

ANTECEDENTS AND OUTCOMES OF WORK-RELATED PSYCHOLOGICAL  
WELL-BEING OF STAFF MEMBERS OF THE UNIVERSITY OF NAMIBIA

A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT

OF THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

AT

THE UNIVERSITY OF NAMIBIA

BY

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MARCH 2013

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## ABSTRACT

**Title:** Antecedents and outcomes of work-related psychological well-being of staff members of the University of Namibia

**Key words:** Well-being, work engagement, psychological meaningfulness, psychological safety, psychological availability, higher education

The aim of this study was to investigate the antecedents of work-related psychological well-being and the individual and organisational outcomes thereof for staff members of the University of Namibia. Psychological well-being was conceptualized as an interrelated process between antecedent variables, psychological conditions, burnout, and work engagement. Institutions of Higher Education across the world have experienced tremendous changes during the past few decades. Academics have been envied for their tenure, light workloads, flexibility and perks, such as overseas trips for study and conference purposes, and the freedom to pursue their own research interests. However, during the past two decades many of these advantages have been eroded and higher education institutions no longer provide the low stress working environment that it once did, thereby threatening the psychological well-being of staff members of these institutions. The potential costs of poor psychological well-being to organisations include low morale, low quality of services and products, and high absenteeism and turnover rates.

A structured questionnaire comprising scales from various measuring instruments (Antecedents Scale, Psychological Conditions Scale, Work Engagement Scale,

Organisational Commitment Scale, Turnover Intention Scale, and the General Health Questionnaire) was used to collect both quantitative and qualitative data. Research participants included all the employees ( $n = 306$ ) of the University of Namibia. Making use of SPSS 20.0, the researcher carried out the following statistical analyses: descriptive analysis, factor analysis, correlation analysis, hierarchical regression analysis and indirect effects. Results from the quantitative analyses showed that emotional and physical engagement was significantly predicted by work-role fit ( $\beta = .30, p < 0.01$ ), co-worker relations ( $\beta = .20, p < 0.01$ ) and psychological meaning ( $\beta = .39, p < 0.01$ ). Organisational commitment was significantly predicted by psychological meaningfulness ( $\beta = .50, p < 0.01$ ) and emotional and physical engagement ( $\beta = .50, p < 0.01$ ). The study further confirmed that work role fit ( $r = -.31, p < 0.01$ ), psychological meaningfulness ( $r = -.40, p < 0.01$ ), emotional and physical engagement ( $r = -.41, p < 0.01$ ), and organisational commitment ( $r = -.37, p < 0.01$ ) are negatively related to turnover intention. The results further demonstrated the significant effect of qualifications ( $p < 0.01$ ;  $\eta^2 = 0.08$ ) on cognitive engagement. Content analysis of the qualitative data indicated that employment resources played a significant role in work engagement and turnover intention, both as contributing and restraining factors. Work overload and management style were identified as significant restraining factors which detracted from emotional and physical engagement. This study provides important knowledge pertaining to the antecedents and outcomes of engagement and turnover intentions which can be used to develop future intervention strategies to prevent burnout, detachment and withdrawal behaviour of staff members of the University of Namibia.

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## **ACKNOWLEDGEMENTS**

I would hereby like to thank God my Saviour for being my source and strength through the many trials and tribulations that I faced while doing this PhD. This dissertation is a testimony to Your awesome grace, faithfulness and unfailing love. May I always remember from where my help stems.

Prof. Ian Rothmann (my promoter) – a million thank you's will not be enough to express my gratitude for your guidance and support during this process. You truly embody the values of positive psychology. May this work and subsequent publications be a continuation of your legacy.

Prof. S. Babalola – thank you for your tireless effort to have the examination process completed. Your encouragement and prayers kept me going when I felt discouraged and hopeless. You truly are a God-send.

Staff members of the University of Namibia (participants) – This dissertation would not have been born, were it not for your patience and willingness to participate in this study. Thank you so much for your time, energy and honesty when completing my questionnaire.

To my family, friends and colleagues – You have been an incredible support system throughout this whole process. Thank you for your prayers and words of encouragement. Thank you for understanding when I could not attend celebrations

and social gatherings, and for forgiving all the forgotten birthdays and un-replied sms'es. In particular, I want to thank my sister Tia and her husband Zezito for their unwavering support during this process. I also wish to thank Manfred Janik (my colleague), in particular, for traveling this journey with me, and for carrying my PhD burden many a time with me. You have a friend for life!

To Dr Talita Smit – Thank you for editing this dissertation at such short notice, and for fine-combing this document so thoroughly.

Finally, to the UNAM Staff Development Office – I appreciate the financial assistance and help with the administrative processes of being on staff development. Your office enabled me to complete my life's ambition at such a young age.

## **DEDICATION**

I dedicate this dissertation to Manuel and Maria Marques (my parents), who instilled in me the values of discipline, perseverance and unwavering faith.

I also dedicate this dissertation to Quintin Hanstein (my husband), and my two daughters (Jordan and Kayden). I am truly blessed to have such a wonderful and supportive family. Thank you for believing in me so completely and giving me the courage to continue when I felt that I couldn't go on. I hope that this dissertation will be a source of inspiration to my daughters, and that they will never lose their fascination with life.

**DECLARATION**

I, Lilita A. Marques, declare hereby that this study is a true reflection of my own research and that this work or part thereof has not been submitted for a degree in any other institution of higher education.

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Lilita A. Marques

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Date

**LIST OF ABBREVIATIONS**

Abbreviation	Meaning	Page
GRN	Government of the Republic of Namibia	9
HEI	Higher Education Institutions	9
NCHE	National Council for Higher Education	9
HE	Higher Education	10
GDP	Gross Domestic Product	10
SET	Social Exchange Theory	22
NQA	Namibia Qualifications Authority	27
UNAM	University of Namibia	48
NPC	National Planning Commission	51
PWB	Psychological well-being	54
SWB	Subjective well-being	55
SDT	Self-determination theory	63
UWES	Utrecht Work Engagement Scale	71
MBI	Maslach Burnout Inventory	79
JDC	Job Demands-Control model	125
JDCS	Job Demand-Control-Support	125
JD-R	Job Demands-Resources model	126
COBE	Comprehensive burnout and engagement model	132
COR	Conservation of Resources theory	133
TCM	Three component model	152

AC	Affective commitment	152
CC	Continuous commitment	152
NC	Normative commitment	152
PSS	Perceived supervisory support	167
POS	Perceived organisational support	167
GHQ	General Health Questionnaire	187
AS	Antecedents scale	187
WRFS	Work Role Fit Scale	188
JDS	Job Diagnostic Survey	190
PCS	Psychological Conditions Scale	194
WES	Work Engagement Scale	196
OCS	Organisational Commitment Scale	198
TIS	Turnover Intention Scale	200
SPSS	Statistical Package for the Social Sciences	206
PCA	Principal component analysis	206
MANOVA	Multivariate analysis of variance	207

## **CHAPTER 1**

### **INTRODUCTION**

This dissertation is about the psychological well-being of employees at a higher education institution in Namibia. More specifically, it addresses the work engagement of employees, antecedent variables, psychological conditions, as well as the individual and organisational outcomes thereof.

The aim of this chapter is to provide a background and justification for this study. Furthermore, research objectives which guided the methodology of this study are established. Finally, the methodological approach to this study is briefly described in terms of the research design, participants, measuring instruments, procedure and data analysis.

#### **1.1 BACKGROUND AND MOTIVATION FOR THE STUDY**

During the last two decades, organisations across the world have increasingly been challenged to adapt to a continuously changing environment (Rothmann & Barkhuizen, 2008). The development of new technologies all over the world and the growing globalisation of economies have produced the fastest and biggest technological change ever (Schabracq & Cooper, 2000). Organisations, including Higher Education institutions from all over the globe, have been confronted with a series of complex changes, challenging their mandates, traditional practices, authority and organisational structures (Schabracq & Cooper, 2000). These new



developments have resulted in an escalating global competition where organisations are forced to play along or be left by the wayside. In this process of adapting to a changing environment, it is the employee who bears the impact of these changes. According to Strazdins, D'Souza, Lim, Broom, and Rodgers (2004), people spend much of their adult life at work; therefore, work conditions that affect mental health and physical health need serious attention. Kinman (2001) asserts that workers involved in professions that require high levels of personal interaction, such as the teaching and helping professions, are more vulnerable to occupational stress and burnout than workers in any other profession.

In order to understand why changes in the world of work have such a pervasive impact on the individual employee, it is necessary to reflect on the history and meaning of work. During the prehistoric era, work was confined simply as activities that aimed at satisfying the most basic of human needs, namely food and shelter. Tasks were divided according to age, sex and the proficiency individuals showed in particular tasks, such as gathering plants and hunting animals for food. Anthropologists aptly use the term 'hunters and gatherers' to describe the lifestyle of early human civilization. The uncertain availability of food resulted in nomadic communities who followed food sources. These communities were essentially close-knit, and the tasks of an individual were intricately linked to the well-being of the self and the community (Chalofsky & Krishna, 2009).

Changes in climatic conditions around 8000 BC allowed for the planting of crops and the domestication of livestock (Statt, 1994). The development of agriculture required

communities to establish themselves more permanently and a simple bartering system was introduced (Statt, 1994). Consequently, the first complex civilizations emerged, and work became a separate activity from leisure time (Neff, 1985). Societies became increasingly divided between those who owned resources, such as land, and those that did not own resources. More importantly though was the prevailing contradictory attitudes regarding work. On the one hand, manual work was regarded as degrading and, therefore, deemed ignoble; on the other hand, monastic orders believed that work was a form of worship to God and a way to discipline the soul, and, therefore, ennobling (Neff, 1985). The latter view, emphasizing the moral worth of work and the integrity in the performance of that work became known as the Protestant Ethic, and represented a radical shift in attitudes towards work (Statt, 1994). More individuals started to work for wages and an increasing number of people started to own businesses (Dobb, 1963). The 18<sup>th</sup> and 19<sup>th</sup> centuries saw the rise of large scale manufacturing and mining industries in an era marked as the Industrial Revolution. This era also brought with it an important shift in the psychological relationships between employers and employees (Marglin, 1974).

Work plays a central role in the lives of people as it provides people with the opportunity to interact with the social, political and economic world (Blustein, Schultheiss, & Flum, 2004). The Cambridge Advanced Learner's Dictionary (2010, p. 1678) defines work as "an activity, such as a job, which a person uses physical or mental effort to do, usually for money." McClure and Brown (2008) maintain that in order to fully comprehend the human experience of work, it is necessary to

understand the on-going interactions and relationships between the psychological functioning of human beings and job contextual characteristics.

Work fulfils three fundamental human needs, namely the need for survival, relatedness, and self-determination (Blustein, 2006). The first need that work fulfils relates to the continued survival of the human race (Blustein, 2008). This need for survival is the driving force behind human experience and motivation (Maslow, 1943). Without work, people struggle to get money or other resources to sustain themselves and or significant others. History shows that as early civilizations gained access to resources, societies became increasingly stratified, dividing people into social classes (Giddens, Duneier, & Applebaum, 2005), a phenomenon still evident in many societies today. This social categorization often results in some classes of people having access to better education, health and meaningful work (Carter, 2004).

Secondly, working gives people access to social support and relational connectedness (Blustein, 2008). Working allows people to have both formal and informal interactions with other people, thereby connecting them to the broader social and cultural fabric of life (Blustein, 2006). The third critical need that working fulfils is the need for self-determination (Blustein, 2008). Ryan and Deci (2000) describe self-determination as an experience of authenticity that is characterized by a sense that one is steering the direction of one's life. According to Ryan and Deci (2000), self-determination provides important insight into how people are internally motivated to engage in working through three psychological needs (autonomy, competence, and relatedness), even when they face high job demands and uninteresting jobs.

Blustein (2008) maintains that people's hopes and dreams are tied to their work. When people find their work fulfilling, it can lead to psychological health and well-being. However, when work is unavailable or causes misery, it can be a source of great despair and frustration (Blustein, 2008). Statt (1994, p. 86) states that "paid employment ... provides some measure of independence and autonomy, a feeling of competence, achievement and self-worth, a feeling of being valued, and of making a contribution and of belonging." Gill (1999) asserts that the institution of paid work now fulfils the psychological needs of human beings that were fulfilled in the past with religion, family and society.

Although the detrimental impact of stress on academic life is undeniable, some individuals still flourish despite being exposed to high job demands. Instead such individuals find pleasure in dealing with these stressors, taking obstacles in their stride and finding creative ways to cope with high job demands (Jackson, Rothmann, & Van de Vijver, 2006). From a positive psychological perspective, these individuals can be described as engaged in their work. Engaged employees find their work meaningful, and experience eustress instead of distress. Eustress refers to the extent to which the cognitive appraisal of a situation enhances an individual's well-being (Jackson et al., 2006). Engaged employees focus on positive job aspects, such as learning opportunities, task variety, opportunities for advancement, and relationships with supervisors and co-workers to create psychological meaningfulness which is necessary for optimal performance (Frey, Jonas, & Greitemeyer, 2003). Although the field of psychological well-being and mental health is burgeoning, it still remains underdeveloped (Strauser, Lustig, & Çiftçi, 2008).

The 1980's and 1990's have seen many Higher Education systems expand while resources have not increased proportionally (Lacy & Sheehan, 1997). This has led to rising expressions of concern over the quality of Higher Education, and high levels of disillusionment among academic staff (Lacy & Sheehan, 1997). Although not highly paid, in comparison to professionals in the commercial sector, academics have been envied for their tenure, light workloads, flexibility, perks such as overseas trips for study and conference purposes, and the freedom to pursue their own research interests (Gillespie, Walsh, Winefield, Dua, & Stough, 2001). Other perks such as autonomy, role clarity and a collegiate culture were thought to protect academics from occupational stressors and strains (Kinman & Jones, 2003).

During the past two decades many of these advantages have been diminished and Higher Education institutions are no longer the low-stress working environment they once were (Tytherleigh, Webb, Cooper, & Rickerts, 2005). According to Kinman and Jones (2003; 2008), academics now experience similar, if not more, pressures and strains as other professionals in the commercial sector. The salaries of academics have not kept pace, increasing number of academic positions are now untenured, student numbers and consequently workloads have increased, and academics are under increasing pressure to attract external funds to “publish or perish” (Gillespie et al., 2001). Research on stress among academic and general staff members of universities from across the globe indicates that the phenomenon of occupational stress in universities is alarmingly widespread and increasing, and that it will continue to increase in future decades (Gillespie et al., 2001).

According to Lacy and Sheehan (1997, p. 306), it is not uncommon in many universities to hear academic staff members comment that “morale has never been lower”, or that “staff are at breaking point”. Stress among academic and general staff members of universities significantly affects the quality of both teaching and research, and results in feelings of detachment, low job satisfaction and low job commitment, which may be contagious for students and colleagues (Schabracq & Cooper, 2000). Tytherleigh et al. (2005) further note that the ongoing changes in universities are related to ill-health and poor psychological well-being. Thus, the consequences of academic stress may be more far reaching than previously thought. Michailidis (2008, p.196) defines occupational stress as “the harmful physical and emotional responses that occur when job requirements do not match the capabilities, resources, and needs of the individual worker, in other words, there appears to be an incompatibility between the individual and his/her environment.” According to Jamal (1999), job stress is regarded as a serious occupational health hazard affecting the health and well-being of employees.

Research conducted by Tytherleigh et al. (2005) indicates that the Higher Education sector in Europe, the United Kingdom, New Zealand (Gillespie et al., 2001; Houston, Meyer, & Paewai, 2006) and Australia (Winter, Taylor, & Sarros, 2000) have also undergone significant changes in the past few years. These changes include restructuring, increasing use of atypical employment contracts, external scrutiny. Furthermore, major reductions in funding have far reaching consequences for the employees of these institutions (Tytherleigh et al., 2005). Other challenges include excessive working hours, heavy workloads, increasing administrative work, lack of

promotion opportunities, inadequate salaries, role ambiguity, diminishing resources, increased teaching loads and student to staff ratios, pressure to attract external funds, job insecurity, poor management, and a lack of reward and recognition. According to Tytherleigh et al. (2005), university staff members are underpaid, demoralised and demotivated. This notion was supported by a survey carried out in the UK that found that 93% of university staff members suffered from work-related strain. About half of the participants indicated their morale worsened over time, and that the increasing workload and working over weekends were taking its toll.

Perlberg and Keinan (1986) indicated that 60% of the total strain of academic life came from their work. They further identified the ten most troublesome factors in academe. These include: imposing excessively high self-expectations, securing financial support for research, having insufficient time to keep abreast with current events in fields of interest, low pay for work done, striving for publication of research conducted, feeling continually overloaded with work, job demands interfering with personal activities, lack of progress in career, interruptions due to administration, and meetings. Other research (Clagett, 1980; Eckert & William, 1972; Melendez & De Guzman, 1983) identified the following sources of stress: faculty apathy, student apathy, workload, unprepared students, routine duties, poor facilities, and administrative red tape.

