OCCUPATIONAL STRESS AMONGST LECTURERS WITH SPECIFIC REFERENCE TO A FURTHER EDUCATION AND TRAINING COLLEGE IN THE WESTERN CAPE

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(i) <u>DECLARATION</u>

I declare that the thesis "occupational stress amongst lecturers with specific reference to an Further Education and Training college in the Western Cape" is my own work, and that it has not been submitted for any degree or examination in any other university, and that the resources I have used or quoted have been indicated and acknowledged by complete references.

Marshall Engle



(ii) <u>DEDICATION</u>

I would like to dedicate this research to my parents Manus and Susan, sister and brother Samantha and Eugene Engle. Without your continuous love, support and encouragement, this would not have been possible. To every family member and friend, this hard work and end product is for you. I love you all deeply and thank you from the bottom of my heart for always being there and pushing me to the maximum.



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To my incredible parents and siblings, these past few years have not been easy and I was not the best person to have around due to stressful circumstances, but you have always supported my goals and dreams. Your unconditional love will always be remembered and what you have done and sacrificed for me.

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I would like to thank and at same time dedicate this thesis to my late aunt Maria Du Plessis who was a constant believer in my abilities and I know she is smiling down from Heaven as I achieved this milestone. Miss you lots Auty Rai and this is for you.

To Deslynne, Tenille, Leoni and Celeste, thank you for being part of my life and for your friendship, care and support and all the late nights of helping to type and proof read in the Honours and Masters and your constant conversations during this challenging yet very rewarding time of my life.

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ABSTRACT

Research on stress has indicated that people in the helping professions dealing with people, especially those in the teaching profession, are particularly prone to emotional distress. However, information regarding the stress-related emotions specifically experienced by academic lecturers at institutions of Further Education and Training, is not abundant. University teaching has traditionally been conceived of as a relatively stress-free occupation, or at least has been seen in this way by outsiders. Nevertheless, there is overwhelming evidence attesting to the fact that academia is a highly stressful occupation.

The contemporary academic context in South Africa is characterised by changes such as the incorporation of colleges and the merging of universities and technikons, now referred to as universities of technology. Consequences such as financial predicaments, insecurity of employees, short-term contract positions, fewer fringe benefits, increasing emotional disturbance and stress, are unavoidable. Although they are not highly paid in comparison to professionals in the commercial sector, academics have been envied for their tenure, light workloads, flexibility and freedom to pursue their own research.

Concerns about academic stress have been articulated over the past three decades. Research conducted in the United Kingdom (UK), United States of America (USA), Australia and New Zealand has identified several key stressors commonly associated with stress among academic staff. These include work overload, time constraints, lack of promotion opportunities, inadequate recognition, inadequate salary, changing job role, inadequate management and/or participation in

management, inadequate resources and funding and student interactions. Other sources of stress, such as high self-expectations, poor interactions with colleagues, inequality in the system and lack of regular performance feedback have been highlighted in a few studies. Although some studies found high levels of stress relating to work relationships, control, resources and communication and job insecurity, excessive overload and work-life imbalance are among the most frequently reported stressors by academics.

Since academics do not represent an homogeneous group of professionals, it is considered inappropriate to examine academic stress without taking all their professional and personal characteristics into account. Research has shown that workload, inadequate salaries and a lack of public recognition were perceived as more significant sources of pressure by men than by women, whilst job insecurity, isolation from colleagues, a lack of institutional recognition of worth and work politics were more salient for women. Since academia is still largely a male dominated occupation, female academics may experience more stressors and strains than their male counterparts due to a lack of role models, less socialisation from women from their own rank, gender stereotypes and increased role conflict as they endeavour to balance roles at work and at home. Researchers have also noted the importance of age-based differences, and conventionally believe that stress universally declines with chronological age.

Data was collected through a biographical questionnaire and the Experience of Work and Life Circumstances Questionnaire (WLQ). A convenience sample of lecturers in an FET College (n=150) completed the questionnaires, which were analysed using the Statistical Package for the

Social Sciences (SPSS), version 20. Statistical procedures for data analysis include: T-Test, Multiple Regression Analysis and Analysis of Variance (ANOVA).

The results in the current research reveal that there are statistically significant differences in stress levels of academic staff at the FET college based on gender, age, race, marital status and tenure. Based on the responses obtained, 35.33% of the variance in total stress could be explained by Organisational functioning, Task aspects, Salary, benefits and personnel policies, Extra-organisational factors and Career aspects, and suggest that other unexplored variables could explain the variance in stress levels experienced by academics at the FET college.



CHAPTER 1

INTRODUCTION AND PROBLEM STATEMENT

1. INTRODUCTION

Anecdotal and empirical evidence attests to the fact that the South African educational system is in a transitional stage. Vocational teaching in South Africa, particularly in further education and training (FET) colleges, previously known as technical colleges, is currently the target of large-scale reforms at policy, curriculum and social levels (Papier, 2011). After extensive consultation with relevant decision makers and stakeholders, Act 108 of the Constitution of the Republic of South Africa (1996) ushered in new developments with respect to the education landscape within South Africa. This is illustrated in section 29 (1) (b), of the Constitution, 1996 (Act 108 of 1996), whereby it is stated that: "Everyone has the right: ... to further education, which the state, through reasonable measures, must make progressively available and accessible. In pursuit of the constitutional obligation towards the redressing of inequities, the Ministry of Education developed a new landscape". In particular, this initiative entailed the merger of technical colleges and the removal of past forms of discrimination within the Further Education and Training (FET) sector (Department of Education, 2001).

Since 1994, the post-apartheid government of South Africa has been aiming to redress effects of the apartheid era and move toward a democratic society. One of the focus areas of redress is the education system (Cross, Mungadi & Rouhani, 2002). This has resulted in a restructuring of the

broad higher education system, which implies consequences for the governance of all higher education institutions (Dlamini, 1995; Hugo, 1998). At the same time, the realities of globalisation require of higher education institutions to become internationally competitive (du Toit, 2000).

South African history is also unique in that it has been conceived from a legacy of apartheid with major inequities between educational institutions (Department of Education, 1997; Harman & Harman, 2003; Reddy, 1998). During the period of May 1996 to 1998, the South African Department of Education began a process of bringing about equity in the education system and attending to budgetary problems by redeploying teachers to areas where they were most needed (du Toit, 2000).

The tertiary education sector has undergone radical changes which have, in turn, contributed to the stress experienced by those employed in this sector. A skilled, sophisticated workforce is a prerequisite to competing in today's global, technology driven economic environment and education is key to developing such a workforce. Since 2002, the South African higher education system has undergone a complex restructuring process involving the merger of higher education institutions. Consequences such as financial predicaments, increased demands, insecurity and rapid changes are unavoidable and cause increasing emotional turmoil and stress (Hellriegel, Slocum & Woodman, 2001).

Lucas (2004) maintains that FET colleges have been designed to promote greater access and participation, to promote lifelong learning and to contribute to the country's national human

resource development goals, especially for intermediate knowledge and skills. Far-reaching changes have been brought about which have an impact on FET colleges in South Africa. Most notably, several colleges were merged into a smaller number of much larger multisite institutions and more resources were ploughed into FET colleges (Lucas, 2004). Staff members within FET colleges have hence been faced with an array of changes in expectations which have been placed on them, which is likely to contribute to their stress levels.

The transformation that has been taking place worldwide at higher education institutions over the last two decades has resulted in significant changes in the nature of work at institutions and therefore increased pressure on staff (Dua, 1996; Fisher, 1994; Winefield, Gillespie, Stough, Dua & Hapuararchchi, 2002). Among the possible causes of this rise in job stress is transformation, which includes increased domestic and international competition, restructuring, downsizing, cuts in government funding, and changes in management style and structure (Gillespie, Walsh, Winefield, Dua & Stough 2001).

Education is critical in the development of any country as it influences future economic growth and personal development. The task of tertiary education includes providing in-depth knowledge, academic development, education of students as well as the co-ordination of national development demands (Chen, Yang, Shiau & Wang 2006). Academic staff has a major role to play in achieving the objectives of the institution (Rowley, 2000). The performance of the staff, both as teachers and researchers and also as managers, determines to a large extent, the quality of the student experience of higher education and has a significant impact on student learning and thereby on the contribution that such institutions can make to society (Rowley, 2000).

Willie and Stecklein (1982) maintain that working in a higher education institution has been considered relatively stress-free and highly satisfying. Despite the fact that 75% of university workers reported long working hours, work overload and lack of support, Watts, Cox, Wright, Garrison, Herkimer and Howze (1991) found that academics were relatively satisfied with their jobs. Nevertheless, Winefield et al. (2002) report on an Australian study in which academic staff related their high levels of stress to diminishing resources, increased teaching loads and student/staff ratios, pressure to attract external funds, job insecurity, poor management and a lack of recognition and reward. Research has shown that very long working hours, common among academics, are associated with physical ill-health (Krantz, Berntsson, & Lundberg, 2005).

Amongst academic staff members in an Australian research study, there were complaints that they were dissatisfied with their jobs in general, and more specifically with university management, hours of work, industrial relations, promotion opportunities and pay. On the basis of increasing evidence to corroborate the nature of academic work, Tytherleigh, Webb, Cooper and Ricketts (2005, p. 54), concluded that "occupational stress in university staff is widespread and lends further support to the growing evidence that universities no longer provide the low-stress working environments they once did".

Research has also indicated that biographical variables have a direct effect on work stress. Van Zyl and Pietersen (1999) report that it is possible that gender, marital status, age, length of service, qualifications and job level, could influence susceptibility to stress amongst academics.

It is against this backdrop that the premise of this research is focused on identifying the sources of stress for lecturers, and the influence of biographical factors on stress within an FET college in the Western Cape.

1.2. AIMS OF THE STUDY

This research endeavours to:

- Determine sources of stress amongst a sample of FET lecturers in the Western Cape.
- Determine the impact of biographical characteristics in moderating the impact of these sources of stress.
- Make recommendations to mitigate these sources of stress.

1.3 HYPOTHESES UNIVERSITY of the

Hypothesis 1: There is no statistically significant difference in sources of stress based on the biographical variables (age, gender, race, marital status) amongst lecturers within an FET College.

Hypothesis 2: Task characteristics, organisational functioning, physical work conditions and job equipment, career and social matters and remuneration, fringe benefits and personnel policies will not statistically significantly explain the variance in total stress experienced amongst lecturers within an FET College.

1.4 DEFINITION OF TERMS

1.4.1. Stress:

The term stress is derived from the Latin word `strictus', which literally means tightly strung (van Wyk, 1998, p. 22). Schafer (2000, p. 6) explains stress as `arousal of mind and body in response to demands made on them'. Spector (2006) defines stress as a condition or situation that needs an adaptive response from an individual, and job strain as a negative reaction by an employee to a stressor.

1.4.2. Job stress:

Greenhaus, Callanan and Godshalk (2000) state that job stress results when an individual is confronted by an opportunity, a constraint, or a demand, of which the outcome is uncertain, but for which a particular reaction is required, and hence, aroused only if the outcome of the stimulus is deemed important to the individual.

1.4.3. Strain:

Greenberg and Baron (2000) surmise that strain is the accumulated effect of stress which results primarily in deviations from the normal states or performance and exposure to stressful events.

1.4.4. Burnout:

Burnout is referred to as an extreme form of job-related stress: a chronic affective response pattern to stressful work conditions where high levels of interpersonal contact are demanded (Van Wyk, 1998).

1.4.5. Coping:

In order to cope with major stress, related emotions need to be managed and reduced in such a manner as to bring relief to the person. This requires that individuals change their functioning in order to manage the demands they are experiencing as exceeding their available resources (Schafer, 2000). In so doing, an individual can counteract emotional distress, and succeed in coping with threatening demands.

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1.5 OVERVIEW OF THE STUDY

Chapter 1

This chapter provides an overview of the motivation, aims and objectives as well as the hypotheses of the study. A brief description of the necessity for undertaking the research is provided.

Chapter 2

This chapter focuses on providing an overview of the theory of the study. It explores the concept of stress and stress amongst teachers, university teachers and lecturers as well as research findings based on the topic. The various models and frameworks which underpin the study are discussed.

Chapter 3

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

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Chapter 4

This chapter highlights the results gained from the research analysis and the findings obtained in the study of stress within an FET college in the Western Cape.

Chapter 5

In this chapter a discussion of the results of the study is provided. An explanation of the results, summary as well as recommendations for future research is also provided.

1.6 SUMMARY OF THE CHAPTER

This chapter served to contextualize the research and presented the aims, objectives and hypotheses of the study were also provided. The following chapter provides a literature review based on the research problem of this study.



CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The teaching profession, and academic teaching in particular, has traditionally been viewed as a desirable goal. It was argued to be characterised by working in a stable, safe and predictable environment that was free of stress, and was perceived to have a high social standing. However, recent research suggests that in the last two decades, stress in academia exceeds that in the general population. Once autonomous and relatively unaffected by stress, academic staff members in post-secondary institutions now appear to suffer from occupational stress (Gillespie et al., 2001). In a review of the local research concerned with FET (further education and training) colleges and the vocational education sector in this country, Wedekind (2008, p. 13) notes that '... colleges remain a black box as far as the teaching staff and the students are concerned. This is a major gap in the research.'

There has been a proliferation in empirical stress-related research in various countries amongst academic staff, including China (Sun, 2011), Canada (Catano, Francis, Haines, Kirpalani, Shannon, Stringer & Lozanski, 2007), Sudan (El Shikieri & Hassan, 2012), Nigeria (Ojedele, 2007), South Africa (Coetzee & Rothmann, 2005), the United Kingdom (Tytherleigh, Webb, Cooper & Ricketts, 2005) and Australia (Winefield et al., 2002) attesting to the gravity of the problem. These studies highlight concerns on the implications of low job satisfaction and morale,

increasing ill-health and lower commitment amongst academic staff. The situation is also apparent in other countries, in which universities, universities of technology and institutions of higher and further education are faced with changes in funding, diminishing resources and greater expectations to engage in teaching, publication and community outreach.

