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DECLARATION

I declare that *the relationship between occupational stress, coping and emotional intelligence in a sample of health profession academics at a historically disadvantaged university* is my own work, that it has not been submitted before for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged as complete references.

Abigail Simons 18 October 2016

Signed: .....

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Abstract

Academe is no longer a low stress profession caused by the changing nature of academic work. Academics in health professions perceived a considerable degree of pressure related to the many roles they need to assume such as, teaching, administration, research, and community service. In addition, they are expected to continue practicing in their profession. Research has identified the key stressors experienced by academics, have recorded the debilitating effects of occupational stress and have emphasised that stress left unmanaged can result in burnout. However, such studies on academic well-being and occupational stress are lacking within the South African context. Similarly, studies into the coping strategies used by academic staff and the impact of emotional intelligence on stress and coping remain a focus for further research. Therefore, the overall aim of this study was to determine the relationship between occupational stress, coping and emotional intelligence among academic staff in health professions at a historically disadvantaged university. The study used an online survey design and the sampling frame comprised of all academic staff in a Faculty of Community and Health Sciences at a historically disadvantaged university. Descriptive statistics, correlation matrices and multiple regressions were used to analyse the data. Ethics clearance was obtained from the relevant university committee, and consent to conduct the study at the identified institution was given by the Registrar. As evidenced by the results, significant associations emerged between occupational stress, coping and emotional intelligence. Emotional intelligence was identified as an essential factor that can predict the subjective well-being among academics.

CHAPTER ONE

INTRODUCTION

1.1. Background

Kotecha, Ukpere, and Geldenhuys (2014) reported that in recent years, academic work has become more challenging and demanding as higher education in South Africa and across the world continues to transform. Literature has consistently reported that the transformation in higher education has become a major source of dissatisfaction among academics (Hay & Fourie, 2002; Mapesela & Hay, 2006), as universities, research councils and government are demanding more from academic employees, consequently expanding their duties and responsibilities (Gornall & Salisbury, 2012). For example, pressure has been placed on academics to improve the quality of their teaching processes to ensure the employability of graduates and student throughput rates (Barkhuizen & Rothmann, 2008). Academics are expected to produce good quality research, to supervise masters and doctoral students and to attract external funding (Houston, Meyer, & Paewai, 2006). Academics are also required to engage in administrative duties such as curriculum development, consultation with students, marking and lecture preparation to mention a few (Houston et al., 2006), not forgetting the many roles they need to assume in their personal lives. As a result, occupational stress now appears to be a more prominent feature of the academic profession as academics throughout the world deal with a substantial amount of ongoing stress (Barkhuizen & Rothmann, 2008).

According to the reports of the Council on Higher Education (CHE), change and transformation are major forces that are driving South African higher education towards the emergence of a new education landscape (CHE, 1999). The higher education sector is profoundly different from its fragmented, insular, elite and uneven apartheid inheritance. This is recognised by the transition to democracy that led to the implementation of various policies

aimed at driving South Africa towards a knowledge-based economy (Department of Science and Technology, 2007). The Ten-Year Innovation Plan of the Department of Science and Technology (DST) envisions South Africa to move from a resources-based economy to an economy that is led by "the production and dissemination of knowledge for the enrichment of all fields of human endeavour" (DST, 2007, p.1). It becomes apparent that a shift in the level of knowledge acquired, produced, implemented and questioned not only stems from government officials, but in the realm of higher education, academics have taken up the responsibility to produce both knowledge and knowledge producers (Waghid, 2002).

Waghid (2002) reported that policy itself has become a major source of dissatisfaction among academics in the context of the democratic government formulating several transformational policies. Enormous demands placed on higher education system by policy changes result in various challenges (Pienaar & Bester, 2009). For example, there is an undersupply of response capabilities and dire financial challenges (Barkhuizen & Rothmann, 2008). The policy of 'separate development' during the Apartheid era served as an underlying motivation for many of the transformations and challenges in Higher Education (Boughey, 2002). Historically, Apartheid refers to the South African legal system of institutionalised racial discrimination and segregation (Lipton, 1989). The Apartheid regime not only ensured that the Black majority was denied the sort of learning experiences which would prepare them for tertiary study, but restricted access to well-resourced institutions of higher education largely to White students (Boughey, 2002). Separate institutions for Black and White population groups were established, and particular functions and programmes were assigned to them in relation to the reproduction and perpetuation of the apartheid order (Bozalek & Boughey, 2012; Wolpe, 1995).

Historically Black Universities (HBUs), also known as Historically Disadvantaged Institution (HDIs), such as, the University of the North, University of Zululand, the University of the Western Cape (UWC), and the University of Durban Westville (UDW), emerged under the historical oppression of the black political opposition (Wolpe, 1995). Wolpe further indicated that these universities were restricted to offering qualifications at certain levels (e.g. undergraduate degrees and diplomas) and fields of study (e.g. mainly liberal arts, humanities, education and law) that would not undermine the racial division of labour (Wolpe, 1995). Additionally, a vast majority of students enrolled at HBUs were underprepared and student success rates were comparatively low (Badat, Barron, Fisher, Pillay, & Wolpe, 1994). The institutional infrastructures of HBUs were generally poor due to severe financial and other disadvantages resulting from unequal allocation of resources by the government (Subotzky, 1997).

Subotzky (1997) identified, early in the new democracy, that HBUs faced a number of interrelated challenges post 1994. These included redefining their missions and functions; strategically identifying specialised and niche teaching and research programmes, and building academic, planning and managerial capacity. These challenges were compounded by several factors including, but not limited to junior and less qualified faculty at HBUs than at their counterparts at Historically White Universities (HWUs) (Badat et al., 1994). For example, in 1992 there were fewer professors and associate professors (20%) and senior lecturers (24%) at the HBUs in comparison 35% and 30% in the respective rungs at the HWUs (Badat et al., 1994). Similarly, Hay and Monnapula-Mapesela (2009) reported a differential pattern to qualifications in 1992 where 20% of HBU faculty held only an honours degree, 37% possessed master's degrees, and 24% possessed doctorate degrees. Bozalek and Boughey (2012) identified that this trend continued in that the faculty at the HBUs still were

generally more junior, and less well-qualified than their counterparts at HWUs fifteen years later. The divide in the higher education system resulting from Apartheid has proved hard to eradicate despite the dawn of a new democratic era in 1994 and the election of a demographic government (Boughey, 2002). Thus, the historical influences on the current development of the South African higher education continue to receive intense attention (Hay & Monnapula-Mapesela, 2009).

Boughey (2004) reported that the global challenges in the transformation of higher education are exacerbated in South Africa given the enormous changes observed and legislated during the last two decades. The pressure for universities in South Africa to restructure has gained significant momentum through the formulation of several government policies during the democratic era (Mapesela & Hay, 2006). Hay, Fourie, and Hay (2001) identified numerous factors contributing towards the changes in higher education. For example, the profound inequalities and distortions of the system, incoherent and poor articulation between various types of higher education institutions, the unequal distribution of resources and subsidy amongst higher education institutions, declining state subsidy and increased pressure from international and private higher education institutions.

Hay et al. (2001) also identified the merging of higher education institutions as a significant impetus. The institutional mergers and co-operations that the government encouraged intended to close the gap between HBUs and HWUs. However, despite the good intentions of government, HBUs that remained independent, such as the University of the Western Cape (UWC), continue to experience pressures to perform in demanding environments (Houston et al., 2006). This pressure increases exponentially for staff at HBUs that have to overcome the historical issues raised above in addition to competing with HWUs

for resources and to deliver vastly revised outcomes (Mapesela & Hay, 2006). Thus, HBUs represent a subgroup in Higher Education faced with unique challenges and should be studied separately to gain greater insight into how general concerns in Higher Education present at these institutions.

The transformation of higher education institutions and restructuring of the higher education system has been high on the agenda of government since the democratization (Fourie, 1999). The National Development Plan 2030 identified Higher Education as a sector in need of revision (National Development Plan 2030, 2012). The plan envisions higher education as an expanded, effective, coherent and integrated system. Higher education is identified as the major driver of the information and knowledge system that contributes to economic development in strategic policy development e.g. the 10 year innovation plan of the Department of Science and Technology (DST, 2007), The strategic plan for Higher Education (Ministry of Education, 2001), and the National Development plan 2030 (National Development Plan 2030, 2012). The provision of quality education is contingent on excellence with the qualifications of staff identified as the most important factor determining quality in education (National Development Plan 2030, 2012). The National Development Plan of 2030 aims to improve the qualifications of higher education academic staff by increasing the percentage of PhD qualified staff from 34% to over 75% by 2030 (National Development Plan 2030, 2012). Despite the attempts to transform and restructure the higher education system, academic faculty face increasing pressures to perform in demanding environments (Houston et al., 2006).

As mentioned before, allied health professions who assume academic positions experience significant stress because of the many roles they must assume (Fagan-Wilen,

Springer, Ambrosino, & White, 2006). Previous research has shown that there are challenging balances and tensions between different tasks such as teaching, scholarship, research, consultancy, community engagement/service, administration, clinical training and supervision (Kogan, Moses & El-Khawas, 1994). Du Plessis, du Plessis, and Saccaggi (2013) indicated that registered clinical psychologists who enter the academic role have to continue to practicing their profession. These authors state that this is necessary for their continued role in academia because of supervising and training student clinicians (du Plessis et al., 2013). These dual roles and responsibilities add to a complexity that is unique to health professions (du Plessis et al., 2013).

Gillespie, Walsh, Winefield, Dua, and Stough (2001) reported that research on how academics cope with occupational stress focused on styles of coping such as the support from co-workers and management, recognition and achievement, high morale, and flexible working conditions. Several factors that can significantly impact the extent to which one copes with occupational stress have been identified including, but not limited to personality (e.g. Carver & Connor-Smith, 2010), the nature of the stressful event, the social context within which coping occurs (e.g. DeLongis & Holtzman, 2005) and emotional intelligence (e.g. Montes-Berges & Augusto, 2007). An exposition of all these factors is beyond the scope of this thesis. The impact of EI has been adopted as the focus of the present study based on the recommendation in literature that components of EI could be seen as moderators which could help academics to cope with occupational stressors (Adeyemo & Ogunyemi, 2005; Bar-On, 2010; Eastabrook, Flynn, & Hollenstein, 2014; Mikolajczak, Menil, & Luminet, 2007).

1.2. Problem Statement

The findings reported in literature on higher education have revealed that occupational stress is escalating in universities and among academic staff (Barkhuizen & Rothmann, 2008; Fako, 2010; Gillespie et al., 2001). Academics experience high levels of occupational stress related to the multiple roles they need to assume such as, teaching, administrative work, research and community service (Frantz & Smith, 2013). In addition to these roles, academics within health professions are required to continue as clinical practitioners as current clinical expertise and supervision capacity is fundamental to the training of health profession students (du Plessis et al., 2013).

Tytherleigh, Webb, Cooper, and Ricketts (2005) reported the following sources of occupational stress experienced by academics: excessive work overload, work-life imbalances, work relationships, control, communication and job security. The debilitating effects of these occupational stressors on the individual and the organisational outcomes have been recorded in literature (e.g. Kinman, 2001; Kinman & Jones, 2003; Winefield, Gillespie, Stough, Dua, Hapuarachchi, & Boyd, 2003). Researchers documented in the early post-democratic space already that stress left unchecked or unmanaged can lead to burnout in academic staff (Blix, Cruise, Mitchell, & Blix, 1994; Doyle & Hind, 1998). However, most research on academic stress was conducted in developed countries such as the United States of America, United Kingdom, New Zealand and Australia (e.g. Blix et al., 1994; Doyle & Hind, 1998; Kinman & Jones, 2003).

There is a lack of research, concerning academic occupational stress, conducted in South Africa that reflect the more recent changes in the academic landscape (Barkhuizen & Rothmann, 2008). Additionally, findings in stress research have indicated that coping is an

important factor when individuals experience stress (Folkman & Moskowitz, 2004; Lazarus & Folkman, 1984; Mark & Smith, 2012). However, only a few studies referred to moderators or coping strategies used by academics when faced with occupational stress (Gillespie et al., 2001; Lease, 1999; Mark & Smith, 2012). Furthermore, emotional intelligence has also been found to be related to stress and coping (Adeyemo & Ogunyemi, 2005; Lazarus, 1999). There is a gap in higher education research exploring emotional intelligence in a sample of academic staff in South Africa. Therefore, the present study intended to determine the relationship between occupational stress, coping and emotional intelligence among academic staff in health profession disciplines at a HDI in South Africa.

1.3. Rationale

University staff plays a vital role in the creation and development of knowledge and innovation, in addition to education and training (Gillespie et al., 2001). It is well-documented that high levels of stress, left unchecked and unmanaged, undermine the quality, productivity and creativity of employees' work, in addition to their health, well-being and morale (Barkhuizen & Rothmann, 2008; Tytherleigh et al., 2005). It is important that universities need to manage and protect staff from increasing stress levels in order to preserve staff well-being, organizational performance and intellectual health of the nation, more-so for academics in health professions. Therefore, a clearer understanding with regard to the experience of stress among health professions within the university sector is needed. Given the increased pressure academics are constantly faced with the physiological and psychological effects thereof on the individual (Gohm, Corser, & Dalsky, 2005). Thus, the link between stress and emotional intelligence when experiencing stressors remains a focus for further research. Tabatabaei, Jashani, Mataji, and Afsar (2013) have shown that employees who have a higher emotional intelligence are able to produce higher quality

products and service in their work environment. Therefore, components of emotional intelligence, such as emotional awareness and managing emotions, may have an impact on academic performance (Szczygiel, Buczny, & Bazinska, 2012). It is important to understand the relationship between occupational stress, coping and emotional intelligence as it can assist in providing information for future well-being interventions among academic staff.

1.4. Structure of Thesis

The thesis is comprised of five chapters. The first chapter presents the background, problem statement and the rationale for the present study by means of introduction. Chapter Two is a review of related literature in order to provide an academic rationale for the present study. The body of related literature on stress and coping is comprehensive and a full review of the literature is outside the scope of the present study. Thus, this chapter provides a brief review focusing on occupational stress, coping and emotional intelligence among academic staff.

Chapter Three outlines the aims and objectives of the research, as well as the design and methodology used to attain them. The chapter reports on the methodological decisions made throughout the study. A justification for these decisions is presented. This chapter also reports on the ethics considerations for the study. Chapter Four presents the results of the study in a tabulated form. This chapter consists of two sections. Firstly, descriptive statistics that provided the sample characteristics and profile of the sample on each of the identified constructs. Secondly, results from inferential statistics including correlation matrices and regression analysis are presented. The findings of the study are presented relative to the research questions posed, the respective hypotheses tested and decision rules followed. Chapter Five presents the discussion of the findings integrated with the literature reviewed, as

well as the conclusion of the study. This chapter also reports on the limitations and significance of the study, and the recommendations for future research.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

Traditionally, university teaching was a relatively stress-free and highly satisfying occupation (Fisher, 1994). University lecturers found their jobs to be intrinsically motivating, enjoyable and potentially rewarding despite some reportedly experiencing long working hours, work overload and lack of support (Doyle & Hind, 1998). However, as a number of transformations occurred at higher education institutions, academics have been experiencing significant changes in the nature of their work (Coetzee & Rothmann, 2005). Olivier, de Jager, Grootboom, and Tokota (2005) concluded that academic staff at all levels in higher education are now faced with various challenges such as, student demographics, students' levels of preparedness, the modularisation of courses and changes in management styles and structures. Furthermore, academics have experienced implications of financial constraints at a personal and institutional level, increased workloads and an increasing pressure to publish and acquire external research funding (Olivier et al., 2005; Watts & Robertson, 2011). As a result, these changes have resulted in high levels of occupational stress among academic staff (Kinman & Jones, 2003), which in turn may have an effect on their way of coping as well as their level of emotional intelligence (Boyd, Lewin, & Sager, 2009; Mikolajczak, Menil, & Luminet, 2007).

Occupational stress is a psychological construct that must be conceptualised relative to its parent construct known as stress. Therefore, a brief overview of the body of literature reporting on the conceptualisation and definition of stress, the types of stress experienced, the causes of stress, and the physiological and psychological reactions to stress follows below. Literature on occupational stress will then be presented including the definition, theories and

measures of occupational stress, and the experiences of occupational stress among academic staff. Literature on coping will then follow whereby conceptualisations of coping is provided, as well as the coping strategies used by academics. Lastly, literature on emotional intelligence is presented in which the relationship between occupational stress, coping and emotional intelligence is discussed.

2.2. Stress

The concept of stress is rooted in Hans Selye's (1973) process, 'general adaptation syndrome' (GAS), which assisted in understanding bodily responses to stress. This process consists of three stages, namely, the alarm reaction, the stage of resistance and the exhaustion stage. Selye (1973) explained that when the body reacts to a stimulus, it releases stress hormones such as adrenaline or cortisol (alarm reaction). Once there is a reduction in the alarm reaction, the body adapts to the continued stressor known as the stage of resistance. Finally, exhaustion occurs when the body's resistance is gradually reduced resulting in a lack of energy or reduced immune functioning (Selye, 1973). Selye's seminal work was partially inspired by Walter Cannon's (1932) early research on the physiological processes involved in the 'fight or flight' response, whereby Walter coined the term 'homeostasis' to describe the processes of preserving internal stability when confronted with environmental change (Selye, 1991). Stress research subsequently expanded as researchers such as Adolf Meyer and Harold Wolff examined stressful life events and illness (Christiansen & Matuska, 2006). It was not until the late 1960s that a cognitive perspective of stress emerged (Ice & James, 2007).

Conceptualisations of stress have varied in form and context throughout the centuries (Zomer, 2012). Gupta, Rao, and Mukherjee (2015) summarised that for the last few decades, research on stress has produced a large number of conferences, books and articles, however,

despite the popularity of 'stress' as a research topic, a consensus on its definition is yet to be established. Different definitions emphasise different aspects. Selye (1976) defined 'stress' as a response to challenging events. Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964) defined stress as an event that places demands on an individual. French, Caplan and van Harrison, (1982) defined stress as an environmental characteristic that poses a threat to the individual. Lazarus (1990) defined stress as a realisation by the individual that he or she is unable to deal adequately with the demands placed upon him or her. More current literature underscore that stress is not merely a physiological response to a stressful situation, but the nature and effects of stress may be best understood as arising from the interpretation by the individual (cognitive interpretation) of certain environmental variables (stressors) as stress-inducing (Barkhuizen & Rothmann, 2008; Colligan & Higgins, 2005). In other words, the focus shifts from the physiology of stress to the capacity to respond to the stress or stressor (Gunbayi, 2009).

The term 'stress' is often used simplistically and negative connotations are associated with the typical reaction or response to stress. McVicar (2003) identified that some stress responses are beneficial. 'Eustress' is a term commonly applied to more positive, healthy and developmentally appropriate stress responses in which the body's resources are capable of dealing with the stressful stimulus (Selye, 1976). This category of stress leads to better performance as it provides energy and motivates people to strive (Gunbayi, 2009). The term, 'distress,' describes negative responses. Distress includes stress responses that weaken a person's physical and psychological capacity to cope with the environmental stressors (Gunbayi, 2009).

In essence, the presence of stress is almost inevitable (Viljoen & Rothmann, 2009). It is a natural and expected part of life that requires individuals to respond to demands or adapt to stressors. However, in most cases, individual's responses to stress differ based on their tolerance towards stress and their perceptions of a stressful encounter (Cox, Griffiths, & Rail-Gonzalez, 2009). This suggests that the same stressor may be interpreted differently by different people causing distress in one and eustress in another (Kuntz, Naswall, & Walls, 2013).

2.2.1. Types of Stress

Lazarus (2000) distinguishes between three types of stress, that is, acute, episodic and chronic stress. Each type of stress has associated emotional and physiological symptoms. Acute stress occurs when new demands, pressures and expectations placed on an individual that elevate their arousal levels above the threshold of their adaptability (Colligan & Higgins, 2005). These demands can be in the form of receiving unrealistic work demands or other situations that might cause frustrations, but last for a short period of time. Morrison and Bennett (2009) identified cataclysmic events such as natural catastrophes, i.e. hurricanes or earthquakes and exam stress as examples. Symptoms of acute stress often include emotional disturbances such as anxiety, worry, and frustrations (Morrison & Bennett, 2009). Physical symptoms include fatigue, increased blood pressure, rapid heart rate, dizziness and headaches, to mention a few (Zimbardo, Weber, & Johnson, 2003).

Episodic stress is similar to acute stress that the stress is experienced with higher frequency and more consistently, often in multiple episodes (Colligan & Higgins, 2005). A person who experiences episodic stress tends to exhibit aggressiveness, low frustration tolerance, impatience and a sense of time urgency. Additionally, a person experiencing

episodic stress is at risk for heart disease, asthma, chest pain, hypertension and persistent headaches (Lazarus, 2000). Finally, chronic stress is characterised by the accumulation of stressors that persists and are long-standing (Colligan & Higgins, 2005). This type of stress is often associated with family problems, poverty, long-term illness and occupational strain (e.g. Morrison & Bennett, 2009). Chronic stress can lead to diseases of lifestyle including high blood pressure, heart attacks, chronic fatigue and tiredness, as well as symptoms of psychological syndromes such as depression, anxiety disorders and psychosis (Lazarus, 2000).