## 1.2 PROBLEM STATEMENT

Like educational institutions in Europe and elsewhere, institutions of Higher Education across Africa have also been subjected to drastic changes over the last decade. According to Ssesanga and Garrett (2005), in Uganda academics are under increasing pressure to perform more effectively and efficiently, under adverse and declining circumstances. Likewise, academics in South African institutions of higher learning are expected to give more in terms of time, effort, skills and research output, whilst facing increased enrolment, rigorous promotional criteria and diminished resources (Barkhuizen & Rothmann, 2008). Thus, employees are now faced with demands for greater accountability, value for money, efficiency and quality, while factors such as autonomy and control which once motivated and “protected” staff from high levels of strain, are being eroded (Tytherleigh et al., 2005). Ofoegbu and Nwadiani (2006) found that among eight Nigerian universities the following prominent challenges were identified: a lack of facilities and instructional resources, poor interpersonal relationships among staff (i.e. in particular between academic and non-academic staff members) and between students and administration, increased militant behaviour by students and unmanageable student populations.

Namibia is no exception. Since its independence in 1990, the Government of the Republic of Namibia (GRN) has invested significantly in the Higher Education sector, in the form of policy reforms, improvements in the infrastructure of Higher Education Institutions (HEI's), and the inception of various funding schemes to improve student access to Higher Education (NCHE, 2010a). At present, Namibia



has a relatively small, fragmented Higher Education (HE) system which is subjected to various economic, political and societal pressures. Namibia currently has public (i.e. the University of Namibia and the Polytechnic of Namibia) and private (International University of Management) Higher Education institutions, as well as various post-secondary institutions, such as colleges and vocational training centres and other organisations that operate under the auspices of various ministries (NCHE, 2010a).

Namibia's shared history with the Apartheid regime in South Africa has left its mark on the general education system, as evident in the imbalances and inequalities that are pervasive in this sector. While the Government of Republic of Namibia is aiming towards transforming Namibia into a knowledge-based economy, with a high quality of life at all levels of society (GRN, 2004), there is a growing gap between the rich and poor which further leads to the exclusion of rural students and students from marginalised groups, in particular. In addition, increasingly weak high school graduates are emerging from basic education which ultimately influences the calibre of students at tertiary level (NCHE, 2010a). This calls for significant improvements in the quality of elementary, primary and secondary schools in Namibia (NCHE, 2010a). Moreover, although the government of Namibia allocates a substantial amount of its Gross Domestic Product (GDP) to education, a lack of a national funding formula with clear criteria on how to distribute funding to the various educational institutions is promoting unhealthy competition and hostility between these institutions. Furthermore, in the quest to produce a highly skilled labour force that can transform Namibia into a knowledge-based economy, the relevance of HEI

programs are increasingly being questioned in terms of national priority (NCHE, 2010a). Other challenges faced by higher education institutions in Namibia are high turnover rates by staff members, mainly attributable to perceptions of poor working conditions and services, and infrastructure (i.e. office and lecture venues, on-campus leisure facilities, library resources, Information Communication Technology) that does not meet the needs of ever-expanding Higher Education institutions (NCHE, 2010b).

Higher education institutions in Namibia currently face a 'brain-drain' with more and more highly skilled and qualified individuals opting for better opportunities and compensation in the corporate world. Finally, institutions of Higher Education in Namibia are relatively young compared to other institutions of Higher Education in Africa, Europe and the United States. As a result, staff members of these institutions in Namibia often lack the competencies and institutional support that are required to produce high quality research outputs. These challenges have placed tremendous pressure on staff members of these institutions. This study, therefore, endeavoured to investigate the psychological well-being, the antecedents of work engagement and the outcomes thereof of staff members of the University of Namibia. This study further aimed to identify the most significant helping and restraining factors contributing to engagement and turnover intention.

According to Schabracq and Cooper (2000), prolonged periods of pressure may result in poor psychological well-being. The potential costs of strain to organisations include low morale, low quality of services and products, poor internal

communication and increase in conflicts, bad publicity, high absenteeism and turnover. This potential cost of strain is a growing concern because it has significant economic implications for organisations through employee dissatisfaction, lowered productivity and lowered psychological and physical health. Siu (2002) agrees that the implications of employee strain on organisations include reduced employee performance, diminished staff morale and poor quality control.

Gillespie et al. (2001) postulated that high levels of occupational strain that are left unchecked and unmanaged undermine the quality, productivity, and creativity of an employee's work, as well as to the employee's health, well-being and morale. According to Dua (1994), there is a general agreement on the factors that constitute organisational stressors. These include intrinsic job factors, such as poor working conditions and work overload, roles in organisations (i.e. role conflict and role ambiguity), career development possibilities, poor work relationships and the organisational culture. These stress factors reported high correlations with job dissatisfaction, psychological distress, and absence from work due to illness.

In contrast, Lacy and Sheehan (1997) found that academics were generally satisfied with their work environment, but that there were high levels of dissatisfaction and stress with compensation-related elements of the job. Research conducted by Kinman (1998) indicated that academic staff reported difficulty in maintaining firm boundaries between the workplace and home. As a result, they often felt emotionally and physically drained by their jobs (Kinman, 2001).

One of the first and largest studies of stress in Higher Education conducted in the United States by Gmelch, Wilke, and Lovrich (1986) indicated that 60% of the stress experienced by academics came from their work as opposed to other life domains (Kinman & Jones, 2003). This study identified the following five stressors: reward and recognition, time constraints, departmental influence, professional identity and student interaction (Kinman & Jones, 2003). In a later study conducted by Blix, Cruise, Mitchell, and Blix (1994) it was found that 66% of academics from a university in the United States perceived severe levels of stress at work at least half of the time; most of this stress related directly to limited resources, time constraints, limited prospects for career advancement, poor communication and inadequate salaries (Kinman & Jones, 2003). Results from Gmelch et al.'s (1986) study also showed that 48% of respondents reported depression and anxiety resulting from work stress, and that 84% considered their productivity and performance to have been negatively affected. This signifies that there is growing evidence that occupational stressors and strains are increasing for academics in the United States of America (Kinman & Jones, 2003).

Research conducted by Boyd and Wylie (1994) suggested that working conditions for academics in these two countries have changed considerably in recent years. Heavier workloads have resulted in inter-personal conflict in staff relationships, less time for research and professional development, and reduced quality of teaching and research (Kinman & Jones, 2003). It was also found that academics work an average of 55 hours a week during term time and almost half of this work was conducted during evenings and weekends. Interestingly, most of this time was spent on

administration rather than teaching or research. In this study, five major stressors were identified: lack of human and technical resources, insufficient research funding, work overload, poor leadership and management, job insecurity, and lack of promotion, recognition and reward (Kinman, 1998). The study further found that academics reported higher levels of psychological distress than several other occupational groups including teachers and prison officers (Tytherleigh et al., 2005). In the United Kingdom, an epidemiological study of job satisfaction in 143 occupational groups placed university and polytechnic teaching professionals in the bottom 25% (Kinman & Jones, 2003). Research conducted by Doyle and Hind (1998) found levels of burnout in a sample of academic staff to be similar to those reported by members of the medical profession. Although academics might have been relatively privileged in the past, teaching and research in Higher Education institutions across the world have become comparatively stressful and unsatisfying, even distressing. Many reasons could be proposed; most could be linked to the widespread and rapid changes that have overtaken the sector over the past decade (Gillespie et al., 2001). Demands for greater accountability, efficiency and quality have further taxed the resources of the sector (Kinman, 2001).

Working in an environment where working conditions are eroding, resources are diminishing and workloads increase continuously, is a remarkable challenge to the well-being of individuals. When individuals face increasing demands and challenging working conditions without the necessary resources, support or coping skills, their well-being is compromised. Mor Barak and Levin (2002) define well-being as showing good mental health and an overall positive disposition. The well-

being of employees should be of particular concern to organisations. When organisations take care of their employees, the employees will reciprocate and take care of the organisation, thus signifying the important relationship between the well-being of employees and the profitability and success of the organisation (Pfeffer, 1998). High levels of psychological well-being and work engagement play an important role in fostering an organisational culture associated with success, high performance criteria and organisational effectiveness (Robertson & Cooper, 2010). Engaged employees flourish despite high job demands, and use the available job resources to express themselves physically, cognitively, emotionally and mentally (Kahn, 1990). The extent to which employees use these job resources and invest themselves in their work roles are influenced by three psychological conditions, namely meaning, availability, and safety.

### **1.3 JUSTIFICATION FOR THE STUDY**

This study is important for the following reasons. Firstly, this study investigates the psychological well-being of staff members of the University of Namibia from a positive psychology perspective. Positive psychology attempts to take a more positive and appreciative stance regarding the potentials, strengths, motives and optimal functioning of human beings (Sheldon & King, 2001). Seligman and Csikszentmihalyi (2000) explained that the predominant thrust of traditional psychology has been to focus on the diagnosis and treatment of pathology within a disease model of human functioning. Positive psychology focuses on the well-being of individuals which revolves around two distinct paradigms, namely hedonia and

eudaimonia (Ryan & Deci, 2001). The hedonic perspective defines well-being in terms of individuals' subjective happiness through the attainment of pleasure and the avoidance of pain (Deci & Ryan, 2008). Happiness, described as one of the most obscure words in the English language (Haybron, 2003), represents pleasure, contentment, or gladness (Delbridge, Blair, Peters, & Butler, 1996). Early philosophers reasoned that happiness is a privilege reserved only for the Gods (Hosie & Sevastos, 2010). Eudaimonia, on the other hand, views well-being as the striving for meaning and self-realization, and ultimately the fulfilment of one's potential (Ryan & Deci, 2001). Eudaimonia is especially important because it draws a distinction between happiness and well-being. Individuals who evaluate themselves as happy are not necessarily psychologically well (Ryan & Deci, 2001). Psychological well-being requires individuals to be authentic, search for meaning, and engaging in activities that fosters personal growth (Ryff & Singer, 2008). Justified by the underpinnings of positive psychology, this study therefore focuses on psychological well-being as an important outcome, resulting from work engagement (as the antipode of burnout). Burnout and work engagement can be conceptualized as a model of employees' wellness (Rothmann, 2002).

Secondly, this study is important for the health of the University of Namibia as an organisation. A healthy work organisation is an organisation that "maximizes the integration of worker goals for well-being and company objectives for profitability and productivity" (Sauter, Lim, & Murphy, 1996, p. 250). An important component of establishing a healthy work organisation is the evaluation of the work environment to identify what is needed to facilitate and support health behaviours of employees

(DeJoy & Wilson, 2003). The evaluation of the work environment predominantly focuses on how the work is organised in terms of the structure and characteristics of the organisation, the job demands, management style, interpersonal aspects, work scheduling and other organisational practices (DeJoy & Wilson, 2003). The rationale for aiming towards a healthy work organisation is the notion that a healthy work organisation leads to a healthier and more productive workforce, which will subsequently lead to increased productivity and competitive advantage for the organisation (Grawitch, Gottschalk, & Munz, 2006).

#### **1.4 RESEARCH OBJECTIVES**

As of yet, no research have been conducted to examine the psychological well-being of staff members in Namibian institutions of Higher Education. Therefore, the objective of this study was firstly to investigate the psychological well-being of staff members of the University of Namibia as the most important outcome of the interplay between antecedent variables, psychological conditions and work engagement. Secondly, this study endeavoured to investigate the antecedents and outcomes of work engagement. Thirdly, the impact of helping and restraining factors on staff members' levels of engagement and turnover intentions were investigated. Based on these broad aims, the following research objectives are formulated:

- To conceptualise psychological well-being, work engagement, psychological conditions, antecedent variables and outcome variables from the literature.
- To investigate the relationships between work role fit, supervisory relations, co-worker relations, resources, job enrichment, rewards and recognition, self-



consciousness, organisational support and psychological meaning of staff members of the University of Namibia.

- To evaluate the relationships between work role fit, supervisory relations, co-worker relations, resources, job enrichment, rewards and recognition, self-consciousness, organisational support and psychological availability of staff members of the University of Namibia.
- To determine the relationships between work role fit, supervisory relations, co-worker relations, resources, job enrichment, rewards and recognition, self-consciousness, organisational support and psychological safety of staff members of the University of Namibia.
- To determine the role that psychological meaning, psychological availability, and psychological safety play in the relationships between antecedent variables (work role fit, supervisory relations, co-worker relations, resources, job enrichment, rewards and recognition, self-consciousness, organisational support), and work engagement and outcome variables.
- To establish the relationships between psychological meaning, psychological safety, psychological availability and work engagement of staff members of the University of Namibia.
- To determine the relationship between work engagement and organisational commitment, turnover intention, and ill-health of staff members of the University of Namibia.
- To identify the most significant differences regarding antecedent variables, psychological conditions, engagement dimensions and outcome variables based on demographic variables (age, gender, qualifications, job tenure, job

position, years at the organisation, and type of contract) of staff members of the University of Namibia.

- To investigate the most important contributing and restraining factors contributing to work engagement and turnover intentions of staff members of the University of Namibia.
- To develop a model of work-related psychological well-being for the staff members of the University of Namibia.

## **1.5 SIGNIFICANCE OF THE STUDY**

This study is significant for the following reasons: firstly, it approaches the concept of psychological well-being in a unique manner. Psychological well-being is conceptualized as an outcome of various antecedent variables (work role fit, supervisory relations, co-worker relations, resources, job enrichment, rewards and recognition, self-consciousness, organisational support) that are influenced by psychological conditions (psychological meaningfulness, psychological availability, and psychological safety), which impact the work engagement or burnout experienced by individuals. Secondly, this study examines the impact that psychological well-being has on both organisational (affective commitment and turnover intention) and individual (health) outcomes. Managers often underestimate the impact that poor psychological well-being experienced by employees has on important business outcomes, such as commitment, turnover intentions and employee health. This study provides evidence of the relevance and significance of the psychological well-being of employees. Thirdly, this study integrates both

quantitative and qualitative research design methods as a holistic approach to the study of psychological well-being. Fourthly, very little research has been done thus far on the psychological well-being of employees in the Namibian context. This study not only adds to the body of literature concerning psychological well-being, it also provides an impetus to spark further research directions.

## **1.6 DEFINITIONS OF KEY TERMS**

The Cambridge Advanced Learner's Dictionary (2010) defined an educator as an individual who educates or teaches, or who is involved in the development and implementation of educational programs.

Higher education institutions, also known as tertiary institutions, have been described as institutional bodies that offer education beyond secondary school level. In short, Higher Education generally means university level education. Depending on the country and context, first degrees at a Higher Education institution typically take three to four years to complete. The qualifications offered by these institutions should enable someone to work in a professional field, and it will usually be taught in an environment which also includes an advanced research component. Higher Education institutions may also offer postgraduate degrees, such as postgraduate diplomas, Master's degree courses and Doctoral programs. These courses and programmes should be accredited by a qualification's authority and are therefore recognized as representing specialist expertise supported by a wide range of knowledge and skills (<http://www.wg.aegee.org/ewg/higheredu.htm>)

Work role fit refers to the match or compatibility between a person's self-concept and the context and activities of the job (Scroggins, 2008). A continued good fit may lead to an increase in the self-worth and efficacy beliefs of individuals, as well as increase individuals' well-being (Resick, Baltes, & Shantz, 2007). Work role fit further has motivating potential as individuals derive meaning from their work activities (Scroggins, 2008).

Supervisory relations describe the professional relationship and interactions with one's immediate manager or supervisory that is ideally characterized by support, encouragement, empowerment, constructive feedback and transparency (Deci & Ryan, 1987). May, Gilson, and Harter (2004) further noted that such supportive supervisory relations enhance an employee's self-determination and passion for his or her work.

Co-worker relations refer to rewarding interpersonal interactions with colleagues and satisfy inherent needs for belonging and group membership (May et al., 2004). The interpersonal relations are underscored by interpersonal trust which can either be cognitive-based or affective-based (May et al., 2004).

Resources are the physical, psychological, social or organisational aspects of the job that reduce job demands, facilitate the achievement of goals and enhance personal growth, learning and development (Demerouti, Nachreiner, Bakker, & Schaufeli, 2001). These resources can manifest in various ways and may come from various

levels, such as the organisation, interpersonal and social relations, work and task structure (Bakker, Demerouti, Hakanen, & Xanthopoulou, 2007).

Perceived organisational support has been described as an employee's perceptions about the commitment and concern that the organisation has toward him or her (Hutchison, 1997). Often related to the Social Exchange Theory (SET) (Blau, 1964), perceived organisational support is understood as a reciprocal process with unspecified obligations on the part of both parties (Hutchison, 1997).