Altbach (1996) reports on the results of an international survey of academic professions which was carried out using data from 14 countries in which significant changes had taken place in higher education. It was reported that teachers had higher levels of stress at work, almost double the rate (40%) when compared with other professions. A recent survey carried out by the Association of University Teachers found that 69% of academic and related staff found their job to be stressful and 50% reported psychological distress (El Shikieri & Hassan, 2012).

Against this backdrop, this chapter examines and explores the theoretical foundation of the study. It examines sources of stress within the broader framework of the teaching profession, and more specifically to academic settings. It provides definitions of stress, presents various models of stress and discusses sources of stress. Moreover, the impact of biographical characteristics is discussed, since research has been unequivocal whether biographical characteristics have an influence on stress.

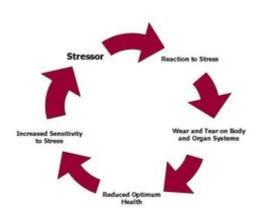
2.2. DEFINITIONS OF STRESS

Stress is a prevalent problem in modern life (Chang & Lu, 2007; Smith, 2000). Occupational stress can be defined as a disruption of the emotional stability of the individual that induces a

state of disorganization in personality and behaviour (Nwadiani, 2006). Stress can be described as functional or dysfunctional. Functional stress, also referred to as eustress, improves performance by motivating people to reach their set objectives. However, excessive stress can result in a variety of negative emotional and/or physical reactions, thus becoming dysfunctional (Lussier, 2009).

Greenberg and Baron (2000) surmise that stress is the complex pattern of emotional states, physiological reactions and related thoughts in response to external demands referred to as stressors, and to strain as the accumulated effect of stress, which results primarily in deviations from the normal states or performance and exposure to stressful events. Stressors are "factors that cause people to feel overwhelmed by anxiety, tension and/or pressure" (Lussier, 2009, p. 299). Figure 2.1 provides an insight into the effect that stressors may have on the individual.

Figure 2.1: The cycle of stress



Source: Greenberg & Baron (2000).

Arnold, Cooper and Robertson (1998) refer to stress as any force that pushes a psychological or physical factor beyond its range of stability and produces a strain within the individual, and when the knowledge that a stress is likely to occur represents a threat to the individual, or causes a strain on the individual (Greenhaus et al., 2000).

2.3 MODELS OF STRESS

There are several models of stress which have been proposed in the literature. These are addressed in the section which follows.

2.3.1 THE PERSON-ENVIRONMENT (PE) FIT MODEL OF STRESS

According to the PE fit theory, stress and stressors are not defined in terms of either the individual or the environment, but rather in terms of the degree to which there is "misfit" between the two (Fevre et al., 2003). The outcome set of PE fit theory consists of the individual's potential reactions to misfit, which can be characterised as either coping or defence (Rees & Redfern, 2000). Coping and defence are both potentially adaptive, neither being necessarily better or more effective than the other.

Harden (1999) explains that in the person-environment fit model of stress, stress is seen as a result of a mismatch between the requirements and the demands of the job and the individual's real or perceived ability to meet the required demands, for example an imbalance of staff, poor

discipline amongst learners, changes in educational approaches, and curriculum changes. Harden (1999) also highlights other sources of stress namely, quantitative work overload, role conflict and role ambiguity, which results when educators are unclear about their responsibilities.

Warr (2002) supports a model of stress which concludes that job strain results when there is a mismatch between the person and their environment, especially on the dimensions deemed important for the well-being of the individual. In the stress model, the relationship between person-environment misfit and strain is illustrated as a U-shaped curve, and for each individual's capabilities there are optimal levels of environmental demands, and, when optimal levels are reached, the strain will be minimal, and likewise, with too little or too much demand, strain increases (Warr, 2002).

2.3.2 THE DEMAND-CONTROL MODEL: STITY of the

The demand-control theory concerns the joint effects of job demands and job control on employee well-being (Kenny, 1999). According to Karasek's job demand-control model, strain occurs when high job demands combine with low opportunity to influence tasks and procedures, resulting in poor employee health and low job satisfaction (Bridger et al., 2007). Heavy workload (McKenna et al., 2002; Nwadiani, 2006), infrequent rest breaks, long working hours and shift work; hectic and routine tasks that have little inherent meaning, do not utilize employees' skills, and provide little sense of control (Fairbrother & Warn, 2003). Locus of control and self-efficacy may have a major impact on perceived stressors and resultant stress

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(Fevre et al., 2003; Love et al., 2007). Thus, an increase in control is positively correlated with job satisfaction (Kenny, 1999).

This model states that the effects of job stressors are a complex interplay of demands and employee control, wherein demands are stressors that need adaptation, and that they only lead to strain if there is insufficient control, and that the act of controlling the demand is the stress buffer (Warr, 2002). In Harden (1999) the demand-control model decision latitude and job demands are the two main factors that determine job strain, and it is said 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.

2.3.3 THE CYBERNETIC THEORY OF STRESS

Warr (2002) describes that in the cybernetic theory, stress is depicted to not only affect the well-being of the individual, but that it also stimulates coping responses that have a direct effect on the cause of the strain, in that through confronting the stressor, the issue has a higher potential for being resolved (see figure 2.2).

Figure 2.2: A Cybernetic model of stress, coping and well-being in organisations

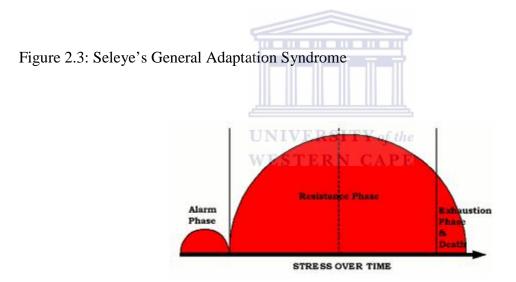
Perception Physical and Social Environment Personal Characteristics Y of the Cognitive Construction of Reality Social Information

A Cybernetic Model of Stress, Coping, and Well-Being in Organizations

Source: Warr (2002).

2.3.4 SELEYE'S THREE STAGES OF STRESS

Scientific attempts at explaining the process of stress have included that of Seleye (1946), who postulates that an individual encounters three stages in stressful situations, the first being the alarm reaction, in which the initial phase of low resistance is followed by counter-shock, wherein an individuals' defense mechanisms become active; the second stage is that of resistance, in which there is either maximum adaptation or a return to equilibrium. However, if the stress agent continues, the individual moves on to the third stage called exhaustion, and here adaptive mechanisms collapse (Arnold et al., 1998) (see figure 2.3).



Source: Arnold et al. (1998)

2.4 THE SOURCES OF JOB STRESS

Arnold, et al. (1998) argue that factors intrinsic to the job, like working conditions, shift work, working long hours, the risk and danger involved with the work, new technology, work overload, work under-load, and the factors that stem from the individuals role within the organisation like

role ambiguity, role conflict, personality variables, responsibility at work, and the quality of relationships at work, all contribute to stress.

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

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

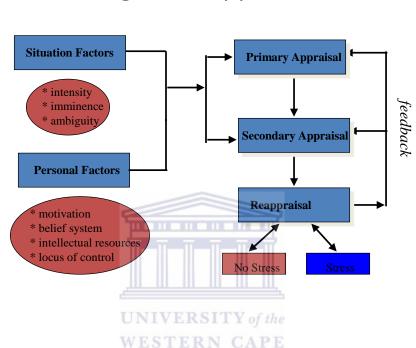
Sources of job strain among employees have been found to be the intrinsic job characteristics, organisational roles, work relationships, career development, organisational structure, organisational climate and the home-work interface (Warr, 2002).

2.5 JOB STRESS, THE INDIVIDUAL, AND THE MODERATORS OF JOB STRESS

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

Greenhaus et al. (2000) add that the personal characteristics of the individual like high anxiety and individuals with personality Type A, have been found to affect levels of job stress and even potentially predispose individuals to experience stress. According to Warr (2002), when individuals perceive their resources or capabilities to exceed that of what the environment demands, then the result is stress. The process is referred to as cognitive appraisal, which comprises both primary cognitive appraisal, in which strain is evaluated as a potential threat, and in the secondary cognitive appraisal phase, individuals assess their ability to cope with the situation if it be deemed threatening in the primary evaluation. In re-appraisal, the specific evaluation of whether or not attempts at coping have been successful, occurs (Warr, 2002) (see figure 2.4).

Figure 2.4: The cognitive appraisal process



Cognitive Appraisal

Source: Lazarus (1984).

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

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

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

2.6. SOURCES OF STRESS AND OCCUPATIONAL COPING FOR EDUCATORS

Various factors have been identified as impacting on the task of academics involved in higher education including the increase in class sizes (often accompanied by no increase in resources), little recognition of teaching skill, increase in the volume of marking and the demands of individual students (Oshagbemi 1997). A further factor which has been identified is declining quality of students in this sector (Oshagbemi, 1997). Winefield et al. (2002) attribute the increase in levels of stress amongst academics to diminishing resources, increased teaching loads and student/staff ratios, pressure to attract external funds, job insecurity, poor management and a lack of recognition and reward.

South African and international research (Fourie & Fourie, 2000; Salmi, 2000; Strydom & Strydom, 2004; Zaharia, 2002) comment that the transformation with education settings has resulted in a number of critical adjustments on the part of academics. Debates with respect to the medium of instruction, composition of student populations, increases in student numbers, outcomes-based instruction and structural design have taken place amongst all the protagonists, further exacerbating stress amongst academics (Barkhuizen, Rothman, & Tytherleigh, 2004; Bellamy, Morley, & Watty, 2003; Gillespie, Walsh, Winefield, Dua, & Stough, 2001).

Anderson, Richard and Saha's (2002) research revealed that amongst academic staff within Australian higher education institutions (HEIs), 68% of the respondents indicated that they wish and intend to leave the higher education sector. South African research (Koen, 2003) reports that South African academic settings are losing between 5–18% of academics. Koen (2003) posits the view that one of the biggest challenges confronting higher education, is related to the recruitment and retention of a new generation of academics. However, Naidu and Govender (2004) maintain that critical engagement and a proactive response is required as academics are increasingly leaving the profession to pursue more lucrative career opportunities.

Research undertaken amongst staff at higher education institutions in the United Kingdom reveals that the most significant stressors were perceived new management styles, unmanageable workload, too much administrative paperwork, lack of information, change in conditions of service, lack of administrative support (Earley, 1994), inadequate resources, uncaring organisation, inadequate salary (Daniels & Guppy, 1994), lack of opportunities for promotion,

ineffective organisational communication and a rushed pace of work (Jackson & Rothmann, 2006; Kinman, 1996).

Gilbert (2000) surmises that in addition to the increasing work load caused by growing student numbers (Gilbert, 2000), life-long learning and adult learning (Shortlidge, 2003), changes in the market place (Blackmore, 2001; Rowley, 2000) and globalisation (Brown & Harvey, 2006), are likely to have an impact on the well-being of employees at higher education institutions. In conjunction with developments within education settings, Kinman and Jones (2003), suggest that these stressors are resulting in lower levels of job satisfaction and commitment amongst academic staff.

Martin (2001) maintains that, since higher education institutions are dependent on the intellectual abilities and commitment of academic staff, the continued existence and sustainability of higher education institutions may be impacted by a lack of response to the prevalence of occupational stress in academic settings. South African research suggests that academics in higher education institutions experience include work overload (Monnapula-Mapesela, 2002), role conflict (Miller, 2003) and poor remuneration as particularly stressful (Koen, 2003). In addition, inadequate performance management (Fairbrother & Warn, 2003; Miller, 2003), insufficient support for teaching and research (Nelson & Burke, 2000), discrimination in terms of race and gender, lack of transparency (Barkhuizen, Rothmann, & Tytherleigh, 2004), and poor communication (Ball, 2004) have been identified by academic staff members as contributing to their stress.

2.6.1 Organisational Climate

An organisational climate refers to "a set of measurable properties of the work environment, perceived directly or indirectly by people who live and work in this environment, and is assumed to influence their motivational behaviour" (Khoza, 2004, p. 27), Reichers and Schneider (cited, in Khoza & Milner, 2008), agree that organisational climate is the shared perception of how things are in the workplace. Hemmingway and Smith (in Khoza, 2004) proposed a framework of possible relationships among organisational climate, occupational stress and stress related outcomes. They also discovered that a favourable climate dimension led to lower levels of occupational stress (Khoza, 2004; Khoza & Milner, 2008).

Various dimensions of organisational climate have been identified in previous research. These include autonomy, work pressure, support, trust, recognition and innovation (Khoza, 2004). Pietersen and Van Zyl (1999, in Khoza, 2004) studied the effect of organisational climate on teachers' level of stress and found that secondary school teachers considered inadequate autonomy, inadequate recognition as well as limited opportunities to be existing in South African education settings.

2.6.2 Stressors and Work

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

specialisation, the growing scope of syllabuses and higher number of learners per class (Niehaus, Myburgh & Kok, 1996).

In South Africa the following factors contribute to the experience of stress of educators which include increasing changes in education and society, and educators burdened with having to make a variety of modifications in their personal and professional lives. These changes comprise of population increases, diversity in student profiles, increases in the cost of living, crime and its effects on learner behaviour, conditions of service, new rules and regulations of the education department, curriculum changes, performance appraisal systems and demands of unions (Mestry, 1999).

2.6.2.1 Role Overload

Educators are subjected to high workloads with a resultant increase in stress and strain. Dewe (cited in Wilson 2002), found that workload was considered as the most frequent, most anxiety-inducing and the most fatiguing problem in a study of 800 teachers in New Zealand. Bertoch, Borg and Nielsen (1988) linked job overload to environmental stressors of teachers. Research shows that when individuals experience high work demands, with little or no control over these demands, psychological changes can occur (Ivancevich, Konopske, & Matteson, 2002).

Role overload has been found to be a salient stressor in academic work-life (Fisher, 1994; Lease, 1999). Academics are increasingly expected to fulfil additional administrative duties without adequate administrative support being made available. Anderson et al (2002) maintain that the

higher degree of accountability for all processes, as well as for quality within the higher education work environment, contributes to higher workloads. This is supported in the research undertaken respectively by Barkhuizen et al. (2004), Gillespie et al. (2001) and Olivier et al. (2004).

