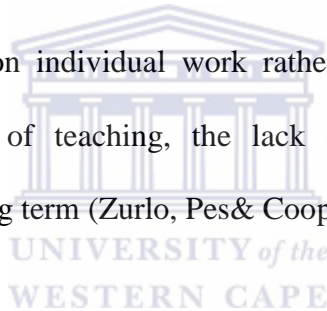
The mean values of the results of this study indicate that most employees experience average to above-average satisfaction with communication, supervision, co-workers and operating procedures. However, teachers were less satisfied with the dimensions of pay, opportunities for promotion, the nature of the work, benefits and contingent rewards.

Kaur (2011) postulate that when teachers are dissatisfied with their work they are more likely to experience occupational stress. A sample of 500 teachers was used and it was found that a negative relationship existed between occupational stress and job satisfaction. Adam (2000), Brewer and Lander (2003), Ghali (2004), Haberman (2005) and Bindu (2007) as cited in Kaur (2011) established that an inverse relationship between occupational stress and job satisfaction existed. Job satisfaction had a positive effect on teachers' performance and work motivation.

Sutton and Huberty (2001) found that an inverse relationship existed between job satisfaction and levels of stress and this was related to individual differences, the transitory nature of stressors in the teaching environment and the various ways in which teachers used coping methods. It was also found that significant determinants of teacher stress are related to stressors found within the teaching environment and that more research is needed in the study of individual differences in stress proneness, coping methods, personality variables, and the

degree of the relationship between job satisfaction and the susceptibility and management of stress.

In a study that examined stress in Italian teachers it was found that the teachers reported most pressure with some aspects of their work namely, the perceived lack of status and professional support, the job of teaching itself, the workload in the form of overcrowded classes and the lack of support from pupils and parents. An important influence of the study revealed the presence of particularly strong coping mechanisms within Italian teachers. These moderating factors buffer the teachers from the negative effects of stress and are based on their tendency to centre their behaviour on individual work rather than teamwork. This could impact on the quality of teaching, the lack of job commitment, and job disengagement in the long term (Zurlo, Pes & Cooper, 2007).

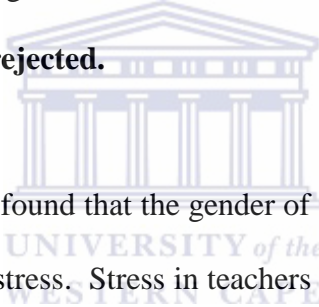


De Nobile and McCormick (2005 as cited in Darmody & Smyth, 2011) investigated the association between job satisfaction and occupational stress and found that negative associations were found between these two variables. The main sources of occupational stress which affected job satisfaction were lack of support from school administration, poor supervision, job variety, the staff-principal relationship and staff-student relationships.

5.3 THE RELATIONSHIP BETWEEN GENDER AND OCCUPATIONAL STRESS

H₂: There is a significant difference between gender and occupational stress amongst high school teachers in the North Metropole district in the Western Cape.

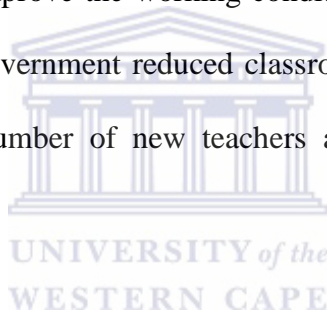
A statistically significant difference ($t = -3.227, p < 0.01$) was found in the stress levels of educators based on their gender. Moreover, female teachers have reported significantly higher levels of stress (Mean = 61.74). **The null hypothesis is therefore rejected.**



Klassen and Chiu (2010) found that the gender of teachers contributed to the level of reported occupational stress. Stress in teachers was investigated with respect to certain demographic variables such as gender and years of experience. A sample size of 1430 teachers was used. The results indicated that female teachers reported 13% higher workload stress and 8% higher classroom stress than male teachers. Gender differences accounted for 3% and 1% of the variances in workload stress and classroom stress respectively.

A study conducted by Popoola and Ilugbo (2010) found that the marital status of female teachers indicated a significant influence of reported stress experienced among female teachers in the population. A sample of 370 teachers drawn from randomly selected schools in Osun State in Nigeria participated in the study. It was found that 80% of teachers in the sample had low occupational stress. The

Scheffe's post hoc comparison of the mean stress rating of single, divorced and married teachers indicated that married female teachers reported significantly lower levels of stress than single or divorced teachers. The researchers surmised that single or divorced teachers may be subjected to higher societal pressure, which could in itself be for them a source of stress. Female teachers who are married, on the other hand, may experience less stress as they have access to more psychological support and enjoy shared responsibility with their husbands. The researchers also attributed the lower stress experienced by female teachers and especially married teachers to certain interventions that have been implemented by the government to improve the working conditions for teachers in the region. Prior to the study the government reduced classroom overcrowding significantly by recruiting a large number of new teachers and addressed the shortage of teachers in the region.