Job enrichment, also known as “vertical job loading”, has been defined by Chung and Ross (1977) as a type of job design that allows employees to perform managerial or supervisory duties and functions, such as increased participation in decision-making, autonomy and more responsibility. Hackman, Oldham, Janson and Purdy (1975) posit that five core job characteristics, namely: skills variety, task identity, task significance, autonomy and feedback, underlie job enrichment and enable individuals to express their unique capabilities and skills. Chalmers (2011) refers to rewards and recognition as any mechanism aimed at acknowledging, appreciating and valuing work well done. In academia, rewards and recognition are typically in the form of awards, promotions, fellowships and research grants.

Fenigstein, Scheier, and Buss (1975, p. 522) define self-consciousness as “the consistent tendencies of persons to direct their attention inward or outward.” Self-consciousness is characterized by excessive self-awareness and a focus on external

cues. Such individuals are more likely to be distracted because they are continuously focused on the impression they make on others.

Psychological availability has been defined by Kahn (1990, p. 714) as “the sense of having the physical, emotional, or psychological resources to personally engage at a particular moment”. May et al. (2004) further maintains that psychological availability indicates a person’s readiness to engage in a work role at any given time.

Psychological meaningfulness has been defined as “a multidimensional construct consisting of the cognisance of order, coherence, and purpose in one’s existence, the pursuit and attainment of worthwhile goals, and the accompanying sense of fulfilment” (Reker, 2000, p. 41).

Kahn (1990, p. 708) defines psychological safety as being “able to show and employ one’s self without fear of negative consequences to self-image, status, or career.” It encompasses perceptions of being comfortable and confident to show one’s authentic self in a work role (Edmondson, 1999).

Described as the antipode of burnout, work engagement is defined as a positive, fulfilling, work-related state of mind that is often conceptualized as consisting of the following dimensions: vigour, dedication and absorption (Schaufeli & Bakker, 2004). Kahn (1990) describes engagement at work as an experience whereby employees invest and express their physical, cognitive and emotional resources in their role performances.

In contrast, burnout is described as the “erosion of engagement” or a state of “mental weariness” (Schaufeli & Bakker, 2004, p. 294). Burnout has been conceptualized as consisting of the following three dimensions: exhaustion, cynicism and professional inefficacy (Schaufeli & Bakker, 2004). Prevalent across occupations and industries, especially in the helping professions, burnout has serious consequences for both individuals and the organisations people who suffer from burnout work for.

Panaccio and Vandenberghe (2009, p. 226) define psychological well-being as the presence of positive affect, the absence of negative affect, and the experience of a sense of job satisfaction and life satisfaction. Psychological well-being is an important dimension of a person’s overall well-being (Danna & Griffin, 1999).

Mowday, Steers and Porter (1979, p. 226) define organisational commitment as “the relative strength of an individual’s identification with and involvement in a particular organisation.” Organisational commitment has been conceptualized as consisting of three dimensions, namely affective, continuance and normative commitment (Allen & Meyer, 1990). Relevant to this study, affective commitment is described as “an affective or emotional attachment to the organisation such that the strongly committed identifies with, is involved in, and enjoys membership in, the organisation” (Allen & Meyer, 1990, p. 2).

Turnover intention has been defined by Carmeli and Weisberg (2006, p. 193) as “the subjective estimation of an individual regarding the probability that she/he will be leaving the organisation she/he worked for in the near future.” Turnover intention is

essentially a form of withdrawal cognitions and behaviour (Mobley, 1977), and has consistently been identified as being the main predictor of actual turnover behaviour (Steers & Mowday, 1981).

Danna and Griffin (1999) maintain that health and well-being are inextricably linked, and are often described along the following dimensions: physical, emotional, psychological and mental dimensions. The World Health Organisation (1998) defines health as a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity.

## **1.7 OVERVIEW OF CHAPTERS**

Chapter Two describes important literature related to the changing landscape of Higher Education institutions, the world of work and the increasing occupational stressors of academia, as well as a brief background of the University of Namibia. Chapter Two is followed by a literature review in Chapter Three that discusses psychological well-being at work. Psychological well-being is conceptualised in terms of its most important theoretical frameworks and research results. Chapter Four describes the antecedents of work engagement, and the theoretical models of work engagement in relation to relevant findings from previous research. Chapter Five describes organisational commitment, turnover intention and ill-health as important individual and organisational outcomes, as well as related empirical findings from previous studies. This is followed by Chapter Six which outlines in detail the research methodology that was used in this study in terms of the research



design, the participants, measurement instruments, data collection procedures and the anticipated data analysis techniques. The results, as guided by the research objectives, are presented in Chapter Seven in a logical and concise manner. In addition, the discussion of results is also presented in chapter seven. Finally, Chapter Eight synthesizes the literature and hypotheses with the empirical findings of this study in a conclusion and recommendations for improvement and future research endeavours. This chapter also highlights significant limitations of the study. A comprehensive reference list and annexures are attached to the study.

### **1.8 CHAPTER SUMMARY**

This chapter introduced the main aim of this study, as well as gave background and justification for the relevance of this study. Key terms were defined and the research methodology in terms of the research design, participants, measuring instruments, procedure and data analysis was delineated. This chapter also provided a brief overview of the content of the chapters to follow.

Chapter 2 focuses on the changing environment of Institutions of Higher Education across the world. It further discusses the work context and roles that staff members of these institutions occupy. In addition, as the institution of interest in this study, a background history of the University of Namibia is provided.

## **CHAPTER 2**

### **HIGHER EDUCATION INSTITUTIONS**

This chapter includes a definition of a Higher Education institution and discusses the changing landscape of institutions of Higher Education over the past few decades. In doing so, it lays the foundation for understanding the current context within which these institutions function. Furthermore, the work context and work-roles of staff members are described. Finally, this chapter concludes with a background history of the University of Namibia.

#### **2.1 DEFINITION OF A HIGHER EDUCATION INSTITUTION**

In the Namibian context, a Higher Education institution is defined as any institution, or branch that provides Higher Education and that is registered with the National Council for Higher Education (NCHE) and whose academic programs are accredited by the Namibia Qualifications Authority (NQA) (Higher Education Act No. 26 of 2003). The NQA and NCHE are statutory bodies which are established by an Act of Parliament (<http://www.unesco.org/new/en/education/resources/unesco-portal-to-recognized-higher-education-institutions/dynamic-single-view/news/namibia/>)

The terms “university”, “tertiary institution”, and “higher education institution” are often used interchangeably. Adapted from the Oxford English Dictionary (XIX), Birtwistle (2003, p. 229) defines a university as follows: “A university is the whole body of teachers and scholars engaged, in a particular place, in giving and receiving

instruction in the higher branches of learning; such persons associated together as a society or corporate body, with definite organisation and acknowledged powers and privileges (especially that of conferring degrees), and forming an institution for the promotion of education in the higher or more important branches of learning; also, the colleges, buildings and other property belonging to such a body” (The Oxford English Dictionary, XIX).

According to Bridges (2006, p. 374), a higher education institution typically has the following features:

- It has residence in the physical environment of a university, in the company of a large number of other students of a broadly similar age (roughly 18 to 21), with a vibrant social and (diverse) cultural life, for three consecutive terms (depending on the context) over the course of three years;
- It uses a combination of a variety of teaching modes, such as reading, writing, listening to lectures, participation in seminars and tutorials, and, where appropriate, laboratory work;
- It engages with “academic” knowledge in which, on the whole, abstract concepts are esteemed above concrete practices, and critical and creative capabilities above routinized skills;
- It involves studying and interacting with teaching staff who are similarly resident in proximity to the university and who have successfully qualified for their positions through recognized scholarly work.

Bridges (2006, p. 374) maintains that institutions of Higher Education across many different countries are currently undergoing some major changes which include: (1) the merging of traditionally separate educational and training institutions (i.e. teacher training colleges, agricultural colleges, colleges of art and design) into conglomerate universities; (2) along with this process, the transformation of professional training into an academic endeavour; (3) the combination of face-to-face instruction with distributed modes of learning; and (4) a variety of outreach initiatives (into the workplace, into accredited institutions, into the home) and modes of delivery (via the post, radio, or the Web) aimed at making Higher Education accessible to a wider range of people.

## **2.2 THE CHANGING LANDSCAPE OF INSTITUTIONS OF HIGHER EDUCATION**

It is generally accepted that universities are social institutions that are relatively stable and resistant to change (Smeenk, Teelken, Eisinga, & Doorewaard, 2009). The role and scope of Higher Education was not significantly questioned or interfered with by governments, and while the percentage of young adults going into higher education increased only slightly, the system remained largely an elite one (Deem, 2004). Tuition fees for undergraduate domiciled students were funded by government maintenance grants (Geuna, 2001). The mandate of Higher Education institutions was to educate, produce research, and to provide community service (Smeenk et al., 2009). Academic knowledge work was largely regulated internally by universities themselves, and the main decision-making bodies consisted of collegial

committees or groups of academics (Doyle & Hind, 1998). Moreover, teaching was also regulated internally and research was regarded as a private activity, a shared interest appreciated only by other academics (Doyle & Hind, 1998). The academic heads (Vice-Chancellors) of universities were regarded mainly as academic leaders. Public higher education was based on a model devoted to “the development of individual learning and human capital, the socialization and cultivation of citizens and political loyalties and the preservation of knowledge and the fostering of other legitimate pursuits for the nation-state” (Gumport, 2000, p. 74).

However, business interests and generation of money outside the funding of Higher Education institutions were already prominent at some universities during the 1970's (Deem, 2004). The 1980's sparked a new era of modernisation in the United Kingdom, and Higher Education across Europe followed suit, becoming the subject of a series of direct and indirect expansion endeavours by governments and university funding bodies (Deem, 2004). Examples of such endeavours are the gradual shift of maintenance grants by government to students and their families taking responsibility for tuition fees (Rolfe, 2002), as well as the introduction of a more contractual-oriented research funding by government (Geuna, 2001). The introduction of a contractual-oriented approach to funding research activities in universities were characterized by two main features, namely: the university was obligated to support aims that were geared towards enhancing national economic development and secondly, government allocated resources through increasing use of competitive mechanisms (Guena, 2001). This approach to Higher Education placed considerable emphasis on culture change and the need to overtly manage academics

and academic work in the context of further marketization of publicly funded education. Explicit performance and quality assurance indicators for teaching and research were used and severe restriction on expenses was implemented (Deem, 2004). Geuna (2001) explained that from the 1980's onward, the demands for nationally relevant university research, as well as increased pressure for accountability and cost reduction significantly influenced the policies and priorities of universities.

These reforms were not without challenges. This could be due to the fact that academic loyalty tends to be directed towards the basic academic unit and subject, and not the broader interest of the university as a whole (Deem, 2004). In addition, much of an academic's work activities, such as research, are done individually rather than collectively (Rolfe, 2002). Furthermore, academics, due to the nature of their profession, can critically analyse any management initiative and agenda (Rolfe, 2002). Thus, managing knowledge work in the context of an audit culture that is particularly concerned with how well academics, departments and universities are performing on short-term, outcome-based measures, such as recent publications or student evaluations of teaching, is a radically different version of traditional academic life that prevailed in the earlier years (Wiggins, 2001). As the function of many academics evolved into management roles, they were required to monitor income generation, expenditure as well as academic performance (Wiggins, 2001).

According to Kinman, Jones, and Kinman (2006), a survey of employees in UK universities examined perceptions of the changes in the sector, together with job

characteristics and working conditions that were considered to be most demanding. The majority of the lecturers and researchers indicated that their jobs had become increasingly stressful over the preceding five-year period. The research further revealed that most academics indicated that their levels of responsibility and working hours had increased considerably, coupled with a sense of reduced status in their organisations and society in general. The pressure on academics to secure funding through research and entrepreneurial activities has increased and market-led policies have demanded regular curriculum redesign (Kinman & Jones, 2003). The level of psychological well-being found among academic staff was unusually low when compared to other professional groups and the general population (Kinman et al., 2006). Other factors contributing to low morale on academics include: increasing administrative duties, role overload, reduced support and resources, poor leadership and management, diminished perceptions of esteem and respect, long working hours, lack of promotion prospects and interpersonal conflicts (Kinman & Jones, 2008).

Other international studies, such as Winefield (2001) indicated the same trend. They reported that excessive working hours, administrative work, lack of promotion, diminishing resources, increased teaching loads and student staff ratios, poor management, and lack of recognition and reward had serious psychological and health consequences for both academic and support staff members of universities. In the late 1990's, the Australian government introduced large scale budget cuts to education (Gillespie et al., 2001). Consequently, Australian universities underwent dramatic restructuring, downsizing and changes to government structures (Tytherleigh et al., 2005). Simultaneously, student numbers increased, which created

a serious imbalance to student-to-staff ratios (Gillespie et al., 2001). Winefield (2001) indicated that universities across the United States, the United Kingdom and New Zealand experienced similar imbalances to student-to-staff ratios. Boyd and Wylie (1994) reported that an increase in workloads and growing administrative responsibilities resulted in less time spent on research, publishing and professional development which lowered the quality of teaching and research standards and increased interpersonal conflict in academic staff relationships.

A similar trend has been observed in universities across the United States (Blix et al., 1994), Japan (Yamamoto, 2004) and Poland (Kwiek, 2003). According to Calhoun (2006), the pursuit of revenues from intellectual property has become an essential component in the transformation of American Higher Education institutions. There has been an expectation that a variety of benefits would follow from turning science into technology faster, and that universities would be able to use new revenues to fund more scientific research (Calhoun, 2006). Unfortunately, universities seem to have adopted capitalist strategies faster than anyone expected. As Washburn (in Calhoun, 2006, p.13) noted:

*“...throughout the modern era, professors have received funding from private corporations and have performed research that helped spur industrial development. What’s truly new and dangerous, is the degree to which market forces have penetrated into the heart of academia itself, causing American universities to look and behave more and more like profit commercial enterprises.”*



Calhoun (2006) agrees that managing a university is like running a big corporation. In a rather critical view, he further argues that academics are responsible for this crisis. Academics have conveniently looked past the increasingly hierarchical organisation of the university system, its dependency on ever-increasing funds, and its lack of meaningful performance criteria (Deem, 2004). They have even left the management of the university to full-time, non-academic administrators, in order to reduce the “unproductive” meetings on their calendars, allowing academic self-governance to become a thing of the past, though reserving the right to whine (Rosser, 2004a). Unfortunately, academics have invited these threats to their autonomy by taking it for granted.

Szekeres (2006) reported that in Australia, the corporatisation of public universities had been taking place over the last 15 years. Winter and Sarros (2002) confirmed this by positing that during the period of 1993 to 1998, senior university managers in Australia adopted corporate management principles and practices as required by government policies, promoting the commercialisation of Higher Education and financial independence of Higher Education institutions. A comprehensive reform process with the aim to expand the Higher Education system was initiated which changed the then elitist education system into a mass system (Winter et al., 2000). The transformation process saw universities and colleges merge to form comprehensive, doctoral universities which offered courses and research programs across a full range of discipline areas (Winter & Sarros, 2002). As a long-term strategy to exercise control over the Higher Education system, the Commonwealth Government introduced strict reforms such as: setting minimum enrolment levels for

institutions, decreasing government funding per student, and implementing external quality control mechanisms (Winter et al., 2000). As universities started to feel the pressure because of declining government resources, increasing student numbers, and increased external audits, the need to corporatize universities became evident (Szekeres, 2006). Students were regarded as customers and the programs and courses offered by universities became products, while institutional structures and language became similar to organisations in the corporate world (Szekeres, 2006). The following challenges were exacerbated following the corporatisation of universities: an increase in stress, intensification of work, reduced resources, and increased expectations. Winter and Sarros (2002) posited that as workloads intensified and pressures to raise university revenues increased, academics reported low morale, a crisis of professional identity, major declines in job satisfaction and high levels of personal stress at work. According to Kinman (2001), academics also found the new corporate style of management overwhelming.

The corporatization of Higher Education systems in Australia was part of a strategy to introduce managerialism in academia. Managerialism has been defined as a public sector reform strategy, based on tight executive control and universal management policies and practices (Winter et al., 2000). Managerialism rests on the following three fundamental principles: a) resource allocation is based on institutional competition and consumer demands, b) performance is measured by explicit outcomes and standards, and c) strong, executive leadership and private sector management techniques are prescribed to manage universities (Pollitt, 1993). In line with the principles of a managerialism paradigm, Higher Education institutions

formulated their objectives into strategic planning statements, coupled it with aggressive marketing strategies, and presented an attractive product to a diverse group of clients (Winter et al., 2000). As a means to promote sustainable income generation strategies and maximise student throughput, a strong hierarchy of authority and management was put in place to execute strategic planning, budgeting and to maintain quality assurance (Winter & Sarros, 2002).