2.3. Occupational Stress

Occupational stress appears specifically within the parameters of the work environment. Work-related factors causes occupational stress and generally has consequences for the work situation (Rothmann & Cooper, 2008). Weinberg and Cooper (2007) stated that when an individual experiences occupational stress, he or she cannot handle work-related demands, such as work overload, role conflict and poor working conditions effectively. This often results in a mismatch between the demands made upon an individual and his or her ability to cope with them. Therefore, occupational stress is considered a combination of high levels of job demands and low levels of control over one's job (Rosenthal & Alter, 2012).

2.3.1. Theories of Occupational Stress

Two of the most influential theories commonly used in studying work related stress are the demands-control-support (DCS) model (Karasek & Theorell, 1990) and the effort-reward imbalance (ERI) model (Siegrist, 1996). The first, the DCS model proposed an interaction between job demands, job control and social support. Job demands include job-related deliverables and expectations such as external pressures and workload (Hausser, Mojzisch,

Niesel, & Schulz-Hardt, 2010) Job control includes the capacity or ability to exert control over events or the chance to use skills in the job context (Hausser et al., 2010). Karasek (1979) posited that a high-strain situation develops when job demands are high and job control is low. High-strain situations in turn result in negative health outcomes. This model further predicts that low levels of social support (e.g. from supervisors, or colleagues) during high-strain situations are strongly related to negative health outcomes (Van Der Doef & Maes, 1999). In other words, interactions between demands, control and social support are such that control and support potentially could buffer the negative effect of job demands on health outcomes (Mark & Smith, 2012).

The second model, effort-reward imbalance (ERI) model, is becoming more widely used in research on work-related stress (Niedhammer, Tek, Starke, & Siegrist, 2004). This model is based on the notion of reciprocity of efforts spent and rewards received underlying the typical work contract (Siegrist, 1996). The ERI model proposes that high levels of reward, such as promotion and recognition should match high levels of work-related effort (Mark & Smith, 2011). This model suggests that strain will develop if efforts are high, but rewards are low. This in turn is likely to result in negative health outcomes (Peter & Siegrist, 1999).

Both theories predict many physical and psychological health outcomes, including mortality, heart disease and depression (Mark & Smith, 2011). However, DCS and ERI are largely focused on job characteristics or environmental factors (Cox, Griffiths, & Rial-Gonzalez, 2009) and fail to take into account individual factors. Cox and Ferguson (1991) identified that it is important to understand how differences between individuals may affect how they deal with stressors at work.

The transactional theory of stress (Lazarus & Folkman, 1984) places emphasis not only on job characteristics, but also on the subjective perceptions of stress and individual differences in ways of coping (Moos & Holahan, 2003). This theory introduces the notion of appraisal or perception of stressors. This suggests that an individual appraises a stressor (primary appraisal) and appraises his or her ability to cope with that stressor (secondary appraisal) (Lazarus & Folkman, 1984). The transactional theory was selected as the theoretical framework for the present study and will be summarised later in this chapter.

2.3.1.1. Measures of Occupational Stress

One of the most widely accepted measures used to assess and explain the dynamics of occupational stress is the ASSET (A Shortened Stress Evaluation Tool) developed by Cartwright and Cooper (2002). This instrument measures an employee's potential exposure to stress with reference to a number of occupational stressors. The ASSET proposes eight sources that contribute to the experience of occupational stress, namely, work relationships, work-life balance, overload, job security, control, resources and communication, pay and benefits and job aspects (Cartwright & Cooper, 2002). It is evident from literature that most of these stressors have a multi-dimensional nature and any one, or a combination thereof, can lead to the experience of occupational stress (Barkhuizen & Rothmann, 2008; Viljoen & Rothmann, 2009). Poor health is often an outcome of stress and this model can ascertain whether workplace pressures have positive and motivating, or negative and damaging effects on the employee (Cartwright & Cooper, 2002).

The experience of occupational stress was studied across a number of professions. Johnson et al. (2005) compared occupational stress across 26 diverse occupations, using the ASSET stress questionnaire, and found that six of the occupations reportedly were the most

stressful regarding physical and psychological well-being and as having the lowest levels of job satisfaction. Those professions included ambulance staff, teachers, social services, customer services, prison officers and police workers. This study also pointed out that the medical profession, nurses, dental and allied health professionals experience low levels of occupational stress (Johnson et al., 2005). However, these results may differ in other countries, for example in South Africa allied health professionals, specifically nurses, experience significant occupational stress due to nursing specific demands (van der Colff & Rothmann, 2009). Furthermore, Research Academics were also included in the study and were ranked 13th, 10th and 21st on stress related to physical health, psychological well-being and job satisfaction respectively. Academic staff in general, on the other hand, was not included in the study. Below is a brief overview of the literature that does report on the sources of occupational stress experienced by academic staff.

2.3.2. Occupational stress among academic staff

As early as 1986, there has been growing evidence that universities no longer provide the low stress environment they once did (Gmelch, Wilke, & Lovrich, 1986). University academics are performing complex work in an increasingly demanding environment. Academics commit to and perform in knowledge creation and knowledge transmission through processes of research and teaching (Houston et al., 2006). As mentioned before, the responsibilities of academics have increased manifold as faculty members perform many roles. These include teaching, research, consultation and supervision of student research, in addition to securing external funding through research grants subsidies and publications (Briggs, 2009). In addition, academics in health professions often continue as clinical practitioners and provide clinical supervision to student clinicians (du Plessis et al., 2013). The intense level of personal and emotional contact that characterise academics' relationships

with large numbers of students, staff, clients and administration, can be quite stressful, as it is expected of health professionals to be selfless and put the needs of others first (Coetzee & Rothmann, 2004). Several studies, from various countries, found that academic stress has become a cause for concern due to increased workloads and reduced support (e.g. Bezuidenhout & Cilliers, 2010; El-Sayed, El-Zeiny & Adeyemo, 2014; Hogan, Carlson & Dua, 2002; Kinman, 2001; Winfield et al., 2002;).

2.3.2.1. Sources of Occupational stress

Gillespie et al. (2001) identified five major sources of occupational stress. These included a lack of funding, resources and support services; task overload; poor leadership and management; lack of promotion, recognition and reward; and job insecurity. Furthermore, Gillespie and colleagues (2001) identified that academics experience high work demands with eroding levels of individual control and workplace support which often result in negative outcomes for staff well-being. Tytherleigh et al. (2005) reported similar sources of occupational stress. It was revealed that the source of stress that was most troubling to academics was job security followed by work relationships, lack of control, resources and communication, work-life balance, work overload, the job overall and the fact that the pay and benefits were not as good as those of others doing the same job (Tytherleigh et al., 2005). Paradoxically, despite reporting high levels of stress and increased demands, there is some evidence that academics also gain a considerable degree of satisfaction from their work (Winefield et al., 2003). Gillespie et al. (2001) and Tytherleigh et al. (2005) revealed that academics are intrinsically motivated by their disciplines, teaching and research tasks, but extrinsically demotivated by work context factors such as insufficient funding, resources constraints and poor management practices.

Studies conducted in Africa demonstrated that teaching at university level is no longer a stress free occupation (e.g. Atindanbila, 2011; El-Sayed et al., 2014). Atindanbila (2011) demonstrated that the main stressor reported among lecturers were the work environment due to the increased intake of students with no expansion of university facilities. Atindanbila (2011) further explains that the lecturer-student ratio is high which often results in work overload causing stress. Teaching load and professional distress were the second and third highest sources of stress reported. Professional distress is the way in which academics perceived themselves professionally. Similar to international studies, El-Sayed et al. (2014) found that academics experienced high levels of occupational stress due to the increased pressure arising from intensive workloads, the process of attaining career aspiration, lack of resources and poor working conditions, career development, work overload and inadequate resources were identified as the most stressful factors experienced by academic staff (El-Sayed et al., 2014).

Bezuidenhout and Cilliers (2010) reported that South African academics face similar demands as they are pressed to produce more research outputs, lecture bigger classes and supervise more postgraduate students. These authors further stated that academic staff needs more time and energy to cope with heavier workloads, less support and fewer means. Barkhuizen and Rothmann (2008) identified that academics within the South African context experience similar sources of stress compared to international findings. This study found that academics experience high levels of occupational stress related to pay and benefits, overload and work-life balance (Barkhuizen & Rothmann, 2008). Academics felt particularly stressed by the time constraints placed upon them and often perceive that they do not perform their jobs as well as they would like to. Results further indicated that academics tend to set unrealistic deadlines to perform unmanageable workloads. Barkhuizen and Rothmann (2008)

further revealed that in comparison to international findings work relationships, job security, control, resources and communication and job characteristics less troubled academics.

2.3.2.2. Effects of Occupational Stress

As identified above, work-life imbalance is an overflow and a source of stress for academic staff (Barkhuizen & Rothmann, 2008; Tytherleigh et al., 2005). Given the increased work demands that force academics to work evenings and weekends, the boundary between work and private life becomes blurred, and for most the level of work-life balance is far below desired (Slišković & Seršić, 2011). Furthermore, Slišković, and Seršić (2011) state that the encroachment of the work domain on the private life does not necessarily occur because of the lack of physical boundaries between the two domains. These authors further explain that the psychological commitment that academics have to their work often interferes with other roles that do not allow for relaxation during free time and disrupts sleep (Slišković & Seršić, 2011). Kinman and Jones (2008) identified that academics who perceive less control over work, schedule inflexibility, and less support from their superiors, experienced a higher level of work-life imbalance, increased job dissatisfaction and the intention of giving up the academic career. This in turn is also associated with lower levels of psychological well-being.

Researchers have also indicated that occupational stress has a negative influence on organisational commitment. For instance, Coetzee and Rothmann (2005) reported that employees perceive characteristics of their jobs and control as big sources of stress. As a result, academics perceive the organisation as less committed to them and in turn become less committed to the organisation. Alternatively, Bakker, Demerouti, De Boer, and Schaufeli (2003) found that poor and lacking resources preclude actual goal accomplishments. They

state that this is likely to cause failure and frustration and therefore may lead to withdrawal from work and reduced motivation and commitment (Bakker et al., 2003).

Occupational stress can have costly implications for organisations, impact on staff morale, turnover, absenteeism rates, and could also lead to reduced employee performance, poor quality control and a fall in production (Karasek & Theorell, 1990; Kinman, 2001; Mostert, Rothmann, Mostert, & Nell, 2008). These changes are also associated with job dissatisfaction, increased smoking, alcohol and drug abuse, physical ill health and poor psychological well-being (Watts et al., 1991; Winfield et al., 2002). Jackson and Rothmann (2006) reported that academics experienced feelings of anxiety, depression, burnout, anger, irritability and helplessness, difficulty in making decisions, loss of sense of humour, constant tiredness, feeling unable to cope, avoiding contact with other people, mood swings and inability to listen to others when faced with occupational stressors.

Previous research reported few differences between male and female academics regarding the amount of occupational stress they experience. For example, men more than women perceived workload, inadequate salaries and a lack of public recognition as more significant sources of stress, whereas, job security, isolation from colleagues, a lack of institutional recognition of worth and work politics were more salient for women (Cross & Carroll, 1990; Dua, 1994). Additionally, female academics experienced a higher degree of conflict between work and home (Doyle & Hind, 1998; Kinman, 1996). An increase in workload, coupled with greater responsibilities related to work and family result in women working longer hours compared to males (Barkhuizen & Rothmann, 2008).

There have been indications that there are age-based differences in academic staff with regard to occupational stress (Barkhuizen & Rothmann, 2008). Previous research found that younger academic staff reported more stress as a result of work politics, working conditions and job significance than older staff (Dua, 1994). Older academics tend to have more responsibility and often report increasing pressure and work overload, however they use a variety of coping mechanisms and therefore report less strain or stress compared to younger academics (Winfield et al., 2002). Consistent with that, lower academic rank was associated with high stress and faculty in contract positions reported a higher level of stress compared to permanent faculty (Lease, 1999). Slišković and Seršić (2011) concurred in reporting that academics in junior positions experience higher levels of stress and lower job satisfaction. These could be attributed to experiencing reduced control, autonomy, salary and greater job insecurity than tenured senior academics.

The body of literature demonstrated that academics experience a significant amount of occupational stress (Bell, Rajendran, & Theiler, 2012; Coetzee & Rothmann, 2005; Tytherleigh et al., 2005). Although there is recent literature, there remains a gap in research on stress that distinguishes between academics within HDI and those within HAI. Furthermore, literature provides a broad sense of the stressors experienced by academics and fail to identify and distinguish between stressors that are unique to academics within the health professions. There is a small body of existing literature that specifically report on allied health professionals occupying academic positions (du Plessis, du Plessis, & Saccaggi, 2013). However, the majority of this research explores the transition from clinical practice to becoming an academic (e.g. Boyd, Smith, Lee, & MacDonald, 2009; Frantz & Smith, 2013; Smith & Boyd, 2012). It becomes clear that there is a gap in the literature that focuses on the stressors experienced by allied health professions in academia at Historically Disadvantaged

Institutions. Therefore, the present study focused on a sample of academics in the health professions at a HDI.

2.4. Coping

Various aspects of the work environment produce unique responses from employees, and how individual employees evaluate and respond to the work environment may hamper their career participation, job satisfaction and productivity (Carverley, 2005; De Jonge, Dormann, Dollard, Landeweerd, & Nijhuis, 2001). Often, these aspects of the work environment become stressful if not managed properly. Employees use a variety of coping strategies to alleviate work stress (Levin, Ilgen, & Moos, 2007) and their success in engaging in such strategies often influences their perceived quality of work life, subjective well-being and productivity (Kovacs, 2007). Skinner, Edge, Altman, and Sherwood (2003) assert that coping is fundamental to an understanding of how stress affects people and further argue that how people deal with stress can reduce or amplify the effects of adverse events and conditions.

Transactional models of stress view coping as a process that intervenes between the appraisals of stressors and the immediate and long-term effects of the stress, including emotional states, chronic physiological and psychological conditions and situational outcomes (Lazarus, 1999). Coping has been defined as an individual's cognitive and behavioural efforts to remove, reduce, manage or tolerate internal or external demands that are appraised as stressful or challenging (Lazarus & Folkman, 1984). Lazarus and Folkman (1984) continue by defining coping strategies as efforts used, such as problem solving or regulating emotions, to alleviate or manage the stressors that exceeded the resources of the individual and potentially could lead to negative consequences.

Previous stress research has identified a number of coping strategies that can moderate, reduce or eliminate the negative effects of occupational stress (Gillespie et al., 2001). The most consistently identified moderators of occupational stress include the individual's coping style (e.g. Gillespie et al., 2001); emotionality (e.g. Szczygiel, Buczny, & Bazińska, 2012); level of control (e.g. Hausser et al., 2010); and social support (e.g. Mark & Smith, 2011). The coping style or strategy used may be more important to an individual's well-being than the presence of the stressor itself (Skinner et al., 2003). Individuals generally assume a coping strategy based on a determination of whether or not they believe the situation could be changed (Boyd, Lewin, & Sager, 2009).

2.4.1. Coping Strategies

In the early formulation of stress and coping theory, Lazarus and Folkman (1984) distinguished between problem focused coping processes and emotion focused coping processes. Problem focused coping (PFC) is directed at altering the environmental demands placed upon a person in order to alleviate the stressful situation. This sort of coping strategy aims at changing the stressor for example, seeking help or taking direct action in a challenging situation (Folkman & Moskowitz, 2004). PFC focuses on defining the problem, planning, generating alternative solutions, weighing the alternatives in terms of their cost and benefits, choosing an alternative and taking action (Rantanen, Mauno, Kinnunen, & Rantanen, 2011). PFC attempts to exert control over the stressful situation and solve problems, and is used in situations appraised as changeable (Lazarus & Folkman, 1984).

On the other hand, emotion focused coping (EFC) involves attempts to regulate emotions surrounding the stressful encounter (Lazarus & Folkman, 1984). This strategy concentrates on positive thinking and expression of emotion with the aim to tolerate the stressful situation

(Rantanen et al., 2011). EFC is a stress-reducing strategy used in situations in which nothing can be done about the stressor and in situations in which people cannot change the prevailing environmental conditions. This strategy includes selective attention, whereby the individual purposefully concentrates on specific or unrelated aspects of the problem, positive comparison and distancing or emotional distress reduction, to name a few (Lazarus & Folkman, 1984). PFC and EFC are also known as ways of coping as they capture the ways people actually respond to stress, such as through seeking help, rumination, problem solving, denial or cognitive restructuring (Skinner et al., 2003).

Problem focused coping has often been emphasised as producing positive effects on psychological outcomes, especially when the stressful situation can be improved by the person's responses (Zeidner & Saklofske, 1996). In fact, this type of coping provides a sense of mastery over the problem and is highly effective in stress reduction that makes it the preferred coping style (Folkman & Moskowitz, 2004; Zeidner & Saklofske, 1996). Conversely, MacCann, Fogarty, Zeidner, and Roberts (2011) state that emotion-focused coping is not generally as effective compared to PFC. They explain that an adaptive response to a remediable situation still requires problem-focused activities in order to effectively remove or ameliorate the threat (MacCann et al., 2011).

The nature of individual coping is more complex than that described by the two-dimensional categorisation of PFC and EFC (Folkman, 2008; Folkman & Moskowitz, 2004). New directions have emerged, for example, Parker and Endler (1996) have introduced a third coping strategy, avoidance focused coping (AFC), which reflects a negative response to stress such as denial, drug taking and mental disengagement. This form of coping process is unlikely to lead to beneficial outcomes in any situation (MacCann et al., 2011). A study

conducted by Odirole, Mpofu, and Montsi (2009) at a Southern African University revealed that people with a higher academic qualification reported using more avoidant strategies compared to those of lower qualifications. Specifically, more employees with a Master's degree reported using more avoidant coping strategies than those with different qualifications when experiencing occupational stress (Odirile et al., 2009). These authors argued that often it is being expected of university employees with higher qualifications to rationalise and find alternative solutions to stressful events rather than to avoid them. They further stated that perhaps the use of avoidant coping strategies may be adaptive in that it 'buys time' for the academic to try to find ways of dealing with the event (Odirile et al., 2009). Furthermore, this study revealed that the use of problem focused strategies was higher among academic staff compared to support staff (Odirile et al., 2009).

Some of the newer models and definitions of coping have drawn on emotion research, linking the constructs of EI and coping quite closely (Folkman & Moskowitz, 2004; Skinner & Zimmer-Gembeck, 2007). As a result, emotion-approach coping, emotion regulation and positive emotion and coping have emerged as new developments of coping strategies (Folkman & Moskowitz, 2004). Emotion-approach coping involves actively processing and expressing emotion when faced with stress (Stanton, Kirk, Cameron, & Danoff-Burg, 2000). Emotion regulation coping refers to the process by which individuals influence which emotions they have, when they have them and how they experience and express these emotions (Gross, 1998). Lastly, positive emotion and coping is described as consciously seeking out positive meaningful events or infuse ordinary events with positive meaning to increase their positive effect when experiencing a stressful situation (Folkman & Moskowitz, 2004). Even prior to these developments, a strong link was posited between EI and coping (MacCann et al., 2011). This is further explored in section 2.5 below.

2.5. Emotional Intelligence

The concept of Emotional Intelligence (EI) was first proposed by Salovey and Mayer (1990). They argued that EI is a type of social intelligence that involves a person's ability to monitor their own and others' emotions, to discriminate among them and to use that information to guide their thinking and actions (Salovey & Mayer, 1990). Bar-On (1997) described EI as consisting of an array of non-cognitive (emotional and social) capabilities, competencies and skills that influence one's ability to succeed in coping with environmental demands and pressures. EI encompasses the human abilities of empathy, self-awareness, motivation, self-control and adeptness in relationships (Bar-On, 1997). It involves verbal and non-verbal assessment, expression of emotions and the use of emotions in solving problems (Mayer & Salovey, 1993). However, EI is more than having a sense of empathy for others, it is a genuine ability to feel emotions in response to others, understand what you are feeling, understand how others are feeling and to move forward constructively with the interest of the whole group at heart (Fernandez, 2007).

The definition of EI can be broken down into four components, namely: 1) perceiving emotion, 2) using emotion, 3) understanding emotion and 4) managing emotions (Mayer & Salovey, 1997). The ability to identify your own emotion, as well as those of others and objects is often referred to as perceived emotion. Using emotion refers to the ability to harness emotions to facilitate various cognitive activities such as thinking and problem solving. The ability to label emotions and recognise relations among the words and the emotions themselves is when an individual is capable of understanding emotion. Lastly, managing emotions is the ability to manage emotions in oneself and others by moderating negative emotions and enhancing pleasant ones (Jude, 2011; MacCann et al., 2011).

2.5.1. Trait and Ability EI

There were many criticisms of EI, one of it being that EI is nothing more than a combination of personality traits (Davies, Stankov, & Roberts, 1998). In addressing this criticism surrounding the theoretical component of EI, a distinction between Trait EI (or 'emotional self-efficacy') and Ability EI (or 'cognitive-emotional ability') was made (Petrides & Furnham, 2001). Trait EI is measured through self-report questionnaires whereas ability EI is measured through maximum performance tests, that is, tests that are based on items that have correct and incorrect answers (Petrides & Furnham, 2003). Petrides and Furnham (2003) emphasised that these are two different constructs, because the procedures used in the operational definitions are fundamentally different, although their theoretical domain might overlap.