Gillespie et al. (2001) investigated stress within academic settings in New Zealand, comparing seven higher education institutions. The respondents in their study indicated that their workload is increasing, with 46% being of the opinion that it will be increasing further in future. These time constraints are likely to place additional burdens on academics.

Anderson et al. (2002), Barkhuizen et al. (2004), Gillespie et al. (2001), Monnapula-Mapesela (2002), and Olivier et al. (2004) have previously identified role overload as one of the most important aspects that gives rise to job dissatisfaction among academics. Research by Barkhuizen et al. (2004), Becher and Trowler (2001), and Olivier et al. (2004) indicates that an academic's work can be divided into teaching, research and community service components. Each of these aspects supposes its own, unique set of duties, responsibilities, processes and skills. Within some disciplines continuing professional development (CPD) activities need to be completed within a specific time period, while academics may also assist with administrative responsibilities, committee work, supervision of postgraduate students and being involved in community outreach work (Gillespie et al., 2001).

2.6.2.2 Role Ambiguity

Role ambiguity refers to the uncertainty, on the part of employees, about key requirements of their jobs, and about how they are expected to behave in those jobs (Nhundu, 1999; Conley & Woosley, 2000; Koustelios et al., 2004). Ivancevich and Matteson (1980, cited in Cartwright & Cooper, 1997) suggest that stress could be decreased in situations where the person's role in the organisation is defined clearly and understood expectations on the person is clear and not conflicting. Role ambiguity, role conflict and the level of responsibility for others are regarded as the major sources of stress pertaining to a person's role in the organisation.

Motseke (1998; Nahavandi & Malekzadeh 1999; Rout & Rout, 2002; Tosi et al., 2000; Wisniewski & Gargiulo, 1997) state that role-based stress which includes role conflict and role ambiguity, exists when educators do not have clarity on their responsibility, expectations or work objectives. When employees do not have a clear understanding of the scope and responsibilities, objectives of the work and expectations of fellow workers role ambiguity exists. Stress can be manifested in decreased self-esteem, feeling depressed, unhappiness or not feeling satisfied with life, poor interpersonal relationship, poor work output and a low motivational level to work which are related to role ambiguity.

2.6.2.3 Role Conflict

Role conflict occurs when different groups or persons with whom an individual must interact hold conflicting expectations about that individual's behaviour (Chang & Lu, 2007; Nwadiani, 2006). It can result from inconsistent information (Conley & Woosley, 2000). Several studies have revealed that role conflict is associated with low satisfaction, absenteeism, low involvement, low expectancies and task characteristics with a low motivating potential and tension, which all affect the productivity and efficiency at the organisation (Chang & Lu, 2007).

Miles and Perreault (1976, cited in Chaka, 1998) state four types of role conflict:

- "Person-role conflict: the individual would like to do the task differently from that suggested by the job description.
- ♣ Intra-sender conflict: this happens when a boss communicates expectations, which are incompatible, e.g. the individual receives an assignment without sufficient personnel to complete the task successfully
- ♣ Inter-sender conflict: the individual is asked to behave in such a manner that one person will be pleased with the result, while others will not be
- ♣ Role overload: the individual is assigned more work than can be effectively handled.

2.6.2.4 Responsibility

Cartwright and Cooper (1997) regard responsibility for people and responsibility for things to be organisational role stressors. They maintain that individuals are likely not to wish to assume

accountability and responsibility for others. Furthermore research indicates that coronary heart disease is more likely to be caused by responsibility for people than the responsibility for things.

Responsibility for others is often associated with significant job stress. This happens because the individual is spending significant amounts of time interacting with others, attending meetings, and trying to work with and motivate others to meet deadlines and schedules. Responsibility for others can be particularly stressful for managerial and professional workers such as teachers (Gmelch & Burns, 1994; Larson, 2004).

2.6.2.5 Relationships at Work

Several studies had revealed that poor social environment and lack of support or help from co-workers and supervisors are considered job stressors (Dua, 1994). According to Sutherland and Cooper (1990, p. 46) poor work relationships are defined as "having low trust, low levels of supportiveness and low interest in problem solving within the organisation". Superiors, peers and subordinates can dramatically influence employees just by their interactions. Problems of instability may occur in situations where the relationship between a boss and subordinate is psychologically unhealthy.

Competition amongst colleagues and differences in personality clashes amongst fellow employees can give rise to stress (Cartwright & Cooper, 1997). Jarvis (2002) found that factors such as social support amongst colleagues and leadership style are likely to have an adverse impact on levels of stress amongst educators. Office politics can be profoundly stressful for professional and white-

collar workers (Chang & Lu, 2007). Working in a large, hierarchical, bureaucratic organization where employees have little control over their jobs can be very stressful. A supervisor's autocratic management style often results in high turnover, high absenteeism, and low morale among their subordinates.

Research by Tytherleigh, et al. (2005) reports that academic staff were stressed by co-workers not pulling their weight, lack of control over decisions affecting their jobs, lack of resources, not being informed about job relevant information, work interfering with home and personal life, insufficient time to do their jobs at the quality level the academics felt necessary, and the level of their pay and benefits. They also expressed a lack of trust in senior management and their institutions, low levels of commitment to their organization, low levels of job satisfaction and high levels of job insecurity.

2.6.2.6 Individual Factors

Dollard (2002, p. 30) asserts that many variables of personality may affect work stress and include:

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- **♣** Type A behavioural patterns;
- # Hardiness;
- Locus of control;
- Negative affectivity; and
- Self-esteem

Dollard (2002) further argues that the stressor-strain relationship might be moderated by these factors. These factors may impact on the nature and magnitude of the stress response, may affect coping, may cause environments that are stressful and may directly affect strain levels. Individual factors could constitute the source of vulnerability or could provide positive resources to cope with stressors (Dollard, 2002). Betoret (2006) adds that high levels of self-efficacy and access to coping resources may mitigate against burnout amongst educators.

The term "personal stress" is used to describe the stress experienced by individuals based on factors that are unique to them due to their life experiences and circumstances. Personality type affects the nature of the stress experienced by individuals. Two main personality types have been identified with regard to the stress experienced by a person. Type A personalities are more likely to be goal driven, have an urgency to get things done and are competitive. They are impatient to get things done and struggle to cope with leisure time. They are more likely to be stressed and suffer from heart disease (Robbins & De Cenzo, 2004). Type B personalities are relaxed, easygoing and non-competitive.

Family matters such as divorce and death have been identified in research as being contributors to stress levels. Previous research has acknowledged the effect of these factors on the stress levels experienced. Financial problems (at home) affect the stress levels of individuals and their ability to function adequately (Newell, 2002).

2.6.3 Stress Intrinsic to the job

Working conditions, shift work, long hours, travel, risk and danger, new technology, work overload and work underload, are listed as the major stress factors intrinsic to the job (Cartwright & Cooper: 1997). Work demands refer to tasks that have to be performed by an employee and may include physical, social and organisational dimensions. Quantitative job demands involve the amount of work and the time available to perform a task, while qualitative work involves an employee's emotional reactions to a job (Cooper, et al., 2001).

Classroom teaching poses many demands, and researchers found that teachers do not have enough time to achieve the required standards of teaching (Kamper & Steyn, 2006). The job demands and resources could also affect work-related stress (Maslach, Schaufeli & Leiter, 2001). This implies that unless teachers are developed, they will be unable to cope with their work demands and hence ongoing training and development as well as support are critical factors.

2.6.4 Working Conditions

Cartwright and Cooper (1997) maintain that an employee's overall mental state and mood can be affected by their physical surroundings and relate to noise, lighting, smell and all the stimuli that can be perceived by the senses. The set-up of the workplace, for example, the design and physical setting may be another source of stress.

Bezuidenhout and Cilliers (2010), maintain that academics in many countries are reeling under the impact of globalisation: full-time, permanent employment is no longer guaranteed, working conditions have deteriorated, and salaries have remained the same or dropped in real terms.

2.6.5 Changes in Education (Policy & Practices)

Travers and Cooper (1996, p. 4) declare that "change is the single most important factor among current sources of stress for teachers and add that it is not only change, but change-on-change is beyond the control of most teachers that is the cause of stress". According to Jacobs (2002) the pace of change since 1994 has produced significant stress amongst educators. Sibuqashe (2005) reports that the transition to the Revised National Curriculum created additional stress for many educators. This is attributed to the fact that educators were expected to teach new subjects as well as adapt their previous lecturing style to a facilitation style in response to an Outcomes-Based approach (Jansen, 1997).

Educators reported feeling stress when external factors impeded or interfered with the teaching-learning process they developed in an educational setting with a specific curricular content. "More specifically, teachers expressed frustration in implementing policies that they felt were contrary to their own pedagogical understanding and professional values" (Moriarty et al., 2001, p. 33).

South African teachers have to absorb continuous change in curriculum, assessment, school structures and at the same time account for failure of learners (Olivier & Venter, 2003). Armstrong (1996) argues that many pressures of change, associated with increased demands on time (for

example, changes in curriculum), require teachers to accept proposed changes, examine their current practice and, in the light of new requirements, alter them.

From the quantitative data on lecturers' workplace experience it is evident that many college lecturers have had little exposure to the industries that their students will enter, which does not accord with the view that vocational teachers need to embrace a 'dual' identity. Palmieri (2004, p. 11) maintains that 'teachers in vocational education must not only know about teaching; they must know the industries they are teaching about ...as well as their identity as a teacher, they have an identity as a chef, a plumber ...'.

The roles of vocational teachers have expanded and diversified, and while they face many challenges, they have had few sources of support (Wedekind, 2008). The prevalence of competency-based systems, demand-led learning, and accountability structures have created new dynamics for vocational teachers. Changes have introduced outcomes-based approaches to teaching and learning, performance-based assessment, modularised programmes, student-centred learning, learner counselling and work-based learning, with profound implications not only for vocational teachers' work, but also for their identity construction.

2.6.6 Lack of career development and Job security

Travers and Cooper (1996) report that some of the most common features of working life are the fear of job loss and the threat of redundancy and that it may add to educators feeling stressed.

Recent literature stresses the importance of effective development programmes for teachers

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

Promotion is an important aspect that could contribute to career dilemmas, since promotion is generally used as an important standard for the evaluation of growth and development (Fairbrother & Warn, 2003; Nelson & Burke, 2000; Olivier et al., 2004). There is also a positive connection between promotion and job satisfaction, since promotion is generally accompanied by increased job satisfaction. The results obtained in this study concur with the findings of studies conducted among academic staff in 23 British and 15 Australian higher education institutions.

Oshagbemi (1996) and Gillespie et al. (2001) found respectively that the lack of promotion opportunities is one of the most significant determinants of stress and consequently job dissatisfaction among academics. In this regard, Olivier et al. (2004) found in South Africa that almost 30% of the respondents identified a lack of promotion opportunities as one of the main reasons for their job dissatisfaction. Gillespie et al. (2001) suggest, based on research among academics in 15 higher education institutions that, unless addressed, turnover is likely to increase, morale and commitment are likely to decrease.

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2.6.7 Poor pay

Anderson et al. (2002), Barkhuizen et al. (2004), Küskü (2003), Olivier, Venter, and De Lange (2004) identified financial remuneration as one of the most important aspects within higher education institutions that gives rise to job dissatisfaction among academics, in South Africa as well as globally. Poor financial remuneration not only contributes to academics experiencing job dissatisfaction, but is also identified as one of the main reasons for academics in South Africa leaving higher education institutions (Potgieter, 2002).

Ball (2004) suggests that the poor financial remuneration of academics in SA is identified as one of the main reasons why higher education institutions cannot recruit or obtain academics of high calibre, since the remuneration in the private sector is so much better. Similar findings were made by Trotman, Bennett, Scheffler, and Tulloch (2002) among academics in the health sciences in higher education institutions in the United States of America.

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

Employment in the vocational teaching sector has not been attractive in many countries for various reasons, not least of which are the remuneration and prestige afforded it when compared with other professions with similar qualification requirements (Attwell & Brown, 2001).

2.6.8 The Home-Work Interface

Travers and Cooper (1996) posit the view that there are possible stressors outside the working environment of educators that may impact on their stress. Some may include stressful life events, financial difficulties, the pressure of a dual-career person and other family responsibilities. This is in particular true of women teachers who make up a larger contingent of the teacher corps worldwide.

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Furthermore, McDonald and Korabik (1991) found that women managers across various industries were more likely to report stress arising from the home/work interface, discrimination and gender-based career barriers than men, whose main source of stress was managing subordinates.

Due to increasing challenges with respect to their work, academic staff may report difficulty in maintaining firm boundaries between the workplace and the home as, for many, it appears that the home is the extension of the workplace (Kinman, 1998). The majority of academics (67%) in Kinman and Jones's (2003) study agreed that work now encroached more on their home lives than in the recent past and 72% believed that their families suffered as a direct result of their jobs. In conjunction with this, both work overload and work-life imbalance have been related to

low psychological well-being among academics (Daniels & Guppy, 1994; Kinman & Jones, 2003; Winefield et al., 2002).

2.7 The impact of personal factors on stress levels

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

The sex and qualifications of academics could also influence their level of stress. Research (Okebukola & Jegede, 1989) reveals that inexperienced teachers tend to report greater stress than experienced ones. Pietersen and van Zyl (1999) establish that sex and marital status play a significant role in stress. However, they found that age, number of dependents, length of service, qualifications and job level did not considerably correlate with stress level amongst a sample of 59 school teachers.

2.7.1 Age

Research concerning stress levels of different age groups, is contradictory. Naylor (2001) reported relatively young teachers who experienced such high levels of stress and nervousness that they contemplated suicide. Research (Karasek & Theorell, 1990; Theorell & Karasek, 1996) suggests

that age is linked with stress amongst educators. However, research by Pisanti, Gagliardi, Razzino and Bertini (2003) amongst a sample of secondary school teachers in Italy did not find proof of a relationship between the age of teachers and the level of stress experienced.