Academic positions of authority became similar to the positions of corporate enterprises where words, such as “budgeting”, “strategic plan”, “customers” and “products”, became part of the everyday language of academics (Clarke, 1998). Furthermore, managerialism resulted in increased power, authority and decision-making prerogatives of management and diminished autonomy and participative decision-making of professional academics (Willmott, 1995). Staff members of affected Higher Education institutions have indicated mixed responses to these changes. Some academics reported increased demoralization and alienation, and being dispirited (Clarke, 1998), while others saw producing marketable knowledge as an opportunity to secure their own status and prestige (Winter et al., 2000). Higher Education has been said to be ruined (Readings, 1997), with its traditional values being eroded by business and enterprise (Barnett, 1994).

South African universities and Namibian Higher Education institutions, for that matter, were essentially shaped against the backdrop of apartheid (Jobbins, 2002). Universities in South Africa and Namibia grew and matured, despite being shunned and hit with sanctions from the international academic community (Bolsmann &

Uys, 2001). Both South African and Namibian academics found themselves excluded from international conferences and seminars (Jobbins, 2002). As the apartheid era drew to an end following global pressures, one of the first areas of transformation was the South African education system (Wangenge-Ouma, 2010). To redress inequities caused by apartheid, the Higher Education system was restructured. This restructuring posed various challenges to the management, as well as to the employees at tertiary institutions (Coetzee & Rothmann, 2005b). Examples of challenges to this restructuring process include: the deeply ingrained European and American mind-sets of white academics which was out of place in a developing African country in the new post-colonial era. Moreover, the vulnerable state of the economy, sustainability of universities and the quality of schooling of the previously disadvantaged population posed significant hurdles (Bolsmann & Uys, 2001). This restructuring process confronted the attitudes and belief systems of individuals and the prevailing institutional cultures and norms, and had various consequences, such as financial predicaments, increased demands and increased job insecurity (Barkhuizen & Rothmann, 2008; Viljoen & Rothmann, 2009).

Since the early eighties, universities worldwide, including South Africa, have been pressured to adapt to the marketization of Higher Education systems and, as a result, became “knowledge factories...with the pursuit of knowledge” (Bolsmann & Uys, 2001, p. 173). Scientific research is transformed into technology which contributes to increasing international competitiveness of a country and which subsequently strengthens the links between institutions of Higher Education and industry (Bolsmann & Uys, 2001). Knowledge is generated for the use of commercial

purposes, and short-term applied research becomes a priority, in order to develop marketable products (Orr, 1997). This marketization has direct implications for the management of universities. Universities are moving away from an academic style of governance to a corporate style of management infused with business principles (Coetzee & Rothmann, 2005a). Furthermore, with the increased emphasis on entrepreneurial activities within Higher Education institutions, less state funding is allocated for subsidizing these institutions (Wangenge-Ouma, 2010).

According to Coetzee and Rothmann (2004), the landscape of Higher Education institutions has evolved from being elite systems to institutions of mass student numbers. Other changes include life-long learning, adult learning, internet-based education and training, formation of strategic alliances on international level and new trends in teaching and learning. Furthermore, changes in the market place, the growth of alternative systems of education and the new demands and needs of society are altering the scope of work for employees at Higher Education institutions (Wangenge-Ouma, 2010). These changes will have a direct impact on the experience of work for employees at Higher Education institutions.

This global corporate shift of Higher Education institutions has yielded mixed emotions and sentiments from staff members of these institutions, with some staff members welcoming the change but the majority believing that a university has a higher purpose than to make money and achieving “bottom-line” results (Szekeres, 2006). The reforms in Higher Education institutions have resulted in a conflict between the values of the professional academic and the values of the “managerial”

organisation (Townley, 1997). This conflict may challenge the organisational commitment, work ethos and psychological well-being of university employees (Chan, 2001).

### **2.3 THE WORLD OF WORK IN HIGHER EDUCATION INSTITUTIONS**

Tertiary institutions have traditionally been regarded as low stress environments with two distinct social structures: a) academic staff and b) support staff (Davis, 1996). ‘Support staff’ refers to all the non-academic staff employed within the Higher Education sector, including staff in academic support, administrative support, and technical areas (Rothmann & Essenko, 2007). Support staff play an important role in supporting the creation and development of knowledge and innovation in Higher Education institutions (Gillespie et al., 2001), and have been called the “instruments of corporatisation” (Szekeres, 2006, p.144). However, when it comes to issues of stress and burnout, support staff at Higher Education institutions have been neglected (Pitman, 2000). This is due to the following reasons: first, the focus of Higher Education institutions remains on teaching and research, with the role of support staff existing to facilitate these aims, and secondly, academics are more likely to conduct and publish studies that focus on those areas that concern them most (Rothmann & Essenko, 2007).

Rosser (2004b) maintains that the contributions of midlevel leaders in academia are rarely recognized. The role of midlevel administrators in academia is to support the primary functions of teaching, service and research of the academic dimension

(Rosser, 2004a). Apart from their interactions with the public, as well as students and faculty members, to ensure smooth service delivery, their main contribution is predominantly in four service areas, namely, academic support, student affairs, business and administrative services, and external affairs (Johnsrud, 1996). Midlevel administrators face three unique challenges in Higher Education institutions: the midlevel nature of the job position, limited opportunities for career growth and advancement, and the lack of recognition and appreciation for their competence and contributions (Johnsrud, 1996). Furthermore, midlevel administrators have to juggle their responsibilities between the directions of their superiors and the needs of the staff members who require their support and services. The results of Rosser's (2004a) study indicate that midlevel administrators' intention to leave is significantly influenced by the quality of their professional and institutional worklife, morale and job satisfaction.

Support staff in Higher Education institutions experience problems different from those of academic staff members (Smewing & Cox, 1998). Support and administrative staff are located across university structures, from the Chancellor's offices and central administrative units to faculties, departments and research units (Whitchurch, 2006). Their roles range from managing the registrar's office to front office receptionists, secretaries, legal staff, library staff, security personnel, as well as technicians, accountants, human resource officers, counsellors and nursing staff (Szekeres, 2006). Yet, despite their pervasive presence across the structures of Higher Education institutions, these staff members continue to be marginalized in literature and writings concerning Higher Education institutions (Szekeres, 2006).

Much of the pressure on academics is passed on to secretarial and administrative employees, who are required to take on more duties and work for a greater number of people (Rothmann & Essenko, 2007). This produces problems with regard to their control of workflow, deadlines, and conflicting pressures. In addition, they are required to use new technology, sometimes without adequate training and often in circumstances where the people they work for do not understand the complexities of the tasks involved (Rothmann & Essenko, 2007). For technical staff, there appears to be an increasing workload, yet many feel that their knowledge and expertise are no longer recognised or utilised effectively (Szekeres, 2006). For managerial staff, there is increasing pressure to stay at work beyond normal office hours (Meyer, 2007). Administrative staff indicated the following stress factors: lack of resources, lack of training in IT systems, poor leadership and management, lack of promotion, rewards and recognition, unrealistic deadlines and an increase in workload (Meyer, 2007).

Literature thus far has yielded various definitions of academic work (Kreber, 2000). According to Houston et al. (2006), the work and commitments of academics are demanding and complex as they are shaped around dual core functions, namely creating knowledge through research and teaching. In the American context, the role of academic staff has been defined according to three domains: teaching, research, and service (administration) (Houston et al., 2006). Bowen and Schuster (1986) state that academic work encompasses four tasks: teaching, research, public service, and institutional governance and operation. Finkelstein (1984), on the other hand, identified five functions of academic work: instruction, research and publication, administration, contact with students, and community service. In the shift of the



traditional model of a Higher Education system to a corporate model, academic work expanded to meet increasing expectations (Coaldrake & Stedman, 1999). Instead of meaningfully adapting the workloads of academics, additional tasks have been added, resulting in excessive workloads and little time for the core functions of academic work (Coaldrake & Stedman, 1999). Abouserie (1996) says that academics in Higher Education institutions are expected to perform several roles simultaneously. They have to teach, as well as carry out all the additional responsibilities that are part and parcel of teaching, such as setting assignments, tests, and examination papers, running tutorials and overseeing practicals (Blix et al., 1994). In addition, they have to conduct research, obtain research funding and publish, while under increasing pressure to take on more administrative tasks, and be involved in community service, as well as serve the institution on various committees and boards (Blix et al., 1994). Participation in multiple roles is a reflection of the increasing job requirements and expectations from academics to support the university's mission (Dale, 2004). This multitude of roles and expectations create a multifaceted strain on the individual academic (Abouserie, 1996).

For the purposes of this study, the terms 'academics' and 'educators' will be used interchangeably. The Cambridge Advanced Learner's Dictionary (2010, p. 7) provides the following definitions of these terms. The term 'academic' refers to "that which is related to schools, colleges, and universities, or connected with studying and thinking." An educator is defined as "a person that educates or teaches, or who is involved in the planning and directing of education" (p. 449).

Winter and Sarros (2002) stated that educators are more likely to hold positive work attitudes towards their jobs and universities when roles and tasks are challenging, yet clear and achievable, if supervisors are supportive and organisation structures allow academics to participate in decision making. In contrast, academics are more likely to experience low levels of motivation when roles are ambiguous and overloaded, tasks are limited and require little skills variety, academics receive little or no support and consideration from supervisors and academics are limited in their decision-making capacity, especially concerning issues that affect them (Winter et al., 2000). Winter and Sarros (2002, p. 255) maintain that corporate work practices demand academic staff to “work harder and smarter”, with non-core work activities, such as administrative tasks, intruding on research time which remains the determining factor in academic reward systems. Relieving academic staff of large administrative workloads will reduce the stress levels of staff members and improve the research profiles of departments and faculties (Winter et al., 2000).

McInnis (2000) argues that it is not only the increase in workloads that is problematic. The confusion of purpose, and the pressures of every day work experiences inevitably threaten the quality and productivity of teaching and learning (McInnis, 2000). Academics struggle to balance the conflicting demands for higher research output and simultaneously uphold quality teaching in the face of increasing student numbers and decreasing resources (Åkerlind, 2011). Another obstacle to improving the quality of teaching is the growing number of academics who are forced to teach subjects outside their field of expertise due to resources being stretched to the limit, departments reducing the number of subjects they offer, and

teaching positions being filled with little regard for qualifications or expertise (Åkerlind, 2011). Furthermore, service work has become the “expanding category of other work” (McInnis, 2000, p. 143). Valuable time is spent serving on task forces, committees and boards, filling a 50 to 60 hour work week which has become the norm for academics (Thorsen, 1996).

Soliman and Soliman (2000) argue that university administrators often associate high workload with high productivity, thereby confusing quantity with quality. Academic workloads consist of numerous interrelated roles and activities which cannot be regarded in isolation. Furthermore, there are wider university contextual factors, such as the level of support from administrative and technical staff, as well as the calibre of students that impact the quality of academic work (Soliman & Soliman, 2000). Harvey and Green (1993) assert that the challenge with defining and identifying indicators of quality is the fact that quality is a relative concept that is often “in the eye of the beholder.” Green (1994) advocates that the criteria for the quality of education should be established with transparency, integrity and a clear articulation of quality assurance measures.

Åkerlind (2005) regards the core values of most academics as having intellectual freedom and academic autonomy. Relationships with colleagues are regarded as an essential source of intellectual stimulation. Although many academics agree that research should be of practical value to society, many perceive a diminished sense of status and prestige (Åkerlind & McAlpine, 2009). Academics are intrinsically motivated by enriching job experiences; however, dwindling resources to support

research and teaching are dissipating this motivation (Catano et al., 2010). Furthermore, salaries are falling behind increasing inflation rates, working conditions are deteriorating, and academics generally perceive a loss of control over their work because of the intrusion of administration and other non-core activities (Churchman & King, 2009).

Although there are significant differences in the scope of work for academic and administrative staff members of universities, research (Gillespie et al., 2001; Taris, Schreur, Van Iersel – Van Silfhout, 2001) have identified common stress-inducing factors that are shared by both categories of staff members. These are work overload, time constraints, a lack of promotion opportunities, inadequate recognition, inadequate salaries, changing job roles, inadequate management, inadequate resources and funding, as well as student interaction (Gillespie et al., 2001). Academic and support staff rarely have similar jobs and supervisory structures, and this gives rise to significantly different employee problems and concerns (Rothmann & Essenko, 2007).

As the first phase of a longitudinal study, Tytherleigh et al. (2005) developed a model to identify the sources of stress, as well as the moderating factors and outcomes of stress, in fourteen universities and colleges in the UK. The research participants included both academic and non-academic staff members in order to establish whether there are any differences in experienced stress levels between the functional roles of these groups (Tytherleigh et al., 2005). Their results indicated that overall staff members, to varying degrees, were stressed due to factors, such as poor

work relationships, lack of control, insufficient resources, poor communication, work overload and poor pay and benefits. Academic support staff comprising of technical staff, among others, reported high levels of stress related to job insecurity (Tytherleigh et al., 2005). It can, therefore, be concluded that it is not only academic, but also non-academic staff that suffer from high levels of occupational stress.

Carnegie and Tuck (2010, p. 434) stress that “research and teaching remain the key components of university missions indicating that academics are a valuable and vital resource.” They further maintain that the increasing use of commercial values and business governance has created tremendous strain between academics and management, and has threatened the coherence of academic institutions (Carnegie & Tuck, 2010). Coaldrake, Stedman, and Little (2003) suggest that university governance should be approached in a spirit of partnership, where academics and management develop a shared understanding of the institutions’ purpose and values.

## **2.4 HIGHER EDUCATION IN NAMIBIA**

The first tertiary institution in the previously called South West Africa (Namibia) was the Academy for Tertiary Education which was inaugurated on the 14<sup>th</sup> of January 1980. Prior to this, anyone who wanted to pursue further studies had to do so in South Africa or in countries abroad ([http://www.polytechnic.edu.na/about\\_us/history.php](http://www.polytechnic.edu.na/about_us/history.php)) The primary aim of the Academy was to provide tertiary education for high school graduates in various theoretical and practical fields. Starting off with a basic structure, the Academy

comprised a rector (Mr. A.J.H. Buitendacht), study council (senate), staff and students under the authority of the Board. The academic branch of the Academy consisted of seven sections namely: Educational Sciences, Social Sciences, Languages, Mathematical and Physical Sciences, Commercial Management and Secretarial Training, Technological Sciences, and Nursing (Annual Report, 1981). The vocational training branch, which was regarded as pre-tertiary training, was divided in the following five sections; Technical Training and Subject Tests, Commercial Training, Continued Education, Pedagogics, Social Work and Health Services (Annual Report, 1981). The theoretical and vocational branches were spread over five campuses in Windhoek. The Academy started with a staff complement of 120, and 1126 students were enrolled on fulltime and part time bases (Annual Report, 1981). The early years of the Academy were essentially years of remarkable growth and development and the cementing of the Academy as the leading institute of tertiary education in the country. In 1987, the Academy consisted of three components. These three components were officially named the University, the Technikon of Namibia, and the College for Out of School Training. These three components would eventually collapse to form the Polytechnic of Namibia and the University of Namibia. Namibia currently boasts with the University of Namibia, one Polytechnic, the Namibian College of Open Learning and various private institutions of Higher Learning, and vocational training centres across the country.

### **2.4.1 The University of Namibia**

After Independence, the University of Namibia (UNAM) was formally established under the recommendation of the Commission of Higher Education on the 31st of August 1992 ([www.unam.na/about\\_unam/history.html](http://www.unam.na/about_unam/history.html)) The university adopted a Commonwealth system of management, where the chancellor serves as the head of the university and the vice-chancellor as the chief executive officer responsible for the day to day management of the university ([www.unam.na/about\\_unam/history.html](http://www.unam.na/about_unam/history.html)) The mission statement of the university was revised to include a strong focus on research, training in specialist areas and service delivery to the community, hence its motto: “Education, Service and Development” (Annual Report, 1996).

During 1995 the university relocated from the City Campus to its current location in Pioneerspark (Annual Report, 1995). His Excellency Dr. Sam Nujoma and Prof. Peter Katjavivi served as the first chancellor and vice-chancellor of the University of Namibia respectively. The first decade after the inception of the University of Namibia was marked with profound progress and development of the university’s structure and mandate. For example, new faculties (e.g. Faculty of Agriculture and Natural Resources), departments and centres were formed, both locally and in other regions, the university’s infrastructure continued to be expanded and upgraded and numerous projects in collaboration with various ministries were undertaken (Annual Report, 2006).