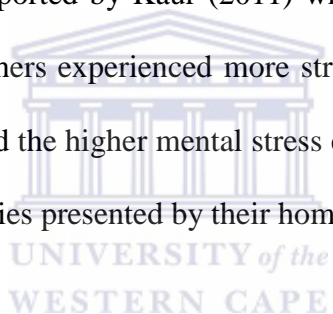


In a study investigating occupational stress in Croatia, it was found that certain employee groups perceive higher levels of stress than other groups. A one-way ANOVA analysis showed that females averaged 55.31 compared to the 50.31 average for males with respect to occupational stress (Vokic & Bogdanic, 2007).

In a cross-sectional study using a sample size of 493 primary and secondary school teachers in Greece, it was found that moderate to high levels of stress was reported by teachers on average. However, a significant relationship was discovered between gender and occupational stress of the high school teachers in the sample. Female teachers, in particular, reported higher occupational stress than their male counterparts with regards to interactions with students and

colleagues, teachers' workload and students progress. In the study it was determined that both male and female teachers report that problems in the classroom contributed significantly to the level of occupational stress experienced in the job. The researchers have warned that occupational stress and the poor working conditions experienced by teachers impact negatively on their personal and family life.

Schulze and Steyn (2007) found that females reported finding the time to accomplish goals as well as lack of confidence as a professional as stressors. Similar findings were reported by Kaur (2011) where the outcomes of his study showed that female teachers experienced more stress than their male colleagues. The researchers attributed the higher mental stress experienced by female teachers to their dual responsibilities presented by their home and school life.



On the contrary, Kauts and Saroj (2010) conducted a study of teacher effectiveness and occupational stress in relation to emotional intelligence among secondary school teachers. The sample comprised 600 teachers from 30 randomly selected co-educational government and private schools from the Jalandhar district in Punjab, India. Analysis of Variance (ANOVA) was employed to assess the differences in occupational stress between male and female teachers and the results indicated that male teachers were more stressed than female teachers.

Aftab and Khatoon (2012) also examined a set of demographic variables with occupational stress among 608 secondary school teachers from 42 schools in the

Uttar Pradesh district in India. Findings of the research also showed that male teachers experienced more stress than female teachers.

Hanif, Tariq and Nadeem (2011) used the Teacher Stress Inventory to measure the role of personal and job-related variables in teacher stress. A sample size of 400 teachers were randomly selected from schools in Islamabad to participate in the study. A step-wise regression indicated that gender significantly affected teacher stress. Gender differences accounted for 14.2% of the total variance in the occupational stress score.

Yahaya and Husain (2011) conducted a study across four regions in Malaysia with a sample size of 400 teachers to analyse the level of occupational stress. The results of the study indicated gender differences in the workload stress factor. However, both genders reported similar levels of stress with regard to stress in interpersonal relationships, student disciplinary problem and school rules.

5.4 THE RELATIONSHIP BETWEEN GENDER AND JOB SATISFACTION

H₃: There is a significant difference between gender and job satisfaction amongst high school teachers in the North Metropole district in the Western Cape.

A statistically significant difference ($t = -1.387, p < 0.01$) in the job satisfaction of educators based on their gender was found. Female teachers reported

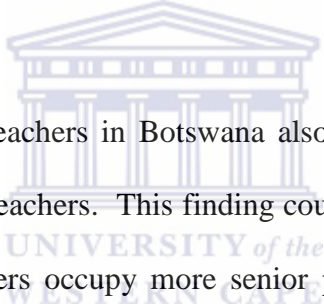
significantly higher levels of job satisfaction (Mean = 94.20). **The null hypothesis is therefore rejected.**

A study conducted by Andersen (2011) with 3439 teachers at 85 Danish schools indicated that gender is both directly and indirectly associated with job satisfaction. The researchers put forward that female teachers usually reported higher levels of self-efficacy and empathy for learners, and this may explain the finding. However, female teachers could be expected to report higher job satisfaction than male teachers.