Trait EI models include a range of emotion-related, self-perception and dispositional variables (Petrides & Furnham, 2003). The precise composition of these self-perceptions and dispositions varies across different conceptualisations. For example, Goleman's trait model (1995) conceptualises EI as self-awareness, self-regulation, self-motivation, empathy and handling relationships, whereas Bar-On's (1997) model measures other postulated dimensions of EI, that is, interpersonal and intrapersonal skills, adaptability, stress management and general mood. Pertrides and Furnham (2000) suggest that these trait EI models are 'mixed' as they asses not only emotional skill, but overlaps with clearly distinct constructs in psychology, uniting them with an overarching 'EI' construct.

Ability EI models are more focused and explicit as to the constituent parts of EI and its relationship to traditional intelligence (Pertrides & Furnham, 2000). Ability EI models are designed to measure specific emotional information-processing skills or ability, such as

emotional perception and regulation (Petrides & Furnham, 2003). This includes the models of Salovey and Mayer's (1990) and Schutte et al. (1998). Ability EI models represent EI as a cognitive ability. According to Mayer, Caruso, and Salovey (2000) emotional intelligence is the capacity to process emotional information accurately and efficiently. These authors measure EI based on the four branch model of emotional capacities, namely perceiving emotion, using emotion, understanding emotion and managing emotion, as explained above (Petrides & Furnham, 2001).

2.5.2. EI and its relationship to Stress and Coping

There has been increasing interest in the role of emotions in the appraisal and response to potentially challenging situations (Slaski & Cartwright, 2002). Pau and Croucher (2003) identified that individuals who are capable of regulating their emotional states are healthier and EI appears to be potentially useful in reducing stress. Gohm, Corser, and Dalsky (2005) concur that EI may protect people from stress as high EI is related to active coping and better adaptation. The use of EI concepts may provide insights into strategies to help academics cope with occupational stress. Nikolaou and Tsaousis (2002) revealed that individuals who can regulate their emotional states tend to be healthier, because they are able to correctly appraise their emotional states, express their feelings and regulate their moods. (Nikolaou & Tsaousis, 2002).

EI is directly connected to resilience. For example, Armstrong, Galligan, and Critchley (2011) stated that people with higher EI cope better with emotional demands of stressful encounters. This is attributed to the ability to perceive and appraise their emotions, knowing when and how to express their emotions, and the ability to manage their mood states. Thus,

EI can buffer or moderate for aversive events by means of emotional awareness, expression and management.

Adeyemo and Ogunyemi (2005) posited that EI may protect individuals from stress and may enhance human accomplishment and personal well-being. Bar-On (2010) identified that EI factors such as the ability to manage emotions and cope with stress, the ability to put things in correct perspective and the ability to solve problems of a personal and interpersonal nature can impact academic performance. Salovey, Bedell, Detweiller, and Mayer (2000) reported that people with high EI are thought to be better equipped to deal with stressful events and that their ability to perceive, understand and manage their own and others' emotions result in better coping skills. Jude (2011) affirmed that EI is a significant factor influencing occupational stress among academics, thus the ability to effectively deal with emotions and emotional information would assist in managing occupational stress. Cherniss (2010) concurred by suggesting various ways in which EI can help individuals deal with stress. These include the avoidance of stressful encounters; more constructive perceptions and situational appraisals; adaptive management and reparation of emotions; richer coping resources and use of effective and flexible coping strategies.

In methodological terms, studies tended to focus on a quantitative approach that typically requires individuals to complete self-reported inventories that claim to measure stress or stressors (e.g. Barkhuizen & Rothmann, 2008; Nikolaou & Tsaousis, 2002; Tytherleigh et al., 2005). This is appropriate given the subjective nature of the constructs, the measurement of attitudes and perception, the large sample size and the relative amount of work conducted on stress (Mazzola, Schonfeld, & Spector, 2011). To a lesser extent, qualitative methods such as interviews and focus groups were used to gather information regarding stress and coping (e.g.

Gillespie et al., 2001; Gunbayi, 2009). Regardless of the types of methodology used, findings consistently indicated the relationship between occupational stress, coping and emotional intelligence (Cherniss, 2010; Jude, 2011).

To conclude, there is evidence that academic staff experience significant stress related to changes within higher education, multiple roles and the commitments and responsibilities. Furthermore, there is a small body of literature that reports on coping strategies used by academic staff and provides evidence that emotional intelligence is an important factor associated with stress and coping (Nikolaou & Tsaousis, 2002; Por, Barriball, Fitzpatrick, & Roberts, 2011). However, academics in health professions have not been prioritized as a target group in stress, coping or emotional intelligence related research, more-so academics in historically disadvantaged universities. There is a lack of empirical research that examines the following: 1) stressors that are unique to academic staff in health professions, 2) stress reducing or coping strategies used by academic staff and 3) whether academics are using emotional intelligence as a facilitator to cope with occupational stress (Adeyemo & Ogunyemi, 2006; du Plessis et al., 2013; Gillespie et al., 2001; van Emmerik, 2002). The majority of studies on stress, coping and EI was conducted in developed countries. Therefore, there is a gap within developing countries such as South Africa with emphasis on the contextual factors. In particular, the relationships between EI, Coping and Occupational Stress within academic staff at historically disadvantaged universities remain a focus for further research. Therefore, the present study attempted to determine the relationship between occupational stress, coping and emotional intelligence in a sample of health professions academic staff at a historically disadvantaged university.

2.6. Theoretical Framework

The present study considered numerous models of work-related stress as the theoretical framework. As mentioned before, the transactional model of stress was selected as the theoretical framework for the present study. Below is a brief exposition of the model.

2.6.1. Transactional Model of Stress

As mentioned before, the fundamental proposition of the transactional model is that it is the interaction of the person and the environment that creates a felt stress for the individual (Lazarus & Folkman, 1984). Lazarus (1991) stated that "stress is not a property of the person, or of the environment, but arises when there is conjunction between a particular kind of environment and a particular kind of person that leads to a threat appraisal" (p.3). This model defines stress as arising from the appraisal of particular environmental demands that challenges individual resources, thus threatening well-being (MacCann, Fogarty, Zeidner, & Roberts, 2011).

The definition of stress encompasses a number of themes that captures the transactional nature of stress. As explained by Lazarus (1999), stress is a product of the transaction between the individual and the environment. The authority and power of the transaction lies in the process of appraisal that binds the person and the environment. It is this 'relational meaning' that the person constructs from the transaction that lays at the heart of the stress process (Lazarus, 1999). Lazarus (1999) continued by stating that there are two appraisals, namely primary and secondary appraisals. It is through these appraisals that the focus is shifted to what people think and do in a stressful situation, representing a process-orientated approach (Lazarus, 2001), and it is the appraisal process that offers a causal pathway, a

bridge, to those emotions that best express the nature of the stress experience (Lazarus, 2001).

The transactional theory of stress and coping have examined individual differences in understanding why certain individuals cope better than others when confronted with similar situations, or why they may perceive and respond differently to similar situations (Zomer, 2012). Lazarus (1984) asserted that the transactional theory depicts people as meaning-building creatures who constantly evaluate everything that happens and who use emotional cues in the process of appraisal. There are two types of appraisals that are central to Lazarus's transactional theory. In Primary Appraisal, the individual questions what he or she has at stake in a particular threatening situation. This is referred to as the motivational relevance of an encounter (Smith & Lazarus, 1990). The answer to the question often influences the quality and intensity of the emotion experienced by the individual. A situation can be appraised as either threatening or challenging to the individual. A challenge appraisal concentrates on the anticipated success and positive outcomes of the event, confidence in one's ability and the resources available to cope with the demand. On the other hand, threat appraisal focuses on the possible harm posed by lack of resources available to allow for effective coping with the demands (Skinner & Brewer, 2002). Individual emotional resources and situational factors influence appraisals that are learnt from previous experiences (Matthews, Zeidner, & Roberts, 2002).

In Secondary Appraisal, individuals question what they can do in response to the perceived threat, that is, their options for coping. The answer to this question informs the types of coping strategy they will implement to manage the demands of the situation (Zomer, 2012). The individual chooses between problem focused coping, emotion focused coping or

avoidance focused coping. Anshel (2001) stated that challenging appraisals are more likely to be associated with the use of problem-focused coping, whereas, threat appraisals are more likely to be associated with avoidance coping.

Lazarus (1999) conceptualised stress, emotion and coping as forming one unit, with emotion as a super-ordinate concept, because it takes into account both coping and stress. Matthews and Zeidner (2000) concurred as they described a model that incorporates EI within the transactional model of stress and coping. They consider EI as an attribute of the person which might predict adaptive outcomes. Lazarus (1999) identified 15 emotions (anger, envy, jealousy, anxiety, fright, guilt, shame, relief, hope, sadness, happiness, pride, love, gratitude and compassion) and explains that every emotion communicates something distinct about how individuals have appraised what is happening in an adaptational transaction and how they are coping with what is happening. Matthews and Zeidner (2000) explained that when an individual encounters stressful situations, the individuals' EI skills influence his or her choice of coping strategies to deal with the situation.

The model was deemed appropriate for the present study based on two core considerations. First, Zomer (2012) asserted that this model has received the greatest acceptance in psychology and has been prominent in the field for the past four decades. Second, the transactional model has been used as a framework in a number of research studies concerning work-related stress and coping (e.g. King & Gardner, 2006; Mark & Smith, 2011; Rantanen et al., 2011). Thus, the theoretical framework of the present study is consistent with current practice, the discipline of psychology, and provided a clear direction for the data collection.

CHAPTER THREE

METHODOLOGY

3.1. Aim

The present study aimed to determine the relationship between occupational stress, coping and emotional intelligence in a sample of academic staff in Health Professions at a Historically Disadvantaged University.

3.2. Objectives

- To assess the occupational stress experienced among academic staff.
- To assess the emotional intelligence (EI) of academic staff.
- To identify the ways that academic staff cope with occupational stress.
- To determine if there are significant associations between occupational stress, EI and coping.
- To determine if occupational stress and EI can significantly predict coping among academic staff.

3.3. Research Design

3.3.1. Survey Design

A survey design was used to determine the relationship between occupational stress, coping and EI. Survey research was the most appropriate design for this particular study as it involved the use of standardised questionnaires to collect data about people and their preferences, thoughts and behaviours in a systematic manner (Bhattacherjee, 2012). This approach was deemed appropriate as it allowed the researcher to collect data for a larger sample of academic staff (Babbie & Mouton, 2000), who could complete the survey at their

own leisure (Fricker & Schonlau, 2002). Surveys were also economical in terms of timeliness and costs (Evans & Mathur, 2005).

There are two basic kinds of survey designs, namely longitudinal and cross-sectional surveys. The former involves collecting data at different points in time to study changes in a phenomenon over time (Babbie, 2011). The cross-sectional design refers to measurement taken at one point in time (De Vaus, 2002). This suggests that a particular variable is measured at one given point as well as the relationships of that variable at the time of the study (Clark-Carter, 2005). Consequently, results may change at a later stage. However, researchers often revisit the phenomenon and build on the results of earlier research (Babbie, 2011). The present study incorporated a cross-sectional design.

A challenge in cross-sectional surveys is that the single point of measurement might not support the determination of causal relationships between variables since there often is no direct evidence that one set of variations in one variable preceded and thereby produced or caused the second (Miller, 1999). Temporal order is a prerequisite for causation to be established, unless the criteria for causation can be empirically or theoretically determined (Miller, 1999). The objectives of the present study included the testing of predictive relationships that required a careful assessment of the criteria for determining predictive and/or causal relationships relative to the nature of data collected from a cross-sectional survey. There are three criteria for determining causation i.e. linear relationships between the measured variables, temporal order of the hypothesized predictive relationship and ruling out rival hypotheses (Edwards & Bagozzi, 2000). The present study did not assess causal relationships, but predictive relationships that required attention to the requirements of linearity and temporal order.

Linear relationships between the measured variables will be tested using inferential statistics discussed later in this chapter. Temporal order can be inferred theoretically in that EI skills are present prior to entry into the world of work. Thus, the potential threats to statistical procedures that can test the predictive relationships between the variables that have been measured cross-sectionally, have been addressed adequately.

3.3.2. Mode of Administration

The survey in the present study was administered online. According to Schuldt and Totten (2008) academics are known to rely heavily on email both in and outside of normal working hours as it is expected of academics to be readily contactable. Therefore, online administration deemed appropriate for academic staff, not only do they have easy access to email and internet connections at their places of work, but online surveys were able to fit in with their daily schedules. The survey was hosted on Survey Monkey. Survey Monkey is a software application that specialises in creating online surveys and enables online administration of surveys with a number of features that are time and cost effective (Survey Monkey, 2016). From this platform, an electronic invitation to participate in the survey was generated and distributed to respondents via e-mail (Appendix A). This invitation contained a link to Survey Monkey.

Prior to inviting academics to participate in the study, a trial run of the survey was emailed to the researcher, as well as to the supervisors on 24 June 2015. This was done to assess the ease of the administration and accuracy of the survey on a number of monitors and software applications. The survey went live on the 2nd July 2015. The survey remained active until the closing date, that is, the 6th October 2015.

3.3.3. Response Rates

Response bias and low response rates were identified as disadvantages of online surveys (Kennedy & Vargus, 2001). Researchers have identified the implications for online surveys and acknowledged that online surveys are much less likely to achieve response rates as high as surveys administered on paper (Dommeyer, Baum, Hanna, & Chapman, 2004; Nulty, 2008; Watt, Simpson, McKillop, & Nunn, 2002). Deutskens, Ruyter, Wetzels, and Oosterveld (2004) found that for online surveys a response rate between 20 – 47% can be expected with an average of 33% that is consistent with other modes of administration. Nulty (2008) asserted that the expected range of response rates for online surveys was between 20% and 47%. On the other hand, Babbie (2007) suggested that a response rate of 60 percent is good and a response rate of 70 percent is very good. Babbie further indicated that a response rate of 50 percent is adequate for analysis and reporting (Babbie, 2007). Nonetheless, Babbie (2011) stated that there is no consensus on response rates, thus, the aforementioned are merely suggested response rates.

In order to increase the response rate for this study, on completing of this survey, academics were able to, on request, gain information regarding the occupational stressors they may be experiencing; reflect on their way of coping when experiencing these stressors and had the opportunity to reflect on their emotional intelligence. Additionally, weekly reminders were sent to participants who have not completed the survey with the invitation to participate in the study (Appendix B). The Survey Monkey platform had the capability to send automated reminders using IP addresses without disclosing the identities of participants who completed the surveys or eligible recipients who have not. This afforded participants' anonymity and the researcher the ability to send reminder emails to those who had not responded to the invitation or those who had not completed the survey. Reminder emails, and

invitations were sent to participants who had not completed the survey on a schedule determined by the researcher and supervisors. These emails were worded in such a way as to stimulate interest in the participants. This was achieved by starting the email with an interesting quote regarding stress in academia and underscoring the rationale for the present study. Reminder emails were scheduled to be sent out weekly, on the 17th, 28th July and the 4th August 2015. It was decided by the supervisor and the researcher that these reminders would not be sent out on a Monday as academics may assume these emails to be junk mail based on the number of emails received over the weekend. No further reminders were sent after the 4th August 2015 as reminder emails ceased to yield an increase in response.

The present study also made use of incentives to increase the response rate. Laguilles, Williams, and Saunders (2011) found that lottery incentives can positively impact online survey response rates. This finding is consistent with previous web-survey experiments (e.g. Deutskens et al., 2004; Goritz & Wolff, 2007). Academics who participated were entered into a lottery for a voucher valued at R250.00. Participants were informed of the lucky draw in the initial email and with each reminder email. This draw took place on the 31st July 2015.

It was anticipated that the minimum response rate would be based on the target of 50% of the sampling frame aligned with Babbie's (2007) recommendation for robust analysis. The initial response to the invitation to participate was slightly below the lower end of the range of anticipated response rates in online surveys i.e. 20%, thus this was a good start. Thereafter, three reminders were sent to all non-responders in the sampling frame. The first reminder increased the response rate to 28% (N = 26). After the second reminder, the number of respondents increased to 36 (N = 36) which constituted 39% of the sample. The third reminder increased the response rate to 55% (N = 51) of the sampling frame. It was identified

that the first two reminders yielded an increase of response rates of 11% each. The third reminder increased the response rates by 12%, which meant that reminders on average increased the response rates by 11.3%. Thus, there was a consistency in terms of the average increase per reminder. The decision to stop data collection was solely based on the 50% target as the response rates was deemed adequate for the study and intended analysis and the timeline for completion of the study.

3.4. Research Setting

The identified research setting was the University of the Western Cape (UWC). UWC was established in 1960 by the apartheid government as a higher education institution for people classified as coloured (UWC, 2013a). It was classified as a historically disadvantaged institution post–1994 given the limited resources that previous apartheid government had allocated to institutions catering for sections of the population that were not white (O'Connell, 2011).

UWC has a history of creative struggle against oppression, discrimination and disadvantage (UWC, 2013a). Historically, such institutions were not designed to engage in research and postgraduate studies, but merely to provide the lower levels of the South African labour force (O'Connell, 2011). The university decisively turned its back on this political heritage and in the 1980s, UWC declared itself an institution whose doors were open to students of all race groups and gained autonomy from direct political control (Rodrigues, 2002). Among academic institutions, UWC has been in the front line of South Africa's historic change, playing a distinctive role in helping to build an equitable and dynamic nation (UWC, 2013a). Since then, UWC has evolved from a teaching institution to an institution that has taken significant strides in developing into a research intensive university (O'Connell,

2011). The types of research performed at UWC have vastly expanded and improved in the last few years. Teaching remains a core activity, but research is increasingly taking centre stage (Research Policy of the University of the Western Cape, 2009). Thus, UWC is now classified as a research intensive university.

UWC consists of seven faculties (UWC, 2013b), but for the purpose of this study, the Faculty of Community and Health Sciences (CHS) was the focus. The CHS Faculty aims at equipping health professionals with the skills to help transform health and welfare services in South Africa. The faculty consists of six departments and three schools (UWC, 2013b). The Departments include Dietetics, Occupational Therapy, Physiotherapy, Psychology, Social Work and Sport, Recreation and Exercise Sciences. The schools include Public Health, Natural medicine and Nursing. Professional degree programmes are offered in the faculty that allows graduates to register with the Health Professions Council of South Africa. Bachelor's degrees leading to registration include the following categories: social work, registered nurse, occupational therapists, physiotherapists and registered dieticians. Postgraduate programmes that lead to registration include the following psychology categories: registered counsellors, clinical, research and counselling.

The CHS faculty comprises of 92 permanent academic staff and employ part-time or contract staff for supervision (UWC, 2013b). The faculty employs staff at all rungs including associate lecturer, senior lecturer, associate professor, professor and senior professor. The majority of the staff is employed at the level of senior lecturer and below (UWC, 2013b). The faculty also consists of predominantly female academics.

3.5. Sampling

The present study utilised a probability sampling method since every permanent academic staff member in the Faculty of CHS had an equal chance of being included in the study (Babbie, 2007). That is to say, an invitation to participate in the study was sent to all permanent academic staff, included in the sampling frame. The final sample consisted of those academics that elected to participate. Thus, simple random sampling was used as the process of deciding to participate was random (Bhattacherjee, 2012). This method was deemed appropriate as it produced an unbiased sample (Fowler, 2009). As mentioned before, 55% of the sampling frame participated in the study translating into a sample of 51 academic staff in the Faculty of CHS.

3.6. Instruments

This study included four questionnaires to solicit information regarding demographics, the sources of stress, coping methods used and emotional intelligence respectively. Below is a brief outline of each instrument.

3.6.1. Demographic Questionnaire

A self-constructed questionnaire was used to gather information about the demographic characteristics of the sample. Barkhuizen and Rothmann (2008) indicated that it is important to examine personal and professional characteristics against the three variables used in this study. There has been evidence that men and women experience different occupational stressors, and that there is a difference in stressors and coping styles based on academic rank and years in academia (Barkhuizen & Rothmann, 2008; Kinman & Jones, 2003). Therefore, the demographic questionnaire measured gender and race, in addition to the department in which they worked, years in academia, highest qualification and academic status (senior

lecturer, associate professor etc.). The initial version of the questionnaire was developed and reviewed in consultation with the supervisors. The final version of the questionnaire is included as an appendix (Appendix C).

3.6.2. Sources of Work Stress Inventory (SWSI)

The SWSI (Appendix D) is a South African developed instrument which measures general levels of occupational stress and identifies possible key sources of stress (de Bruin & Taylor, 2005). This questionnaire uses a five point Likert-type scale with 59 items rated from '*never'* to *'always'* and from *'not at all'* to *'very much'*. The internal consistency reliability coefficients for the SWSI ranged from 0.86 to 0.94 (de Bruin & Taylor, 2005). These Cronbach alpha coefficients were excellent and suitable for psychological research (de Bruin & Taylor, 2005).

The SWSI is divided into two parts, the first section is the General Work Stress Scale, which asks questions about the level of stress that an individual experience at work. The second section, the Sources of Work Stress Scale, appraises eight sources of work stress (de Bruin & Taylor, 2005). As described by De Bruin and Taylor, (2005) the eight scales are as follows:

- **Role ambiguity:** This scale relates to the amount of stress experienced by the individual due to vague specifications or constant change regarding expectations, duties and constraints that defines the individual's job. This scale consists of seven items. A Cronbach's alpha of .85 ($\alpha = .85$) score was obtained for the role ambiguity scale in the present study that suggested high levels of internal consistency and reliability.