Tetty (2009) maintains that, the problem that South African universities face is that scarce and highly skilled academics are aging at an alarming rate. Academics, both male and female, in middle and later career and life stages represent an underutilised talent pool in the South African workforce, neglected in research, theory and practice. Barry and Sawyer (2008) report that 50% of academic staff in South Africa are over the age of 50. Similarly, Tetty (2009) found that the percentage of academics in South African universities who are over the age of 50 varies from 30% to more than 50%. The reality that universities face is that the small core of valuable human capital, constituting the South African academic workforce, is ageing at a rapid rate (Susssman & Yssaad, 2005).

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2.7.2 Gender

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

Much of the research on gender and stress is debatable. Some research suggests that women experience more stress than men and that women are more prone to depression (Van Zyl, 2002).

Other research claims that gender does not contribute to stress in female employees (Martocchio & O'Leary, 1989).

Pisanti et al. (2003) conducted research to determine the connection between gender and stress amongst a sample of 2 182 secondary school teachers in Italy. However, they found an insignificant connection between stress and gender. According to Aamodt (2004), role conflict and ambiguity in female employees are some factors that can add to higher stress levels amongst women. He argues that when employees have competing roles, it can cause them a great deal of stress. "For example, a female employee's role as manager may require her to work on a Saturday, but her role as a mother requires her to attend her daughter's soccer game on the same day" (Aamodt, 2004, p. 478).

Although studies have shown that women in higher education have made significant progress in breaking through the glass ceiling, there are still cultural, organisational, political and social obstacles that prevent many female academics from reaching their full potential (Papier, 2011).

2.7.3 Race

Studies on race and stress are unequivocal. Aamodt (2004) believes that there are only slight differences in reactions to stressful situations among ethnic groups. A study done by Van Zyl and Bester (2001, p. 19) indicates that black illiterate or semi-skilled employees' levels of stress were considerably higher than the literate or skilled group.

Smallegan (1989) and Dressler (1989) and Van Zyl (1991) suggest that high levels of stress in senior black employees are linked to the broad social context within which the individual functions. The following are normal examples: personal home life affected by the extra time devoted to work, physical threats in the townships, inadequate housing and facilities, family problems, poor health, social problems with family and friends, financial problems, insufficient recreation facilities and changes.

2.8 Symptoms of stress

Schlebusch (2004) created a stress symptom checklist to evaluate stress in the general population.

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The results which emanated from this research are depicted in Table 2.3

Table 2.3: Symptoms of stress

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Physical reactions		
Apathy/lack of enthusiasm	Sexual problems	Frequent indigestion
Difficulty in relaxing	Muscle tension	Dizzy spells for no reason
Disturbing dreams/night mares	Feeling physically unwell	Feeling tight-chested for no
		reason
Psychological reactions		
Feelings of helplessness	Feelings of disliking yourself	Feelings that you are a failure
Feelings of general anxiety	Low self-esteem/low opinion	Feelings of confusion
	of yourself	
Awkward feelings when close	Being over self-critical	Feelings of frequent criticism
to others		
Behavioural reactions		
Memory loss/forgetfulness	Difficulty in making up mind	Disconnect in other people
Increased aggressiveness	Frantic bursts of energy	Tics/nervous habits
Lack of interest in life	Little sense of humour	Sleep disturbances

Source: Schlebusch (2004, pp. 327 – 349)

2.9 THE OUTCOMES OF STRESS:

Miner (1992), like Greenhaus et al. (2000), list the outcomes of stress to be physical, namely increased blood pressure, ulcers, elevated serum cholesterol and a rapid heart rate, psychological factors as job dissatisfaction, moodiness, a low self-esteem, low trust, temper tantrums and organisational factors as being absenteeism, sabotage, tardiness, low performance and accident proneness. Nel et al. (2001), associate high absenteeism, labour turnover, low commitment, and low organisational citizenship behaviour to high stress levels.

2.10 THE EFFECTS OF STRESS ON EDUCATORS:

In a study by Borg and Riding (1991) it was found that teachers who reported higher stress were less satisfied in teaching work reported higher absenteeism, and were more intent on leaving teaching, they also found that lower levels of stress are related to improved teaching method effectiveness. Marais (1992) states that the new education approach of outcomes based education, the high crime rate in the country, having to cope with current political change and the corruption in state departments are causing stress for educators.

2.10.1 Low Teacher Morale

Gold and Roth (1993, p.3) declare that "the degenerating mode of teachers is an indication of the stressful conditions of work and the disillusionment they experience because of unmet expectations". Numerous researchers describe this low morale in terms of "Educators in Crisis" or "Education in Crisis" or "A profession in Crisis".

Empirical evidence suggests that teachers' morale is low because the perks they receive are inadequate to meet their needs, and outcomes-based education has caused uncertainty among teachers (Ngidi & Sibaya, 2002; Olivier & Venter, 2003).

2.10.2 Job Dissatisfaction

Travers and Cooper (1996, p. 20) posit the view "that research evidence supports the view that sources of stress in a particular job, together with individual characteristics, can be predictive of stress symptoms, which may reveal themselves in the form of job dissatisfaction ..." Job dissatisfaction is regarded as one of the major significant behavioural manifestation of stress in the workplace.

Travers and Cooper (1996) report on studies that were done by Moracco et al. (1983) and Kyriacou (2001) in which it was reported that there is a high level of dissatisfaction with teaching as a career. Some of the factors identified by teachers that caused this frustration were salary, career structure, promotion opportunities and occupational status.

Zembylas and Papanastasiou (2004, p. 357) claim that "teacher dissatisfaction appears to be a main factor in teachers leaving the profession in many countries". They also surmise that teacher satisfaction is directly related to how they feel about their teaching role, that is, their levels of motivation. Zembylas and Papanastasiou (2004, p. 360) establish that some of the sources that would contribute to teacher satisfaction are "more administrative support and leadership, good student behaviour, a positive school atmosphere and teacher autonomy".

2.10.3 Physical Illness and Absenteeism

Another problem that stems from stress in the workplace is absenteeism where teachers are really sick and where teachers feel they require intermittent breaks from a very difficult workplace (Chapman, 1994). Chapman (1994) states that a secondary problem that flows from teachers' absenteeism is that it can lead to higher rate of pupil dropout.

Wood and Montagno (as cited in Brown & Uehara, 2008) posit the view that "when a qualified educator is absent from the classroom, student success is negatively affected". Furthermore they argue that research has also proven that teacher stress is significantly linked with the total number of days that teachers are away from school.

2.10.4 Attrition

The most frequently cited predictors of withdrawal have been those of intrinsic (recognition, sense of achievement, fulfilment) and extrinsic rewards (working conditions, management policy) (Travers & Cooper, 1996). Huberman (1993, p. 49) listed reasons cited by educators for leaving the profession before retirement as "fatigue, routine, frustration and nervous tension". According to Brown and Uehara (2008), results of a study indicated that in seven out of the ten locations, teachers said that they were consider leaving teaching due to high degrees of stress and burnout. These 'potential leavers' displayed extra emotional exhaustion, greater feelings of depersonalisation, and less personal accomplishment in their jobs (Brown & Uehara, 2008).

Training of teachers does not solve the problem, as very few students are interested in the profession. Unfortunately, schools cannot find sufficient replacements and severe teacher shortages are experienced right through the world. In light of the above, preventing teacher attrition is an educational and economic necessity (Chapman, 1994).

2.11 BURNOUT

Greenhaus et al. (2000), describe burnout as a psychological stress reaction that is characteristic of people doing the kind of work that involves a high degree of emotionally charged interaction with other people and that it consists of three interrelated components namely emotional exhaustion, de-personalization of relationships with whom they serve and a sense of low personal accomplishment at work, and that the consequences of burnout are negative emotions,

interpersonal friction, poor health, declining performance, substance abuse and feelings of meaninglessness.

Burnout is a developing reaction 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 (Montgomery, Mostert & Jackson, 2005).

Spector (2006) also 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 the symptoms of low motivation, emotional exhaustion, low energy and low enthusiasm for the job. The negative experience of burnout involves a degree of emotional exhaustion, the loss of feeling and concern, the loss of trust, the loss of interest, and the loss of spirit, irritability, reduced idealism, feelings of helplessness, a negative reaction to the self, and withdrawal (Miner, 1992).

The results of stress are an increase in performance but only up to a point, beyond which further increments of stress reduce performance and results in burnout and feelings of being trapped and of which the end result is poor health, which manifests itself in life threatening ailments like diabetes, heart disease, strokes and degenerative and infectious diseases (Greenberg & Baron, 2000).

Friedman (1995 as 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 where the overall classroom climate varies this level of burnout.

2.12.1 Definitions of Burnout

Daley (as cited by Travers & Coopers 1996, p. 24), defines burnout as "a reaction to job-related stress that varies in nature with the intensity and duration of the stress itself, resulting in workers becoming emotionally detached from their jobs altogether". Lachman and Aranya (as cited by Travers & Cooper, 1996) define burnout as "A feeling of physical, emotional and mental exhaustion that results from a chronic state of cumulative pressure or stress at work, rather than the outcome of isolated, critical, or intermittent events". Wood and McCarthy (2002) describe burnout as a loss of idealism and enthusiasm for work. Cole and Walker (1990, p. 27), refer to "teacher burnout as a state of mental, emotional and attitudinal exhaustion in teachers which results from a prolonged experience of stress".

2.12.2 Factors causing burnout

Research indicates that teachers identify student misbehaviour as an important source of teacher stress (Hastings & Bham, 2003). According to a study done by Hastings and Bham (2003), as well as other researchers, there is a relationship between student misbehaviour and teacher burnout. Since it was difficult to report how stressful disruptive classroom behaviour is, they conducted a study to measure the direct relationship between the extent of behaviour and classroom level. The Pupil Behaviour Patterns scale (PBP) was used to ascertain: disrespect, attentiveness and sociability (Hastings & Bahm, 2003).

Results from the study revealed that disrespectful student behaviour was reported to be the strongest predictor of burnout. Interestingly, even students themselves identified disrespectful behaviour as the factor that most likely irritated or disturbed their teachers (Hastings & Bahm, 2003).

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2.12.3 Symptoms of teachers' burnout

2.12.3.1 Emotional Exhaustion

Evers, Tomic and Brouwers (2004) describe emotional exhaustion as the "feeling of being emotionally overextended and having depleted one's emotional resources". Similarly, Wood and McCarthy (2002) envisage emotional exhaustion as a situation in which an individual feels emptied of personal emotional resources and becomes highly vulnerable to stressors.

2.12.3.2 Depersonalization

Evers et al. (2004) refer to depersonalization as a negative, callous and detached attitude towards the people with whom an individual works. Travers and Cooper (1996) believe that teachers who are experiencing burnout tend to be less appreciative of good work by learners; they do not give praise and do not encourage learners to aspire to achieve better results.

2.12.3.3 Low levels of Personal – Accomplishment

Maslach and Jackson (as cited by Wood & McCarthy, 2002) surmise that reduced personal accomplishment, in which one devalues one's work with others, is one of the most important symptoms of burnout. Research (Hastings & Bahm, 2003) also indicates that teachers' ability to manage the classroom and student behaviour affects their sense of accomplishment.

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2.12.4 Prevention of burnout

Wiese et al. (2003) state that passive or avoidance coping of stress could possibly be associated with higher levels of burnout. Wood and McCarthy (2002, p. 2) refer to Albee (2000) who advocates a proactive approach to identify the sources of teacher burnout and eliminate them before the syndrome develops, rather than treating it after it has already occurred. According to these two researchers, a distinction has been made on three levels of prevention interventions, namely primary and secondary prevention.

2.12.4.1 Primary Prevention

On this level of prevention, the goal is to reduce the occurrence of new cases of burnout. It is said that teachers should be allowed to have some control over their daily challenges. Kyriacou (2001, as cited by Wood & McCarthy, 2002) suggests the following to prevent new cases of burnout amongst teachers: Teachers should be consulted on matters related to classroom issues, such as curriculum development or instructional planning. Open lines of communication between teachers and administrative staff must be provided and kept in place so that support is at hand. Teachers must be encouraged and allowed to develop themselves professionally.

2.12.4.2 Secondary prevention



In the case of secondary prevention, the goal is to identify and treat the symptoms of burnout early and before they turn into a full-blown disorder. Woods and McCarthy (2202, p. 3) include the following as early symptoms of stress and burnout:

- Feeling like not going to work or actually staying absent.
- Struggling to concentrate on the task at hand.
- Feelings of overwhelmedness with the workload and inadequacy to perform the given tasks.
- Isolating oneself or having conflicting relationships with colleagues.
- Experiencing a general feeling of irritation about school.
- Struggling with sleeplessness, eating disorders, headaches and heart palpitations.
- Incapacitation and inability to function effectively under severe pressure situations.

2.12.4.3 Tertiary prevention

Once burnout is diagnosed, a decision should be made whether the affected individuals may continue with their work. Researchers (Gold & Roth, 1993; Kyriacou, 2001; Travers & Coooper, 1996) found that most educators go through a period of burnout some time or another in their teaching career. The decision to stay at school and in teaching is affected by many factors, amongst which are personal factors. This may include issues like finding another job outside of teaching, personal, financial and family responsibilities (Chapman, 1994; Kerry, 2000).

Woods and McCarthy (2002, p. 3) succinctly maintain that: "Given that teachers must face a classroom full of students every day, negotiate potentially stressful interactions with parents, administrators, counsellors, and other teachers, contend with relatively low pay and shrinking school budgets, and ensure that students meet increasingly strict standards of accountability, it is no wonder many experience a form of burnout at some point in their careers."

2.13 Management of Stress

In the previous sections of this study, attention was accorded to stress as an inherent aspect of teaching. Aamodt (2004, p. 474) believes that "in order to properly manage stress, it is critical to understand what causes stress and learn to handle that stress". Aamodt (2004) further believes that stress could be managed before it happens by incorporating certain practices into a daily

programme. Some of these techniques, included in figure 2.5, include laughter, exercise, a balanced diet, support groups and self-empowerment.

Figure 2.5: Managing stress



Source: Aamodt (2004).