A study conducted by Jabnoun and Fook (2007) aimed to identify the factors that determine not only overall job satisfaction but also the relationship between job satisfaction and certain demographic variables in a sample of 135 secondary school teachers in Selangor, Malaysia. A significant difference was found between male and female teachers. More specifically, male teachers were more satisfied with administrative leadership whereas female teachers were more satisfied with teacher-student relations even though the differences were not highly significant. A reason put forth for the higher satisfaction in student-relations by female teachers were that they were generally more patient with the learners than male teachers. However, a more significant difference was found between male and female teachers with respect to professional development where female teachers had a mean of 17.2389 and males had a mean of 14.500. This difference was explained by the nature of female teachers in the Selangor region seeming to display less career ambition, desire for promotion and need for achievement than male teachers. Male teachers on the other hand, were less

satisfied with professional development as they have a higher need for achievement and desire more recognition for their work.

In contrast to the findings of the current study, Kauer (2009) conducted research with a sample of 500 school teachers in Islamabad and found that male teachers reported higher levels of job satisfaction than females even when there were no differences in job security and remuneration of teachers in both gender groups and where both male and female teachers received equal salaries and job security. The researchers have attributed this difference between genders being influenced by the effects of their respective home duties.



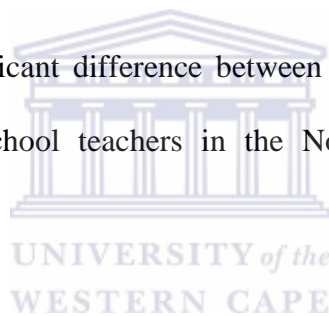
In another study, male teachers in Botswana also reported relatively higher job satisfaction than female teachers. This finding could be explained by the fact that in Botswana male teachers occupy more senior positions in secondary schools than their female compatriots (Monyatsi, 2012).

Ngimbudzi (2009) also investigated job satisfaction amongst a sample of 162 teachers in 13 participating secondary schools in Tanzania. A T-test was generated and the findings thereof revealed that male teachers differed significantly with regard to job satisfaction on two dimensions namely, job characteristics and meaningfulness of the work than female teachers. It was concluded that job satisfaction related directly to the dimensions of the job characteristics, social benefits, meaningfulness of the job and support from administration and that higher satisfaction in these dimensions in particular would lead to overall job satisfaction.

Mwanwenda (2004) investigated job satisfaction in salary and promotion of high school teachers in the Eastern Cape in South Africa. The findings revealed that 48% of teachers in the sample reported dissatisfaction with their salaries and felt the promotion process was not fair. Moreover, no significant differences were found between male and female teachers regarding satisfaction with salaries and promotion in teaching.

5.5 THE RELATIONSHIP BETWEEN TENURE AND OCCUPATIONAL STRESS

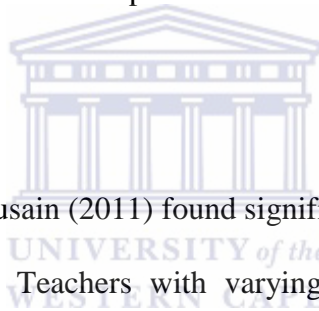
H₄: There is a significant difference between tenure and occupational stress amongst high school teachers in the North Metropole district in the Western Cape.



A statistically significant difference ($F = 0.574$; $p < 0.01$) was found in the stress levels of educators based on their tenure. **Hence, the null hypothesis is rejected.**

A study conducted amongst 68 secondary school teachers in the Uttar Pradesh district in India showed a significant relationship between tenure and occupational stress (Aftab & Khatoon, 2012). The results indicated an increase in occupational stress with an increase in years of experience. However, there was no increase in occupational stress reported by teachers with less than 16 years of experience. The reason put forth for this phenomenon was that older teachers may be more attuned to what is expected from them in their roles. Older teachers are seen to be more experienced than their younger colleagues and it has been surmised that they

are thus more ready to cope with the occupational stress in the teaching profession. High levels of occupational stress was reported by teachers with 6-10 years of experience and those with 11-15 years of experience. This finding among secondary school teachers in India were explained by the high levels of exhaustion, the teachers' lack of competence and the challenges presented by the work such as the poor success rate of teaching interventions and the high degree of learner disruptiveness in class. In India, teachers with 0-5 years of experience reported the lowest occupational stress. The researchers claimed that in the early years of being in the profession teachers enjoyed their work more and that it was this sense of joy in their work that protected them which acted as a buffer against occupational stress.