- **Tools and equipment:** This scale relates to the stress experienced by an individual due to the lack of tools and equipment needed to do the job, or working with inappropriate, or broken, or complex machinery. This scale consists of five items. The subscales provided to be reliable for use in this sample as evidenced by the Cronbach's alpha of .88 (α = .88) that was obtained.

- **Career advancement:** This scale refers to the stress experienced by the individual due to a perceived lack of opportunity to further his or her career prospects within the organisation in which they work. This scale consists of five items. A Cronbach's alpha of .89 (α = .89) was obtained with the career advancement scale in the present study that indicated high internal consistency and reliability in this sample.

- **Work/home interface:** This scale refers to the stress experienced by an individual as a result of 1) a lack of social support at home or from friends, 2) work/non-work activity and spill over, and 3) conflict with regards to stress within or outside the workplace. This scale consists of eight items. A Cronbach alpha of .85 (α = .85) was obtained for this scale supporting its reliability in the sample of the present study.

- **Relationships:** This scale refers to the stress experienced by an individual as a result of having poor interpersonal relationships with colleagues and supervisors, as well as being subjected to interpersonal abuse. This scale consists of eight items. A Cronbach's alpha of .93 (α = .93) was obtained for the relationship scale in the present study suggesting excellent reliability.

- **Job security:** This scale refers to the amount of stress experienced by an individual due to uncertainty about his or her future in the current workplace. This scale has four items with an internal consistency score of .91 (Cronbach's α = .91) obtained in the present study.

- **Lack of autonomy:** This scale refers to the amount of stress experienced by an individual due to a lack of decision-making authority in the workplace. This may be due to either job constraints or workplace constraints. This scale consists of seven items. A Cronbach's alpha of .92 (α = .92) was obtained for this scale in the present study suggesting a high reliability index.

- **Workload:** This scale refers to the amount of stress experienced by the individual due to the perception that he or she is unable to cope or be productive with the amount of work allocated to him or her. The workload scale consists of six items and tested as reliable with the sample in the present study (Cronbach's α = .96).

3.6.3. Coping Orientation to the Problems Experienced Inventory (COPE)

The (COPE) assesses how people respond when they confront difficult or stressful events (Meyer, 2001). The instrument has an expanded and abbreviated version (Snell, Siegert, Hay-Smith, & Surgenor, 2011). Carver (1997) developed the abbreviated version of the COPE that has been used in the present study (Appendix E). The Brief COPE comprises of 28 items using a 4-point Likert Scale ranging from 'I haven't been doing this at all' to 'I've been doing this a lot'. Carver (1997) reviewed the psychometric properties of the Brief COPE in a non-psychiatric sample. Among 168 adults who survived a major hurricane, the Brief COPE Inventory showed a complex factor structure, with nine factors accounting for 72.4% of the variance (Carver, 1997). Snell et al. (2011) reported more recently that the internal consistency coefficients of all scales were acceptable. This well-established scale has held its psychometric properties over a period of almost 20 years and has been used to assess dispositional coping strategies in various sample groups (Bose, Bjorling, Elfstrom, Persson & Saboonchi, 2015; Meyer, 2001; Snell et al., 2011; Zomer, 2012).

The Brief COPE consists of 14 subscales containing two items each. For the purpose of this study, and based on existing literature, the 14 subscales were grouped into three coping categories by summing items accordingly, with higher scores indicating greater intensity of the use of the coping strategy (Carver, Scheier, & Weintraub, 1989; Cooper, Katona, Orrell, & Livingston, 2008; Snell et al., 2011). Subscales were grouped as follows: Problem-Focused Coping (active coping, planning, using instrumental support), Emotion-Focused Coping (positive reframing, acceptance, humour, religion, using emotional support) and maladaptive/dysfunctional coping (self-distraction, denial, venting, substance use, behavioural disengagement and self-blame). These subscales proved to have good internal consistency for the present study as evidenced by the Cronbach's alpha of .81 for Problem-focused coping; .76 for Emotion-focused coping and .79 for maladaptive coping. Subsequent factor analysis of this instrument indicated that these methods of coping can also be broadly categorised as adaptive coping and maladaptive coping strategies (Su et al., 2015).

3.6.4. The Assessing Emotions Scale

The Assessing Emotions Scale (Shutte, Malouff, & Bhullar, 2009), also known as the Emotional Intelligence Scale or the Schutte Emotional Intelligence Scale is based on Salovey and Mayer's (1990) original model of emotional intelligence. This scale attempts to assess characteristic, or trait, emotional intelligence (Appendix F). The Assessing Emotions Scale comprises of 33-items which are rated along a five-point scale (*Strongly disagree* to *Strongly agree)*. The total scale scores were calculated by reverse coding items 5, 28 and 33 and then summing across all items. Scores range from 33 to 165, with higher scores indicating characteristic emotional intelligence (Shutte, Malouff, & Bhullar, 2009). This instrument assesses four factors namely Perception of emotion, Managing own emotions, Managing others emotions and Utilisation of emotion. Schutte et al (1998) found the internal

consistency, as measured by Cronbach's alpha, to be .90 and a two week test-retest reliability coefficient of .78 for total scores. The four factor obtained good reliability indexes in the present study, as estimated by Cronbach's alpha or internal consistency. The Cronbach's alphas obtained in the present study were as follows: Perception of emotion .86; Managing own emotions .81; Managing others emotions .76 and Utilization of emotions .78.

3.7. Analysis

Prior to the analysis of the data, data screening was completed to ensure assumptions were met for inferential statistics. The following screens were included namely, an examination of the descriptive statistics for all the variables, normality, homogeneity of variance, linearity and missing data.

3.7.1. Descriptive Statistics

Descriptive statistics were used to compile the demographic profile of the participants. Descriptive statistics were appropriate for this purpose as it increased the familiarity with the sample by summarising sample characteristics (Clark-Carter, 2004). Descriptive statistics particularly frequencies provided a summary of the sample in terms of the constructs measured and demographics.

3.7.2. Inferential Statistics

Inferential statistics were used to test the hypothesized relationships between the identified variables. This allowed the researcher to draw conclusions about the population based on the information obtained from the sample (Fowler, 2009). The analysis involving inferential statistics were all conducted as two-tailed (non-directional) hypothesis testing. In

the ensuing analysis, associations between variables and predictive relationships were tested for significance at a 0.05 alpha level (Field, 2009).

3.7.2.1. Correlations

Significant associations between variables and demographics were tested by means of a correlation matrix (Aron, Aron, & Coups, 2009). Correlation is a mathematical index of association that expresses the degree of association between two variables (Field, 2009). Correlation indices are expressed as a value between 1 and -1, with 1 referring to a perfect association and 0 referring to no association.

Correlations are used in the analysis of cross-sectional survey data since causal inferences are not drawn (Field, 2009). Walker & Maddan (2013) recommended that the type of variables determined the correlation coefficient that should be used. Three different types of correlations were computed in this analysis. The Pearson product moment was computed when two continuous variables were correlated e.g. Age and the outcome variables (Mukaka, 2012). The Biserial correlation coefficient was computed when a continuous variable (e.g. Age) was correlated with an artificial dichotomous variable (e.g. Race) (Aron et al., 2009). The latter consisted of four categories that were redefined as an artificial variable consisting of either "white" or "minority." The Point-biserial correlation was computed when continuous variables (e.g. coping) were correlated with true dichotomous variables e.g. Gender. Gender consists of two mutually exclusive categories namely, male and female (Clarke-Carter, 2004).

The matrix was computed to determine if the demographic variables were significantly correlated with the outcome and the predictor variables (Walker & Maddan, 2013).

Significant correlations with the outcome variables were useful for determining possible covariates. These covariates were considered in the subsequent regression analysis. The correlation coefficient also allowed for the coefficients of determination and alienation to be calculated (Field, 2009).

3.7.2.2. Regression Analysis

A multiple regression analysis was computed to determine if the independent variables could significantly predict the dependent variable (Aron et al., 2009). The regression analysis entailed an omnibus test that entered all identified variables simultaneously which allowed them to compete with each other in order to calculate the unique contribution of each variable controlling for all other predictors in the model (Field, 2009). The model of regression and individual semi-partial regression coefficients were tested for significance at an alpha level of 0.05.

The process was broken into two steps. Step 1 entailed testing the relationship between EI and sources of occupational stress to ascertain if they could predict each other. Nine models were tested in this step. The second step involved testing EI and coping to see if they could predict each other. Three models were tested in this step. Thus the regression analysis consisted of twelve models being tested.

Brace, Kemp, and Snelgar (2003) suggested that a minimum of 10 participants per predictor variable is required for samples to support regression analysis. In the present study, the threshold was set at 10 participants per variable in order to support the use of parametric modelling (Stevens, 2009). Therefore, no more than five variables were tested at a time that

would set the minimum sample size at 50 participants. The sample size was sufficient to proceed with the analysis as planned.

3.8. Ethics

Project registration and ethics clearance (Reg. No.: 15/4/42) was granted by the Senate Research Committee of UWC (Appendix G). Furthermore, permission to conduct the study at the identified institution was requested from the Registrar (Appendix H) and subsequently granted by the Office of the Registrar (Appendix I). Permission to conduct the study in the identified Health Sciences Faculty was further granted by the Dean.

Permission to conduct the study at the university was subject to the prescriptions of the Protection of Personal Information (PoPI) ACT (Government Gazette, 2013). This act aims to protect and safeguard personal information of participants and emphasises the right to privacy. Under the PoPI Act the email addresses of the academic staff were considered as private information that could not be distributed without consent of the information holders. As such the university designated an individual who would distribute the invitation to participate in the study on the researchers' behalf. In this way, interested parties could choose to participate without their information having been given to a third party who could use it for purposes other than consented to by the Office of the Registrar. In this way compliance with the act could be ensured whilst the study could still be executed.

All eligible participants received an electronic information sheet (Appendix J). The sheet summarised what the study was about and provided an outline of the risks and benefit of participating in the study. This document informed potential participants of their rights and identified the names of persons to contact in the event of recourse being sought. The

document clarified what participation would entail and emphasised ethics considerations such as confidentiality. The dissemination protocol was presented to participants including an unpublished thesis, conference presentation and an article to be submitted to a journal for publication.

Participants received a consent form (Appendix K) which was submitted electronically by clicking on a link, prior to being presented with the survey. The consent form emphasized confidentiality and the right to withdraw from the study without fear of negative consequences was underscored for participants.

Participants were provided the opportunity to provide feedback to the researcher. Concerns were raised by participants that they might be identified by the department in which they worked. Therefore, the researcher along with her supervisors decided to make reporting the department optional to further protect the anonymity of responses and the privacy of participants. This was communicated to all staff on the mailing list to reassure those who have already participated that the concern was addressed. It was also included in the reminder emails to assure and encourage those yet to participate.

CHAPTER FOUR

RESULTS

This chapter reports on the statistical analyses performed relative to the objectives of the study. The chapter has been organized into three sections. The first section reports on descriptive statistics that provide summaries of the profile of the sample. The second section reports on correlation matrices and the third section reports on regression analyses. The results have been summarized and are presented in tabular form.

4.1. Descriptive Statistics

4.1.1. Demographic Profile

The distribution across departments in the faculty is represented in Table 4.1 below.

Table 4.1

Frequency Distribution of Academics per Department (N = 51)

	Department	Frequency	Percent (%)
Valid	Dietetics	3	5.9
	Occupational Therapy	1	2.0
	Physiotherapy	8	15.7
	Psychology	15	29.4
	Social Work	4	7.8
	Sport, Recreation and Exercise Science	6	11.8
	School of Public Health	2	3.9
	School of Nursing	8	15.7
	School of Natural Medicine	3	5.9
	Total	50	98.0
Missing	System	1	2.0
Total		51	100.0

Of the total respondents, 66.7% (n = 34) were female and 33.3% (n = 17) were male. Ethnic or racial self-identifications were as follows: 33.3% (n = 17) self-identified as White,

47.1% (n=24) as Coloured, 7.8% (n = 4) as Black, 7.8% (n = 4) as Indian and 4% (n = 2) as "Other". Respondents ranged in years in academia from 3 to 35 years, with a mean of 13 years, median of 11 years and a mode of 8 years.

In terms of the level of qualifications, 3.9% (n = 2) of the total respondents qualified with an Honours degree, 45.1% (n = 23) with a Masters degree and 51.0% (n = 26) with PhD. Their academic status ranged from associate lecturer to professor as seen in Table 4.2 below.

Table 4.2

Academic Status of Respondents (N = 51)

	Academic Status	Frequency	Percent (%)
Valid	Associate Lecturer	3	5.9
	Lecturer	29	56.9
	Senior Lecturer	11	21.6
	Associate Professor	3	5.9
	Professor	4	7.8
	Total	50	98.0
Missing	System	1	2.0
Total		51	100.0

4.1.2. Occupational Stress Profile

The range and the mean with standard deviation for scores on occupational stress subscales or sources of stress are presented in Table 4.3 below. Higher scores reflect a greater incidence of stress resulting from a particular source. The sources of stress have been presented in rank order from highest to lowest.

Table 4.3

Occupational Stress Profile for Academic Staff (N = 51)

Rank order		Range	Minimum	Maximum	Mean	Std. Deviation
1	Workload	53	27	80	56.02	12.451
2	Work/Home Interface	31	38	69	55.02	8.499
3	General Work Stress	42	36	78	53.06	9.704
4	Role Ambiguity	23	41	64	51.52	5.589
5	Relationships	70	0	70	51.10	10.585
6	Tools and Equipment	29	37	66	50.31	8.627
7	Lack of Autonomy	56	24	80	47.80	11.721
8	Career Advancement	41	30	71	47.16	9.313
9	Job Security	36	30	66	44.41	9.620

As seen in Table 4.3, workload is the highest ranked stressor among academic staff with an average of 56.02, followed by Work/Home Interface (55.02). Job Security, with an average of 44.41, reportedly produces the least amount of stress among academic staff. The average scores across all the subscales of occupational stress were relatively high and the range of average scores is somewhat constricted. Thus academic staff reportedly experience a substantial amount of occupational stress from varied sources with some sources of stress peaking slightly.

The range of scores obtained for each source of occupational stress is quite varied. Relationships as a source of stress appears to have the highest range of 70, indicating that sample scores are diversely spread out between 0 and 70. This particular source of stress is the only one that reported scores of zero. Role ambiguity has the lowest range of 23 indicating that as a source of stress there was far less variation on the scores reported.

4.1.3. Emotional Intelligence Profile

The reported capacities in emotional intelligence for the sample are presented in terms of the measures of central tendency and variability. The results have been tabularised and ranked from highest to lowest in Table 4.4 below.

Table 4.4

Emotional Intelligence Profile for Academic Staff (N = 51)

Rank Order		Range	Minimum	Maximum	Mean	Std. Deviation
1	Managing Own Emotions	2	3	5	4.11	.500
2	Perception of Emotion	2	3	5	3.99	.587
2	Managing Others Emotions	3	2	5	3.99	.560
3	Utilization of Emotions	4	2	5	3.92	.608

The results indicated that academics' ability to manage emotions within themselves ranked first with an average of 4.11. The capacity to perceive emotions and the capacity to manage the emotions of others jointly ranked second with an average of 3.99. The use of emotions to facilitate cognitive activities such as thinking and problem solving ranked fourth with an average of 3.92. The truncated ranking and small difference in mean scores indicate that there was less variance in the reported use of all capabilities in this sample.

4.1.4. Coping Profile

The profile of coping styles in the sample has been determined through measures of central tendency and variability as represented in Table 4.5 below.

Table 4.5

Coping Profile for Academic Staff (N = 51)

Rank order		Range	Minimum	Maximum	Mean	Std. Deviation
1	Problem Focused Coping	3	1	4	2.74	.659
2	Emotion Focused Coping	3	1	4	2.43	.547
3	Maladaptive Coping	2	1	3	1.76	.422

Problem-focused coping methods ranked first within the sample, with an average of 2.74. This was followed by emotion focused coping strategies with an average of 2.43. Maladaptive coping was the lowest rank with an average of 1.76. Thus, it becomes evident that this sample reported higher use of adaptive coping styles as evidenced by higher means. The ranges were constricted and the measures of central tendencies were similar.

4.2. Inferential Statistics

4.2.1. Correlation

4.2.1.1. Correlation between Five Demographic Variables

Table 4.6 below represents the correlation matrix between the five demographic variables namely, gender, years in academia, highest qualification, race and academic status.

Table 4.6

Correlation Matrix for Demographic Variables (N = 51)

		Gender	Years in Academia	Highest Qualification	Academic Status	Race
Gender	Sig. (2-tailed)	1				
Years in Academia	Sig. (2-tailed)	.223 .123	1			
Highest Qualification	Sig. (2-tailed)	.145 .309	.571** .000	1		
Academic Status	Sig. (2-tailed)	-.014 .923	.754** .000	.639** .000	1	
Race	Sig. (2-tailed)	.086 .556	-.065 .664	-.310* .030	-.127 .391	1

**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).

A significant correlation was identified between Years in Academia and Level of Qualification (r = .571) at a .01 alpha level. The size of the correlation suggests that there is a moderate association between the two variables. The correlation index was positive in nature. This association suggested that academics who have spent a longer time in academia are significantly more likely to be higher qualified. The coefficient of determination (r^2 = .326) indicates that 32.6% of the variance on Level of Qualification is accounted for by Years in academia.

A significant correlation was also identified between Years in Academia and Academic status (r = .754) at a .01 alpha level. The size of the correlation indicates that there is a strong association between the two demographic variables. The correlation index was positive in nature and indicated that academics with higher ranks significantly tend to have spent longer time in academia. Those who have recently entered academia significantly tend to have lower ranks. The coefficient of determination (r^2 = .569) indicates that 56.9% of the variance on Academic Status is accounted for by Years in Academia.

Level of Qualification was significantly correlated with Race (r = -.310) at a 0.5 alpha level. The size of the correlation indicates that there is a small association between level of qualification and race. The correlation index is negative in nature, suggesting that white academics are inclined to have higher qualifications. The coefficient of determination (r^2 = .096) indicates that 9.6% of the variance on the Level of Qualification is accounted for by Race.

Lastly, a significant correlation was also found between level of qualification and academic status (r = .639) at a .01 alpha level. The size of the correlation indicated that there was a strong association between the level of qualification and academic status. The correlation index was positive in nature. This indicated that level of qualification increases with academic status and vice versa. The coefficient of determination (r^2 = .408) indicated that 40.83% of the variance on Academic Status is accounted for by the Level of Qualification.

4.2.1.2. Correlation between five demographic variables and sources of occupational stress

Table 4.7 overleaf represents the correlations between the five demographic variables and sources of occupational stress. Gender was identified as significantly correlated with Work/Home interface (r = -.338, N = 49) at a 0.05 alpha level. The size of the correlation indicates a small association between Gender and Work/home Interface. The correlation index was negative in nature suggesting that female staff were significantly more likely to report experiencing stress due to negotiating the work/home interface. The coefficient of determination (r^2 = .114, N = 49) indicates that 11.4% of the variance on Work/Home

interface is a function of Gender, but 88.6% of the variance remains unexplained as evidenced by the coefficient of alienation.

A significant correlation was found between Years in Academia and Tools and Equipment (r = -.294, N = 47) at a .05 alpha level. The size of the correlation indicates a small association between Years in Academia and Tools and Equipment. The correlation index was negative in nature suggesting that stress related to the tools and equipment needed to do their job was significantly more likely to be reported by academics that entered academia more recently. The coefficient of determination (r^2 = 0.086, N= 47) indicates that 8.6% of the variance on Tools and Equipment is a function of Years in Academia.

Table 4.7

Correlation Matrix for Demographic Variables and Sources of Occupational Stress (N = 49)

		Gender	Years in Academia	Highest Qualification	Race	Academic status
General Work Stress		-.139	.035	-.098	-.040	-.047
	Sig. (2-tailed)	.332	.810	.495	.783	.745
Role Ambiguity		-.266	-.119	-.160	.110	-.102
	Sig. (2-tailed)	.062	.420	.266	.457	.485
Relationships		-.087	.087	-.098	-.175	.074
	Sig. (2-tailed)	.546	.557	.500	.235	.615
Tools and Equipment		-.031	-.294*	-.308*	-.202	-.328*
	Sig. (2-tailed)	.832	.045	.031	.172	.023
Career Advancement		-.013	-.170	-.311*	.237	-.335*
	Sig. (2-tailed)	.930	.253	.030	.109	.020
Job Security		-.108	-.353*	-.467**	.306*	-.366*
	Sig. (2-tailed)	.461	.015	.001	.037	.011
Lack of Autonomy		.039	-.064	-.374**	.316*	-.140
	Sig. (2-tailed)	.792	.668	.008	.030	344
Work/Home Interface		-.338*	-.050	.057	-.192	-.136
	Sig. (2-tailed)	.017	.739	.697	.196	.356
Workload		-.116	.143	.053	-.116	.011
	Sig. (2-tailed)	.427	.338	.716	.436	.943

*. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed)

A significant correlation was also found between Years in Academia and Job Security (r = -.353, N = 47) at a .05 alpha level. The size of the correlation indicates a small association between Years in Academia and Job Security. The negative nature of the correlation suggests that stresses related to job security tended to decrease as the number of years tenured increased. The coefficient of determination (r^2 = 0.124, N = 47) indicates that 12% of the variance on stress related to Job Security is accounted for by Years in Academia.