Armstrong (1996) argues that there are basically four main reasons why employers should admit that their employees are experiencing stress and do something about it: firstly, because of their social responsibility to provide a good quality of working life; secondly, because excessive stress causes illness; thirdly, it can result in an inability to cope with the demands of the job, which causes more stress; and lastly, excessive stress reduces the effectiveness of the employee and therefore the organisational performance.

Van Zyl (2002, p. 27) postulates the following reasons why measurement and management of stress is not a luxury, but a necessity for organisations: "stress management can only be effective if the focus falls on the specific problems of the organisation and on the needs of the people. Scientific stress measurement and making known its results in a confidential and responsible manner could motivate people to become involved in stress management. It allows organisations to respond in a preventative manner to identify problem cases and areas. More pro-active measures can be taken to prevent a situation where organisations are dealing with stressors in a symptomatic and in a reactive way". Figure 2.6 depicts organisational stress management approaches.

Organizational Stress Management

Goal Setting

Wellness
Programs

Organizational
Communication

Employee
Involvement

Figure 2.6: Organisational stress management

Source: Robbins (1998).

Armstrong (1996, p. 227), Brown and Uehara (2008) and Travers and Cooper (1996) list the following as possible strategies to manage stress: Redesigning of work, ergonomics, teacher training and counselling to assist teachers in coping. Developing or implementing of policies and

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programmes; redesigning access (screening for weapons, installing gates and closed circuit cameras, and adopting extra security measures). A safer-physical environment (improved lightning, usage of access cards); redesigned work (team teaching, open parent/teacher meetings), reducing the danger of role ambiguity and conflict. Figure 2.7 illustrates some of the strategies which can be used in order to manage stress.

Figure 2.7: Individual stress management



Source: Robbins (1998).

Educators must be encouraged to increase their time management skills in and out of work and in doing so decrease the pressure that it puts on themselves; Biofeedback – electronic measurement of mind-body functions, including blood flow, heartbeat, muscle tension, breathing, aerobic activity and any form of physical activities that would encourage relaxation, should encouraged.

2.14 CONCLUSION

The literature review provided an overview of the theoretical body of knowledge and research pertaining to the issue of educator stress. The next chapter focuses on the methodology that was applied to conduct the research. Attention was paid to the sampling design, procedure, measuring instrument, collection of data and the different statistical techniques used to analyse the data.



CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Sekaran and Bougie (2010) define research as a systematic and organised effort to investigate a specific problem that needs a solution. In doing research a series of steps are designed and followed. Research involves a series of well thought-out and carefully executed activities that will enable one to know how organisational problems can be solved or at least minimized (Sekaran & Bougie, 2010). Research thus incorporates the process of inquiry, investigation, examination and experimentation. These processes have to be carried out systemically, diligently, critically, objectively and logically.

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In this chapter, the process followed is explained, along with the research design, a description of the population and sample is provided, the objectives and hypotheses are delineated. In addition, the data collection instruments, psychometric properties and rationale for inclusion are explained.

3.2 RESEARCH OBJECTIVES

The objectives of the research are as follows. They include inter alia;

• To determine sources of stress amongst academic staff members within an FET college in the Western Cape.

- To determine the impact of biographical characteristics in moderating the impact of these sources of stress.
- To make recommendations to mitigate these sources of stress.

3.3. RESEARCH DESIGN

For the purpose of the current research, a quantitative approach was employed and based on a cross-sectional design, during which data was collected over a limited period. Self-administered questionnaires were administered to the sample of respondents. In drawing the sample, it was decided to make use of a non-probability sampling design which implies that the probability of any element of the population being chosen is not known (Hair, Babin, Money & Samuel, 2003).

When using non-probability sampling, no inference regarding the target population can be made and the sampling error cannot be estimated. Loubser (1996, p. 253) states that "in non-probability sampling there is no way of estimating the probability that any element will be included in the sample, and therefore there is no method of finding out whether the sample is representative of the population". Cooper and Schindler, (2003) provide some of the important practical reasons for using this type of sampling, namely: It is a cheap method and easy to administer in the sense that whoever is available and willing can participate on a voluntary basis. Accordingly the technique that was employed is based on the method of convenience sampling. However, it is the least effective method due to the potential bias which may be introduced into a study. Hence, the generalizability of the findings is adversely impacted (Sekaran & Bougie, 2010).

3.3.1 CONVENIENCE SAMPLING

Convenience sampling, as a form of non-probability sampling, involves taking all cases on hand until the sample reaches the size desired (Bless & Higson-Smith, 1995). The sample thus comprises those population elements that can be studied with the greatest convenience (Sekaran, 2000; Steyn, Smit, Du Toit, & Strasheim, 1994). This design was primarily selected due to the advantages attached to its use. Convenience sampling is relatively uncomplicated, inexpensive, not time-consuming, and is free of the statistical complexity inherent in probability sampling methods (Huysamen, 1994).

3.4 POPULATION AND SAMPLE

Huysamen (1994) defines a population as encompassing "the total collection of all members, cases or elements about which the researcher wishes to draw conclusions." (p. 38). A sample, on the other hand, constitutes a subset of this population. Conclusions are, thus, drawn from the sample and are generalized to the population as a whole (Sekaran & Bougie, 2010).

The population for this study consisted of academic staff members within an FET college in the Western Cape. The approximate population size constitutes of approximately 300 teachers. Tredoux and Durrheim (2002, p. 14) explain a population is "an entire collection of elements or individuals" and a sample as "a subset of such collection".

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

For the purpose of this research 200 questionnaires were handed out, of which 150 were returned, representing a response rate of 75%. Such a response rate may be considered relatively high since Sekaran and Bougie (2010) maintain that a response rate of 30% may be regarded as being acceptable.

3.5 DATA COLLECTION METHOD AND PROCEDURE

Permission was requested from the Director of the college prior to the research being undertaken. Once the permission was obtained, cover letters were attached to the questionnaires which fully explained the nature of the study, as well as assuring respondents of the confidentiality of any information provided. Respondents were also provided with detailed instructions as to how the questionnaires were to be completed and returned. The rationale behind providing clear instructions and assuring confidentiality of information rests on the fact that this significantly reduces the likelihood of obtaining biased responses (Sekaran & Bougie, 2010).

Such a procedure was also deemed suitable since the information was to be obtained simply through the use of structured questions. Collecting the data in this way also has a number of advantages. It allows for the convenient analysis of the obtained data, is relatively inexpensive, and is generally not time-consuming (Sekaran & Bougie, 2010).

3.5.1 BIOGRAPHICAL QUESTIONNAIRE

The biographical questionnaire elicited information with respect to the age, race, gender, marital status, years of employment and educational level of academic respondents.

3.5.2 SAMPLE CHARACTERISTICS

Descriptive statistics in the form of frequencies and percentages are subsequently graphically presented for the variables included in the biographical questionnaire. These include the:

• gender of the respondents

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- race
- age
- qualifications
- tenure and

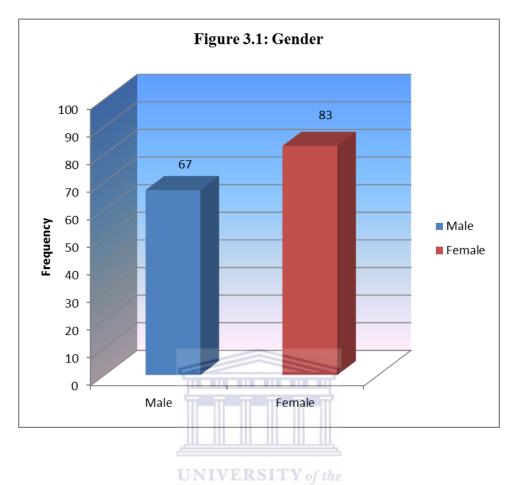
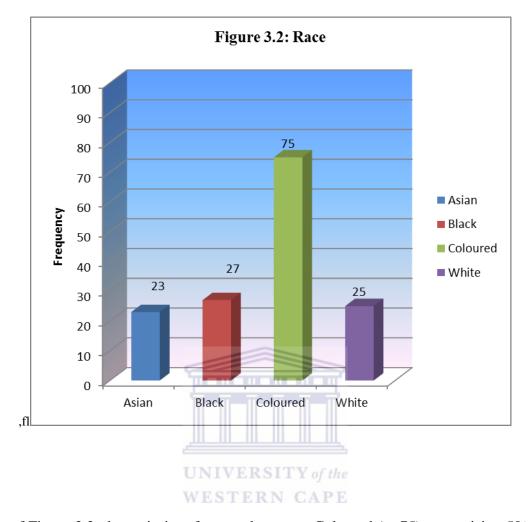
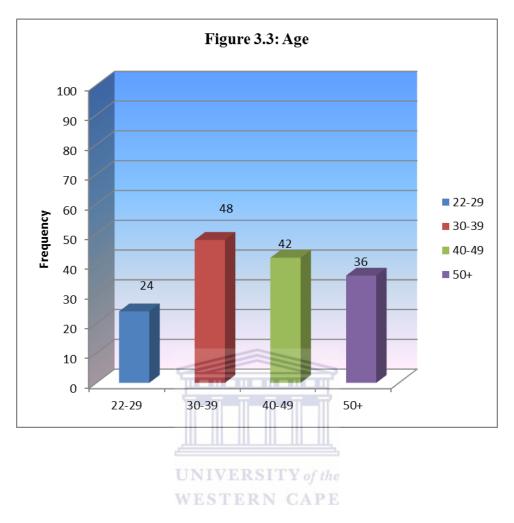


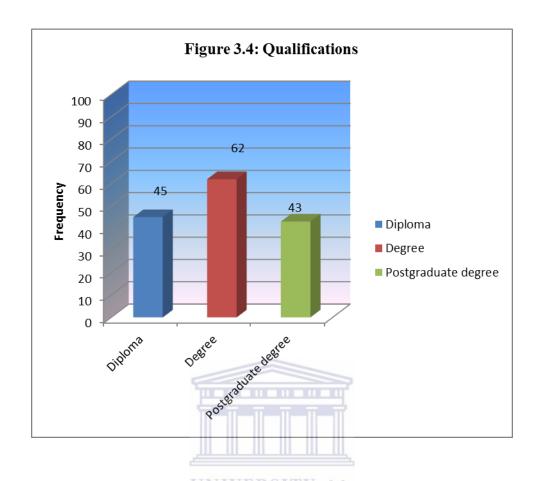
Figure 3.1 indicates the gender distribution of the sample of educators that participated in the research. In terms of Figure 3.1, the majority of respondents were female (n=83) or 55%, while males (n=67) constituted 45% of the sample.



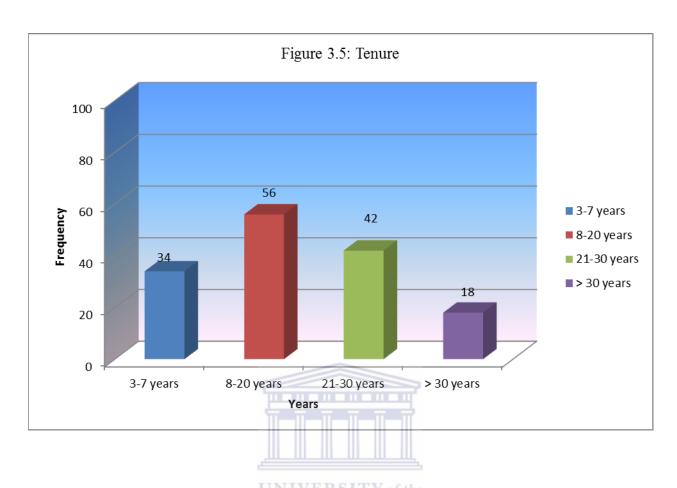
In terms of Figure 3.2, the majority of respondents was Coloured (n=75), comprising 50% of the sample. White respondents (n=25) represent a further 17% of the sample. Black respondents (n=27) comprise 18% of the sample, while Asian respondents (n=23) constitute 15% of the sample.



Based on the frequency distribution presented in Figure 3.3, it can be deduced that the majority of the respondents (n=48) or 32% of the sample is in the age category 30-39 years. Respondents in the age category 40-49 years constituted the second largest group of respondents (n=42), thereby comprising 28% of the sample. While 24% of the respondents were in the age category 50+ (n=36), 16% were in the age group 22-29 (n=24).



In terms of the sample, it may be seen that the majority of the respondents had a teachers' degree (n=62, or 41%). A further 45 teachers has a diploma (that is 30%), while 43 respondents have postgraduate qualifications, constituting 29% of the sample.



In terms of Figure 3.5, it can be seen that the majority of the respondents (n=56), or 37% of the respondents has been in teaching for 8-20 years, while a further 42, that is 28% have been in teaching for 21-30 years. While 23% of the respondents had 3-7 years' teaching experience (n=34), only 12% had more than 30 years' teaching experience.

3.5.2 Advantages of the Questionnaire

Advantages for using questionnaires include ease of administration to large numbers of individuals, it allows for respondents to remain anonymous and it is relatively more economical to use (Rosnow & Rosenthal, 1996). Van Zyl (2002) maintains that as self-evaluating questionnaires are quantified it becomes easier to compare the scores of different respondents.

3.5.3 Experience of Work and Life Circumstances Questionnaire (WLQ)

3.5.3.1. Nature and Composition

The WLQ is a stress questionnaire that was developed by the Human Sciences Research Council (HSRC) and standardised for South African conditions (Van Zyl & van der Walt, 1994). The WLQ was developed to measure the level and causes of stress of an individual whose reading and writing ability is at least at Std. 8 level (Grade 10). A person who experiences high levels of stress will score a high score on the items in the questionnaire. The questionnaire comprises of two sections namely experience of work and circumstances and expectations (Van Zyl & van der Walt, 1994).

The experience of work section is utilised to establish the respondent's level of stress, which is categorised as normal, high or very high and it comprises 40 items. To determine the extent of certain feelings a five-point scale is employed. The circumstances and expectations section aims to examine the causes for a respondent's level of stress. This section of the questionnaire comprises of 76 items and a five-point scale is used to determine the frequency of certain aspects of stress. The circumstances part (23 items), deals specifically with the following areas:

Outside work environment: Sixteen (16) items dealing with Family problems, Financial obligations, Life phase (e.g. midlife), General economic state of the country, Changing technology, Arrangements at home, Social situations, Status, Health, Background, Impact of work on home life, Travel arrangements,

Religious life, Political ideology, Availability of accommodation and Availability of recreational facilities.

o *Inside the work environment*: Seven (7) items pertaining to characteristics of task(s) to be performed.