Similarly, Yahaya and Husain (2011) found significant differences between tenure and occupational stress. Teachers with varying years of experience reported significantly different levels of stress with regard to workload, interpersonal relationships and student discipline factors.

Hadi, Naing, Daud, Nordin and Sulong (2009) conducted a cross-sectional study investigating the prevalence and factors associated with stress among secondary school teachers in Kota Bharu, Malaysia and found that in a sample of 580 teachers, those with more than 10 years experience experienced higher stress. The reason put forth for the higher stress experienced by teachers with more than 10 years experience was that there is a higher expectation from government and school management for teachers in this category to be subject specialists and lead

students and other teachers. The multiple roles they play may contribute to the occupational stress that they experience.

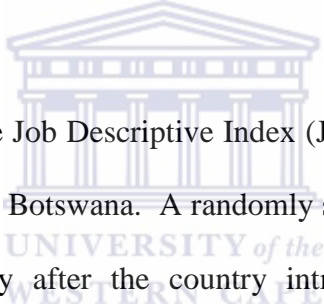
Santiago, Otero-Lopez, Castro and Villarderfrancos (2008) used the Inventory of Occupational Stressors for secondary school teachers to investigate stress associated with students' disruptive behaviour and difficulties faced by teachers in conflict management. They found that in a sample of 1386 teachers those with 10 years experience or more, experienced higher occupational stress than those in other categories of teaching experience. The years of teaching experience had a significant influence on how certain incidents of students' disruptive behaviour and conflict management is perceived. Less experienced teachers (namely, those with less than 10 years) and teachers with the longer experience (namely, those with over 29 years of experience) perceived student disruptive behaviour as less stressful. Teachers with some experience (namely, 10 – 29 years) experienced the highest stress. A reason for the phenomenon experienced by teachers in the intermediate stage was that they experienced a combination of high enthusiasm and motivation to teach and also struggled to modify students' behaviour effectively at this particular stage of their teaching career.

Contrary to the above finding, a study conducted in Hong Kong found no significant difference in perceived occupational stress levels reported between teachers with different years of experience (Chan, Chen & Chong, 2010).

5.6 THE RELATIONSHIP BETWEEN TENURE AND JOB SATISFACTION

H₅: There is a significant difference between tenure and job satisfaction amongst high school teachers in the North Metropole district in the Western Cape.

A statistically significant difference ($F = 0.810$; $p < 0.01$) was found in the job satisfaction levels of educators based on their tenure. **The null hypothesis is therefore rejected.**



Monyatsi (2012) used the Job Descriptive Index (JDI) to measure the level of job satisfaction of teachers in Botswana. A randomly selected sample of 550 teachers participated in the study after the country introduced many changes in its education system and was concerned about those who have been tasked to lead the future of secondary education in the country. The results of the study indicated that teachers with longer length of service in teaching reported higher levels of job satisfaction. This level of satisfaction reported was congruent with a generally satisfied population of teachers in the sample, where high satisfaction levels were also reported in the 0-5 year category and the 11-15 years category in the teaching service.

Badril (2009) conducted a study in Kedah, Malaysia where he investigated job satisfaction of teachers in the region. The findings indicated that teachers with

more years of experience were more satisfied than teachers with less years of experience.

Jabnoun and Fook (2007) investigated the relationship between job satisfaction and years of service with a sample of 135 teachers in Selangor, Malaysia. Five categories of work experience were identified namely, 1 to 5 years experience, 6 to 10 years of experience, 11 to 15 years of experience, 16 to 20 years of experience and 21 years or more years of experience. It was evident from the outcome of their study that teachers with 1 to 5 years of experience were more satisfied with teaching than those with more than 6 to 10 years of experience. The reason suggested for this result was that younger teachers were possibly more enthusiastic about the profession whereas teachers with longer years of service often felt overburdened by the demands of work activities. Teachers with 11-15 years of experience reported higher job satisfaction than those in the first two categories. Teachers in the fourth group had higher job satisfaction than those in the third group but those in the fifth group (namely, 21 years or more experience) reported the highest job satisfaction of all categories. The findings suggested that teachers become more satisfied in teaching after 11 years or more experience.