Level of qualifications have been identified to be significantly correlated with Tools and Equipment (r = -.308, N = 49) and with Career Advancement (r = -.311, N = 49), both at a .05 alpha level. The size of the correlations indicates that there was a small association between Highest Qualification, and Tools and Equipment, as well as between Highest Qualification and Career Advancement. The correlation indices for both associations are negative which indicates that higher qualified academics were less likely to experience stress related to tools and equipment. Similarly, higher qualified academics reportedly experienced less stress related to career advancement. The coefficient of determination (r^2 = .095, N = 49) indicated that 9.5% of the variance on stress related to Tools and Equipment is accounted for by level of qualification. The coefficient of determination (r^2 = .097, N = 49) indicates that 9.7% of the variance on stress related to Career Advancement is accounted for by level of qualification.

Significant correlations were also found between Level of Qualification and Job Security (r = -.467, N = 49), and Lack of Autonomy (r = -.374, N = 49) respectively at a .01 alpha level. The size of the correlations indicated a moderate and small association respectively. The correlation index for both associations was negative in nature. This suggested that academics who are higher qualified reportedly experience less stress concerning job security,

and academics with higher qualifications experience less stress with regards to lack of autonomy. The coefficients of determination indicated that 21.8% and 14.0% of the variance on stress related to Job security (r^2 = .218, N = 49) and Lack of Autonomy (r^2 = .140, N = 49) respectively was accounted for by level of qualification.

Race was also identified to be significantly correlated with Job Security (r = .306, N = 47) at a .05 alpha level in Table 4.7. The size of the correlation indicated that there was a small association between Race and Job Security. The correlation index was positive in nature. In the present study, race was coded as 1 for White and 2 for minority, thus, the increases on race represented moving from White to minority ethnic status. The results indicated that minority academic staff reportedly experience higher levels of stress related to job security. The coefficient of determination (r^2 = .094, N = 47) indicated that 9.4% of the variance on stress related to Job security is a function of Race.

Race is also significantly correlated with Lack of Autonomy (r = .316, N = 47) at a .05 alpha level. The size of the correlation indicated that there was a small association between Race and Lack of Autonomy. The correlation index was positive in nature. This suggests that minority academic staff experience more stress related to the lack of autonomy. The coefficient of determination (r^2 = .100, N = 47) indicated that 10% of the variance on stress related to Lack of Autonomy is a function of Race.

Table 4.7 illustrated that there was a significant correlation between Academic Status and Tools and Equipment (r = -.328, N = 48) at a .05 alpha level. The size of the correlation indicated that there was a small association. The correlation index is negative in nature suggesting that academics with a lower rank experienced more stress related to tools and

equipment. The coefficient of determination (r^2 = 0.108, N = 48) indicated that 10.8% of the variance on stress related to Tools and Equipment is a function of Academic Status.

Significant correlations were also found between Academic Status and Career Advancement (r = -.335, N = 48), as well as Job Security (r = -.366, N = 48) respectively at a .05 alpha level. The size of the correlations indicated a small association. The correlation index was negative in nature for both associations. This suggests that an academic with a lower academic status experiences more stress regarding career advancement and job security. The coefficients of determination indicated that 11.2% and 13.4% of the variance on stress related to Career Advancement (r^2 = 0.112, N = 48) and Job security (r^2 = 0.134, N = 48) respectively, was a function of Academic Status.

4.2.1.3. Correlation between Five Demographic Variables and EI

A correlation matrix was computed between five demographic variables (gender, years in academia, highest qualification, race and academic status) and EI variables (Perception of emotions, Managing emotions, Managing others emotions, Utilization of emotions). The results of the correlation matrix were tabulated and presented in Table 4.8. Due to missing data, the sample size has been indicated in the title of the table, but the number of cases included in each correlation was indicated separately.

Table 4.8

Correlation Matrix for Demographic Variables and Emotional Intelligence (N = 51)

		Gender	Years in Academia	Highest Qualification	Race	Academic Status
Perception of Emotion		.040	.029	-.215	.147	-.120
	Sig. (2-tailed)	.786	.846	.139	.325	.415
Managing Own Emotions		.305*	.114	-.155	.400**	-.095
	Sig. (2-tailed)	.033	.446	.287	.005	.519
Managing Others Emotions		.004	.009	-.402**	.326*	-.166
	Sig. (2-tailed)	.980	.950	.004	.026	.259
Utilization of Emotions		.087	-.045	-.125	.092	-.194
	Sig. (2-tailed)	.552	.766	.391	.540	.185

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Gender has been identified as being significantly correlated with Managing own Emotions (r = .305) at a .05 alpha level. The size of the correlation indicated that there was a small association between Gender and Managing Own Emotions. The correlation index was positive in nature suggesting that increased ability to manage their own emotions is more likely to be evidenced by female academics. The coefficient of determination (r^2 = .093) indicates that 9.3% of the variance on Managing own emotions is a function of Gender.

A significant correlation was also found between Level of Qualification and Managing Others Emotions (r = -.402) at a .05 alpha level. The size of the correlation suggests that there was a small association between Level of Qualification and Managing Others Emotions. The correlation index was negative in nature indicating that the management of the emotions of others was less likely to be reported by academics with a higher level of qualifications. The coefficient of determination (r^2 = .162) indicates that 16.2% of the variance on Managing Others Emotions is accounted for by the level of qualification.

Race and Managing Own Emotions was also identified as significantly correlated (r = .400) at a .01 alpha level. The size of the correlation indicates that there was a small association between Race and Managing Own Emotions. The correlation index is positive in nature. This indicates that minority academics are more inclined to manage their own emotions. The coefficient of determination (r^2 = .16) indicates that 16% of the variance on Managing Own Emotions is a function of Race.

Lastly, Race and Managing others Emotions were also significantly correlated (r = .326) at a .05 alpha level. The size of the correlation indicated that there was a small association between Race and Managing Others' Emotions. The correlation index was positive in nature suggesting that minority academics were more inclined to manage the emotions of others. The coefficient of determination (r^2 = .106) indicates that 10.6% of the variance on Managing Others Emotions is accounted for by Race.

4.2.1.4. Correlation between Five Demographic Variables and Coping

The results of the correlation matrix between the five demographic variables and coping were tabulated and presented in Table 4.9 below.

Table 4.9

Correlation Matrix for Demographic Variables and Coping (N = 51)

		Problem Focused Coping	Emotion Focused Coping	Maladaptive Coping
Problem Focused Coping	Sig. (2-tailed)	1		
Emotion Focused Coping	Sig. (2-tailed)	.740** .000	1	
Maladaptive Coping	Sig. (2-tailed)	.560** .000	.683** .000	1
Gender		-.292*	-.273	-.180

	Sig. (2-tailed)	.042	.058	.215
Years in Academia		-.183	-.219	-.021
	Sig. (2-tailed)	.219	.139	.887
Highest Qualification		-.221	-.256	-.168
	Sig. (2-tailed)	.128	.076	.247
Academic Status		-.171	-.271	-.097
	Sig. (2-tailed)	.247	.063	.511
Race		.095	-.044	-.124
	Sig. (2-tailed)	.525	.770	.407

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Gender was significantly correlated with Problem Focused Coping (r = -.292) at a .01 alpha level. The size of the correlation indicated that there was a small association between Gender and Problem focused coping. The correlation index was negative in nature suggesting that problem-focused coping was more likely to be used by men. The coefficient of determination (r^2 = .085) indicates that 8.5% of the variance of Problem Focused Coping is a function of Gender. Null findings were reported for correlations between measures of coping and the remaining demographic variables at a 0.05 alpha level.

4.2.1.5. Correlation between Sources of Occupational Stress and EI

The correlation matrix between Sources of Occupational Stress and EI was tabulated in Table 4.10 overleaf. A significant correlation was identified between Career Advancement and Utilisation of Emotions (r = .295) at a .05 alpha level. The size of the correlation indicated that there is a small association between Career Advancement and Utilisation of Emotions. The correlation index was positive in nature, suggesting that academic staff who are more able to utilise their emotions is significantly more likely to advance in their careers. The coefficient of determination (r^2 = .087) indicates that 8.7% of the variance on stress related to Career Advancement is accountable by Utilisation of Emotion.

Lack of autonomy has been identified as being significantly correlated with Perception of emotion (r = .381) at a .01 alpha level. The size of the correlation indicated that there was a small association. The correlation index was positive in nature. This suggests that academics who are less inclined to perceive emotions within themselves and within others are significantly more likely to experience stress related to lack of autonomy. The coefficient of determination (r^2 = .145) indicates that 14.5% of the variance on stress related to lack of autonomy is a function of perception of emotion.

Table 4.10

Correlation Matrix for Sources of Occupational Stress and Emotional Intelligence (N = 51)

		GWS	RA	R/ships	T&E	CA	JS	LA	W/HI	W
Perception of Emotion	Sig. (2-tailed)	.193	.103	.185	.007	.176	.074	.381**	.057	.249
		.184	.483	.203	.964	.227	.613	.007	.696	.085
Managing Own Emotions	Sig. (2-tailed)	-.274	-.158	-.011	-.247	.123	.029	.150	-.409**	-.175
		.057	.277	.939	.087	.399	.842	.305	.003	.230
Managing Others Emotions	Sig. (2-tailed)	.091	.103	.124	-.019	.280	.145	.426**	-.057	.105
		.532	.482	.395	.895	.052	.319	.002	.695	.474
Utilization of Emotions	Sig. (2-tailed)	.170	.214	.117	-.014	.295*	.130	.441**	.247	.202
		.242	.141	.422	.926	.040	.374	.002	.087	.165

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Significant correlations were also identified between Lack of Autonomy and Managing others' emotions (r = .426), as well as Utilization of emotions (r = .441) respectively at a .01 alpha level. The size of the correlations indicated that there are moderate associations between variables. The correlation index was positive in nature for both relationships. This illustrated that academics who are more inclined to manage the emotions of others are significantly more likely to experience stress related to lack of autonomy. Similarly,

academics who are more inclined to use emotions to facilitate various cognitive activities are significantly more likely to experience stress related to lack of autonomy. The coefficient of determination indicated that 18.1% and 19.4% of the variance on stress related to lack of autonomy was accounted for by managing others emotions (r^2 = .181) and utilization of emotions (r^2 = .194) respectively.

Work/Home Interface was identified as being significantly correlated with Managing own emotions (r = -.409) at a .05 alpha level. The size of the correlation indicated that there was a small association between Work/Home interface and Managing own emotions. The correlation index was negative in nature suggesting that academics who are more inclined to manage their own emotions are significantly more likely to experience less stress related to work/home interface. The coefficient of determination (r^2 = .167) indicated that 16.7% of the variance on stress related to work/home interface is accounted for by the capacity to manage own emotions.

4.2.1.6. Correlation between Sources of Occupational Stress and Coping

The correlation matrix between the predictor variable, occupational stress, and coping as the outcome variable is illustrated in Table 4.11 below.

Table 4.11

Correlation Matrix for Sources of Occupational Stress and Coping (N = 49)

		Problem Focused Coping	Emotion Focused Coping	Maladaptive Coping
Problem Focused Coping	Sig. (2-tailed)	1		
Emotion Focused Coping	Sig. (2-tailed)	.740** .000	1	
Maladaptive Coping	Sig. (2-tailed)	.560** .000	.683** .000	1
General Work	Sig. (2-tailed)	.279 .052	.444** .001	.760** .000
Role Ambiguity	Sig. (2-tailed)	.353* .013	.526** .000	.703** .000
Relationships	Sig. (2-tailed)	.261 .070	.351* .014	.392** .005
Tools and Equipment	Sig. (2-tailed)	.091 .536	.273 .058	.405** .004
Career Advancement	Sig. (2-tailed)	.187 .198	.440** .002	.415** .003
Job Security	Sig. (2-tailed)	.170 .242	.429** .002	.402** .004
Lack of Autonomy	Sig. (2-tailed)	.312* .029	.456** .001	.483** .000
Work/Home Interface	Sig. (2-tailed)	.177 .224	.355* .012	.598** .000
Workload	Sig. (2-tailed)	.313* .029	.437** .002	.691** .000

**Correlation is significant at the 0.01 level (2-tailed); *Correlation is significant at the 0.05 level (2-tailed)

Problem-Focused Coping was significantly correlated with three stress variables, namely, Role Ambiguity (r = .353), Lack of autonomy (r = .312) and Workload (r = .313) respectively at a .05 alpha level. The size of the correlations indicated that there are small

associations. The correlation indices were positive in nature. This suggested that academics were most likely to engage in problem-focused coping methods when experiencing higher levels of stress related to role ambiguity, lack of autonomy and workload. The coefficients of determination indicated that 12.5%, 9.7% and 9.8% of the variance on stress related to Role ambiguity (r^2 = .125), Lack of Autonomy (r^2 = .097) and Workload (r^2 = .098) was accounted for by Problem-focused coping.

Significant correlations were also found between Emotion-focused coping (EFC) and eight of the occupational stress variables. EFC was found to be significantly correlated with General Work Stress (r = .444) and Role Ambiguity (r = .521) both at a .01 alpha level. The sizes of the correlations indicate that there are small associations. The correlation indices were positive in nature, indicating that academics were likely to use EFC strategies when experiencing higher levels of stress related to general work stress and role ambiguity. The coefficient of determination indicated that 19.7% and 27.1% of the variance on stress related to general work stress (r^2 = .197) and role ambiguity (r^2 = .271) respectively was accounted for by EFC.

EFC was also found to be significantly correlated with Relationships (r = .351) at a .05 alpha level. The size of the correlation indicates that there is a small association between EFC and Relationships as a source of occupational stress. The correlation index was positive in nature, thus academics who engaged more in EFC strategies when faced with increasing levels of stress related to relationships within the workplace. The coefficient of determination (r^2 = .123) indicates that the variance on Relationships as a source of occupational stress was a function of EFC.

Significant correlations were also found between EFC and career advancement (r = .440), job security (r = .429) and lack of autonomy (r = .456) respectively at a .01 alpha level. The sizes of the correlations indicated that there were moderate associations between variables. The correlation indices were positive in nature. This indicated that academics are more likely to use EFC strategies when experiencing higher levels of stress related to career advancement, job security and lack of autonomy. The coefficients of determination indicated that 19.4%, 18.4% and 20.8% of the variance on EFC was a function of stress related to career advancement (r^2 = .194), job security (r^2 = .184) and lack of autonomy (r^2 = .208) respectively.

Work/Home interface was also found to be significantly correlated with EFC (r = .355) at a .05 alpha level. The size of the correlation indicated that there was a small association. The correlation index was positive in nature thus academics are more inclined to use EFC strategies when faced with higher levels of stress related to the work/home interface. The coefficient of determination (r^2 = .126) indicated that 12.6% of the variance on EFC is a function of stress associated with the work/home interface.

Lastly, a significant correlation was found between EFC and Workload (r = .437) at a .01 alpha level. The size of the correlation indicated that there was a small association between EFC and workload. The correlation index was positive in nature indicating that EFC strategies are more likely to be used when stress related to workload is increased. The coefficient of determination (r^2 = .191) indicated that 19.1% of the variance on stress related to workload was accounted for by EFC.

Table 4.11 also illustrated relationships between maladaptive coping and nine occupational stress variables. Maladaptive coping was found to be significantly correlated with general work stress (r = .760), and role ambiguity (r = .703) at a .01 alpha level. The sizes of the correlations indicated that there were strong associations between these variables. The correlation indices were positive in nature, suggesting that academics are more inclined to use maladaptive coping strategies when they experience higher levels of stress related to general work stress; and role ambiguity respectively. The coefficients of determination indicated that 57.8% and 49.4% of the variance on general work stress (r^2 = .578); and role ambiguity (r^2 = .494) respectively was a function of maladaptive coping.

Maladaptive coping was found to be significantly correlated with Relationships as a source of occupational stress (r = .392). The correlation index was positive in nature, suggesting that academics are more inclined to use maladaptive coping strategies when they experience higher levels of stress related to relationships. The coefficient of determination indicated that 15.4% of the variance on relationships (r^2 = .154) was a function of maladaptive coping.

Maladaptive coping was found to be significantly correlated with tools and equipment (r = .405), career advancement (r = .415) and job security (r = .402) respectively at a .01 alpha level. The sizes of the correlations indicated that there were small associations. The correlation indices were positive in nature, indicating that maladaptive coping strategies were increasingly used when stress related to tools and equipment, career advancement and job security were experienced more. The coefficient of determination indicated that 16.4%, 17.2% and 16.2% of the variance on maladaptive coping was a function of stress concerning

tools and equipment (r^2 = .164), career advancement (r^2 = .172) and job security (r^2 = .162) respectively.

Lastly, maladaptive coping was also found to be significantly correlated with lack of autonomy (r = .483), work/home interface (r = .596) and workload (r = .691) respectively at a .01 alpha level. The sizes of the correlations illustrated that there were moderate associations. The correlation indices were positive in nature. This suggested that academics are most likely to use maladaptive coping strategies when experiencing higher levels of stress related to lack of autonomy, work/home interface and workload respectively. The coefficients of determination indicated that 23.3%, 35.5% and 47.7% of the variance on maladaptive coping was a function of stress related to lack of autonomy (r^2 = .233), work/home interface (r^2 = .355) and workload (r^2 = .477) respectively.

4.2.1.7. Correlation between EI and Coping

Table 4.12 presents the correlation matrix between Coping and Emotional Intelligence.

Table 4.12

Correlation Matrix for Coping and Emotional Intelligence (N = 51)

		Perception of Emotion	Managing Own Emotions	Managing Others Emotions	Utilization of Emotions
Problem Focused Coping		.416**	.090	.451**	.308*
	Sig. (2-tailed)	.003	.540	.001	.032
Emotion Focused Coping		.200	-.015	.317*	.375**
	Sig. (2-tailed)	.168	.921	.026	.008
Maladaptive Coping		.274	-.233	.207	.190
	Sig. (2-tailed)	.057	.107	.153	.190

**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).

A significant correlation was found between Perception of Emotion and Problem-Focused Coping (r = .416) at a .01 alpha level. The nature of the relationship is positive suggesting that the more academics are able to perceive emotions, the more likely they are to engage in problem-focused coping methods. The coefficient of determination (r^2 = .173) indicates that 17.3% of the variance of Problem-focused Coping is a function of Perception of Emotion.

A significant correlation was also found between Managing others' Emotions and Problem Focused Coping (r = .451) at a .01 alpha level. The positive nature of the relationship suggests that academics who demonstrate an increased preference to manage others' emotions are significantly more likely to engage in problem-focused coping methods. The coefficient of determination (r^2 = .203) indicates that 20.3% of the variance on Problem-Focused Coping is a function of managing others emotions.

A significant relationship was also found between Managing others Emotions and Emotion Focused Coping (r = .317) at a .05 alpha level. The size of the relationship indicated that there was an association between managing others' emotions and Emotion-Focused Coping. The positive nature of this relationship indicated that academics who demonstrated an increased tendency to manage others' emotions are significantly more inclined to use emotion-focused coping. The coefficient of determination (r^2 = .100) indicates that 10% of the variance on emotion-focused coping was accounted for by managing others' emotions. Thus, it emerged that the ability and inclination to manage others' emotions were significantly correlated with adaptive coping styles. Correlation analysis unfortunately cannot account for shared variance between the variables and therefore it would be important to test both coping styles together in multiple regression analysis that will allow them to compete and to identify the unique contribution of each variable as a predictor.

Utilizations of emotions was found to be significantly correlated with problem-focused coping (r = .308) at a .05 alpha level. The size of the correlation indicated that there was a small association between the variables. The positive correlation suggests that the more academics are capable of using their own emotions to facilitate cognitive activities; the more likely they are to engage in problem-focused coping strategies. The coefficient of determination (r^2 = .095) indicated that using of emotions for problem solving accounts for 9.5% of the variance on problem-focused coping.

A significant association was also found between Utilisation of Emotions and Emotion Focused Coping (r = .375) at a .05 alpha level. The size of the correlation indicated that there was a small association between Utilisation of Emotions and Emotion Focused Coping. The correlation index was positive in nature indicating that academics who are more likely to use emotions to facilitate cognitive activities, are more likely to use emotion focused strategies as a coping strategy. The coefficient of determination (r^2 = .140) indicated that 14% of the variance on emotion-focused coping was a function of utilization of emotions.

4.2.2. Regression analyses

4.2.2.1. Emotional Intelligence Regressed onto Occupational Stress

Table 4.13 summarises the results of regression analyses where the predictive relationship between emotional intelligence and subsidiary scales were tested as predictors of occupational stress as measures by the various subscales. Nine models were tested to determine whether the subscales of Emotional Intelligence could significantly predict the subscales of Occupational Stress, controlling for level of qualification.

The various subscales of occupational stress were used as the outcome measures for the respective models. The models predicted general work stress, role ambiguity, relationships, tools and equipment, career advancement, job security, lack of autonomy, work/home interface and workload respectively. The predictors for each model included the subscales of emotional intelligence (utilization of emotions, managing own emotions, perception of emotions and managing others emotions). From earlier correlation matrices, the level of qualification was identified as a possible covariate for inclusion in the regression models.