Under the leadership of Vice-Chancellor Prof. Lazarus Hangula the University of Namibia currently boasts with eight faculties, two schools, ten campuses and various units. To ensure quality and relevancy, the university's programmes are continually re-evaluated to meet national and international standards of training. To this end, the university embarked on a curriculum review process in conjunction with relevant stakeholders from various ministries, professional bodies, corporate entities and the National Qualifications Authority (NQA). The total staff complement is currently approximately 887 and 12 535 students have registered for the 2010 academic year (Annual Report, 2010). Although still relatively young compared to other institutions of Higher Education in the rest of Africa, the University of Namibia has and is continuing to make its mark as one of the most promising universities in Africa ([http://www.unam.na/about\\_unam/about\\_unam\\_index.html](http://www.unam.na/about_unam/about_unam_index.html))

#### **2.4.2 Challenges faced by the University of Namibia**

Despite its achievements and great strides, the University of Namibia is continually facing numerous challenges. One of the most significant challenges to date has been the continuous lack of financial resources and a dependency on government for funding. This has implications not only for developmental purposes but for the retention of staff members who continue to search for greener pastures at other universities or are lured to the corporate world with better salaries and benefits (Annual Report, 2006). Another important challenge is the annual increase of students who enrol with the university. This has negatively impacted the workloads of academic staff, especially since the teaching staff complement does not grow proportionally to the increasing student population (Annual Report, 2008). Although



the university has embarked on the expansion of infrastructure to accommodate more students, both in the lecture halls and hostels, this situation is likely to still pose a problem in future.

The prevalence rate of HIV/Aids among students continues to be a major national concern, as evident by a recent newspaper headline (*“HIV Prevalent among Tertiary students: Startling Figures”*, Informanté, 2012 February 29). As students are considered to be the future of this country, HIV/Aids is a devastating threat to the social and economic development of Namibia. The University of Namibia has also been surrounded by much controversy, such as sex scandals, mal-administration, murder, and fraud, as evident from various newspaper headlines such as *“Chaos with Unam exams”*, (The Namibian, 2011 January 21) *“Management cause of Unam demise”* (The Namibian, 2007 March, 9), *“Man charges wife with fraud at Unam”* (The Namibian, 2006 April 12), *“Unam knew about sex-for-marks claims”* (The Namibian, 2011 September 7), *“Witchcraft claims behind murder of Unam student”* (The Namibian, 2012 April 20) and *“Unam salaries reveal growing inequality”* (Informanté, 2012 June 27). Furthermore, tertiary education institutions in Namibia were ranked 112<sup>th</sup> out of 139 countries on the quality of the education system in the country (Angula, 2011). Angula (2011) maintains that with such low ranking, tertiary institutions are not competent in their roles as institutions of Higher Education. He further reiterated that tertiary institutions should serve the needs of society as opposed to “operating like medieval ivory towers behind the walls of academic autonomy” (Angula, 2011).

When Hon. Rev. Willem Konjore resigned as the chairperson of the UNAM Council in 2003, he left with the following words:

*“I, therefore, leave firmly convinced that the University is well poised to play an increasingly important role in the social and economic transformation needed for our country today, and the days ahead.” (Annual Report, 2003, p. xiii)*

These words became prophetic when the National Planning Commission (NPC) was mandated by His Excellency, the President Dr. Sam Nujoma, to develop a long-term plan to map out the future course of development for Namibia ([http://www.npc.gov.na/vision/vision\\_2030bgd.htm](http://www.npc.gov.na/vision/vision_2030bgd.htm)) This long-term plan was aptly named “Vision 2030” and was launched in June 2004 by H.E. President Sam Nujoma. Following extensive deliberations, Vision 2030 was developed around several themes with the aim of transforming Namibia into a knowledge-based society with improvements in the following areas: education, science and technology, health and development, sustaining agriculture, peace and social justice, and gender equality. As the country’s only national university, the University of Namibia plays a central role in the achievement of Vision 2030 (Annual Report, 2010). H.E. President Sam Nujoma confirmed this by stating

*The University is not only responsible for delivering competent high-level human capital to the Nation, but is also key to the overall process of cultural development, the diffusion of knowledge to society, and for building and sustaining research*

*networks in support of human and national development* (Annual Report, 2010, p. ix).

Considering this mandate, it is important that the University manages and protects its staff members from increasing levels of stress, in order to preserve staff well-being, organisational performance and the intellectual health of the nation. According to Gillespie et al. (2001), in addition to education and training, university staff plays a vital role in the creation and development of knowledge and innovation. Coetzee and Rothmann (2005b) assert that Higher Education institutions make an important contribution to the reconstruction of a country. They further maintain that staff members of Higher Education institutions comprise the human capital of an education institution and it is, therefore, important to take care of them.

## **2.5 CHAPTER SUMMARY**

This chapter provided an extensive overview of the changes in Higher Education systems across the world and the direct consequences to the overall functioning of such education systems. This chapter further discussed the work context and roles of staff members of Higher Education institutions, as well as stressors related to their respective roles. In order to bring into focus the context of this study, the University of Namibia was discussed in terms of background history and current functioning.

Chapter 3 focuses on psychological well-being as the ultimate and ideal outcome of experiencing work engagement through the following psychological conditions:

psychological availability, psychological meaningfulness and psychological safety. Various variables are explored as antecedents fostering work engagement through the psychological conditions. Psychological well-being is thus depicted as a result of an interwoven process between antecedent variables, psychological conditions, and work engagement.

## **CHAPTER 3**

### **PSYCHOLOGICAL WELL-BEING AT WORK**

This chapter discusses psychological well-being in terms of its definition and theoretical frameworks. It further explains psychological well-being as a positive outcome of an interrelated process between various antecedent variables, three psychological conditions (namely psychological meaningfulness, psychological availability, and psychological safety), and work engagement.

#### **3.1 PSYCHOLOGICAL WELL-BEING**

Writings on psychological well-being (PWB) date as far back as 350 BC in Aristotle's *Nicomachean Ethics* (Ryff & Singer, 2008). Aristotle's main tenet was that ultimate fulfilment comes from realizing one's true potential, instead of from subjective feelings of happiness (Ryff & Singer, 2008). From this notion, two important approaches to happiness were developed. The first approach, also known as the 'hedonic approach', focuses on positive moods and emotions (i.e. feelings) and overall life satisfaction as indicators of well-being and happiness (Robertson & Cooper, 2010; Ryan & Deci, 2001). The second approach, called the 'eudaimonic approach', posits that the only life worth living is the one that has purpose (Robertson & Cooper, 2010; Ryan & Deci, 2001). The hedonic approach, although pleasurable, is unsustainable over the long term without the presence of eudaimonic well-being (Fisher, 2010). Recent research findings suggest that these two approaches should be viewed as complementary, embracing both positive emotions

and purpose and meaning as key ingredients of psychological well-being (Robertson & Cooper, 2010).

### **3.1.1 The hedonic approach**

Hedonism, as an approach to well-being and happiness has a long history, and consequently various definitions have emerged. Early philosophers defined hedonism as the pursuit of sensation and pleasure, and the satisfaction of human appetites (Ryan & Deci, 2001). However, modern scholars of the hedonic approach prefer a holistic focus that includes the preferences and pleasures of the mind and the body (Kubovy, 1999). For these scholars, the focus is on the experience of pleasure versus displeasure with the expressed purpose of obtaining maximum happiness and avoiding pain (Ryan & Deci, 2001). To measure the pleasure versus displeasure experience, subjective well-being (SWB) is used as the standard (Diener & Lucas, 1999). Subjective well-being is defined as “a person’s cognitive and affective evaluations of his or her life” (Diener, Oishi, & Lucas, 2002, p. 63). Subjective well-being encompasses three components: life satisfaction, the presence of positive affect, and the absence of negative affect (Deci & Ryan, 2008). Life satisfaction is defined as “a global evaluation of a person of his or her life” (Lucas, Diener, & Suh, 1996, p. 61). In evaluating life satisfaction, individuals assess the aspects of their lives, weigh the good against the bad, and arrive at a global evaluation of overall satisfaction (Rothmann, in press). Positive affect is described as the frequency or presence of positive or pleasurable emotions, such as joy and happiness, while the presence of negative affect indicates adverse emotions, such as sadness or dejection

(Rothmann, in press). Satisfaction with life is primarily a cognitive evaluation of one's life (Pavot & Diener, 2008), and while it is related to both positive and negative affect, it should be measured as an independent construct. The term subjective well-being is often used interchangeably with 'happiness', although scholars are debating whether this concept should perhaps be integrated into a more eudaimonic perspective (Deci & Ryan, 2008).

### **3.1.2 The eudaimonic approach**

The eudaimonic approach holds that happiness does not equate well-being, because the satisfaction of desires and bodily pleasures does not necessarily lead to well-being (Ryan & Deci, 2001). From a eudaimonic perspective, well-being requires people to live authentically and in accordance with their daimon (true self) (Waterman, 1993). When people live authentically, they feel intensely alive and would strive to fulfil their potential (Waterman, 1993). Thus, well-being is a process of living up to one's true self and potential, rather than an end state (Deci & Ryan, 2008). Norton (1976, p. xi) maintains that eudaimonia encompasses "meaningful living conditioned upon self-truth and self-responsibility." Ryff (1989) argues that the characteristics of well-being are indicative of positive psychological functioning or psychological well-being. Similarly, McMahan and Estes (2010) assert that a eudaimonic orientation in life is more strongly associated with well-being than a hedonic orientation.

### 3.1.3 Defining psychological well-being

Warr (1978) observes that psychological well-being is a complex concept which incorporates various affective aspects of everyday life experiences. According to Wright and Cropanzano (2000), psychological well-being has three important characteristics, namely a) it involves people's subjective beliefs about their own happiness; b) it includes emotional or affective properties; c) it involves a holistic evaluation of one's life. DeJoy and Wilson (2003) described psychological well-being as a representation of the interplay of physical, mental and emotional aspects of employee health. More specifically, psychological well-being embraces the following constructs: general physical health, general mental health, job satisfaction, employee morale, stress, motivation, organisational commitment and climate (Grawitch et al., 2006, p. 134). These definitions all allude to the fact that psychological well-being is a reflection of the overall effectiveness of an individual's psychological functioning (Diener, Sandvik, & Pavot, 1991; Wright & Cropanzano, 2000). In an attempt to redefine well-being more holistically, Page and Vella-Brodrick (2009) proposed that subjective well-being, workplace well-being and psychological well-being together should make up employee well-being.

Diener et al. (1991) described psychological well-being in terms of an individual's subjective well-being. Applying this concept to the workplace, Bakker and Oerlemans (2012) posit that an individual who has high, work-related, subjective well-being has the following defining characteristics: a) job satisfaction and b) the experience of more positive than negative emotions. They further mention that work



engagement, happiness at work and job satisfaction are positive forms of work-related, subjective well-being, while workaholism and burnout constitute negative forms of work-related, subjective well-being (Bakker & Oerlemans, 2012). Robertson and Flint-Taylor (2008, p. 316) define work-related well-being as “the affective and purposive psychological state that people experience while they are at work.” In order to further comprehend the concept of psychological well-being, the most significant theoretical frameworks are discussed in the following section.

#### **3.1.4 Theoretical frameworks of psychological well-being**

A variety of theoretical frameworks has been developed to examine psychological well-being (Diener & Ryan, 2009). Some of these theories include telic theories (i.e. need theories by Ryff & Singer, 1996; self-determination theory by Ryan & Deci, 2000), cognitive theories (i.e. the AIM – attention, interpretation, and memory model by Diener & Biswas-Diener, 2008), evolutionary theories (i.e. broaden and build theory by Fredrickson, 1998), dispositional theories (Diener & Biswas-Diener, 2008; Diener & Lucas, 1999; Fujita, 1991), and relative standards theories (i.e. social comparison theory by Carp & Carp, 1982; adaptation theory by Brickman, Coates, & Janoff-Bulman, 1978). The following theoretical frameworks of psychological well-being will be described: Ryff’s (1989) model of well-being, Warr’s (1987, 1994) model of well-being, Van Horn, Taris, Schaufeli and Schreurs’ (2004) integrated model of well-being and Ryan and Deci’s (2000) self-determination theory.

### 3.1.4.1 Ryff's (1989) model of well-being

Borrowing from various conceptualizations of positive psychological functioning, such as Maslow's Hierarchy of Needs (1962), Rogers' (1961) Humanistic Psychology, Jung's (1933) Individual Psychology, as well as from life span approaches, such as Erikson (1959), Buhler (1935), Allport's (1961) and Jahoda's (1958) criteria of mental health (Ryff (1989), Ryff and Singer (2008) summarized the six most important dimensions underlying psychological well-being:

- **Self-acceptance** – This is one of the defining features of mental health, self-actualization, optimal functioning, and maturity. It involves being self-aware of both one's strengths and weaknesses, and accepting and valuing one's uniqueness.
- **Positive relations with others** – This important part of mental well-being is the ability to establish warm, trusting interpersonal relationships with others. In order to achieve this, one needs to be capable of empathy, affection and respect for all human beings.
- **Personal growth** – Closely related to meaning, personal growth represents the striving for self-actualization of one's potential. This is achieved by being open to positive experiences that will broaden one's horizons.
- **Purpose in life** – This dimension represents the search for meaning and purpose in life. It provides a person with a sense of goal-orientated direction and intentionality that determines one's every day activities.

- **Environmental mastery** – This dimension refers to one's ability to be comfortable in one's environment, and to control and manipulate it, if required to do so.
- **Autonomy** – Encompassing concepts such as self-determination and independence, autonomy describes the confidence to act individually and to hold oneself to personal standards rather than conventional measures determined by others.

#### **3.1.4.2 Warr's (1987, 1994) model of well-being**

Focussing on well-being in the work context, Warr (1987, 1994) and Daniels (2000) proposed that work-related well-being can be conceptualized as consisting of four primary dimensions (affective well-being, aspiration, autonomy and competence) and a secondary fifth dimension (integrated functioning). Conceptualizing work-related well-being as a multidimensional construct allows managers and practitioners to have a better understanding how employees' well-being is affected by job-related factors (Van Horn et al., 2004). The first dimension, affective well-being, entails five components of affective experience, namely (a) a pleasure-displeasure component which refers to an individual's level of job or life satisfaction, (b) an anxiety-comfort component which describes experiences of high mental arousal coupled with low comfort or low arousal with high pleasure, (c) an enthusiasm-depression component where enthusiasm is a result of high pleasure and high mental arousal, while depression combines low pleasure and low mental arousal, (d) a tiredness-vigour component, with tiredness describing feelings of exhaustion and vigour referring to

feelings of energy and motivation and (e) an anger-placidity component, with anger describing feelings of aggression and placidity referring to being docile or easy-going.

The second dimension is aspiration. Aspiration in the work context refers to the intrinsic motivation that people have to pursue challenging goals in their job (Van Horn et al., 2004). Autonomy refers to the degree to which people can make their own decision and map out their own course of action (Warr, 1987). The final dimension is competence which relates to a person's ability to deal with problems successfully and confidently (Warr, 1987).

#### **3.1.4.3 Van Horn et al.'s (2004) integrated model of well-being**

Van Horn et al. (2004) maintain that the conceptualizations of well-being, as proposed by War (1987, 1994) and Ryff (1989), overlap quite substantially. They propose an integrated approach which entails five dimensions. Three of these dimensions cover aspects of the Warr (1987) and Ryff (1989) models, and the last two were added by Van Horn et al. (2004). These dimensions are affective well-being, social well-being, professional well-being, cognitive well-being and psychosomatic well-being.

Affective well-being in this model includes emotional exhaustion, job satisfaction and organisational commitment. Emotional exhaustion is related to Warr's (1987) enthusiasm-depression component, describing feelings of being overwhelmed, as

well as the depletion of one's emotional resources. Job satisfaction represents the pleasure-displeasure component of Warr's (1987) model of well-being, and describes individuals' evaluation of how happy they are with their job. Also representing the pleasure-displeasure component, organisational commitment refers to a person's identification and involvement in the organisation (Van Horn et al., 2004).

Professional well-being encompasses Warr's (1978, 1994) constructs of autonomy, aspiration, professional competence and Ryff's (1989) dimensions of autonomy and purpose in life. These concepts are related to job motivation, achievement, ambition and self-efficacy (Van Horn et al., 2004). Closely resembling Ryff's (1989) dimension of positive relationships with others, social well-being assesses two distinct concepts (Van Horn et al., 2004). First, it measures the extent to which a person is depersonalized from colleagues, and secondly, it measures how well a person functions in social relationships at work (Schultz, 2008).