Drukpa (2010) collected responses from 267 teachers at secondary schools in the Thimpu district of Bhutan where he investigated job satisfaction amongst teachers in the region. A statistical significant difference was found between years of experience and job satisfaction levels of secondary school teachers in the region. Teachers with 21-30 years of experience and those with over 30 years of experience reported the highest levels of satisfaction. A reason for this level of

satisfaction reported by teachers with longer lengths of service was that teachers with more experience had developed the ability to adapt to policy changes in education in the district. Moreover, there was a high demand for well-trained and experienced teaching professionals in Bhutan and this in itself may be an opportunity for the career advancement of teachers in the Thimpu district.

5.7 LIMITATIONS OF THE CURRENT STUDY AND RECOMMENDATIONS FOR FUTURE RESEARCH

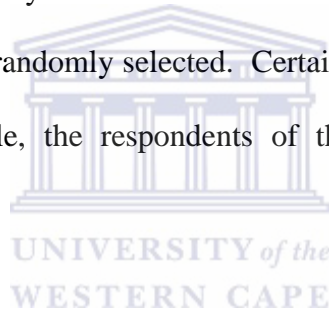
Although the present study has made a contribution to the body of knowledge, a number of limitations are worth noting. The results of the study should be interpreted with caution due to the following limitations of the study.

The current study collected data from only the Western Cape's North Metropole Education district so it cannot be inferred that occupational stress affects all teachers in the Western Cape. The external validity of the study is compromised as the sample size was small and the different occupational categories were not equal thus the conclusions thereof cannot be inferred to the general population of teachers in the region.

The use of a non-probability research design in the form of convenience sampling was used and this implies that the results emanating from the research cannot be confidently extrapolated to the population of teachers, as circumstances in other environments may differ from the sample that was selected. Stratified random sampling is a suitable technique as it allows greater flexibility and validity in the

research (Anastasi, 1990; Murphy & Davidshofer, 1988). In future studies researchers could stratify the sample by perhaps using a specific number of teachers across the different occupational categories. The population could be expanded to be representative of not only a few selected schools within the North Metropolitan district but the entire district. Stratified random sampling is argued to minimise sampling errors and enhance the external validity of research findings (Sekaran, 2003). Consequently it allows for results to be extrapolated from the sample to the population with greater confidence.

The limitations of the study also include the unmatched gender ratio and the fact that the sample was not randomly selected. Certain groups may have been under-represented (for example, the respondents of the current study were mainly female).



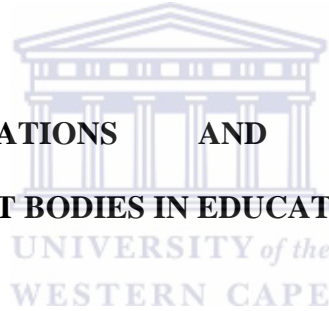
Only self-reported questionnaires were used to collect data. These lend itself to response bias. Furthermore, it is possible that data collected from the questionnaires may not capture the complexity of teachers' perceptions of their workplace conditions. Since a quantitative design was used, qualitative data (namely interviews and focus groups) could add value to the research. Interviews could provide clarity to responses unlike questionnaires which restrict responses. The use of both quantitative and qualitative methods could enrich the quality of the data.

In future, a triangulation method could be employed to gather richer data to establish the impact of a third variable on occupational stress and job satisfaction.

Even though this is a small study, it has indicated that stress amongst teachers does exist and that there is a link between these two variables. However, further research could investigate whether it is a causal relationship and explore the existence of moderating variables and its impact on the variables which have been investigated in the current study.

More accurate results could be obtained with a longitudinal study or to measure the change in respondents when conditions or variables have changed. In addition to the variables investigated in the current study organizational citizenship behavior and turnover could also be included in future research.

5.8 RECOMMENDATIONS AND IMPLICATIONS FOR MANAGEMENT BODIES IN EDUCATION



The following are recommendations are put forth to be used as interventions to address the problem of occupational stress and job satisfaction of teachers in the North Metropole district of the Western Cape by those responsible for the development of policies and the implementation of strategies.

The following are some suggestions which have been recommended by Olivier and Venter (2003) to alleviate stress conditions namely: (i) that the state and the school governing bodies make the effort to right-size the teacher-learner ratio's and solve the problem with the lack of space, the lack of infrastructure and the lack of resources with which to do the work, and that the work environment of teachers be invested in (ii) that the time that teachers spend at school and extra-

curricular activities be controlled and that recreational activity, sport and exercise be encouraged (iii) that the views, opinions and ideas of teachers be acted on and reinforced in a positive way and that the participation of teachers in school policy be encouraged.