The expectation part (53 items) deals with Organisational functioning, Task aspects, Physical working conditions and work equipment, Career prospects, Social aspects and Salary, benefits and personnel policies (Van Zyl & van der Walt, 1994).

3.6 PSYCHOMETRIC PROPERTIES OF THE WLQ

Anastasi (1982, p. 103) maintains that "reliability refers to the consistency of scores obtained by the same persons when re-examined with the same test on different occasions, or with different sets of equivalent items, or under variable examining conditions." Murphy and Davidshofer (1988, p. 77) explain that "to determine the influence of variability in true scores and to what extent errors of measurement results in variability in test score, is the chief goal of estimating reliability". When determining reliability two major components are important:

- i) Internal consistency How accurate is the test at a given time? Are all the items measuring the same thing?
- ii) Time consistency How dependable is the test for predictive purposes? Does it yield consistent results over time?

There are three major methods (Test-Retest Method, Parallel- Form Method and Split-half Method) of measuring test reliability. All use the Pearson product - moment correlation coefficient and a positive correlation is expected. Other methods include Alternate Form and Internal consistency or Kuder-Richardson Theory. According to Smith (1981, cited in Van Zyl & van der Walt, 1994), the Kuder-Richardson formulae measures internal consistency and the Test-retest methods focus on correspondence between the first and second measurement.

Table 3.2 provides an indication of the reliability levels of the different fields of the WLQ. The calculation that was used is based on the Kuder-Richardson formula 8 (as modified by Ferguson). The Test-retest scores are based on two test administrations that were done with a four-week interval.

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Table 3.2. Kuder-Richardson 8 and Test-Retest Reliability Coefficients

Scale	KR 8	Test- retest
Levels of stress	,92	,79
Causes arising outside the work situation	,85	,80
Causes originating within the work situation:		
Organisational functioning	,83	,72
Task Characteristics	,83	,65
Physical working conditions and job equipment	,84	,62
Career matters	,84	,72
Social matters	,84	,69
Remuneration, fringe benefits and personnel policy	,86	,65
N	731	178

Source: Van Zyl, E.E. & Van der Walt H.S. (1994): Manual for the Experience of Work and Life Questionnaire (WLQ): p.21

The reliability coefficients of the Kuder-Richardson 8 range from 0.83 to 0.92. The test-retest reliability coefficients vary from 0.62 to 0.80. The reliability of the WLQ is regarded as satisfactory. When measured against reliability coefficients for the 16PF it compares favourably (van Zyl & van der Walt, 1994). The reliability of the WLQ based on the current study is reported on in the next chapter.

3.7.1 Validity

3.7.2.1 Content Validity

It is regarded that face validity and logical validity are indicators of content validity (van Zyl & van der Walt, 1994). According to Aamodt (2004) face validity indicates the degree to which a test appears to be valid. He adds that tests takers and test administrators will not have confidence in the results if a test or its items do not appear valid. Smith (1981 cited in van Zyl & van der Walt, 1994, p. 22) contend, "Face validity does not refer to what the questionnaire actually measures, but to what the items apparently measure". The questionnaire is assumed to have face validity as the items in the questionnaire was developed according to a theoretical model and evaluated by a panel of experts (van Zyl & van der Walt, 1994).

According to Smith (1981, cited in van Zyl, 1994 & van der Walt, p. 22) logical validity has three requirements:

• "A careful definition in behavioural terms of the traits or aspect of behaviour dealt with in the questionnaire.

- Analysis of that behaviour aspect in the parts which it represents..
- An evaluation of the question whether the items have adequate discrimination value".

Van Zyl and van der Walt (1994) maintain that during the development of the WLQ the questionnaire was subjected to the above logical validity requirements. The obtained results resulted in the assumption that the questionnaire has logical validity.

3.7.2.2. Construct Validity

According to Smith (1981, cited in van Zyl & van der Walt, 1994, p.22) "Construct validity concerns the extent to which a test/questionnaire measures a theoretical construct or trait". The intra-test and inter-test methods were used to obtain information regarding the construct validity.

Intra-test methods places focus on the internal structure of the questionnaire and inter-test methods refers to the simultaneous measurement of the correlations amongst a large number of tests or questionnaires (Smith, 1981, cited in van Zyl & van der Walt, 1994).

The various fields or scales of the WLQ indicated a fairly significant relation between them supporting the construct validity of the questionnaire. Correlations between the WLQ and the 16PF Questionnaire, the PHSF Relations Questionnaire and the Reaction to Demands and Life Questionnaire were obtained. The results supported the construct validity of the WLQ (van Zyl & van der Walt, 1994).

3.7.2 Rationale for Inclusion

The questionnaire has been standardised for South African circumstances and it has satisfactory validity and reliability.

3.7.3 Statistical Techniques

Statistical analyses involved both descriptive and inferential statistics which include the t-test, Analysis of variance (ANOVA), Scheffe' multiple comparison procedure and Multiple regression analysis.

3.7.4.1 t -Test

A t-test enables a researcher to ascertain whether two groups have equivalent or different mean scores. The t-test is used to establish whether an observed difference in the means of two groups is sufficiently large to be attributed to a change in as variable or whether this is due to chance factors which could impact on the difference, if any (Welman, Kruger & Mitchell, 2008).

3.7.4.2 Analysis of Variance (ANOVA)

According to Mouton and Marais (1990) ANOVA makes it possible to appraise the separate and joint influence of several independent variables on the experimental criterion. According to Hinkle, Wiersma and Jurs (1982, p. 253) "in ANOVA, the hypothesis is that the mean

performance in the population is the same for all groups (equality of population means)". They add that mean differences are tested for statistical significance.

3.7.4.3 Scheffe' Multiple Comparison Procedure

Hinkle et al. (1982, p. 266) state that "when a statistically significant F ratio is obtained in an ANOVA, and the null hypothesis is rejected, we conclude that at least one population mean is different from the others". They add that all the population means could differ or that any combination differs and therefore in order to establish which pairs of means differ it is necessary to do a follow-up analysis like the Scheffe' Multiple Comparison Procedure. This procedure involves computing an F value for each combination of two means.

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3.7.4.4 Multiple Regression

Multiple regressions are applied to analyze the simultaneous effects of several independent variables on a dependent variable that is interval-scaled, thus multiple regression looks at how much of the variance in the dependent variable can be explained by a set of predictors or factors (Sekaran & Bougie, 2010). Cohen and Swerdik (2002) state that multiple regression analysis takes into account the inter-correlations among all variables involved. Sekaran (2000), reports that with multiple regression analysis more than one predictor is regressed against the criterion variable.

Multiple regressions are therefore used to determine if the selected sources of stress statistically significantly explain the variance in total stress experienced by academic staff at the FET college in the Western Cape.

3.8 ETHICAL CONSIDERATIONS/ ETHICS STATEMENT

The study was conducted with the voluntary participation of the employees and informed consent was obtained. Measuring instruments were carefully structured/formatted and investigated for reliability and validity evidence, in order to prevent harm to employees. The human rights and welfare of the participants were acknowledged and protected throughout the entire project. Confidentiality and anonymity remained priority to the researcher and identities of the participants of this research were continuously protected and remained confidential. This research was strictly conducted according to the ethical code for psychologists, as stipulated by the Professional Board for Psychology.

3.9 SUMMARY OF THE CHAPTER

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

CHAPTER 4

PRESENTATION OF RESULTS

4.1 INTRODUCTION

Sekaran and Bougie (2010) define research as a systematic and organised effort to investigate a specific problem that needs a solution. In doing research a series of steps are designed and followed. Research involves a series of well thought-out and carefully executed activities that will enable one to know how organisational problems can be solved or at least minimize. Research thus incorporates the process of inquiry, investigation, examination and experimentation. These processes have to be carried out systemically, diligently, critically, objectively and logically (Sekaran & Bougie, 2010).

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The data discussed and presented in this research discussion was treated with the Statistical Package for Social Science (SPSS) software. Data is the unprocessed feedback that is collected in research study by way of questionnaires, interviews, observations, or secondary databases and by arranging data in a specific way, analyzing the data and making sense of the results, the answers to the questions posed at the formulation of the hypotheses, are obtained (Sekaran, 2003).

Descriptive statistics enable the researcher to present data in a structured, accurate and summarized way (Huysamen, 1990) and the descriptive data employed in the presentation of the

data collected in the survey includes frequencies, percentages, means and deviations. Descriptive statistics look at how frequently certain phenomena occur (frequencies), the mean (average) score of a set of data collected, and the extent of the variability in the set, namely the central tendencies and the dispersions of the dependent and the independent variables (Sekaran, 2003).

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

The two categories of inferential statistics are parametric statistics, which are based on the assumption that the population from which the sample is drawn is normally distributed and that the data is collected at interval or ratio scale, whereas non-parametric data makes the assumption regarding the normality of the distribution, and is used when the data is collected on a nominal or ordinal scale (Sekaran & Bougie, 2010).

4.2.1 Descriptive statistics

The descriptive statistics calculated for the sample are provided in the sections that follow. The data pertaining to the variables included in the study, as collected by the measuring instruments employed, are summarised by descriptive measures. In this manner, the properties of the observed data clearly emerge and a feel for the data can be established (Sekaran, 2003).

4.2.2 LEVELS AND SOURCES OF STRESS FOR ACADEMIC STAFF IN AN FET COLLEGE IN THE WESTERN CAPE

Table 4.1: Levels and sources of stress

Scale UNIVERSITY of the	Mean	Sd	Interpretation
Stress level WESTERN CAP	93.1	17.18	High
Extraorganisational causes	27.89	4.32	Normal
Organisational functioning	15.03	4.97	High
Task characteristics	38.57	8.51	High
Physical work conditions and job equipment	14.12	5.94	Very high
Career development	24.03	7.17	High
Social matters	22.03	6.82	Normal
Remuneration, fringe benefits and personnel policy	17.93	9.13	Very high

Table 4.1 indicates that as a group, FET College lecturers, teachers experience high stress. Teachers report the highest stress as emanating from physical work conditions and job equipment (Mean = 14.12, s = 5.94), as well as remuneration, fringe benefits and personnel policy (Mean = 17.93, s = 9.13). In addition, they report their stress levels to be high (mean = 93.1, s = 17.18), rating organisational functioning to be stressful (Mean = 15.03, s = 4.97), task

characteristics (Mean = 38.57, s = 8.51) and career development also resulting in high stress levels (Mean = 24.03, s = 7.17).

4.3. Inferential Statistics

4.1 Hypothesis 1

There is no statistically significant difference in sources of stress based on the biographical variables (age, gender, race, marital status) amongst lecturers within an FET College.

A student's t-test and a series of one-way ANOVA's was carried out to determine whether the educators' stress levels (dependent variable) differed in terms of their biographical variables (gender, age, marital status, race). Scheffe's post hoc multiple comparison technique was used to determine the statistical difference between the groups.

Table 4.2: t-test Job stress by Gender

	t	P
Male	2.113	0.001**
Female		

** p < 0.01

Table 4.2 depicts the t-test with respect to job stress based on the gender of respondents. The results indicate that there are statistically significant differences in the stress levels of educators

based on their gender (t=2.113, p < 0.01,. Hence, the null hypothesis, is rejected with respect to differences in stress levels of educators based on their gender.

Table 4.3: ANOVA: Job stress by Age

	Sum of squares	df	Mean square	F	P
Between groups	1645.898	3	548.632	1.793	0.001**
Within groups	41931.645	137	306.070		
Total	43577.543	150			

** p < 0.01

Table 4.3 depicts the ANOVA with respect to job stress based on the ages of respondents. The results indicate that there are statistically significant differences in the stress levels of educators based on their ages (F=1.793, p < 0.01). Hence, the null hypothesis is rejected with respect to differences in stress levels of educators based on age category. Scheffe's post hoc multiple comparison method was used to determine whether there were any statistically significant differences between the stress levels of educators from previously advantaged and previously disadvantaged schools in the Western Cape based on their age categories.

Table 4.4: Scheffe's Post hoc comparison of the age of respondents in relation to job stress

	Mean	Std error	P
21 and younger	63.72	11.46	0.000**
22-29 years	72.18	13.25	
30-39 years	83.46	27.94	
40-49 years	103.34	12.96	
50 years +	76.34	8.73	

** p < 0.01

The results indicate that educators in the age group 40-49 differ significantly from the other groups, with respondents in the age category 21 years and younger experiencing lower stress levels relative to the other age categories.

Table 4.5: ANOVA: Job stress by Race

	Sum of squares	Df	Mean square	F	P
Between groups	1965.864	3	655.288	2.803	0.001**
Within groups	34363.757	147	233.767		
Total	36239.621	150			

** p < 0.01

The results with respect to job stress based on race are shown in Table 4.5. The results clearly indicate that there is a statistically significant difference in the stress levels of educators based on their race group (F=2.803, p < 0.01). Hence, the null hypothesis is rejected with respect to differences in stress levels of educators based on their race group.

Table 4.6: Scheffe's Post hoc comparison of the race of respondents in relation to job stress

	Mean	Std error	P
Black	102.63	8.24	0.000**
Coloured	84.68	11.53	
Asian	63.84	17.84	
White	86.14	10.76	

** p < 0.01

In terms of Table 4.6, Scheffe's post hoc multiple comparison revealed that there is a statistically significant difference between educators' stress levels on the basis of their race group. Respondents from the African group evidenced significantly higher stress levels (p < 0.01) relative to the other three race groups. African respondents' mean stress levels were the highest (102.63), followed by White respondents (Mean = 86.14, s = 10.76), Coloured respondents (Mean = 84.68) and Indian respondents (Mean = 63.84).