Van Horn et al. (2004) added a cognitive well-being dimension to their model, arguing that for people to do their work optimally, they needed to be able to focus and concentrate on tasks, and learn and apply information. Whereas emotional exhaustion, as devised by Maslach (1993) and Warr (1987), relates to work-related fatigue, cognitive well-being relates to cognitive weariness which specifically represents the effectiveness of an employee's cognitive functioning (Van Horn et al., 2004). The final dimension included in Van Horn et al.'s (2004) model of well-being is the psychosomatic dimension. This dimension refers to the prevalence of psychosomatic complaints (i.e. headaches and back pain), often due to factors, such a

long working hours (Van der Hulst, 2003) and high job demands (De Lange, Taris, Kompier, Houtman, & Bongers, 2003). In a study investigating the occupational well-being of a sample of 1012 teachers in Finland, Kinunnen, Parkatti, and Rasku (1994) found evidence that well-being is strongly correlated with somatic complaints.

#### **3.1.4.4 Ryan and Deci's (2000) Self-Determination Theory (SDT)**

Self-determination theory (SDT), as proposed by Ryan and Deci (2000), is concerned with psychological growth, integrity and well-being through the fulfilment of three innate psychological needs, namely: competence, autonomy and relatedness. Competence reflects individuals' desire to feel able and capable to carry out their duties (Klassen, Perry, & Frenzel, 2012). Autonomy is defined as individuals' need to experience choice and to take ownership and responsibility for their behaviour, and relatedness represents individuals' need for close and intimate relationships and feelings of belongingness (Ryan & Deci, 2000). Autonomy in this context is conceptualized differently from the Hackman and Oldham (1980) definition of autonomy as a job contextual factor. The satisfaction of these needs stimulates an individual's psychological energetic resource and fosters an individual's well-being and performance (Van den Broeck, Vansteenkiste, De Witte, & Lens, 2008). In contrast, if the satisfaction or fulfilment of any one of these needs is hindered, it can deplete an individual's energy and be psychologically damaging to that individual (Samman, 2007).

SDT further emphasizes the experience of need satisfaction, in particular the variation in experienced need satisfaction, rather than the strength of a need (Van den Broeck et al., 2008). The variation in satisfaction is crucial for one's motivation, well-being and performance (Ryan & Deci, 2000). Ryan and Deci (2000) thus developed the SDT to account for both goal content and the motivational processes that are necessary to achieve these goals. Arguing that SDT represents a model of eudaimonia, Deci and Ryan (2008) maintain that SDT focuses on the processes that achieve eudaimonic living because eudaimonia emphasizes how one lives one's life rather than well-being as an outcome.

Van den Broeck et al. (2008) postulate that need satisfaction can explain the relationships between various types of job characteristics and employees' psychological well-being. Following Ryan and Deci's (2000) reasoning, these authors argue that need satisfaction can explain the motivational processes between job resources and engagement. Similarly, need satisfaction can also explain the energetic processes that underlie the relationships between job demands, job resources, and burnout (Van den Broeck et al., 2008). Thus, the thwarting of need satisfaction can be useful in explaining the negative effect that high job demands and poor resources has on an individual's psychological well-being.

### **3.1.5 Psychological well-being at work**

Currently, the psychological well-being of employees is regarded as one of the most important issues in organisational behaviour (Cropanzano & Wright, 2001), because

it also serves as a powerful indicator of the “well-being” of the organisation. According to Rothmann (2008), wellbeing encompasses various life roles, such as family, marriage, work and housing. From these life roles, the work domain is perhaps the most important, since it sustains the other domains financially. People also spend the majority of their time, energy and effort on work-related activities, which renders it an important determinant of life satisfaction.

According to Robertson and Cooper (2010), current literature on engagement places strong emphasis on organisational outcomes, such as commitment, attachment and citizenship behaviour, and too little on employee psychological well-being. Schaufeli (2004) argues that, considering the detrimental impact global changes in the world of work have on employees, psychological well-being is well worth examining. Schaufeli (2004) establishes further that the following three contextual factors directly or indirectly influence employees’ safety, health and well-being: the external context, the organisational context and the work context. The external context describes factors outside the organisation and in society in general, such as legislation, economic development, social and demographic changes, as well as technological innovation. The organisational context encompasses the organisational environment and climate, and refers to factors, such as organisational restructuring, new management processes and initiatives, as well as the psychological climate of the organisation. Finally, the work context describes factors pertaining to the job itself, such as task attributes, the job content, career development and work-roles. Rothmann, Mostert, and Strydom (2006), however, maintain that the uniqueness of various job demands and job resources in different job settings must be considered,



as every occupation has specific risk factors that could hamper psychological well-being.

High levels of psychological well-being and engagement have a significant role to play "... in delivering some of the important outcomes that are associated with successful, high performing organisations" (Robertson & Cooper, 2010, p. 325). There has also been substantive research evidence (Donald et al., 2005; Wright & Cropanzano, 2000) to confirm the positive link between engagement, psychological well-being and performance. These studies consistently show that engagement and psychological well-being are significant predictors of job performance (Robertson & Cooper, 2010). Thus, high levels of engagement and psychological well-being lead to better performance at work, while low levels of engagement and psychological well-being are associated with poor performance.

Psychological well-being is of particular importance to employees as it is linked to very specific individual outcomes, such as mental and physical health (Wright & Cropanzano, 2000). Research indicates that low levels of control and autonomy, which partly constitutes psychological well-being, are associated with increased risk of illness (Robertson & Cooper, 2010). In contrast, high levels of psychological well-being are associated with various positive outcomes and behaviours, such as more effective problem-solving skills, increased enthusiasm, more positive interactions with others and a better ability to adapt to change (Robertson & Cooper, 2010). Diener and Ryan (2009) suggest that there is growing evidence that high psychological well-being is beneficial, especially in four domains of human

functioning: health and longevity, work and income, social relations and societal benefits. With regards to health and longevity, research reports that people with high levels of subjective well-being also enjoy better physical health (Roysamb, Tambs, Reichborn-Kjennerud, Neale, & Harris, 2003), and engage in healthier behaviours (Diener & Biswas-Diener, 2008). Interestingly, people with high well-being are more likely to earn more money, regardless of occupation (Diener, Nickerson, Lucas, & Sandvik, 2002). Apart from better career success, people with high well-being also exhibit more organisational citizenship behaviours (Diener & Biswas-Diener, 2008) and receive more positive performance ratings (Cropanzano & Wright, 1999). Furthermore, people with high levels of well-being naturally draw other people to them because they tend to have higher levels of self-confidence, good leadership abilities and warmth (Diener & Ryan, 2009). Lastly, having high levels of well-being not only benefits the individual, but also the society in general (Diener & Tov, 2007). It is reported that people with high levels of well-being tend to engage in more altruistic and pro-social behaviour which makes for a more stable and productive society (Thoits & Hewitt, 2001).

The theoretical framework of psychological well-being is graphically displayed in Figure 1. In summary, the central hypotheses of this study are (1) psychological conditions/needs mediate the relationship between antecedent variables and engagement and burnout, (2) engagement and burnout predict psychological well-being, and (3) psychological well-being leads to both organisational and individual outcomes. Based on this theoretical framework, the following definition of work-related psychological well-being is proposed: work-related psychological well-being

is an interrelated process whereby various job characteristics foster work engagement through psychological conditions, which has various outcomes for both the individual and the organisation.

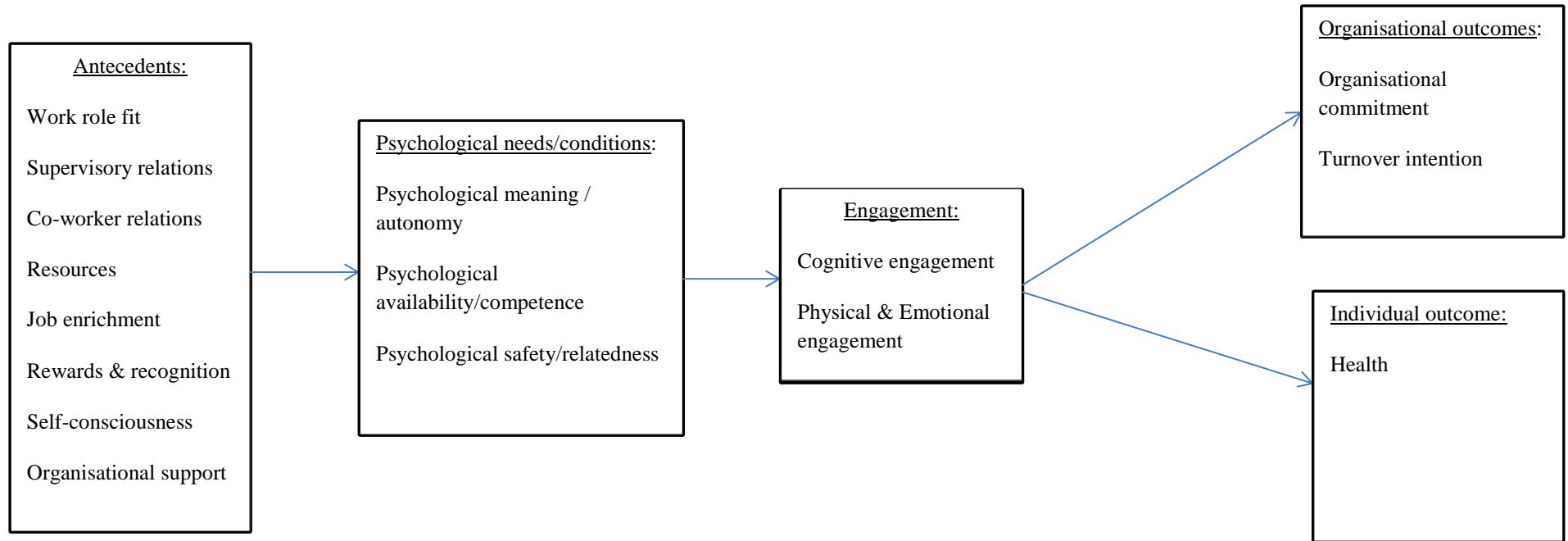


Figure 1. Theoretical model of work-related psychological well-being

### **3.2 WORK ENGAGEMENT: A THEORETICAL OVERVIEW**

Since Kahn's (1990, 1992) first exploration of the concept personal engagement as an extension of role occupation, there have been numerous attempts to conceptualize and explain the concept as a valid and independent construct. Unfortunately, there has been little agreement amongst scholars concerning its definition, dimensions and measurement, and some authors have described engagement as an emotional and intellectual commitment or simply discretionary effort by the individual (Saks, 2006). Kahn (1990, p. 694) first defined engagement as "the harnessing of an organisation's members' selves to their work-roles." With this definition and further investigation, he alludes to the psychological state or presence that is the very essence of being engaged (Kahn, 1992). Psychological presence is defined as the extent to which people are attentive, connected, integrated and focused in their role performances (Rothbard & Patil, 2012). It thus extends beyond being physically present at work to employing all mental faculties to do one's work. A person can also be disengaged from a work-role by becoming detached (Simpson, 2009) and demonstrate low levels of enthusiasm and authenticity. Olivier and Rothmann (2007, p. 49) state that "... disengaged employees become disconnected from their jobs and hide their true identity, thoughts and feelings during role performances".

Using a different approach, Maslach, Schaufeli, and Leiter (2001) viewed engagement as one end on a continuum with burnout on the other end, rendering these constructs opposites of each other. They further described work engagement as the "positive antipode" of burnout (Maslach et al., 2001, p. 294). They initially

explained engagement in terms of three dimensions: energy which is the opposite of exhaustion, involvement which is the opposite of cynicism and depersonalization and efficacy as the opposite of reduced professional efficacy. They also assume that burnout and engagement can be measured with the same scale, and that low scores on burnout dimensions would mean that a person is engaged (Maslach et al., 2001; Maslach & Leiter, 1997). However, after reconsideration, Maslach et al. (2001) proposed that engagement and burnout should be measured as two distinct constructs. They then recharacterized engagement as consisting of the following three dimensions: a) vigour which refers to high energy levels and mental resilience, b) dedication which refers to being challenged, inspired and enthusiastic about one's work, and c) absorption which describes the experience of being fully captivated by one's work (Maslach et al., 2001). Engagement was measured with the Utrecht Work Engagement Scale (UWES) (Maslach et al., 2001).

Subsequent research by Zhang, Rich, and LePine (2009), however, identified problems with this approach. Firstly, there was still too much theoretical dependency on two of the burnout dimensions, namely exhaustion and cynicism, which challenged the validity of analysis results. Secondly, items measuring various engagement dimensions overlapped with other well-established constructs, such as positive affect and meaningfulness, which further compromised the interpretation of these dimensions.

May et al. (2004) propose that for individuals to engage in work, they need to be able to immerse themselves in their work on a cognitive, emotional and physical

dimension. Their study aimed to investigate why some individuals engaged themselves in their work, while others became alienated and disengaged from their work. They argue that if one understands the psychological processes or dimensions of engagement, it is possible to predict why some individuals come to psychologically identify with their jobs (May et al., 2004). They subsequently developed hypotheses to examine the role that the three psychological conditions (as conceptualized by Kahn, 1990; 1992) play in employee's work engagement.

Drawing on the initial theorizing of Kahn (1990, 1992) and subsequent researchers, such as May et al. (2004), Rich, LePine, and Crawford (2010) also measured engagement in terms of the following three dimensions: physical, emotional and cognitive. Physical engagement refers to the investment of physical energy in the role/s that one plays, emotional engagement involves being positive and deriving pleasure from the work that one does and, finally, cognitive engagement involves being purposeful, focused and absorbed in one's role. Although this broad conceptualization was welcomed, two concerns were raised. First, once again the emotional dimension of engagement was too similar to positive affect (Rich et al., 2010). Although positive affect contributes significantly to our understanding of engagement, it is important to detangle the two constructs from each other. The second concern relates to the measurement of the cognitive dimension. This dimension is measured by items relating to attention and absorption (Rich et al., 2010). However, analysis of these items does not yield a clear factoring for these components (Rothbard & Patil, 2012), which has potential implications for

interpretation. Some scholars (Macey, Schneider, Barbera, & Young, 2009) have argued that the engagement definition lacks a behavioural dimension.

### **3.2.1 Defining and clarifying the engagement construct**

During the last decade, the concept of engagement has become immensely popular with academic scholars and practitioners (Christian, Garza, & Slaughter, 2011). Schaufeli, Taris, and Van Rhenen (2008) maintain that the concept of work engagement emerged from extensive research on burnout as an attempt to investigate both “employee unwell-being” and “employee well-being”. While scholars agree that engagement is a psychological state, “...the construct of engagement has been through considerable development and change” (Rothbard & Patil, 2012, p. 59). It is, therefore, not surprising that several “types” of engagement have been identified. Whereas personal engagement in general has been described in terms of a holistic personal investment in one’s role, work engagement is defined as “a positive, fulfilling, work-related state of mind that is characterized by vigour, dedication, and absorption” (Schaufeli & Bakker, 2004; Schaufeli, Salanova, Gonzales-Roma, & Bakker, 2002). Employees who experience work engagement tend to work harder than others and are more likely to have successful outcomes (Rothmann & Jordaan, 2006). This is perhaps due to the fact that they make good use of their skills and abilities which further gives them a sense of accomplishment (Rothmann & Jordaan, 2006). Harter, Schmidt, and Hayes (2002) made a further distinction between work engagement and employee engagement. They described employee engagement as an emotional connection to others, being cognitively vigilant and, experiencing



satisfaction and enthusiasm for one's work. There are four antecedent elements necessary for employees to be engaged: (a) clear expectations and all basic materials and equipment should be provided, (b) the employee should feel that he or she is making a meaningful contribution to the organisation, (c) a sense of belonging to the organisation and (d) the perception that there are opportunities available for personal growth and development (Simpson, 2009).

From the various definitions of engagement, three important features can be highlighted. First, work engagement is described as a psychological connection with “the performance of work activities rather than an attitude” towards different aspects of the job or organisation (Christian et al., 2011, p. 91). Secondly, work engagement requires self-investment of personal resources. This means that individuals channel physical, emotional and cognitive energies into their work-roles, and in doing so, engage in their work on multiple levels (Christian et al., 2011). Finally, engagement is conceptualized as a “state” rather than a “trait” (Dalal, Brummel, Wee, & Thomas, 2008). Although engagement is often regarded as a relatively stable experience, research reveals that engagement levels can fluctuate during the day, varying both between and within individuals (Dalal et al., 2008). This implies that even though engagement is said to be a state, it definitely has trait-like components.

Contrary to popular belief, the various definitions of engagement do not automatically imply positive affect (Rothbard & Patil, 2012). In fact, it can be associated with both positive and negative affect (Gubman, 2004). It is possible for an individual to become engaged in a task, even though the individual associates

negative emotions with the task. It is perhaps important to reiterate that engagement should not be viewed as the opposite of burnout, as engagement describes a deeper motivational construct (Rothbard & Patil, 2012).