Factors such as social acknowledgement, improved working conditions, leadership and administration, income and welfare, and overall job satisfaction could increase morale among secondary school teachers. This could be experimented within teaching in South Africa to alleviate teacher job dissatisfaction and prevent the further exodus of teachers (Weiqui, 2007).

A way to deal with stress is to institute stress management programmes at regular intervals to ensure the stress is managed proactively at schools. This could involve teaching individuals to manage their stress. Efforts to reduce employee stress by decreasing role-related problems are also recommended by Beard (1990), who suggests that teachers combat stress by delegating responsibilities, setting realistic goals, better time-management and realistic self-assessment.

Rothmann and Jackson (2005) suggest that the role of principals is fundamental to enhance coherent and participative work climates. Teachers were found to draw their satisfaction from their own performance but also from the way that the school as a whole reaches its goals.

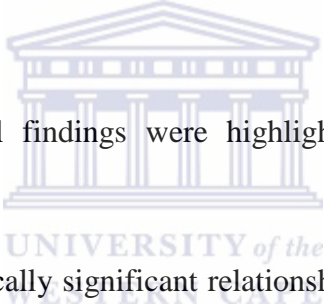
Stakeholders must invest in education and should realize that in order to increase the quality of education in the province, the election and recruitment of teachers

must be improved, the development of staff must take place, conflict within schools must be managed, the strain upon teachers must be controlled, leaders must be developed and trained within the school governing body and the curriculum must be managed (Smith, 2002b).

5.9 CONCLUSION

The purpose of the study was to investigate the relationship between occupational stress and job satisfaction of high school teachers in the North Metropole district in the Western Cape.

The following empirical findings were highlighted from the stated research hypotheses:

- 
- There is a statistically significant relationship between occupational stress and job satisfaction amongst high school teachers in the North Metropole district in the Western Cape.
 - There is a significant difference between gender and occupational stress amongst high school teachers in the North Metropole district in the Western Cape.
 - There is a significant difference between gender and job satisfaction amongst high school teachers in the North Metropole district in the Western Cape.
 - There is a significant difference between tenure and occupational stress amongst high school teachers in the North Metropole district in the Western Cape.

- There is a significant difference between tenure and job satisfaction amongst high school teachers in the North Metropole district in the Western Cape.

Job satisfaction encompasses feelings of happiness and contentment whereas in contrast, job dissatisfaction leads to negative feelings and consequently leads to occupational stress. In turn, teachers' performance may suffer in terms of their level of creativity, classroom management and effective teaching techniques when they encounter job dissatisfaction and occupational stress (Kaur, 2011).

Teachers are facing changes within the education system and their perceived lack of control over their environment is causing distress (Peltzer et al., 2009). South African researchers such as Ngidi and Sibaya (2002) and Olivier and Venter (2003) have determined that in Kwazulu-Natal and the Eastern Cape respectively, time-pressures, poor working conditions, educational changes, administrative problems and pupil misbehaviour contribute to stress in teaching.

Higher levels of job dissatisfaction of teachers have been linked with teacher performance, absenteeism and job turnover (Kyriaciou, Kunc, Stephens & Hultgreen, 2003 as cited in Darmody & Smyth, 2011).

In the light of the above it is critical that the Department of Education consider the findings of the current study if it is to enhance the human resource management aspect of teaching in the Western Cape and seek to reduce the negative relationship between occupational stress and job satisfaction.

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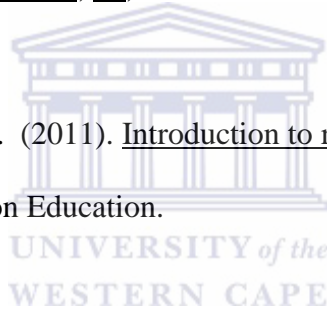
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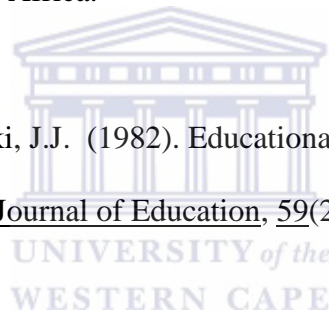
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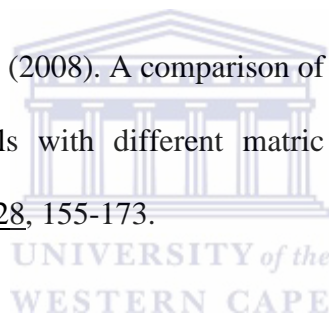
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