Table 4.7: ANOVA: Job stress by marital status

	Sum of squares	Df	Mean square	F	P
Between groups	1546.924	3	515.641	1.783	0.001**
Within groups	42501.552	147	289.126		
Total	44048.476	150			

** p < 0.01

Table 4.7 shows the ANOVA with respect to job stress based on the marital status of respondents. The results indicate that there are statistically significant differences (F=1.783; p < 0.01), in the stress levels of educators based on their marital status.

Table 4.8: Scheffe's Post hoc comparison of the marital status of respondents in relation to job stress

	Mean	Std error	р
Single	74.34	12.46	0.000**
Married	78.26	17.35	
Divorced	108.28	15.32	
Widowed	89.64	10.02	

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

Table 4.9: ANOVA: Job stress by tenure

	Sum of squares	Df	Mean square	F	P
Between groups	1324.934	3	441.644	1.896	0.000**
Within groups	34231.354	147	232.866		
Total	35556.288	150			

** p < 0.01

Table 4.9 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 = 1.896; p < 0.01), in the stress levels of educators based on their tenure.

Table 4.10: Scheffe's Post hoc comparison of the tenure of respondents

	Mean ERSITY of the	Std error	P
3-7 years	63.34	11.29	0.000**
8-20 years	65.36	16.32	
21-30 years	62.26	10.65	
> 30 years	87.28	16.73	

** p < 0.01

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

Table 4.11 Stepwise regression: Dependent variable (Total stress)

Multiple Regression	0.65928			
R squared (R ²)	0.43465			
R squared (Adjusted R ²)	0.35327			
Standard error	0.41228			
			F = 8.047	Sig
				F = 0.00**
Variables in the equation	В	SE for B	T	P
Organisational functioning	-2.929	1.235	-3.26	0.02*
Task aspects	-1.224	0.146	5.22	0.00**
Physical working conditions & equipment	-0.452	0.232	3.54	0.06
Salary, benefits and personnel policies	-3.562	0.152	1.83	0.00**
Extraorganisational factors	-2.343	1.664	-1.63	0.00**
Career aspects	-1.426	0.242	-1.42	0.00**

^{*} p < 0.05

Table 4.11 depicts the results of regressing the six independent variables against total stress. The UNIVERSITY of the results shown in Table 4.11 suggest a moderate percentage of the variation in Total Stress explained by the variables entered in the equation ($R^2 = 65.93\%$; R^2 (adjusted) = 35.33%). Thus 35.33% of the variance in total stress can be explained by Organisational functioning, Task aspects, Salary, benefits and personnel policies, Extra-organisational factors and Career aspects. The F-ratio of 8.047 (p = 0.00) indicates the regression of total stress on the Organisational functioning, Task aspects, Extra-organisational factors and Career aspects expressed through the adjusted squared multiple (R^2 (adj.) = 35.33%) is statistically significant. These variables account for 33.53% of the variance in total stress, and suggest that other unexplored variables could explain the variance in stress levels experienced by educators. Hence, the null hypothesis is rejected.

^{**} p < 0.01

Table 4.12 Reliability of the WLQ

	Number of	N	Cronbach
	items		
WLQ	24	150	0.93

The reliability of the data collection instrument which was administered was assessed using Cronbach's alpha which provides an indication of the stability, consistency and freedom from error. Since the reliability coefficient was above 0.7, it can be regarded as acceptable.

4.4. CONCLUSION

This chapter focused on the presentation of results obtained from the analysis of the descriptive and inferential data that was generated based on the sample of academics in an FET College in the Western Cape. Both descriptive and inferential statistical techniques were applied. With respect to the inferential techniques, t-tests, multiple regression analysis and analysis of variance were used to indicate relationships and differences in the experience of work and life circumstances (stress) on the basis of the sample of educators who participated in the research. In the following chapter, the results arising from the empirical data analysis will be discussed and contextualised based on previous research within the field.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

Occupational stress is a complex biopsychosocial situation and has been recognized as major health hazard for employees (Sun et al., 2011). According to Salo (2002), stress comes from imbalanced situations where the demands on an employee exceed or undervalue the employee's actual conditions, or situation, where needs and goals were continually frustrated. In an organisational context, occupational stress was also known as job stress and/or work stress (Azman et al., 2009). WHO (2011) described work-related stress as the response people may have when presented with work demands and pressures that are not matched to their knowledge and abilities and which challenge their ability to cope.

Psychological stress now appears to be a feature of occupational life for university staff, occurring not only in increasing levels in the United Kingdom (Kinman & Jones, 2003), but also in Australia and New Zealand (Boyd & Wylie, 1994; Gillespie, Walsh, Winefield, Dua & Stough, 2001). Winefield et al. (2002) in their longitudinal study of occupational stress in Australian universities, found that 43% of academic staff, compared to 37% of general staff, were classified as possible 'cases' of psychological illness using the General Health Questionnaire (Goldberg & Williams, 1988). This compared to a 12% case rate in the Australian

population overall. Kinman (2001) also reported a 53% 'case' rate among academic staff at a university in the UK.

Kinman (2001) reports that psychological well-being amongst academics is relatively poor. This was confirmed by Gillespie et al.'s (2001) research in which academics reported that stress impacted on them psychologically, in which they described experiencing feelings of anxiety, depression, burnout, anger, irritability and helplessness. South African research (Coetzee & Rothmann, 2005) corroborates these findings, reporting that they found high levels of psychological and physical ill health in a sample of 372 university staff members.

The primary objective of this study was to determine the sources of stress of academics in an FET College in the Western Cape. This chapter presents an overview of the most important findings of the research performed. In order to contextualize the research, comparisons are drawn with available literature on stress amongst teachers in various settings. The remainder of the chapter provides the conclusions that can be drawn from the research as well as recommendations to address the problem of teacher stress.

5.2 SOURCES OF STRESS

The results identified that the present sample of employees is experiencing relatively high levels of stress (M = 93.1, SD = 17.18). According to Van Zyl and van der Walt (1991) a score of 40-79 is viewed as normal, a score of 80 or above is an indication of high stress and a score of 98 -200 is viewed as very high. However, it should be noted that the categories only serve as guidelines and should not be regarded as absolute limits in this regard (Van Zyl & van der Walt, 1994).

Results in the study indicate that teachers in FET College lecturers experience high levels of stress. An analysis of the sources of stress indicates that physical working conditions and work equipment, as well as remuneration, benefits and personnel policies are regarded as the most highly stressful. This is followed by organisational functioning, task characteristics and career prospects.

Researchers (Cole & Walker, 1989; Travers & Cooper, 1996) indicate a definite connection between the physical environment and work-related stress experienced by teachers. Researchers are of the opinion that educators are faced with working conditions that force them to perform their jobs poorly due to, inter alia, a lack of adequate resources, large class sizes, poor staffroom facilities, vandalism by learners, poor lightning, broken windows and furniture, high noise levels and absent parents (Olivier & Venter, 2003). Research done after 1994 brought to light that there is a difference in the available materials, equipment and resources in schools in townships and Exmodel C schools (Ngidi & Sibaya, 2002). The shortage of materials or means to prepare and present a well-planned lesson seems to be a great source of frustration and disillusionment for teachers and concomitantly contributes to stress (Travers & Cooper, 1996).

Kyriacou (2001) found, based on a sample of 257 teachers in 16-medium sized schools to indicate the most significant stressors. They indicated pupil misbehaviour, poor working conditions, time pressures and poor school ethos as stressful. These factors were also identified by researchers in other countries (Borg et al.,1991: Laughlin, 1984; Okebukola & Jegede, 1989, Payne & Furnham, 1987). In a study that examined stress in Italian teachers it was found that the

teachers reported most pressure with some aspects of their work related to the perceived lack of status and professional support, to the job of teaching itself, to the workload in the form of overcrowded classes and the lack of support from pupils and parents (Zurlo, Pes & Cooper, 2007).

An important influence of the study of stress in Italian teachers revealed the presence of particularly strong coping mechanisms within Italian teachers, these moderating factors buffer the teachers from the negative effects of stress and are based on their tendency to centre their behaviour on individual work rather than teamwork, and this could impact on the quality of teaching, the lack of job commitment and job disengagement in the long term (Zurlo, et al., 2007). It would be critical for researchers to explore the impact of moderating variables or buffering factors that may reduce the negative effect of stress in teaching.

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

Sutton and Huberty (2001) found that significant determinants of teacher stress are related to stressors found within the teaching environment, and that more research is needed in the study of

individual differences in stress proneness, coping methods, personality variables, and the susceptibility and management of stress.

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

Academic university lecturers in China suffer a rather serious occupational stress where the average raw score of Perceived Stress Questionnaire was 91.0% which is 4.7% and 9.8% higher than the levels obtained from doctors and teachers in primary and high schools respectively (Sun et al., 2011).

Research conducted in the United Kingdom (UK), United States of America (USA), Australia and New Zealand has identified several key stressors commonly associated with stress among academic staff. These include work overload, time constraints, lack of promotion opportunities, inadequate recognition, inadequate salary, changing job role, inadequate management and/or participation in management, inadequate resources and funding and student interactions (Blix, Cruise, Mitchel, & Blix, 1994; Boyd & Wylie, 1994; Cross & Carroll, 1990; Daniels & Guppy, 1994; Doyle & Hind, 1998; Kinman, 1998).

Other sources of stress, such as high self-expectations (Hind & Doyle, 1996), job insecurity (Tytherleigh, et al., 2005), lack of community and poor interactions with colleagues (Abouserie, 1996), inequality in the system (Gillespie et al., 2001), concerns over amalgamations (Sharpley, Reynolds, Acosta, & Dua, 1996) and lack of regular performance feedback (Boyd & Wiley, 1994) have been highlighted in a few studies.

In the academic context, occupational stress has specifically been associated with job dissatisfaction, increased smoking, alcohol and drug abuse, physical ill health (coronary heart disease) and poor psychological well-being (anxiety and depression) (Doyle & Hind, 1998; Winefield, et al., 2002). Furthermore, stress has been implicated as a causal factor of impaired work performance, decreases in faculty productivity, absenteeism, propensity to leave and higher staff turnover (Kinman, 2001). Finally, occupational stress is also thought to have a spill-over effect, whereby stress becomes a major determinant of the overall quality of life, including family life (Kinman & Jones, 2003).

Also, with this escalation in the demands of the job, academic staff report difficulty in maintaining firm boundaries between the workplace and the home as, for many, it appears that the home is the extension of the workplace (Kinman, 1998). The majority of academics (67%) in Kinman and Jones's (2003) study agreed that work now encroached more on their home lives than in the recent past and 72 percent believed that their families suffered as a direct result of their jobs. More seriously, both work overload and work-life imbalance have been related to low psychological well-being among academics (Winefield et al., 2002).

Generally speaking, psychological well-being amongst academics is relatively poor (Kinman, 2001). Two-thirds of the respondents in Gillespie et al.'s (2001) study reported that stress impacted on them psychologically: they described experiencing feelings of anxiety, depression, burnout, anger, irritability and helplessness. Academic burnout in particular has been well documented (Blix et al., 1994; Doyle & Hind, 1998). Moreover, depression has been associated with suicidal thoughts and tendencies. An epidemiological study of suicide conducted by Kelly, Charlton, and Jenkins (1995) suggests that university academic staff are at around 50 percent greater risk than the average worker. Psychological stress, in turn, can lead to severe physical consequences.

In a study by Winefield et al. (2002), the majority of the respondents reported experiencing tiredness 'sometimes' to 'nearly all the time', back and neck pains, sleeping difficulties, headaches, muscle pain, colds and virus infections. Furthermore, in the South African context, Coetzee and Rothmann (2005) recently found high levels of psychological and physical ill health in a sample of 372 university staff members. Results and conclusions regarding commitment among academics remain confusing and confounding. There is some evidence to suggest that, on average, academic staff appear to be committed to their organisations while experiencing stressors and strains (Winefield et al., 2002).

5.3 BIOGRAPHICAL CHARACTERISTICS AND STRESS

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

- African respondents reported the highest stress levels relative to the other race groups.
- Female respondents displayed higher stress levels compared to males
- Educators in the age group 40-49 reported significantly higher stress levels.
- Divorced respondents displayed the highest stress levels relative to the other marital status categories.
- Those with more than 30 years' tenure experienced greater stress.

5.3.1 GENDER

The results comparing job stress based on the gender of the respondents indicates that there are statistically significant differences (F=4.654; p<0.01), in the stress levels of lecturers in FET colleges based on their gender.

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Although much of the research on gender and stress is contentious, empirical evidence exists attesting to the fact that men and women experience stress differently. For example, Van Zyl (2002) and Pietersen and van Zyl (1999) suggest that women experience more stress than men.

Many researchers suggest that women have more stress than men and that women are more prone to depression (Aamodt, 2004; Van Zyl, 2002). Van den Bergh (2001) as cited by van Zyl (2002) postulates that "many black women suddenly find themselves in managerial positions, sometimes without the necessary skills, experience and support" which result in high levels of stress for these women. The reason why female employees experience more stress than men may be due to the fact that they are more committed to their jobs and they have more barriers to overcome to attain their positions (van Zyl, 2002). This commitment of female teachers result in high stress levels.

Van Zyl (2002) maintains that this commitment of female teachers result in high stress levels. In conjunction with this, Pearlin (1989, in Long, 1998, p.65) posits the view that "greater vulnerability to stress may be attributed to social roles that reflect the unequal distribution of resources, opportunities and self-regard". Nevertheless, female teachers' normal duties and busy work schedules combined with other roles that need to be fulfilled results in continuous stress (van der Linde, van der Westhuizen & Wissin, 1999).

With regard to gender, there are very few differences, if any, between male and female academics regarding the amount of occupational stress they experience and report. However, academics seem to differ significantly in terms of the work stressors they perceive. Research has shown that workload, inadequate salaries and a lack of public recognition were perceived as more significant sources of pressure by men than by women, whilst job insecurity, isolation from colleagues, a lack of institutional recognition of worth and work politics were more salient for women (Cross & Carroll, 1990; Dua, 1994).

Since academia is still largely a male dominated occupation, female academics might experience more stressors and strains than their male counterparts due to a lack of role models, less socialisation from women from their own rank, gender stereotypes and increased role conflict as they endeavour to balance roles at work and at home (Blix et al., 1994; Richard & Krieshok, 1989).