Bakker, Schaufeli, Leiter, and Taris (2008) cautioned against the dilution and overextension of the engagement construct with too many conceptualizations. Recent literature has identified various other types of engagement, such as trait engagement, state engagement and behavioural engagement (Christian et al., 2011). Christian et al. furthermore, advocated for "...the use of engagement as a specific, well-defined, and properly operationalized psychological state that is open to empirical research and practical application" (Bakker et al., 2008, p. 189).

### **3.2.2 Distinguishing engagement from other constructs**

Engagement is closely related to other constructs in the literature. In fact, this has often lead to "...confusion as to whether engagement is conceptually and empirically different from other constructs, such as job satisfaction and organisational commitment" (Christian et al., 2011, p. 90). Macey and Schneider (2008) argue that the relationships between potential antecedents and outcomes of engagement and similar constructs have not been sufficiently studied to establish discriminant validity.

Engagement can be distinguished from organisational commitment and job satisfaction, as these constructs are deemed an attachment and attitude toward the

organisation and job respectively and are often considered to be antecedents of engagement (Rothbard & Patil, 2012). Organisational commitment connotes an attachment to the organisation as a whole, while engagement is directed to the individual's work (Christian et al., 2011). Furthermore, engagement is a broader construct which involves cognitive, emotional and physical dimensions of the self, whereas organisational commitment makes reference to an emotional attachment (Bakker et al., 2008). According to Bakker (2011), job satisfaction is a more passive form of employee well-being, while work engagement combines work pleasure with high levels of energy. Engagement is also not merely job involvement as job involvement is tied to the fulfilment of an individual's needs and expectations of a job, whereas engagement describes the manner in which an individual performs his or her job (Rothbard & Patil, 2012).

Similarly, work engagement is different from work-related flow in that it generally lasts longer (Bakker, 2011). Flow generally has a peak experience that lasts for an hour or less while engagement is a more enduring and pervasive state (Schaufeli et al., 2002). Flow has been defined as "the holistic sensation that people feel when they act with total involvement" (Csikszentmihalyi, 1975, p. 36). When individuals experience flow, they "lose a sense of consciousness about their 'selves' as they meld with the activity itself" (May et al., 2004, p. 12). Another distinction can be made between work engagement and motivation. Work engagement can be said to include motivation in the form of dedication, together with a cognitive and affect dimension (Bakker et al., 2008). Thus, engagement encompasses a broader spectrum

of psychological processes and conditions as oppose to passive attitudes and expectations.

Finally, work engagement is different from workaholism in that workaholics spend inordinate amounts of time on work activities and have difficulty ‘switching off’ when they are away from work. Schaufeli, Taris, and Van Rhenen (2008) explain that workaholics go beyond what their job description requires, and they invest so much of themselves that they neglect their personal lives. Work becomes a compulsion that often threatens the individual’s health, psychological well-being, interpersonal relationships and social functioning (Bakker et al., 2008). Although engaged employees work hard, they do so because they regard it as fun, fulfilling and meaningful. Thus, working hard is a conscious choice and not an obsessive urge.

### **3.3 BURNOUT**

The term ‘burnout’ was first used in the 1970’s in the United States, particularly in the context of helping professions (Maslach et al., 2001). This means that initial studies on burnout focused more on the individual’s relational interaction in the workplace than on the individual’s stress response in the workplace (Maslach et al., 2001). During the 1980’s and 1990’s, research on burnout became more systematic and empirical, and was extended to other occupations beyond the helping professions (Schaufeli et al., 2002). With the emergence of positive psychology at the turn of the century, authors (Schaufeli & Bakker, 2004) proposed a shift of focus from burnout to engagement. Together these constructs may be considered to be a model of

psychological well-being. Demerouti, Mostert, and Bakker (2010) reported construct validity for both constructs in a South African study among 528 employees in the construction industry.

### **3.3.1 Definition of burnout**

Burnout is defined as “a persistent, negative, work related state of mind in “normal” individuals that is primarily characterised by exhaustion, which is accompanied by distress, a sense of reduced effectiveness, decreased motivation, and the development of dysfunctional attitudes and behaviours at work” (Schaufeli & Enzmann, 1998, p. 36). Halbesleben (2006, p. 1134) described burnout as “a psychological strain that is a response to chronic work stress.” Burnout is thus an individual experience that is specific to the work context. Burnout affects the individual on a cognitive, affective, physical and behavioural level as a result of a general breakdown in defences against prolonged job-stressors (Coetzee & Rothmann, 2004). Rothmann (2004) observes that burnout develops gradually and may go unnoticed for a long time, exacerbated by the subjective experiences of every day work reality and insufficient coping resources.

According to Schaufeli, Leiter, Maslach, and Jackson (1996), burnout incorporates the following three dimensions: (a) exhaustion, which refers to the depletion or draining of emotional resources and feelings of being overextended; (b) cynicism, which refers to negative, callous or excessively detached responses to various aspects of the job and (c) reduced professional efficacy, which refers to feelings of

incompetence at work. In contrast to burnout, Maslach and Leiter (1997) describe engagement in terms of energy, involvement and efficacy, which are directly opposite to the three burnout dimensions. They further define burnout as "...the erosion of engagement" when energy turns into exhaustion, involvement gives way to cynicism, and efficacy is replaced by ineffectiveness (Demerouti et al., 2010, p. 211). It is important to note that although reduced professional efficacy is regarded as a core component of burnout, Schaufeli (2003) points out that empirical evidence showed that it plays a less central role in burnout, as it is regarded as a personality characteristic, rather than a state.

The burnout construct is measured by the Maslach Burnout Inventory (MBI) as developed by Maslach and Jackson (1986). Coetzee and Rothmann (2004) argue that although the MBI is a good tool for assessing burnout, the concept is too narrowly conceptualized because of an over-reliance on factor analysis to extract an arbitrary set of items. Burned-out employees increasingly report a host of distress complaints, such as sleep disturbances, irritability, tension headaches and an inability to relax. More specifically, burned-out employees also report additional symptoms, such as an inability to concentrate and solve complex tasks, as well as increased forgetfulness, indicating cognitive impairment (Coetzee & Rothmann, 2004). Consequently, Taris, Van Horn, Schaufeli, and Schreurs (2004) developed an additional exhaustion dimension, namely cognitive weariness, and described it as a lack of capacity to absorb new information and an inability to concentrate on work related activities. The factorial validity and internal consistency of the adapted four-factor model of the

MBI was confirmed by studies conducted in the South African context (Coetzee & Rothmann, 2004; Marais, Mostert, & Rothmann, 2009).

The relationships among job satisfaction, stress, the job environment and organisational climate are especially important with respect to burnout (Bilge, 2006). Although few studies have been conducted on the relationship between job satisfaction and burnout, research (Cam, 2001; Cetinkanat, 2002; Neumann & Neumann, 1991) has consistently found that a lack of job satisfaction and low work engagement are the best predictors of burnout. According to Van den Broeck et al. (2008), job satisfaction is realised when the expectations and aspirations of the individual are met by his or her job. Unfortunately, academics have to work harder to fulfil the gradually increasing expectations not only for themselves but also for the institution (Bilge, 2006). It is often the case that they do so with very limited resources. Schaufeli and Enzmann (1998) posit that burnout develops in response to job demands and a lack of resources. They further note that the first stage of burnout is characterised by an imbalance between resources and demands that eventually leads to feelings of exhaustion, and later cynicism.

Burnout occurs as a result of an individual's experience in the work context (Cordes & Dougherty, 1993; Maslach et al., 2001). Maslach et al. (2001) maintain that there is overwhelming evidence to show that burnout develops as a result of work overload and time pressure. Burnout has also been linked to role conflict and role ambiguity. Role conflict occurs when an individual experiences conflicting demands at work, while role ambiguity refers to uncertainty about how a job should be performed

(Maslach et al., 2001). In addition, burnout has also been associated with a lack of job resources, in particular a lack of support from supervisors, as well as a lack of feedback and decision-making participation (Maslach & Leiter, 1997).

In an attempt to expand the theoretical framework of burnout and to integrate both individual and situational factors, Maslach et al. (2001) propose that burnout develops as a result of a mismatch between the person and the job, and engagement occurs if people do fit into their jobs. Capturing the complexities of the working relationship people have with their jobs, this approach further hypothesizes that there are six work life dimensions that play a central role in the development of burnout (Maslach, 2003; Maslach et al., 2001). These work-life dimensions are workload, control, reward, community, fairness and values. Workload describes excessive overload of job tasks, doing the wrong kind of work and/or doing work that requires excessive emotional labour (Schaufeli et al., 2002). Control refers to when people experience a lack of control over resources or authority while still being expected to perform their job duties efficiently (Maslach, 2003). Rewards describe a lack of both financial rewards and social recognition for a job well done, which could lead to feelings of being devalued and inefficacy (Maslach, 2003). Community refers to the interpersonal relations people have with co-workers and the sense of belonging and membership they derive from these interactions (Maslach et al., 2001). Chronic, unresolved conflict between co-workers and feelings of isolation are likely to produce feelings of frustration and hostility, and hamper social support between colleagues (Schaufeli et al., 2002). Fairness describes feelings of perceived distributional and procedural justice and transparency in the workplace (Maslach et



al., 2001). A lack of fairness causes people to feel disrespected and devalued which is emotionally exhausting and upsetting for people (Schaufeli et al., 1996). Finally, people can also experience conflict between their own values and the values required or prescribed by the job or the organisation (Schaufeli & Bakker, 2004). This dissonance of values can produce feelings of frustration and resentment.

### **3.3.2 The impact of burnout**

Maslach et al. (2001) assert that the importance of burnout research lies in the negative outcomes it has for both the individual and the workplace. Burnout has been associated with various negative job behaviours, such as absenteeism, intention to leave and actual turnover (Schaufeli et al., 2002). It also leads to lower effectiveness and productivity at work, which further reduces job satisfaction and commitment to the job or organisation (Schaufeli et al., 2002). Moreover, burnout can have a negative effect on co-worker relations as it may cause conflict and disruption at work (Maslach et al., 2001). Burke and Greenglass (2001) also provide evidence of a 'spill-over' effect where peoples' personal lives are affected by job burnout. Maslach et al. (2001) further maintain that the exhaustion component of burnout is predictive of stress-related health outcomes. Burnout has also been linked to symptoms of mental dysfunction, such as anxiety, depression and low self-esteem (Schaufeli & Bakker, 2004).

### **3.3.3 Burnout in academia**

Bilge (2006) maintains that, despite the fact that burnout is prevalent in many other professions, the risk of experiencing burnout is mostly seen in professions, such as education, health and social work where relational interaction is required. Talbot (2000, p. 359) defines academic burnout as “an emotional phenomenon associated with high achievement in the academic role.” Maslach et al. (2001) explain that high expectations cause people to work excessively hard, which lead to burnout if their hard work does not pay off. Kinman (2001) indicates that female academics experience higher levels of stressors and strain than male academics. This is due to a lack of role models, increased role conflict and a lack of perceived guidance and support (Kinman, 2001). Moreover, stressors increased with seniority, in particular for female academics (Kinman, 2001). Dua (1994) reported that younger academics experienced more stress than older academics. Younger academics are more likely to be responsible for undergraduate teaching as opposed to conducting research which is more rewarding (Gmelch, Wilke, & Lovrich, 1986). Similarly, Thorsen (1996) indicated that professors reported the least amount of stress as they had more control over their job tasks, and could engage in meaningful work activities. Hickson and Oshagbemi (1999) suggest that individuals have better coping mechanisms as they age, and as a result experience greater stability, ego strength and job satisfaction. Moreover, new academics to the organisation are also more likely to experience stress due to the “newness” of the organisation and the required performance expectations (Barkhuizen & Rothmann, 2008).

While it is recognised that some degree of stress is normal and inevitable in daily living, research (Gillespie et al., 2001) suggests that a significant proportion of university staff is experiencing maladaptive levels of stress, which has an impact on the individual's physical and psychological health, interpersonal relationships at work, the quality of work and workplace morale (Gillespie et al., 2001). Unfortunately, very little research has been done on the impact of occupational stress on academics, and the majority of the available research has been done in the United States, United Kingdom, New Zealand, and Australia (Rothmann & Barkhuizen, 2008).

Coetzee and Rothmann (2004) further note that the current changes and demands in the Higher Education scenario will inevitably have an impact on the levels of burnout of employees at Higher Education institutions. Also, the intense level of personal and emotional contact that characterises academic relationships can be quite stressful, since it is expected of professionals to be selfless and put the needs of other first, as well as do whatever it takes to help the student (Maslach, 1998). Academics are frequently expected to perform a number of roles which include that of teacher, researcher, adviser, facilitator, colleague, marketer, tutor, writer and manager simultaneously; they often even play a counselling role as well. It can be argued that such supplementary tasks may be considered a healthy diversification of one's job; however, the toll of these added demands may well be an important cause of extreme job-related strain, leading to burnout (Cooper, Dewe, & O' Driscoll, 2001). In the teaching profession, burnout has been linked to negative affective and professional consequences, including cynicism, emotional exhaustion, depression, impaired

occupational functioning and dissatisfaction with one's career choice (Mearns & Cain, 2003). Talbot (2000) further mentions that burnout in the academic profession is associated with poor mental and physical health, poor interpersonal relationships and a decrease in teaching performance. An academic that suffers from burnout may have a negative effect on his or her students' well-being and performance (Maslach & Leiter, 1995).

Mearns and Cain (2003) caution that high job demands do not always lead to burnout. In fact, certain individuals may not only be unaffected by high job demands, but may actually thrive under it. Naude and Rothmann (2006) also maintain that some individuals, regardless of high job demands and long working hours, show no symptoms of burnout. On the contrary, they seem to find pleasure in working hard and dealing with job demands. From a positive psychology perspective, such individuals could be described as engaged in their work.

### **3.4 PSYCHOLOGICAL CONDITIONS OF ENGAGEMENT**

Kahn (1990) investigated the conditions that cause people to either engage or disengage at work. He proposes that at any given moment individuals invest of themselves to varying degrees, depending on whether certain conditions, expectations or needs are met. Needs are defined as anything that compels individuals to action (Murray, 1938). To fulfil certain needs, individuals unconsciously evaluate a situation by asking themselves three pertinent questions: (1) How meaningful is it for me to bring myself into this performance? (2) How safe

is it for me to do so? And (3) How available am I to do so? (Kahn, 1990, p. 703). Favourable evaluations of these questions compel individuals "... to place increasing depths of themselves into role performances" (Kahn, 1990, p. 703). May et al. (2004, p. 12) describe this "depths of themselves" as the human spirit at work which seeks fulfilment through self-expression at work. The following three psychological conditions/needs were identified as having an influence on an individual's engagement or disengagement at work: meaningfulness, safety (relatedness), and availability (autonomy/competence) (Simpson, 2009). Deci and Ryan (2008) compared these three conditions/needs to essential nutrients for the optimal functioning and well-being of human beings. Each of these conditions will be discussed separately.

#### **3.4.1 Psychological meaningfulness**

The concept and search for meaning has a long history of human inquiry (Morgan & Farsides, 2009). Also referred to as "meaning of life", "meaning in life" or "personal meaning" (Auhagen, 2000), this search dates as far back as Aristotle's conceptualization of eudamoinia (meaning and self-realization) to Aquina's Renaissance writings on virtues (Linley & Joseph, 2004). With the emergence of modern psychology, this curiosity about meaning was further examined by scholars, such as James (1902) (optimal human functioning and transcendence), Jung (1933) (individuation), Allport (1961) (maturity), as well as Maslow (1962) and Rogers (1951) (human potential). However, the recognition of meaning in life as a clinical construct was cemented by the writings of psychiatrist Victor Frankl (1963) about his

difficult experiences in a concentration camp in Auschwitz (Germany) during World War II (Morgan & Farsides, 2009). Based on his experiences, Frankl (1963) proposes that human beings are motivated to search for personal meaning, which encompasses a quest to understand the nature of their lives and the need to feel significant, purposeful and important. The search for meaning in life is conceptualized around three pillars: freedom of will, will to meaning, and meaning in life (Frankl, 1988). Freedom of will refers to the freedom that human beings have to make choices, while will to meaning describes the motivational process to actively search for meaning (Barnes, 2000). Meaning in life explains people's desire and efforts to understand the meaning, significance and purpose of their lives (Steger, Kashdan, Sullivan, & Lorentz, 2008). Frankl (1963) further suggests that an understanding of one's meaning in life is necessary to avoid *noogenic neurosis*, a pathological condition with features of boredom, aimlessness and apathy (Maddi, 1967).