Table 4.13

Regression Analysis for Emotional Intelligence and Sources of Occupational Stress (N = 51)

Model	Predictors	Outcome	R^2	*B*
1	Highest Qualification	General Work Stress	.248*	-.069
	Utilization of Emotions			.152
	Managing own Emotions			-.544**
	Perception of Emotions			.256
	Managing others Emotions			.163
2	Highest Qualification	Role Ambiguity	.140	-.102
	Utilization of Emotions			.210
	Managing own Emotions			-.359
	Perception of Emotions			.053
	Managing others Emotions			.166
3	Highest Qualification	Relationships	.230	-.031
	Utilization of Emotions			.072
	Managing own Emotions			-.145
	Perception of Emotions			.196
	Managing others Emotions			.033
4	Highest Qualification	Tools and	.190	-.344*
	Utilization of Emotions	Equipment		.007
	Managing own Emotions			-.336
	Perception of Emotions			.092
	Managing others Emotions			-.013
5	Highest Qualification	Career	.171	-.238
	Utilization of Emotions	Advancement		.230
	Managing own Emotions			-.053
	Perception of Emotions			-.037
	Managing others Emotions			.150
6	Highest Qualification	Job Security	.231*	-.490**
	Utilization of Emotions			.108
	Managing own Emotions			-.024
	Perception of Emotions			.002
	Managing others Emotions			-.082

7	Highest Qualification	Lack of Autonomy	.350**	-.253
	Utilization of Emotions			.324*
	Managing own Emotions			-.161
	Perception of Emotions			.164
	Managing others Emotions			.175
8	Highest Qualification	Work/Home	.347**	.088
	Utilization of Emotions	Interface		.317*
	Managing own Emotions			-.641**
	Perception of Emotions			.157
	Managing others Emotions			.141
9	Highest Qualification	Workload	.208	.128
	Utilization of Emotions			.170
	Managing own Emotions			-.425*
	Perception of Emotions			.321
	Managing others Emotions			.124

*P < .05 **P < .01

Model 1 regressed the subscales of Emotional Intelligence (utilization of emotions, managing own emotions, perception of emotions and managing others emotions) and one demographic variable (level of qualification) onto General Work Stress. The model tested significant at a .05 alpha level. This model explains 24.8% of the variance on general work stress. From this model, managing own emotions was a significant predictor of general work stress, controlling for highest qualification, utilisation of emotions, managing others' emotions and perceiving emotions. For every one unit increase in scores for managing own emotions, there was a corresponding decrease of .544 units in general work stress controlling for the other predictors in the model. Thus, the inclination to manage your own emotions significantly predicted decreases in general work stress controlling for the other variables in the model.

Model 6 regressed the subscales of emotional intelligence and level of qualification onto Job Security. The model tested significant at .05 alpha level and explained 23.1% of the variance on job security. From this model, the level of qualification was a significant predictor of job security controlling for utilization of emotions, managing own emotions, perception of emotions and managing others emotions at a .01 alpha level. For every one unit

increase in level of qualification there is a corresponding decrease of .490 in stress related to job security controlling for the remaining predictors in the model.

Model 7 regressed the subscales of emotional intelligence and level of qualification onto Lack of Autonomy. The model tested significant at a .01 alpha level. This model explained 35% of the variance on lack of autonomy. Utilization of emotions was a significant predictor of lack of autonomy, controlling for level of qualification, managing own emotions, perception of emotions and managing others emotions at a .05 alpha level. For every one unit increase in utilization of emotions, there is a corresponding increase of .324 units in stress related to lack of autonomy controlling for the remaining predictors in the model.

Model 8 regressed the subscales of Emotional Intelligence and level of qualification onto Work/Home interface. This model tested significant at a .01 alpha level. This model explains 34.7% of the variance on work/home interface. For this model, utilization of emotions ($p <$ .05) and managing own emotions ($p < .01$) were significant predictors of work/home interface, controlling for highest qualification perception of emotions and managing others emotions. For every one unit increase in scores for utilization of emotions there is a corresponding increase of .317 controlling for the remaining predictors in the model. For every one unit increase in managing own emotions there is a corresponding decrease of .641 in work/home interface, controlling for the remaining predictors in the model.

Null findings were reported on models 2, 3, 4, 5 and 9 indicating that the combination of level of qualification and EI factors could not significantly predict Role Ambiguity, Relationships, Tools and Equipment, Career Advancement and Workload respectively.

4.2.2.2. Emotional Intelligence Regressed onto Coping

Regression analyses were conducted to test the predictive relationship between emotional intelligence and coping styles. Three models were formulated in which the subscales of emotional intelligence (managing others' emotions, managing own emotions, utilization of emotions and perception of emotions) were regressed onto coping. From earlier correlation matrices, Gender was identified as a potential covariate and was included in these models. Problem-focused coping, emotion-focused coping and, maladaptive coping was used as outcome variables for the respective models. Table 4.14 summarises the results of the regression analyses between emotional intelligence factors, gender and coping.

Table 4.14

Regression Analysis for Emotional Intelligence and Coping (N = 51)

Model	Predictor	Outcome	R^2	*B*
10	Gender	Problem-Focused	.355**	-.254
	Managing others Emotions	Coping		.373
	Utilization of Emotions			.163
	Managing own Emotions			-.201
	Perception of Emotions			.193
11	Gender	Emotion-Focused	.297**	-.223
	Managing others Emotions	Coping		.398
	Utilization of Emotions			.322*
	Managing own Emotions			-.252
	Perception of Emotions			-.073
12	Gender	Maladaptive Coping	.308**	-.018
	Managing others Emotions			.365
	Utilization of Emotions			.118
	Managing own Emotions			-.601**
	Perception of Emotions			.243

*P < .05 **P < .01

Model 10 regressed the subscales of EI and Gender onto Problem-focused coping. The model tested significant at a .01 alpha level. Model 10 accounted for 35.5% of the variance on problem-focused coping. No significant predictors were found.

Model 11 regressed the subscales of EI and Gender onto Emotion Focused Coping. The model tested significant at a .01 alpha level. The model explained 29.7% of the variance on emotion-focused coping. The results indicated that utilization of emotions was a significant predictor of emotion-focused coping at a .05 alpha level controlling for the remaining predictors in the model. For every one unit increase in scores for utilization of emotions, there was a corresponding increase of .322 in emotion-focused coping controlling for the remaining predictors in the model.

Model 12 regressed the subscales of EI and Gender onto Maladaptive coping. This model tested significant at a .01 alpha level. The model explained 30.8% of the variance on maladaptive coping. Managing own emotions was identified as a significant predictor of maladaptive coping at a .01 alpha level controlling for the remaining predictors in the model. For every one unit increase in managing own emotions there was a corresponding decrease of .601 in maladaptive coping controlling for the remaining predictors in the model.

4.2.2.3. Sources of Occupational Stress regressed onto Coping

Table 4.15 summarises the results of regression analyses where the predictive relationship between sources of occupational stress and subsidiary scales were tested as predictors of coping as measures by the various subscales. Three models were tested to determine whether the subscales of occupational stress could predict the subscales of coping.

Table 4.15

Regression Analysis for Sources of Occupational Stress and Coping (N = 51)

Model	Predictor	Outcome	R^2	*B*
13	Role Ambiguity	Problem-Focused	.223*	.076
	Lack of Autonomy	Coping		.145
	Workload			.171
	Gender			-.237
	Level of Qualification			-.128
14	General Work Stress	Emotion-Focused	.359**	-.116
	Work/Home interface	Coping		.122
	Workload			.122
	Role ambiguity			.411*
	Relationships			.280*
15	General work stress	Maladaptive	.698**	.287
	Work/home interface	Coping		.147
	Workload			.233
	Role ambiguity			.207
	Relationships			.218*

*P < .05 **P < .01

Model 13 regressed three subscales of occupational stress (Role ambiguity, Lack of autonomy and Workload), Gender and Level of qualification onto problem-focused coping. From earlier correlation matrices the three subscales, gender and level of qualification were identified as potential covariates and were included in the model. The model tested significant at a .05 alpha level. Model 13 accounted for 22.3% of the variance on problem-focused coping. No significant predictors were found.

Model 14 regressed the subscales of occupational stress (General work stress, Work/Home interface, Workload, Role ambiguity and relationships) onto emotion-focused coping. The model tested significant at a .01 alpha level. Model 14 accounted for 35.9% of the variance on emotion focused coping. The results indicated that stress related to role ambiguity and relationships were significant predictors of emotion-focused coping at a .05 alpha level controlling for the remaining predictors in the model. For every one unit increase

in stress related to role ambiguity and relationships, there is a corresponding increase of .411 in EFC controlling for the remaining predictors in the model. For every one unit increase in stress related to relationships, there is a corresponding increase of .280 in EFC controlling for the remaining predictors in the model.

Model 15 regressed General work stress, Work/Home interface, Workload, Role ambiguity and relationships onto maladaptive coping. The model tested significant at a .01 alpha level. Model 15 accounted for 69.8% of the variance on maladaptive coping. The results indicated that relationships as a source of occupational stress was a significant predictor of maladaptive coping at a .05 alpha level. For every one unit increase in stress related to relationships there is a corresponding increase of .218 in maladaptive coping controlling for the remaining predictors in the model.

CHAPTER FIVE

DISCUSSION AND CONCLUSION

The overarching aim of the present study was to determine the relationship between occupational stress, coping and emotional intelligence among academics in health professions at a historically disadvantaged university. To reiterate, the objectives of the study were:

1. To assess the occupational stress experienced among academic staff.
2. To assess the emotional intelligence (EI) of academic staff.
3. To identify the ways that academic staff cope with occupational stress.
4. To determine if there are significant associations between occupational stress, EI and coping.
5. To determine if occupational stress and EI can significantly predict coping among academic staff.

The variables in this study were subjected to frequency distributions and measures of central tendency and variability to compile a profile of the participants. Further, inferential statistics, correlation and multiple regression were used to test the hypothesised relationships of associations and prediction between the variables. This chapter provides a discussion of the results and conclusion. The chapter has been organised into two sections namely, 1) discussion of results, and 2) conclusion in which the limitations, recommendations and the significance of the study will be included.

5.1. Discussion of Results

5.1.1. Profiles

5.1.1.1. Sample

The self-constructed demographic questionnaire contained questions specifically intended to produce particular demographic data about the health profession academics who participated in this study. The findings revealed that 66.7% of the sample was female. This composition was consistent with the general population of the faculty. The composition also reflects the gender distribution within the helping professions that is increasingly female (Magnusson, 2009). This finding also reflects the shift in higher education where more female staff are employed. Previously, women were significantly under-represented and academia was considered a male dominant career (Riordan & Louw-Pogieter, 2011). However, in recent years, women in academia are gradually increasing (van Arensbergen, van der Weijden, & van den Besselaar, 2012). The results further revealed that the sample comprised of a majority of academics with minority ethnic statuses e.g. Black African, Coloured and Indian. At HDI's the staffing composition typically has a larger component of staff with minority ethnic statuses (Mapesela & Hay, 2006). Thus, the results were consistent with the general population of the faculty.

With regards to academic rank, the results indicated that 56.9% of the sample occupied lecturer positions and 21.6% occupied senior lecturer positions. Further, 7.8% of the sample was professors, followed by associate professors (5.9%) and associate lecturers (5.9%). These results are reflective of the typical academic positions at HDIs, where fewer academics are positioned in higher ranks (Badat et al., 1994). Furthermore, the results revealed that 51% of the total sample qualified with PhD, 45.1% with a Masters degree and 3.9% with an Honours degree. These results reflect the improvements in terms of the number of doctoral academic

staff, especially within HDIs. Previously, academics within HDIs were less well-qualified compared to their counterparts at HWUs (Bozalek & Boughey, 2012). The results empirically support the fact that South Africa is moving towards a knowledge-based economy as the PhD production rate continues to increase.

5.1.1.2. Occupational stress experienced among academic staff

The frequency distributions revealed that all sources of occupational stress are being experienced in fairly similar measures as evidenced by the means. This truncated range suggests that all sources contribute to the intensity of the experience of stress in academia of this sample. Taking into consideration that no direct comparison with previous occupational stress studies can be made because different measures were used and sources were not ranked, the results indicate that occupational stress among academics are widespread. Previous studies have however reported on stressors which are of increasing concern to academics, these include: work overload, work-life balance, job security, career advancement, lack of control and lack of resources and communication (Barkhuizen & Rothmann, 2008; Gillespie et al., 2001; Tytherleigh et al., 2005). As these sources were identified as the top stressors contributing to occupational stress, the following section will discuss how these sources differ from or align to the results obtained in this study.

A ranking of all sources of stress identified that stress related to the amount of work allocated/workload was the highest source of stress. The change and transformation of higher education may be responsible for the change in academic roles of lecturers, researchers and administrators, adding to their heavy workloads. This result is consistent with previous findings which found that academics are predominantly stressed by unmanageable workloads related to the triple demands of teaching, research and administration (Barkhuizen &

Rothmann, 2008; Tytherleigh et al., 2005; Winefield et al., 2003). Jacobs and Winslow (2004) found that long working hours can significantly contribute to success in publishing. Essentially, academics who work sixty or more hours per week are substantially more likely to publish than those who work fewer hours. Since research productivity has become a central expectation of faculty, it is understandable why many academic staff consider working longer weeks.

Longer working hours, due to increasing workloads, often blurs the boundaries that separate work from other spheres of life resulting in the conflict between work and personal life. Previous research conducted by Kinman (2001) confirmed that long working hours and heavy workloads interfered with the personal lives of academic staff. Similarly, Bell, Rajendran, and Theiler (2012) found that when academics felt irritated, pressured, agitated, tense, and pushed by their work pressures, they experienced less work-life balance and more work-life conflict. The results of the present study concurred with this finding in that work/home interface emerged as the second highest source of occupational stress in the sample. Work/home interface refers to the spill over and conflict related to stress within and outside the workplace (de Bruin & Taylor, 2005).

General work stress emerged as the third highest sources of stress. General stress serves as the degree to which individuals' appraise their work environments as stressful (De Bruin, 2006). The results reflect that workload and work-life balance is more noteworthy compared to general stress, yet general stress still appears among the top three sources of stress. Thus, academics are predominantly stressed by their workloads and interference, especially if they lack control over their demands (Barkhuizen & Rothmann, 2008; Tytherleigh et al., 2005; Winefield et al., 2003).

In comparison to previous research (Gillespie et al., 2001; Tytherleigh et al., 2005), it was observed that tools and equipment, career advancement and job security as sources of stress were less of a concern. Academics within this sample were less stressed about the lack of resources available to them. This result may suggest that academics within HDIs are used to using less resources as HDIs, previously, were less well-resourced compared to HWUs (Fourie, 1999; Jansen, 2003; Wolpe, 1995). The results further indicated that academics were less concerned about their career stability compared to the stress experienced in relation to the amount of tasks and responsibility they needed to attend to. This is not surprising, as academics in South Africa are made permanent after a two year probationary period. Thus, academics within the sample do not face the same stressors to obtain tenure as international samples do (du Toit, 2006)

5.1.1.3. Emotional Intelligence (EI) among academic staff

The ranking of EI abilities revealed that managing your own emotions was the highest ranked EI capability. This suggests that health profession academic staff reportedly have the ability to manage their emotions when encountering difficult and challenging situations. From the earlier results on stress, it emerged that academics in this sample faced challenges related to the nature of their occupations. Two important considerations emerge in relation to the occupation. First being an academic entails a high human interaction or contact in which the need to be aware of and the ability to effectively regulate strong emotions are integral (El-Sayed et al., 2014). Second, academics in health professions have to use emotion regulation skills to establish therapeutic relationships with their patients and clients, manage emotions in themselves to prevent vicarious traumatisation and burnout, provide clinical supervision and mentoring, and to maintain an empathic stance towards their work (Romanelli, Cain, & Smith, 2006). Thus, it is assumed that they possess the skill of regulating their emotions as

they are in a position to show empathy towards others. In essence, managing one's own emotions appears to be a key component in the lives of health profession academics (Littlejohn, 2012). The results of the present study empirically support the assumption that academics in health professions are emotionally skilled individuals who use EI capabilities to regulate their own emotions

Perception of emotion and managing the emotions of others jointly ranked second in the frequency distribution. This finding suggests that academics have the ability to be aware of their own emotions and recognise the emotions of others through cues such as behaviour, facial expressions and language. This process allows academics can assess potentially challenging situations and intervene effectively and preventatively (Ashkanasy & Daus, 2002). The results also suggest that academics are capable of managing the emotions of others by moderating negative emotions such as anxiety and frustration and enhancing pleasant ones. Essentially, with the use of these skills, academics are likely to build successful relations with their colleagues, and manage conflict and stress successfully (Brackett, Rivers, & Salovey, 2011).

The results further revealed that fewer academics utilise their emotions towards better job performance, as evidenced by the means (ranked 3rd). Utilisation of emotions involves the ability to harness emotions to facilitate various cognitive activities such as problem solving (Jude, 2011). In the case of the academic profession, emotions may direct attention to important information and may encourage specific problem-solving approaches when academics encounter difficult situations. However, it is observed that fewer academics engage in this process for the reason that other skills may take precedence to enhance job performance before utilization of emotion.

5.1.1.4. Ways of coping in academic staff

The frequency distributions revealed that health profession academics were more likely to engage in problem and emotion focused coping when encountering a stressor. Problem focused coping entails defining the problem, planning, generating alternative solutions and taking action (Rantanen et al., 2011). Emotion focused coping involves attempts to regulate emotions surrounding the stressful encounter such as distancing or distracting oneself from the stressor, using emotional support and positive reframing. The results further revealed that fewer academics engaged in maladaptive coping strategies as evidenced by the lower means. Maladaptive coping includes self-blame, substance use, behavioural disengagement, and avoidance. These results are consistent with a study conducted by Iqbal and Kokash (2011), which have found that academics were most likely to engage in exercises, spirituality, time management, and spending time with their family as a way of moderating stress experienced at work.

5.1.1.5. Associations between Demographics and Occupational stress, coping and EI

Demographics and Occupational Stress

The correlations tested between the demographic data and sources of occupational stress revealed that women reported a greater experience of occupational stress related to work/home interface compared to men. It appeared that female health profession academics experienced greater amounts of pressure trying to actualise themselves in their work place while continuing to carry the major responsibility for the role in home and family. As a result, female academics may reduce their involvement in a number of household tasks, to accommodate the demands of their career, and often rely on assistance outside or within the family to cope with household responsibilities (Naidoo & Jano, 2002). Previous studies have

increasingly shown the changing status of women in society and highlighted the change in gender role prescriptions and the division of domestic labour (Ahmad, 2008; Higgins, Duxbury, & Lyons, 2010; Naidoo & Jano, 2002). Women married or not, are increasingly engaged in paid employment outside the home giving rise to the dual-career or dual-earner families (Naidoo & Jano, 2002). However, family and personal obligations coupled with greater responsibilities for duties related to work mean that women often have to negotiate maternal or parental responsibilities with stringent academic demands.

The current results also show that stress related to tools and equipment is experienced more by junior academics (i.e. those with the least number of years in academia). Within higher education institutions, early career academics or those who have just entered the academic profession may lack the understanding regarding the functioning of the organisation and lack the clarity of their new roles as lectures and researcher, consequently leading to stress. De Bruin and Taylor (2005) attributed this correlation to the scarcity or the lack of understanding regarding the tools and equipment needed to accomplish a task, or working with broken, inappropriate or complex machinery. McArthur-Rouss (2008), as well as Smith and Boyd (2012) reported that academics new to higher education institutions experience excessive amounts of stress related to the adjustment period in which they have to develop an understanding of the organisation, their tasks and the tools and skills needed to perform effectively.

An association was found between years in academia and stress related to job security. This finding corresponds with previous research (Cameron, 2010; Pienaar & Bester, 2008) as health profession academics within the early career phase often find themselves in vulnerable positions, such as competing for tenure. Tenure is a concept that academics who have served

a proper period of apprenticeship are guaranteed job security in their post and are subject to removal only for adequate reasons (Cameron, 2010). Tenure-track academics, or those in the process of achieving tenure, are placed under significant amounts of pressure to publish in peer-reviewed journals as tenure is, in large part, determined by the number of articles they publish. Murray, Stanley, and Wright (2014) states that the demands placed on early career academics often result in feelings of discomfort, stress, low confidence, disempowerment, loss of security and fear that often leads to self-doubt. Those who have just entered the academic career not only need to master the technical aspects of their job and adjust to the norms, values and expectations of the organisation but are constantly placed under pressure to achieve tenure (Miller, Taylor, & Bedeian, 2011; Pienaar & Bester, 2008).

The results revealed that job security and lack of autonomy was likely to be reported by academics from minority ethnic groups as sources of stress. Coming from an era of apartheid, it is evident that South African higher education institutions and academia, to some extent, may still be characterised by racial unfairness (Netswera, Rankhumise, & Mavundla, 2005; Seekings, 2008). Results reveal that Black health profession academics are more likely to experience stress related to job insecurity and similarly, are more likely to experience authority issues compared to White academics. Academics from ethnic minority may perceive themselves as powerless and may perceive their jobs to be strenuous and at risk.