Both Kinman (1996) and Doyle and Hind (1998) found that, women academics in general experienced a higher degree of conflict between work and home. High workload, coupled with greater responsibilities for duties related to work and family, mean that women have to work long hours. Long working hours are now recognised as posing a serious threat to health and well-being (Cooper, 1999; Sparks & Cooper, 1997).

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Female academics reported higher levels of physical ill health than male academics. According to Blix et al. (1994), women working in higher education experience more stressors and strains than their male counterparts as a result of a lack of role models and increased role conflict as they endeavour to balance roles at work and at home. Hayes (1986) for instance noted that the demands on women's time coupled with role conflicts and the absence of mentors negatively affect their health, work and relationships.

In an Australian study conducted by Savery and Luks (2000), the males in the sample generally attributed significantly more stress than the females and were more likely to work excessive hours than women whereas women are more focused on intrinsic rewards and rely less on promotion and salary than men and, therefore, they spend less time at the office.

In another study by Gmelch & Burns (1994) in the United States, women academics were found to experience significantly more stress than their male counterparts in the areas of task-based and professional identity. Similar findings were reported by the Singaporean study of human resource professionals, it was reported that females experienced significantly more stress as a result of organisational politics than their male counterparts (Lim & Teo, 1996).

Similar findings were reported in the United Kingdom by Fotinatos-Ventouratos & Cooper (2005) who found that in terms of "relationships with other people" females reported a higher mean score, indicating this to be a source of job pressure. de Smet and co-workers (2005) showed that, adjusting for age, education and occupational groups, men perceived less psychological job demand than women did (although marginal).

Consistent with previous studies (Abouserie, 1996; Gmelch & Burns, 1994; Dua, 1994) no significant differences regarding occupational stress were found between male and female academics. However, female academics reported higher levels of physical ill health than male academics. According to Blix et al. (1994), women working in higher education experience more stressors and strains than their male counterparts as a result of a lack of role models and increased role conflict as they endeavour to balance roles at work and at home. Hayes (1986) for

instance noted that the demands on women's time coupled with role conflicts and the absence of mentors negatively affect their health, work and relationships.

5.3.2 AGE

The results of research to compare job stress based on the basis of ages of the respondents indicate that there are statistically significant differences (F=0873; p<0.01), in the stress levels based on age.

Research regarding stress levels of different age groups, is contradictory. Naylor (2001) reported on relatively young teachers who experienced such high levels of stress and anxiety that they contemplated suicide. Research (Karasek & Theorell, 1990; Theorell & Karasek, 1996) suggests that age is associated with stress amongst teachers. However, research by Pisanti, Gagliardi, Razzino and Bertini (2003) amongst a sample of secondary school teachers in Italy did not find evidence of a relationship between the age of teachers and the level of stress experienced. Results, are hence, unequivocal.

Literature suggests that younger teachers experience lower levels of stress due to the absence of family responsibilities. Pietersen and van Zyl (1999) maintain that it is likely that older respondents experience higher levels of stress due to the fact that they are less mobile and more loyal to the profession that they have chosen. Indeed, Borg and Falzon (1989) found that, despite the high prevalence of stress, the majority of teachers regarded their profession as highly rewarding.

Researchers have also noted the importance of age-based differences in faculty, and conventionally believe that stress universally declines with chronological age. Dua (1994) found that younger academic staff reported more stress as a result of work politics, working conditions and job significance than older staff. This is quite understandable since younger faculty are more often involved in undergraduate teaching as opposed to more rewarding tasks such as research (Gmelch, Wilke, & Lovrich, 1986). The latter, however, is a prerequisite for advancement up the faculty career ladder.

Coupled with an economy that reduces the chances for success to a greater extent than at any other time during the past decades, academics are thus under greater pressure to increase their research output, if they are to be retained, employed or promoted on this basis (Kinman & Jones, 2003). Moreover, new academics also have to make sense of the organisational structures and values of their newly employing institution, learn the expectations for performance and advancement, and balance multiple and sometimes conflicting demands on their time (Sorcinelli, 1994).

More seriously, Osipow, Doty, and Spokane (1985) found that younger academics are less likely to cope with occupational stressors, and therefore experience greater psychological and interpersonal strain than their older colleagues. Older academics tend to have more responsibilities and often report increasing pressure and work overload (Dua, 1994; Winefield et al., 2002). In particular, Winter, Taylor, and Sarros (2000) found that both professors and associate professors reported significantly more role overload than lecturers did.

Dua (1994) also reported that academics with postgraduate qualifications tend to have a heavier workload. Furthermore, Winefield et al. (2002) found that as occupational levels increased, so did working hours for associate professors and professors, who reported an average of 55–56 hours per week. However, Osipow et al. (1985) suggested that older academics use a variety of coping mechanisms and therefore report less perceived strain compared to younger academics.

Based on the findings of Osipow et al. (1985), results in this study showed that older academics (60 to 69 years) were less troubled by physical and psychological ill health problems. This may be because as people get older they become more experienced and more worldly-wise and consequently adopt more rational cognitive coping mechanisms than younger academics (Dua, 1994; Osipow et al. 1985).

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Dua (1994) found that younger academic staff reported more stress as a result of work politics, working conditions and job significance than older staff. Gmelch, Wilke and Lovrich (1986) maintain that younger academics are often involved with heavier teaching loads, while older faculty members are rewarded with time to pursue research. However, within academic settings, research publication could result in career advancement opportunities.

Osipow et al. (1985) suggested that as people age and gain in experience and status within the organisation, they appear to take on additional responsibilities and consequently experience an increase in job demands.

5.3.3 RACE

The results in the current study indicate that there are statistically significant differences in stress based on race. Research on race and stress is unequivocal. Aamodt (2004) believes that there are only minor differences in reactions to stressful situations among ethnic groups. A study done by Van Zyl and Bester (2001) indicates that Black illiterate or semi-skilled employees' levels of stress were significantly higher that the literate or skilled group.

Wynne-Potts (1996) investigated the relationship between township life stressors, role overload at work, coping at work and levels of distress in township teachers on the East Rand. Based on a sample of 97 teachers, Wynne-Potts (1196) found teachers from townships experienced high levels of stress. Results from Kutame's (1998) research in which stress amongst teachers in rural secondary schools in the Northern Province of South Africa was investigated, indicated that these teachers experience high levels of stress.

Furthermore, Jonas (2001) investigated the relationship between perceived social support, stress and general health of 81 Black teachers from seven schools in the Northern Province. Jonas (2001) reported that among the factors contributing to stress experienced by teachers was age, gender, family size, family income, level of education, marital status and the support network and resources available to teachers.

Ngidi and Sibaya (2002) found in their study among black teachers that the conditions under which those teachers work in schools are frustrating and demoralising and cause high levels of

stress in those teachers due to poorer physical conditions such as overcrowding, inadequate equipment and lack of adequate facilities. This is a consequence of disparities in financial provisions during the apartheid era in South Africa. Poor working conditions may therefore be a major source of stress among teachers. Poor physical conditions such as overcrowding may in turn exacerbate problems such as teachers having to cover the syllabus in little time available, as well as a lack of time for marking and less preparation (Ngidi & Sibaya, 2002).

Empirical research revealed that township or previously disadvantaged school teachers, who are mostly black, experience moderate to high levels of stress (Dooley, 1997; Motseke, 1999; Ngidi & Sibaya, 2002). Davies (1986) and Prins (1995) believe that black employees experience a variety of difficulties in the work situation: inter alia: work overload, time pressures, inadequate training opportunities, poor communication, little participation in decision-making and stereotypical prejudice.

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Smallegan (1989) and Dressler (1989) and van Zyl (1991) indicate that high levels of stress in senior black employees are linked to the broad social context within which the individual functions. The following are typical examples: personal home life affected by the extra time devoted to work, physical threats in the townships, inadequate housing and facilities, family problems, poor health, social problems with family and friends, financial problems, insufficient recreation facilities and changes.

Many studies support these findings that black teachers experience more stress in suburb schools as a result of the physical conditions under which they have to perform their duties. Other

possible reasons for the higher levels of stress in black teachers are lack of skills, inadequate facilities and materials, overcrowded classes and poor training (Ngidi & Sibaya, 2002; Van Zyl 2002). Watts (1985, p. 303) summarises the situation as follows: "It is worrying that the black South African employee tends to adopt emotional defensive coping strategies such as withdrawal or passivity when faced with stress."

Recent studies of organisational management have addressed the significance of organisational culture on stress formation, since sources of stress can depend on the characteristics of the culture which exists in organisations (Chang & Lu, 2007). Teachers from very different cultures might neither understand nor appreciate the cultural differences of the communities in which they are placed. This could then lead to additional stress, which eventually leads to high attrition (Brown & Uehara, 2008). Job stress also occurs when conditions on a job inhibit, stifle, or thwart the attainment of expectations and goals.

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5.3.4 MARITAL STATUS

The results revealed there are significant differences (F=.810, p<0.01) in stress levels based on the marital status of respondents. The mean stress levels for those that are divorced (Mean = 89.64, s = 10.02) are significantly higher than those who are widowed (Mean = 82.63, s.15.56).

In their study of 55 teachers, Pietersen and van Zyl (1999) found that married female teachers in particular experience high levels of stress. Linde and Marx (1995) advance the view that stereotypes and discrimination against women in general have a negative effect on their income,

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

Whether a person is married or not also impacts, for some, on their level of well-being. Williams (2003) states that in the past it was determined that men's marital status was more important to their well-being than for women, but that the quality of the marriage is more important to women. She states however that these beliefs are changing owing to changes in family and gender roles. Thus, presently, evidence suggests that both men and women are affected in the same way from either being married or not being married and from the quality of the marriage (Williams, 2003).

5.4 LIMITATIONS

A limitation of this study is its reliance solely on self-report measures. According to Schaufeli et al. (1993), the exclusive use of self-report measures in validation studies increases the likelihood that at least part of the shared variances between measures can be attributed to method variance. Another limitation is the sampling method and sample size. The total population of academic staff at the institution was targeted, but a response rate of 75% was obtained. Although the sampling method and size make it impossible to generalise the findings to the total population of employees in the institution, the findings still represent important insights regarding occupational stress and the outcomes thereof in an FET college.

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The importance of variables such as job satisfaction, organisational climate, job involvement, organisational citizenship behaviour and a range of other important aspects such as psychological capital (PsyCap) cannot be overlooked in the management of stress. Indeed, the importance of resilience, as one of the dimensions of PsyCap, has been shown to impact on the capacity of individuals to effectively and comprehensively manage stress. This is depicted in figure 5.1.

Figure 5.1: Resilience in managing stress



Source: Luthans, Norman, Avolio and Avey (2008).

Luthans et al. (2008) propose that individuals are able to effectively stave off potential stressful situations if they maintain an optimistic disposition, are emotionally aware, exercise effective

emotional self-control, and have self-belief. Access to social support, and a sense of humour, along with a flexible and dynamic approach to situations, are all likely to impact on the individual's sense of resilience.

5.5 CONCLUSIONS

The research findings of this study should be interpreted carefully and with caution, since there were limitations in the present research study. Although the response rate is considered fairly acceptable for this kind of research, the uneven distribution of male and female academics could have biased implications. Consequently, clear limitations in comparing with potentially different groups and in generalizing the findings of the localized study exist.

In order to increase the performance and undertake a reorientation program of the FET system, the development of staff becomes a crucial issue. Nevertheless, understanding the key performance indicators necessary for the successful attainment of such a transformation initiative within the FET sector becomes essential (Alas & Vadi 2004).

The management of the FET college could, in consultation with labour unions and other important stakeholders discuss how to address the issue of improved remuneration, more effective management of role overload, more effective performance management, more training and development opportunities, more support regarding individual career management, more effective general management, more support regarding research outputs, elimination of discrimination practices, transformation initiatives, encouraging of entrepreneurship,

improvement of equipment and working conditions, creation of job security, and promotion of networking (Pienaar & Bester, 2006).

Professional development, or preparation of educators, is an essential activity to ensure that educators can stay abreast of developments in teaching in order to improve the quality of the education system. Young (2006) maintains that the professional development of Further Education and Training (FET) College staff has been and is still neglected. The generally low status of FET Colleges, the absence of links between universities and FET Colleges and the recruitment approach of FET staff have been cited as some of the possible reasons why the neglect is perpetuated.

McGrath and Palmer (2004) contend that failure to institute professional development for FET staff will result in:

- 1) FET Colleges being unable to keep pace with the rapid and far-reaching changes in the nature of work.
- 2) The inability to address problems within the composition of their workforce, especially related to age and gender.
- 3) The failure to turn their commitments of developing partnerships into sufficiently good practice.
- 4) The continuous feeling that FET programmes and training are inferior.
- 5) FET Colleges being unable to produce learners that can become participating members in society.

6) The deterioration of the FET system as FET Colleges struggle to retain staff.

5.6 RECOMMENDATIONS FOR FUTURE STUDIES

A quantitative design was deemed more practical by the researcher, however using qualitative data could have increased the value of the research, since more subjective inputs from respondents could have provided a better conceptualization of the stress experienced by academics at the FET College in the Western Cape where the research was undertaken.

Some of the recommendations which emerge from the study would be that it is imperative that the FET college devise strategies to assist in ameliorating the negative effects of stress. This is because proactive measures to address and resolve stressful situations, could in the long-term contribute to lower levels of stress, burnout, absenteeism, employee turnover and improve levels of service and commitment.

In order to generalize findings in the multi-cultural South African context, findings should be validated through equal comparison of the perceived strain/stress construct across cultural groups. Possible future interventions could include the provision of a more supportive climate, the creation of flexible working conditions, improving personal relationships in the workplace and the implementation of career and personal development programmes (Mahomed & Naudé, 2006).

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

Stratified random sampling is a suitable technique as it allows greater flexibility and validity in the research (Anastasi, 1990; Murphy & Davidshofer, 1988). Stress-coping research should adopt a holistic approach, considering the totality of the teacher's life span, rather than just assessing one domain in isolation (Cooper et al., 2001).



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