The results of this study further identified a significant association between academic status and stress related to career advancement. Academics that possess a senior status or possess PhDs are less likely to experience stress related to advancing in their careers. In recent years, higher education institutions have become dependent on the intellectual abilities and commitment of academic staff and have become more stringent regarding academic staff

obtaining their doctorate degrees (Pienaar & Bester, 2008). Backhouse (2009) asserted that academics are under pressure from their departmental heads, or institutions to obtain their PhD as those with PhDs are most likely to be promoted. Additionally, policies such as the National Development Plan of 2030 has been placing immense pressure on academics to obtain their PhDs as this policy aims to increasing the percentage of PhD qualified staff from 34% to over 75% by 2030 (National Development Plan 2030, 2012). Thus, significant amounts of pressure are placed upon health profession academics to undertake their PhD, consequently increasing their level of occupational stress.

Demographics and EI

A significant association between emotion management and gender was identified. Female health profession academics reportedly use emotional strategies to become aware of, maintain, regulate or change emotional experience or expression. Females are often portrayed as more emotionally competent than men, as women are more emotionally intense, emotionally expressive and more skilled in the use of nonverbal cues related to emotion (Ciarrochi, Hynes, & Crittenden, 2005; Joseph & Newman, 2010; McClure, 2000). Joseph and Newman (2010) showed that women have higher EI in relation to men and explained that women have more complex emotion knowledge that often contributes to their higher levels of EI. Brody and Hall (2008) found that women exert more control over anger, contempt, and disgust, and men exert more control over fear and surprise. The results may imply that women in academic settings are most likely to manage or regulate emotions.

Race was significantly associated with managing emotions. Academics of minority ethnic status (Black, Coloured and Indian) were more likely to manage their own and the emotions of others. There is a substantial lack of research regarding race and emotional intelligence.

However, the results indicate that there is a tendency amongst academics of minority ethnic status to engage more in self-management and management of the emotions of others. This resembles the surveillance described in literature (e.g. Mapesela & Hay, 2005; Stanley, 2006; Subotzky, 1997) that is often exhibited by professionals of minority statuses when working in competitive environments.

A negative association was found between managing others emotions and level of qualification. The results could infer that health profession academics with higher qualifications may be more focused on organisational outcomes, managerial tasks and research focused, whilst academics with lower qualifications are more involved with students. Thus, academics with lower qualifications are most likely to be in situations that require them to manage the emotions of others. Matthews and Zeidner (2000) similarly reported that academics with lower qualifications are more likely to manage the emotions of others.

Demographics and Coping

An association between problem focused coping and gender was found. This finding suggests that male academics were more inclined to use problem focused coping techniques to actively solve situations that caused stress. This suggests that male academics reportedly were more likely to engage in active coping, planning and using instrumental support. Brody and Hall (2008) similarly found that men are more likely to take active steps in solving a situation of difficulty that might arise in the context of work. Further, Wallace (2014) confirms that men are more likely to use informational and instrumental support from colleagues as a form of support and coping when experiencing stress.

5.1.2. Associations between occupational stress, coping and EI

A series of correlation matrices were tested to identify whether occupational stress, coping and EI were related to one another. The correlation analysis confirmed the existence of bivariate associations between sources of occupational stress, coping and emotional intelligence. A number of significant associations emerged between EI and sources of occupational stress. Utilisation of emotions was significantly associated with stress related to career advancement. Academic employees that use positive emotions and behaviour to drive their success, for example assertiveness, independence, self-direction, flexibility and optimism, are more likely to advance in their careers (e.g. be promoted, attend training and development opportunities). Similarly, Kim, Cable, Kim, and Wang (2009) asserted that academics possessing higher levels of emotional intelligence use positive behaviours in the workplace that allow them to gather better information, or make better decisions about their activities, that results in better integration with colleagues and better performance on the job.

Stress related to lack of autonomy was found to be significantly correlated with three branches of EI. Firstly, a significant association was identified between lack of autonomy and using emotions. Academics that experience stress related to autonomy as a result of the lack of decision making authority or job constraints are less likely to use their emotions towards better job performance. Secondly, a significant association between managing others emotions and lack of autonomy was found. Academics that experience stress related to their lack of autonomy in their workplace are less likely to manage the emotions of others. Lastly, a significant association was found between lack of autonomy and perception of emotions. Academics that experience stress related to their lack of independence within their workplace are less able to perceive emotions within themselves and of others. Academic autonomy has long been regarded as fundamental, as a core value and as an essential socio-technical

condition of good academic work (Henkel, 2007). Autonomy is a key element of the academic work environment that enable academics to engage in core activities such as critical thinking, reflection and collegial interactions in the context of disciplinary interests and expertise (Winter, Taylor, & Sarros, 2000). Ultimately, academics that are independent are considered self-reliant and thus able to manage their own career. However, lack of independence may result in stagnation.

Stress related to work/home interface was negatively associated with the ability to manage own emotions. This makes sense on an instinctual level and is supported by literature that found a relationship between work-home conflict and emotional exhaustion (Ahmad, 2008; Demerouti, Bakker, & Butlers, 2004;). Ahmad (2008) identified that the challenges faced by academic staff, that is, work overload, role conflict and work/home conflict often results in emotional exhaustion. These results lend itself to earlier findings in this study that suggests that stress related to work interfere with academics' capacity to fulfil domestic obligations. The results imply that academics that stress and emotional content from work are more likely to spill over into other spheres of life e.g. personal and home lives when academics are less inclined to manage their own emotions related to work.

A number of significant associations emerged between sources of occupational stress and coping. Firstly, problem focused coping was positively associated with stress related to role ambiguity, lack of autonomy and workload. These findings suggest that academics that reportedly experience stress from the many roles they assume, their lack of decision making authority and their increasing workloads, are most likely to engage in problem solving techniques in order to cope. Rantanen et al., (2011) asserts that problem focused coping is most likely to be used when an individual can control stressful situations and appraises the

situation to be changeable. Essentially, academics may view these stressors as changeable, thus they are most likely to engage in a problem solving techniques to cope with these demands.

Weak to moderate associations were found between emotion focused coping and eight out of the nine sources of occupational stress (general work stress; role ambiguity; relationships; career advancement; job security; lack of autonomy; work/home interface and workload). Health profession academics reportedly engaged in coping methods such as positive reframing, acceptance, humour, religion and emotional support in order to cope with occupational stress. These results are consistent with Gillespie et al. (2001) that reported that academics are likely to engage in social support from family, friends and co-workers to help them to cope with work-related stress.

The results showed that academics also employed maladaptive ways of coping such as self-distraction or avoidance, self-blame, denial, venting and perhaps substance use. Significant associations emerged between maladaptive ways of coping and all nine sources of occupational stress (general work, role ambiguity, relationships, tools and equipment, career advancement, job security, lack of autonomy, work/home interface and workload). The results suggest that health profession academics tend to use expressive maladaptive coping strategies when faced with stressors. Venting, self-blame, avoidance and denial are often general features of stress (Montero-Marin, Prado-Abril, Demarzo, Gascon, & Garcia-Campayo, 2014). It is not uncommon for academics to engage in these ways of coping to alleviate the stress experienced. This type of coping strategy tends to disengage academics from the threatening situation, instead of confronting it. Similarly, Odirile, Mpofu, and

Montsi (2009) found that academics often engaged in maladaptive coping startegies, specifically avoidance.

Bivariate associations were observed between EI and coping. The ability to perceive and manage one's own emotions was correlated with an increased ability to employ problem focused coping when faced with challenging situations. Perception of emotions involves the ability to perceive or be self-aware of emotions and the ability to express emotions and emotional needs accurately to others. In other words, the feelings academics experience following the stressful encounter drives the emotional and behavioural consequences that follow. The ability to recognise the emotions of oneself and those of others as well as the management thereof contributes to their selection of an appropriate coping strategy. This finding resonates with literature in that emotional awareness is the starting point for dealing with an appraisal of stress (Ashkanasy, Ashton-James, & Jordan, 2004).

Significant correlations were found between emotion focused coping and managing others' emotions as well as using emotions. The ability to use and manage the emotions of others was associated with an increased ability to employ emotion focused coping when faced with stressful situations. Emotion management revolves around one's ability to connect or to disconnect with an emotion depending on its usefulness in any given situation (Jordan, Ashkanasy, & Hartel, 2002). This finding resonates with coping literature, in that managing one's emotions involves the expression or the suppression of emotion. Emotion focused coping strategies involves the suppression of emotions or regulating emotions surrounding the stressful encounter. Essentially, emotion focused coping could be seen providing the best outcome when academics need to manage their emotions.

It was observed that no associations emerged between EI and maladaptive coping. The current findings clarified the relationships between adaptive coping strategies and EI which concurred with research conducted by MacCann et al. (2011) who found significant relationships between adaptive coping strategies and emotional skills. The findings suggest that when academics are confronted with stressful situations, emotionally intelligent academics seem particularly inclined to look for the positive aspect, invoke pleasant thoughts or memories in order to counter their current emotional state, think about what steps to take in order to handle the problem and put it into perspective (Mikolajczak, Nelis, Hansenne, & Quoidbach, 2008). Thus having strong emotional skills is associated with more control over the coping behaviour. Ultimately, EI appeared to provide participants with the ability to use emotional information to guide their judgment in effective action by implementing more adaptive coping strategies (problem and emotion focused coping) when dealing with particular sources of occupational stress (Zomer, 2012).

5.1.3. Predictive relationships between occupational stress, EI and coping

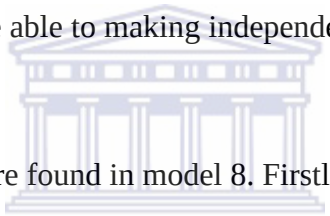
This study attempted to establish the predictive relationship between occupational stress, coping and emotional intelligence in this sample. Mixed results emerged for the hypothesised predictive relationship between EI and sources of occupational stress. The combination of EI and level of qualification could significantly predict four sources of occupational stress, namely, general work stress, job security, lack of autonomy and work/home interface. However, findings further revealed that the combination of EI and level of qualification were not able to significantly predict stress related to role ambiguity, relationships, tools and equipment, career advancement and workload.

In model 1, managing own emotions emerged as a significant predictor of general work stress while controlling for level of qualification, using emotions, perceiving emotions and managing others emotions. The ability to manage one's own emotions can significantly predict the stress experienced in relation to one's work. Emotion management involves the skill of influencing which emotions are experienced, when they are experienced and how they are expressed (Szczygiel, Buczny, & Bazińska, 2012). Health profession academics that possess the skill of managing their own emotions are less likely to experience stress related to their work. In other words, they are most likely to regulate their emotions when experiencing a stressful situation. Similarly, Gorgens-Ekermans and Brand (2012) found that academics that are capable of managing their own emotions appropriately within the academic environment could increase constructive self-evaluations. This could lead to positive feelings of competence, achievement and confidence in one's ability to perform well, consequently decreasing occupational stress (Gorgens-Ekermans & Brand, 2012). Essentially, academics that are capable of regulating how they feel or change the feelings they show are most likely to interact with students and colleagues in an effective way.

In model 6, the results revealed that level of qualification was a significant predictor of job security while controlling for EI. The results suggest that academics who have obtained a higher level of qualification, such as PhD, experience less stress concerning job security. Within academia, job security is guaranteed when academics have obtained tenure. Essentially, higher qualified academics have most likely demonstrated mastery in teaching and have actively engaged in publishing research, thus receive tenure and are guaranteed full-time positions within higher education institutions (Cameron, 2010). Academics with a lower qualification may still need to work towards tenure, consequently they are more vulnerable as job security is not guaranteed. Further, it was observed that EI was not a significant predictor

of stress related to job security. This means that irrespective of whether academics are emotionally intelligent, their level of qualification emerged as a stronger predictor concerning their stress related to job security.

In model 7, using emotions was found to be a significant predictor of stress related to lack of autonomy, controlling for level of qualification, managing own and others' emotions and perception of emotions. Academics that use emotions to perform effectively at their work are more capable of working independently, thus experience less stress regarding job autonomy. This finding resonated with past research (e.g. Kim et al., 2009) which has found that emotionally intelligent individuals, those who use their emotions towards better job performance, are most likely to be able to making independent decisions.



Two significant predictors were found in model 8. Firstly, managing own emotions emerged as a significant predictor of stress related to work/home interface controlling for level of qualification, using emotions, perceiving emotions and managing others emotions. These findings empirically support the notion that managing one's own emotions predicts the amount of stress experienced related to work/home conflict. Further, using emotions also emerged as a significant predictor of work/home interface controlling for level of qualification, perceiving emotions, managing own and others emotions. Surprisingly, academics that use their emotions are most likely to experience stress related to work/home interface as this could lead to emotional exhaustion or burnout. Furthermore, health professions are generally more aware and able to use their emotions at home and work, thus this predisposes them to emotional exhaustion.

The combination of EI and gender could significantly predict coping. Three regression models were tested for significance with the three subscales of coping as the respective outcomes i.e. problem focused, emotion focused and maladaptive coping. The models produced mixed results in the assessment of the unique contribution of each predictor in the respective models. In model 10, no significant predictors were found for problem focused coping, even though the model tested significant. Thus, the unique combination of EI and gender contribute to the use of problem focused coping when academics experience work stress. Similarly, MacCann et al. (2011) found that people with higher emotion management tend to use problem focused coping.

In model 11, utilization of emotions emerged as a significant predictor of emotion focused coping, controlling for gender, managing others emotions, perception of emotions and managing own emotions. Academics that use emotion related information to facilitate thoughts and make better decisions are likely to engage in emotion related strategies as a coping method when stressed. This resonates with Noorbakhsh, Besharat, and Zarei's (2010) research which found utilisation of emotion as a predictor of emotion focused coping.

In model 12, managing own emotions emerged as a significant predictor for maladaptive coping. The ability to manage one's own emotions decreases the likelihood of engaging in maladaptive coping methods. As mentioned before, managing emotions was a key component in enhancing positive outcomes. Academics who lack the ability to manage or regulate their emotions properly or use emotions to facilitate rationale thought are likely to engage in negative coping strategies, such as substance use or self-blame. Similarly, Salovey, Bedell, Detweiller, and Mayer (2000) found that people high in EI are better equipped to deal with stressful events as they engage in better coping skills.

Three sources of occupational stress (Role ambiguity, Lack of autonomy and Workload) in combination with gender and level of qualification could significantly predict problem focused coping. However, no significant predictors were found despite model 13 testing significant. Further, model 14 revealed that five sources of occupational stress (general work stress, work/home interface, workload, role ambiguity and relationships) could significantly predict emotion focused coping. It was found that role ambiguity was a significant predictor of emotion focused coping. Role ambiguity, as mentioned before, relates to the amount of stress academics experience due to the vague specifications or constant change regarding performance expectations, duties, responsibilities and constraints that defines academic work (De Bruin & Taylor, 2005; Coetzee & de Villiers, 2010). The triple demands of teaching, research and administration work can be considered challenging especially to those who have just entered academia. Academics that experience this sort of stressor were likely to regulate and suppress their emotions or seek emotional support from others in order to cope with the many roles they assume.

Stress related to co-worker relationships was identified as a significant predictor of emotion focused coping. This type of stressor may be a result of poor interpersonal relations among colleagues and supervisors, poor communication and perhaps interpersonal abuse. Health profession academics face many pressures related to their academic work and must often be responsive to additional stakeholders, including clinical settings, patients, clients and the profession. These pressures and demands are often accompanied by incivility between colleagues. This often occurs in academic settings particularly in regard to the unwritten rules of gaining tenure, promotion and other rewards, as well as issues of rank and power which are often covert or overt determinants of relationships between academic staff members. Academics incivility may include, silent treatments, constant criticism and gossip, exclusion,

belittling and taking credit for others' work. Gunbayi (2009) states that incivility among academics can be a high source of stress especially when employees work in collaboration. Essentially, academics that experience that sort of stressor are most likely to deal with it by using emotion related coping techniques such as, suppressing and regulating their emotions surrounding the stressor. To an extent, academics are also likely to engage in maladaptive coping when relationship stress is experienced, as evidenced in model 15.

5.2. Conclusion

The higher education sector in South Africa emerges as a unique and complex system because, in addition to the universal forces driving it towards change, the historical background of South Africa acts as the main reason why higher education is moving towards a new education landscape (Mapesela & Hay, 2006). The pressure for universities to restructure has gained significant momentum through the formulation of several government policies during the democratic era (Waghid, 2002). However, transformations and change, as a result of policy implementation, has become a major source of dissatisfaction among academics because of the varying and enormous demands placed upon university staff (Fourie, 1999; Mapesela & Hay, 2006). Academics are now seen as producers of knowledge and are faced with increasing demands related to their role as a producer of knowledge. As a result, occupational stress has become a major feature of the academic profession.

The present study aimed to determine the relationship between occupational stress, coping and emotional intelligence in a sample of academics at a historically disadvantaged university. Overall, the results have confirmed that academia is a stressful profession as health profession academics experienced occupational stress from a number of sources. To a greater extent, academics experienced occupational stress related to their workloads which is

mainly attributable to the transformations and changes within the education landscape. Moreover, it emerged that to some extent South Africa's legacy continues to play a substantial role in higher education institutions. This study provided insight that the historical nature of the university, gender, race and professional status continues to contribute to the occupational stress academics experience.

The results also revealed that academics possess emotionally intelligent skills that allow them to cope effectively with stress in the academic environment. It was found that health profession academics are profoundly capable of managing and regulating their emotional experiences and expressions when they are confronted with challenging situations. Further, it was confirmed that academics engaged in a full range of coping skills including problem focused, emotion focused and maladaptive coping. However, higher rates for problem and emotion focused coping were reported to eliminate or moderate the stressors experienced.

Taken together, the findings of this study were consistent with the adapted *Transactional Model of Stress and Coping* that incorporates emotional intelligence. According to this model, when an individual encounters a stressful situation, the individual's EI skills influence his or her choice of coping strategy to deal with the situation (Matthews & Zeidner, 2000). Results indicated that when health profession academics experienced stress, EI provided participants the ability to use emotional information to guide their judgment in effective action by implementing more adaptive coping strategies (problem and emotion focused coping) in dealing with particular sources of occupational stress. The predictive relationships between variables further substantiate that EI can predict occupational stress and there is a predictive relationship between EI and coping. Thus, one can infer that EI in combination with specific demographic variables can predict subjective well-being among academics.

5.2.1. Significance of the study

Overall, the present study provided insight into the challenges faced by academics and highlighted the pertinent need to address the issue of occupational stress within higher education institutions. This study provides empirical support for the notion that academics experience moderate to high levels of occupational stress. Emotional intelligence emerged as a crucial component of coping strategies and can guide the appraisal of an effective coping method (Armstrong, Galligan, & Critchley, 2011). Further, this study has provided a platform to engage with the ways in which historically disadvantaged universities, gender, race and Health Profession status may contribute to the experience and management of occupational stress.

This research and potential future research studies, concerning occupational stress, coping and EI is considered important, as it is evident that these factors can hinder not only academic achievement and productivity, but also the well-being of academic staff. Therefore, higher education institutions need to be mindful of the pressures and demands placed upon academic staff members, and provide support and protect their staff from increasing levels of stress in order to preserve staff well-being, organizational performance and the intellectual health of the nation. A deeper understanding of these factors could assist in providing information for future well-being interventions among academic staff.

5.2.2. Limitations of the study

There are a number of limitations present within the current study. Occupational stress, coping and EI data were merely ranked and the degree of the variables within the sample could not be determined. Further, third party predictors were not tested. There is also the limitation inherent in all self-report questionnaires. Even though self-report measures have

the advantage of obtaining data in a convenient way from the sample group, they have the disadvantage that the respondent may rush through the questionnaire or provide socially desirable answers. Moreover, the results of this study are confined to the Faculty of Community and Health Sciences at the HDI.

5.2.3. Recommendations

The findings of this study emphasise the value of emotional intelligence as a psychological buffer in the context of the academic environment. A deeper understanding of this construct, and perhaps exploring the components separately within higher education could prove to be useful. For example, to further explore emotional management or regulation among academic staff.

This study only targeted health profession academics from one faculty at a historically disadvantaged university. Future research could consider using samples outside these limits and perhaps compare the level of occupational stress experienced among academics of different disciplines, in addition to whether emotional intelligence skills differ across disciplines and the coping strategies used.

As work overload plays a central role in the process that leads to increasing levels of stress, reducing workloads seems necessary to reduce levels of stress. In line with Barkhuizen and Rothmann (2008) it is suggested that more research assistants and tutors are recruited to assist in research and teaching, thus reducing the pressures placed on academics.

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APPENDIX A
Electronic Mail for Participation

Gmail [redacted]

CHS Faculty Survey
1 message

Abigail Simons [redacted] Thu, Jul 2, 2015 at 12:46 PM

To: [redacted]

Cc: [redacted]

Dear CHS staff member

I am Abigail Simons, a student in the M. A. Research Psychology programme at UWC. For my thesis, I am conducting an internet survey with staff in CHS as the population and CHS faculty at UWC as the research setting. The study aims to explore the impact of the relationship between occupational stress, coping and emotional intelligence in a sample of academics at a historically disadvantaged university. This survey will take approximately 15-20 minutes to complete in an on-line forum called Survey monkey. As per the UWC protocol, find attached an information sheet that outlines what your participation will entail in detail and the roles and responsibilities of the researcher and potential participants, as well as the recourse you have should you want to provide feedback about this study.

The benefits of participating include

- An opportunity to identify possible occupational stressors that academic staff may be experiencing.
- An opportunity to reflect on their way of coping when experiencing occupational stress.
- An opportunity to reflect on their emotional intelligence.
- To be entered into a lucky draw for a R250 Voucher if you successfully complete the survey.

Find attached copies of the ethics clearance certificate and the permission to conduct the study at UWC from the Registrar.

We anticipate that this study could help to gain insight into the relationship between occupational stress, coping and emotional intelligence for academic staff given the changing landscape of higher education. This in turn could be helpful in facilitating staff retention and informing staff development.

I appreciate how busy your schedules are and will be very grateful if you could take the time out to complete this survey. Access the questionnaire via the link below.

https://www.surveymonkey.com/s/G3W7TZZ

Warm regards

Abigail Simons

3 attachments

Ethics_Simons_15_4_42.pdf
112K

Information Sheet.docx
55K

Registrars approval
226K

APPENDIX B
Weekly Reminders

Gmail [redacted]

Occupational stress amongst academics in CHS
1 message

Abigail Simons <[redacted]> Fri, Jul 17, 2015 at 12:32 PM

To: [redacted]

Cc: [redacted]

Dear CHS staff member,

Barkhuizen & Rothmann (2008) concluded that higher education institutions are now commonly labelled as 'stress factories' and academics throughout the world deal with a substantial amount of ongoing occupational stress. Two weeks ago a survey on occupational stress amongst academics, for my Masters thesis in Psychology, was circulated to all faculty members. The results of this survey will help us gain insight into the current situation in our faculty. As per the UWC protocol, find attached an information sheet that outlines what your participation will entail in detail and the roles and responsibilities of the researcher and potential participants, as well as the recourse you have should you want to provide feedback about this study. To participate click on the link below.

https://www.surveymonkey.com/s/G3W7TZZ

Thank you to those who have completed the survey thus far. This e-mail is an invitation for those who have not yet completed to participate in the survey. To increase the anonymity, the item about the department in which you are employed has been made optional. The first lucky draw will take place on Thursday based on all completed surveys.

Warm regards

Ms. Abigail Simons (stud no.: 3412617)

3 attachments

Ethics_Simons_15_4_42.pdf
112K

Information Sheet.docx
55K

Registrars approval

Gmail Abigail Simons <[redacted]>

Occupational stress among CHS academics
3 messages

Abigail Simons [redacted] Tue, Jul 28, 2015 at 11:15 AM

To: [redacted]

Cc: [redacted]>

Dear CHS staff member,

Kotecha, Ukpere and Geldenhuys (2014) reported that in recent years, academic work has become more challenging and demanding as higher education in South Africa and across the world continues to transform. This is particularly true in health sciences with the additional demands of clinical supervision and competency requirement regulated by the Health Profession Boards.

Three weeks ago a survey on occupational stress amongst academics, for my Masters thesis in Psychology, was circulated to all faculty members. As per the UWC protocol, find attached an information sheet that outlines what your participation will entail in detail and the roles and responsibilities of the researcher and potential participants, as well as the recourse you have should you want to provide feedback about this study. I have been overwhelmed by the generosity of the faculty evidenced by their willingness to participate. The initial results are very interesting and we would like to get as comprehensive a picture as possible of the current situation in our faculty. Thank you to those who have completed the survey thus far. This e-mail is an invitation for those who have not yet completed to participate in the survey. To participate click on the link below.

https://www.surveymonkey.com/s/G3W7TZZ

Warm regards

Ms. Abigail Simons (3412617)

Gmail

Abigail Simons [redacted]

Occupational Stress among academic staff
1 message

Abigail Simons [redacted] Tue, Aug 4, 2015 at 11:57 AM

To: [redacted]

Cc: [redacted]

Dear CHS staff Member

According to Rothmann, Barkhuizen and Tytherleigh (2008), academic staff members in higher education institutions are likely candidates for occupational stress because of their relationships with large numbers of students, staff and administration.

A survey, for my Masters thesis in Psychology, regarding occupational stress among academic staff has been circulating the CHS Faculty for four weeks. I have been overwhelmed by the generosity of the faculty evidenced by their willingness to participate in my survey. I can gladly announce that the first winner of the R250 Voucher has been selected, **Ms Wendy Rosenthal congratulations on your win!** The last winner will be announced on Friday as this survey comes to an end.

Thank you to those who have completed the survey thus far. This e-mail is an invitation for those who have not yet completed to participate in the survey. As per the UWC protocol, find attached an information sheet that outlines what your participation will entail in detail and the roles and responsibilities of the researcher and potential participants, as well as the recourse you have should you want to provide feedback about this study. To participate click on the link below.

https://www.surveymonkey.com/s/G3W7TZZ

Warm regards

Ms Abigail Simons (3412617)

APPENDIX C
Demographic Questionnaire

This information is for research purposes only and will be kept strictly confidential

Please tick (√) or complete the appropriate box:

1. **Gender:** Male ☐ Female ☐
2. **Race:** White ☐ Coloured ☐ Black ☐ Indian ☐ Other _____
3. **Current Age:** ☐
4. **Department:** Dietetics ☐ Occupational Therapy ☐ Physiotherapy ☐
   Psychology ☐ Social Work ☐ Sports, Recreation and Exercise Science ☐
   School of Public Health ☐ School of Nursing ☐ School of Natural Medicine ☐
5. **Years in academia** ☐ Fulltime: ☐ Part-time: ☐
6. **Highest qualification** Honours ☐ Masters ☐ PhD ☐
7. **Academic Status:** Associate Lecturer ☐ Lecturer ☐ Senior Lecturer ☐
   Associate Professor ☐ Professor ☐

Thank you for your participation

APPENDIX D
Sources of Work Stress Inventory (SWSI)

The purpose of the following questions are to examine how STRESSED you are at work. Please respond to the questions on the answer sheet provided, by marking the number that best indicates your answer. Please do not make any marks on the questionnaire.

1 Never	2 Rarely	3 Sometimes	4 Often	5 Always

1. Does work make you so stressed that you wish you had a different job?
2. Do you get so stressed at work that you want to quit?
3. Do you worry about having to wake up and go to work in the morning?
4. Do you find it difficult to sleep at night because you worry about your work?
5. Do you get so stressed at work that you forget to do important tasks?
6. Does work make you so stressed that you find it hard to concentrate on you tasks?
7. Do you spend a lot of time worrying about your work?
8. Do you feel like you can't cope with your work anymore?
9. Does work make you so stressed that you lose your temper?

The purpose of the following questions is to determine areas that might cause you stress at work. How much do the following aspects contribute to stress at work for you? Please indicate your answer by marking the number that corresponds with the AMOUNT OF STRESS YOU EXPERIENCE.

1 Not at all	2 Very little	3 Some	4 Quite a lot	5 Very much

10. Being unsure about what my job really involves.
11. Not knowing exactly what is expected of me at work.
12. Having to do extra things that aren't part of my job.
13. Doing tasks that are totally unrelated to each other.
14. Being unaware about what I am supposed to do to complete my work tasks.
15. Having too many different people telling me what to do at work.

16. Receiving unclear assignments from my supervisor.
17. Being treated in a degrading manner.
18. Having a poor working relationship with my manager.
19. Being treated unfairly.
20. Having irresolvable arguments with my supervisor.
21. Being bullied.
22. Hearing people at work make unkind remarks about me.
23. Being unfairly criticised for my work.
24. Experiencing offensive interpersonal abuse in the workplace.
25. Having the wrong tools for the job.
26. Working with equipment that is outdated.
27. Having insufficient access to resources or tools to complete a task.
28. Having to wait for the tools I need to do my job properly.
29. Working with machinery of equipment that is too slow.
30. Having poor promotional prospects.
31. Being paid less than others for doing the same work.
32. Being overlooked for promotion.
33. Being unsure about the policies and procedures for promotion at my workplace.
34. Progressing slower in my career than I hoped I would.
35. Being unsure about what the future holds for my organisation.
36. Being unsure about my future in the organisation
37. Being unsure about how changes at work will affect me.
38. Being uncertain about how to keep my job secure.
39. Dealing with changes that happen too slowly.
40. Having to do my work according to a rigid set of rules.
41. Having policies and procedures at work that prevent me from doing my work properly.
42. Being unable to be creative in my work.
43. Having other people make decisions about me.
44. Not being consulted on changes at work that affect me.
45. Having to ask permission before doing anything.
46. Balancing work and family responsibilities.
47. Having little support at home.
48. Balancing the demands at work with the demand at home

49. Taking my stress from work out on the people at home.
50. Arguing with my family about my work.
51. Having happenings at home that affect the quality of my work.
52. Arguing with friends because of my work.
53. Being too busy to have a hobby
54. Having to work very quickly to get all my work done
55. Having to take work home at night
56. Having to work over weekends
57. Having to cut back on my social life to get my work done
58. Having too few hours in the day to get all my work done
59. Receiving work at a faster pace than I can handle.

APPENDIX E
Brief COPE

We are interested in how people respond when they confront difficult or stressful events in their lives. There are lots of ways to try to deal with stress. This questionnaire asks you to indicate what you generally do and feel, when you experience stressful events. Obviously, different events bring out somewhat different responses, but think about what you usually do when you are under a lot of stress.

Then respond to each of the following items by blackening one number on your answer sheet for each, using the response choices listed just below. Please try to respond to each item separately in your mind from each other item. Choose your answers thoughtfully, and make your answers as true FOR YOU as you can. Please answer every item. There are no "right" or "wrong" answers, so choose the most accurate answer for YOU--not what you think "most people" would say or do. Indicate what YOU usually do when YOU experience a stressful event.

1 = I haven't been doing this at all
2 = I've been doing this a little bit
3 = I've been doing this a medium amount
4 = I've been doing this a lot

1. I've been turning to work or other activities to take my mind off things.
2. I've been concentrating my efforts on doing something about the situation I'm in.
3. I've been saying to myself "this isn't real.".
4. I've been using alcohol or other drugs to make myself feel better.
5. I've been getting emotional support from others.
6. I've been giving up trying to deal with it.
7. I've been taking action to try to make the situation better.
8. I've been refusing to believe that it has happened.
9. I've been saying things to let my unpleasant feelings escape.
10. I've been getting help and advice from other people.
11. I've been using alcohol or other drugs to help me get through it.
12. I've been trying to see it in a different light, to make it seem more positive.
13. I've been criticizing myself.
14. I've been trying to come up with a strategy about what to do.
15. I've been getting comfort and understanding from someone.
16. I've been giving up the attempt to cope.
17. I've been looking for something good in what is happening.
18. I've been making jokes about it.
19. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.
20. I've been accepting the reality of the fact that it has happened.
21. I've been expressing my negative feelings.

22. I've been trying to find comfort in my religion or spiritual beliefs.
23. I've been trying to get advice or help from other people about what to do.
24. I've been learning to live with it.
25. I've been thinking hard about what steps to take.
26. I've been blaming myself for things that happened.
27. I've been praying or meditating.
28. I've been making fun of the situation.

APPENDIX F
The Assessing Emotions Scale

Directions: Each of the following items asks you about your emotions or reactions associated with emotions. After deciding whether a statement is generally true for you, use the 5-point scale to respond to the statement. Please circle the "1" if you strongly disagree that this is like you, the "2" if you somewhat disagree that this is like you, "3" if you neither agree nor disagree that this is like you, the "4" if you somewhat agree that this is like you, and the "5" if you strongly agree that this is like you. There are no right or wrong answers. Please give the response that best describes you.

1 = strongly disagree
2 = somewhat disagree
3 = neither agree nor disagree
4 = somewhat agree
5 = strongly agree

1. I know when to speak about my personal problems to others. 1 2 3 4 5

2. When I am faced with obstacles, I remember times I faced similar obstacles and overcame them. 1 2 3 4 5

3. I expect that I will do well on most things I try. 1 2 3 4 5

4. Other people find it easy to confide in me. 1 2 3 4 5

5. I find it hard to understand the non-verbal messages of other people. 1 2 3 4 5

6. Some of the major events of my life have led me to re-evaluate what is important and not important. 1 2 3 4 5

7. When my mood changes, I see new possibilities. 1 2 3 4 5

8. Emotions are one of the things that make my life worth living. 1 2 3 4 5

9. I am aware of my emotions as I experience them. 1 2 3 4 5

10. I expect good things to happen. 1 2 3 4 5

11. I like to share my emotions with others. 1 2 3 4 5

12. When I experience a positive emotion, I know how to make it last. 1 2 3 4 5

13. I arrange events others enjoy. 1 2 3 4 5

14. I seek out activities that make me happy. 1 2 3 4 5

15. I am aware of the non-verbal messages I send to others. 1 2 3 4 5

16. I present myself in a way that makes a good impression on others. 1 2 3 4 5

17. When I am in a positive mood, solving problems is easy for me. 1 2 3 4 5

18. By looking at their facial expressions, I recognize the emotions people are experiencing. 1 2 3 4 5

19. I know why my emotions change. 1 2 3 4 5

20. When I am in a positive mood, I am able to come up with new ideas. 1 2 3 4 5

21. I have control over my emotions. 1 2 3 4 5

22. I easily recognize my emotions as I experience them. 1 2 3 4 5

23. I motivate myself by imagining a good outcome to tasks I take on. 1 2 3 4 5

24. I compliment others when they have done something well. 1 2 3 4 5

25. I am aware of the non-verbal messages other people send. 1 2 3 4 5

26. When another person tells me about an important event in his or her life, I almost feel as though I experienced this event myself. 1 2 3 4 5

27. When I feel a change in emotions, I tend to come up with new ideas. 1 2 3 4 5

28. When I am faced with a challenge, I give up because I believe I will fail. 1 2 3 4 5

29. I know what other people are feeling just by looking at them. 1 2 3 4 5

30. I help other people feel better when they are down. 1 2 3 4 5

31. I use good moods to help myself keep trying in the face of obstacles. 1 2 3 4 5

32. I can tell how people are feeling by listening to the tone of their voices. 1 2 3 4 5

33. It is difficult for me to understand why people feel the way they do. 1 2 3 4 5

APPENDIX G
Ethics Clearance

UNIVERSITY of the
WESTERN CAPE

OFFICE OF THE DEAN
DEPARTMENT OF RESEARCH DEVELOPMENT

04 June 2015

To Whom It May Concern

I hereby certify that the Senate Research Committee of the University of the Western Cape approved the methodology and ethics of the following research project by:
Ms A Simons (Psychology)

Research Project:	The relationship between occupational stress, coping and emotional intelligence in a sample of academics at a historically disadvantaged university.
Registration no:	15/4/42

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

The Committee must be informed of any serious adverse event and/or termination of the study.

Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape

Private Bag X17, Bellville 7535, South Africa
T: +27 21 959 2988/2948 . F: +27 21 959 3170
E: pjosias@uwc.ac.za
www.uwc.ac.za

APPENDIX H
Permission to conduct study from registrar

The Registrar
Student Administration
UWC
Private Bag X17
Bellville, 7535
10 June 2013

Re: Permission to conduct research at the University of the Western Cape.

I am currently registered as a student in the M. A. Research Psychology programme at UWC. I have to complete a research project/ thesis in partial fulfilment of the degree requirements. To this end, I wish to apply for permission to conduct my Masters level study at UWC. The proposed study has been approved for ethics clearance at the Senate Research Committee (4 June 2015). The study aims to explore the impact of the relationship between occupational stress, coping and emotional intelligence in a sample of academics at a historically disadvantaged university. The study is being supervised by Dr. Mario R. Smith and Mrs. Erica Munnik who are co-signing this letter to request permission to conduct the study.

The study has been designed with Staff in CHS as the population and CHS faculty at UWC as the research setting. The proposed study is an internet survey in which staff members will be asked to complete an online survey including measures of occupational stress, coping and emotional intelligence, as well as demographic variables. This survey will take approximately 45 minutes to complete in an on-line forum called Survey monkey. The Survey Monkey website allows follow-up emails to be sent to uncompleted surveys without the researcher accessing the specific email address or details of the participants. This will further protect the anonymity of responses and privacy of participants. Findings will be treated confidentiality. There are no risks anticipated in participating in this research project. An incentive for completing the survey will also be offered in the form of a lucky draw for a R250 Book voucher.

The benefits of participating include

- An opportunity to identify possible occupational stressors that academic staff may be experiencing.
- An opportunity to reflect on their way of coping when experiencing occupational stress.
- An opportunity to reflect on their emotional intelligence.
- To be entered into a lucky draw for a R250 Voucher if they successfully complete the survey.

In addition to permission to conduct the study, I would like to request access to the names and e-mail addresses for Academic staff in CHS in order to invite them electronically to participate in the study.

We anticipate that the proposed study will help us gain insight into the relationship between occupational stress, coping and emotional intelligence for academic staff given the changing landscape of higher education. This in turn could be helpful in facilitating staff retention and informing staff development. Find attached a copy of the proposal, ethics clearance certificate and proof of registration.

We hope that this application will be met with your favourable approval. Please do not hesitate to contact my supervisors or myself if you require additional information.

Thanking you in anticipation.

Ms. A. Simons	Dr. Mario R. Smith	Ms. Erica Munnik
Student # 3412617	Supervisor	Supervisor
abigailsimons91@gmail.com	mrsmith@uwc.ac.za	emunnik@uwc.ac.za
0835716643	0823309284/ Office X3713	X2283

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959 2283 Fax: +27 21-959 3515

APPENDIX I

Permission letter from the Registrar

UNIVERSITY of the WESTERN CAPE

OFFICE OF THE REGISTRAR

Private Bag x17, Bellville 7535
South Africa
Telegraph: UNIBELL
T: +27 21 959 2102/2111
F: +27 21 959 3126
Website: www.uwc.ac.za

24 JUNE 2015

TO WHOM IT MAY CONCERN

RE: PERMISSION TO DO RESEACH

I hereby confirm that permission has been granted to Ms A Simons (Student No: 3412617), a Master's Student in the Psychology Department at UWC, to conduct an electronic research study with Staff in the Faculty of CHS with assistance from her Supervisor towards her Research Project: The Relationship between occupational stress, coping and emotional intelligence in a sample of academics at a historically disadvantaged university with Registration No: 15/4/42 as reference.

Yours sincerely

MS N LAWTON-MISRA
REGISTRAR

UNIVERSITEIT VAN WES-KAAPLAND
UNIVERSITY OF THE WESTERN CAPE
KANTOOR VAN DIE REGISTRATEUR
24 JUN 2015
OFFICE OF THE REGISTRAR
PRIVAATSAK / PRIVATE BAG
BELLVILLE

APPENDIX J
Information Sheet

INFORMATION SHEET

Project Title: The relationship between occupational stress, coping and emotional intelligence in a sample of academics at the University of the Westerns Cape.

What is this study about?

This is a research project being conducted by Miss Abigail Simons, Ms E. Munnik and Dr M. Smith at the University of the Western Cape. We are inviting you to participate in this research project because you are currently an academic staff member in the Faculty of Community and Health Sciences at UWC. The purpose of this research project is to determine the relationship between Occupational Stress, Coping and Emotional Intelligence among academic staff in CHS Faculty.

What will I be asked to do if I agree to participate?

You will be asked, as an academic staff member in CHS, to complete an online survey including measures of stress, coping , emotional intelligence and demographic variables. This survey will take approximately 30 minutes to complete in an on-line forum called Survey monkey.

Would my participation in this study be kept confidential?

The Survey Monkey website allows follow-up emails to be sent to uncompleted surveys without the researcher accessing the specific email address or details of the participants. This will further protect the anonymity of responses and privacy of participants. The surveys are anonymous and will not contain information that may personally identify you. Findings will be treated confidentiality. To maintain confidentiality of data all information will be kept under password-protected computer files.

What are the risks of this research?

All human interactions and talking about self or others carry some amount of risks. We will nevertheless minimise such risks and act promptly to assist you if you experience any discomfort, psychological or otherwise during the process of your participation in the study. Where necessary an appropriate referral will be made to a suitable professional for further assistance or intervention.

What are the benefits of this research?

The benefits to you include:

- An opportunity to identify possible occupational stressors that you may be experiencing.
- An opportunity to reflect on your way of coping when experiencing occupational stress.
- An opportunity to reflect on your emotional intelligence.
- To be entered into a lucky draw for a R250 Voucher if you successfully complete the survey.

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

Is any assistance available if I am negatively affected by participating in this study?
Appropriate referrals will be made if unforeseen negative impacts arise.

What if I have questions?
This research is being conducted by Miss Abigail Simons at the Department of Psychology at the University of the Western Cape. If you have any questions about the research study itself, you can contact:

Miss Abigail Simons
Dept. of Psychology, UWC
021-9320453/0836716643
abigailsimons91@gmail.com

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Supervisor: **Ms Erica Munnik**
Dept. of Psychology, UWC
021-9592835
emunnik@uwc.ac.za

Co-Supervisor: **Dr. Mario Smith**
Dept. of Psychology, UWC
021-9592283
mrsmith@uwc.ac.za

Head of Department: **Dr. M. Andipatin**
Dept. of Psychology, UWC
021-9592283
mandipatin@uwc.ac.za

Dean of the Faculty of Community and Health Sciences:
Prof. Jose Frantz
University of the Western Cape
Private Bag X17
Bellville 7535
021-959 2631 chs-deansoffice@uwc.ac.za

Appendix K
Consent Form

CONSENT FORM

Title of Research Project: The relationship between occupational stress, coping and emotional intelligence in a sample of academics at the University of the Westerns Cape.

The study has been explained to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits.

Participant's name……..

Participant's signature……

Date……