#### **3.4.1.1 Defining psychological meaningfulness**

In an attempt to develop a psychological analysis of the meaning in life concept, Auhagen (2000) explains that meaning is essentially a process of finding meaningful fulfilment in particular components of life. Therefore, the meaning in life experience will be different for one person to the next. Meaning in life can be experienced on two levels: on a superior (cosmic) level and on a level of everyday life (Yalom, 1980). The cosmic level is based on a superior view of the world, while the everyday experiences level is based on life content and goals (Yalom, 1980). Reker (2000, p.41) defined meaning in life as "a multidimensional construct consisting of the

cognizance of order, coherence, and purpose in one's existence, the pursuit and attainment of worthwhile goals, and the accompanying sense of fulfilment.”

Auhagen (2000, p. 38) defined meaning of life as follows:

*“Meaning of life is a theoretical concept which denotes reflections on, and/or ways of experiencing, contexts of meaning in relation to human life in general, to one's own individual life, or to parts of the latter.”*

Psychological meaningfulness is defined as “a feeling that one is receiving a return on investments of one's self in a currency of physical, cognitive, or emotional energy” (Kahn, 1990, p. 703). Individuals experience psychological meaningfulness when their work activities and goals are congruent with their own ideals and ambitions, and they derive a deep sense of satisfaction and worth from being able to contribute to society (May et al., 2004). Thus, a person derives meaning when he or she feels useful and appreciated. When a person experiences a lack of meaning, it is often coupled with feelings of alienation, boredom, frustration and even estrangement of the self (Kahn, 2007). Perhaps a more general definition of meaning is that of Baumeister (1991, p. 15) who defined meaning as “a mental representation of possible relationships among things, events and relationships.”

#### **3.4.1.2 Meaning in adverse conditions**

The presence of meaning further serves as a powerful tool to cope with negative circumstances albeit in people's personal lives or work lives (King, Hicks, Krull, &

Gaiso Del, 2006). Meaning, as a coping process, entails perceptions of the significance of a negative event or situation, making adjustments to that event, and making sense of the event (Frazier & Schauben, 1994). Park and Folkman (1997) distinguished between two levels of meaning, namely global meaning and situational meaning. Global meaning encompasses people's most basic beliefs and fundamental assumptions about the world, their goals and subjective feelings (Dittman-Kohli & Westerhof, 1999). Global meaning has a significant influence on how people understand the past and the present, and their expectations of the future (Park & Folkman, 1997). Situational meaning, on the other hand, describes the interaction of a person's global beliefs and the outcomes of a person-environment interaction (Park, 2010). Situational meaning further includes the following three components: appraisal of meaning, which refers to an evaluation of the personal significance of an event, search for meaning, which entails the coping processes a person employs, and lastly, meaning as outcome, which describes the meaning people make in the aftermath of an event (Park & Folkman, 1997).

Steger (2009) made a distinction between two approaches to conceptualize meaning in life: a motivational (or purpose-centered) approach and a cognitive (significance-centered) approach. The motivational approach explains how people develop short- to long-term goals in life, and the cognitive component entails the conceptualization of how people understand themselves and the world in which they live, and how they prioritize and manage the most important life events (Rothmann, in press). Under circumstances of adversity (e.g., traumatic experiences and adverse life conditions), people often seek purpose in life to give them understanding and direction when such



circumstances are present (Matuska & Christiansen, 2008). Searching for meaning in life is a powerful motivational drive and indicative of good mental health (Steger, Kashdan, Sullivan, & Lorentz, 2008).

### **3.4.1.3 Meaning in the work context**

Experiencing meaning and purpose at work contributes to meaning in life, especially because people spend a large part of their lives at work (Holbeche & Springett, 2004). In addition, people who are employed show better psychological health than unemployed individuals (Arnold, Turner, Barling, Kelloway, & McKee, 2007). People can find or create meaning in unpleasant working conditions, especially if their values are congruent to that of the organisation's, their work provides them opportunities to connect with others and if their job gives them a sense of competence (Grant, Morales, & Sallaz, 2009).

Arguing that people must take an active role in finding meaning in the activities of their lives, Frankl (1988, p. 70) stated that “... *there are three principal ways in which man can find meaning in life. The first is what he gives to the world in terms of his creations; the second is what he takes from the world in terms of encounters and experiences; and the third is the stand he takes to his predicament in case he must face a fate he cannot change. That is why life never ceases to hold meaning...*” This assertion has important implications for finding meaning in work. People can find meaning in work that gives them the opportunity to share their creativity and uniqueness with others, as well as when they can learn from it (Morrison, Burke, &

Greene, 2007). The teaching profession is a unique occupation that allows for the establishment of long-term, meaningful connections with students, who are regarded as the “clients” of the work environment (Klassen, Perry, & Frenzel, 2012). Teachers or educators, albeit on elementary, primary or post-secondary level, are in a unique position to generate and transfer knowledge to students, and, in doing so, create meaning for themselves, as well as for their students. Rothmann (in press) emphasizes that people derive meaning and purpose from knowing what their highest strengths and talents are, and in using them as a service to others.

Kahn (1990) identified the following workplace factors underlying and influencing psychological meaningfulness: work characteristics, role characteristics and work interactions. May et al. (2004) later renamed these dimensions to ‘job enrichment’, ‘work role fit’ and ‘co-worker relations’. A positive relationship was found between job enrichment and psychological meaningfulness and similarly between work role fit and psychological meaningfulness (May et al., 2004). Psychological meaningfulness was identified as having the strongest effect on engagement (May et al., 2004). Olivier and Rothmann (2007) also found psychological meaningfulness to be the strongest predictor of work engagement. Although the onus is on employees to create meaning for themselves, some authors argue that organisations have the responsibility to provide its employees with meaningful work, because it can lead to personal growth and motivation (Olivier & Rothmann, 2007).

For this project, the following hypothesis has been formulated regarding the relationship between psychological meaningfulness and work engagement:

Hypothesis 1: Psychological meaningfulness is positively related to work engagement.

### **3.4.2 Psychological availability**

#### **3.4.2.1 Defining psychological availability**

Psychological availability refers to “the sense of having the physical, emotional or psychological resources to engage at a particular moment” (Kahn, 1990, p. 714). It measures how ready and confident a person is to engage the self at work regardless of the various other roles that a person has to fulfil (May et al., 2004). Psychological availability is closely related to constructs, such as self-efficacy, competence and autonomy (Hirschi, 2012). Self-efficacy refers to the extent to which an individual has acquired cognitions with regards to his or her capacities to successfully accomplish future work tasks (Rigotti, Schyns, & Mohr, 2008). Competence describes an inborn need to be efficient, effective, and masterful of one’s environment (Ryan & Deci, 2000).

#### **3.4.2.2 Psychological availability in the work context**

According to Betz (2007), perceptions and beliefs about one’s self-efficacy increase motivation and effort in working towards the achievement of goals which simultaneously leads to positive personal and organisational outcomes. Perceptions of self-efficacy further foster resilience and persistence in the face of challenges and

obstacles (Bandura, 1997). In addition, self-efficacy beliefs serve as an important personal resource that enhances greater engagement at work (Bakker et al., 2008), physical health (Carver & Scheier, 1990) and vitality (Vansteenkiste, Lens, Soenens, & Luyckx, 2006). Educators have described their profession as a journey of development and actualization, as well as a process of “finding themselves within their work on a deeper level” (McClure & Brown, 2008, p. 13).

Kahn (1990) proposed that the following four factors influence an individual's psychological availability: physical energy, emotional energy, individual security and outside lives. May et al. (2004) on the other hand, hypothesize that an individual's resources, work-role insecurities and outside activities influence psychological availability. All three factors have shown a significant effect on psychological availability, with individual resources demonstrating the strongest effect. In their revised model, May et al. (2004) reported that self-consciousness did not have a significant effect on psychological availability. May et al. (2004) further observed that psychological availability had a significant effect on engagement. Olivier and Rothmann (2007) found evidence that psychological availability was a significant predictor of work engagement.

The following hypothesis is formulated regarding the relationship between psychological availability and work engagement:

Hypothesis 2: Psychological availability is positively related to work engagement.

### **3.4.3 Psychological safety**

#### **3.4.3.1 Defining psychological safety**

Kahn (1990) defined psychological safety as individuals' perception concerning the freedom to be themselves (within boundaries) in a particular role without fearing negative consequences or victimization to their self-image, status or career. People feel psychologically safe when they can express themselves honestly, when they feel that they can take reasonable risks, and when they can rely on the protection of their co-workers. Protection in this context refers to the confidence that one's co-workers will have one's best interest at heart. When these factors are lacking, people experience uncertainty, ambiguity, and inconsistencies which could hamper their personal engagement (Kahn, 1990). Nembhard and Edmondson (2012) explain that people carefully consider the personal risk associated with a specific behaviour and would either refrain or engage in behaviour depending on the perceived risk that would result from that behaviour.

Psychological safety further ties into feelings of relatedness. Relatedness refers to the need to belong and to feel connected to others, and to establish close interpersonal bonds (Reis, Sheldon, Gable, Roscoe, & Ryan, 2000). This psychological need for relatedness is critical for healthy psychological functioning and has two primary features (Baumeister & Leary, 1995). The first feature involves frequent positive interactions or personal contact with other people and the second feature pertains to perceptions of stability, affective concern and the continuation of the interpersonal

relationship/s in the foreseeable future (Baumeister & Leary, 1995). Relatedness or belonging is a fundamental human motivation that can provide important insight into the psychological well-being of people (McClure & Brown, 2008).

#### **3.4.3.2 Psychological safety in the work context**

Research has shown that a primary motivation for individuals choosing the teaching profession is the opportunity to work closely with, and to connect with, colleagues and students (Watt & Richardson, 2007). From a theoretical perspective of self-determination, this connection with colleagues and students is an important factor that shapes the intrinsic motivation of teachers or educators (Klassen, Perry, & Frenzel, 2012). Educators' intrinsic motivation further mirrors their work engagement, which leads to higher performance, persistence and creativity (Ryan & Deci, 2000). The experienced work engagement of educators is reflected in their self-determined teaching and other work behaviours which also have an impact on the academic behaviour of students (Roth, Assor, Kanat-Maymon, & Kaplan, 2007). Educators who are emotionally exhausted (element of burnout) experience little teaching motivation and lower levels of professional efficacy (Hakanen, Bakker, & Schaufeli, 2006). This is likely to create a poor quality classroom environment and damage the educator-student relationship (Bakker et al., 2007).

Kahn (1990) proposed that the following dimensions underlie psychological safety: interpersonal relationships, group and intergroup dynamics, management style and process and organisational norms. Based on subsequent research (Edmondson, 1996,

1999), May et al. (2004) hypothesize that supervisor relations, co-worker relations and co-worker norms influence psychological safety. May et al. (2004) found that all three dimensions had a significant influence on psychological safety, with supervisor relations showing the strongest effect. Psychological safety was positively associated with work engagement. In revising their initial model, May et al. (2004) further found that feelings of self-consciousness had a significant effect on an individual's psychological safety. Olivier and Rothmann (2007) found that psychological safety was a statistically significant predictor of work engagement.

The following hypothesis is formulated regarding the relationship between psychological safety and work engagement:

Hypothesis 3: Psychological safety is positively related to work engagement.

Kahn (1992) summarizes the three psychological conditions with the following statement: *“When an individual finds meaning, feels safe, and has the necessary external and internal resources in their work-role, personal engagement will result and the individual is stated to be ‘fully present.’”(p. 332)*

It is posited that the three psychological conditions, namely psychological meaningfulness, psychological safety and psychological availability, will influence individual's work engagement. Individuals are likely to seek out work environments in which they can satisfy these needs (Rothmann, in press). The satisfaction of psychological needs has a remarkable impact on the intrinsic and extrinsic motivation of individuals (Gagné & Deci, 2005). Thus, when individuals perceive

their work activities as meaningful, they are likely to engage in their work. Likewise, when individuals feel that they can be themselves without fear of reprisal in an environment that is unambiguous and predictable, they are likely to engage in their work. Finally, individual work engagement is facilitated when individuals believe that they have the necessary physical, emotional and cognitive resources to do so, as well as when they experience feelings of autonomy, competence, and relatedness. When these needs are satisfied, “individuals are able to move toward the experience of achieving effectiveness, connectedness, intrinsic motivation, and ultimately psychological well-being” (Patrick, Knee, Canevello, & Lonsbary, 2007, p. 435). Research (Hahn & Oishi, 2006; Kasser & Ryan, 1996) has shown that these psychological conditions/needs are associated with higher psychological well-being across age, cultural dimensions and lifespan.

### **3.5 Chapter summary**

This chapter explained psychological well-being in terms of its definition and theoretical frameworks. It further discussed work engagement and the psychological conditions (psychological meaning, psychological availability and psychological safety) as playing an integral role in the development of psychological well-being.

In the following chapter, the following antecedents of work engagement are explored: work role fit, supervisory relations, co-worker relations, resources, job enrichment, rewards and recognition, self-consciousness and organisational support.



Work engagement is further explained in terms of its theoretical frameworks and its significance for the academic environment.

## **CHAPTER 4**

### **ANTECEDENTS OF WORK ENGAGEMENT**

This chapter explores the existing literature and research findings on the following antecedents of work engagement: work role fit, supervisor relations, co-worker relations, resources, job enrichment, rewards and recognition, self-consciousness and organisational support. The various theoretical frameworks of work engagement are discussed and the concept is further explored in the context of the academic environment.

#### **4.1 ANTECEDENTS OF WORK ENGAGEMENT**

##### **4.1.1 Work role fit**

Work role fit, also referred to as job fit (Resick, Baltes, & Shantz, 2007) or person-organisation fit, (Kristof, 1996, p. 6) is defined as the extent to which an individual and an organisation are compatible under the following conditions: a) at least one entity provides what the other needs, or b) they share similar fundamental characteristics, or c) both. May et al. (2004) describe work role fit as the extent to which a person's self-concept is congruent with his or her role. According to Resick et al. (2007), work role fit is becoming increasingly important for an organisation's attraction and retention initiatives, recruiters' selection decisions, and employees' work-related attitudes and actions (Kristof-Brown, Zimmerman, & Johnson, 2005). Moreover, work role fit is important because it influences an employee's

organisational life cycle, impacting on decisions ranging from decisions to join an organisation, behaviours and attitudes towards their employer and their decision to remain or leave the organisation (Greguras & Diefendorff, 2009).

Various conceptualizations of work-role have been developed (Kristof, 1996). Resick et al. (2007) posited that work role fit can be described in terms of perceived fit and objective fit. However, perceived fit has yielded larger effect sizes and is a more accurate reflection of an individual's attitudes and decision-making processes than objective fit (Resick et al., 2007). Muchinsky and Monahan (1987) drew a distinction between supplementary and complementary fit. Supplementary fit occurs when an individual possesses similar characteristics to that of other people in the organisation while complementary fit occurs when the characteristics of an individual "completes" the environment (Muchinsky & Monahan, 1987). Edwards (1991) referred to work role fit as person-job fit, and developed the following two conceptualizations: demands-abilities fit and needs-supplies or supplies-values fit. Demands-abilities fit refers to the extent to which the knowledge, skills and abilities of employees are congruent with the job requirements (Kristof-Brown et al., 2005). Needs-supplies fit, on the other hand, describes the extent to which employees' needs, expectations and desires are fulfilled by the jobs they perform (Kristof-Brown et al., 2005). Both these conceptualizations of person-job fit describe the compatibility of results from personal and environmental characteristics that are well matched.

Greguras and Diefendorff (2009) postulate that the relationship between work role fit and various individual outcomes such as affective organisational commitment and job performance are mediated by psychological needs (autonomy, relatedness and competence). When individuals experience work role fit, the work environment will allow these individuals to fulfil their needs, which will result in favourable attitudes (Arthur, Bell, Villado, & Doverspike, 2006). Using the self-determination theory, Greguras and Diefendorff (2009) maintain that work role fit facilitates the satisfaction of psychological needs, which leads to favourable outcomes. Educators who experience work role fit show energy and effectiveness in their daily work lives, because their skills and abilities match the requirements of their jobs (Campbell, McCloy, Oppler, & Sager, 1993). This congruence between the skills and requirements of the educator and the requirements of the job allows educators to feel competent in their teaching behaviours, and consequently perform better than those who do not feel competent. According to the self-determination theory, the satisfaction of one's need for competence will increase one's motivation (Deci & Ryan, 2008), and consequently strengthen one's affective commitment to the organisation (Greguras & Diefendorff, 2009). Locke (1969) concurs that poor fit perceptions of educators increase their risk for burnout, while good fit perceptions foster job satisfaction, engagement and positive work attitudes (Cable & Edwards, 2004).

As the world of work is continuously changing, people are re-evaluating their lives and work (Scroggins, 2008). Apart from external rewards, individuals are also searching for other intangible outcomes that will provide them with a sense of

satisfaction and meaningful work experiences (Scroggins, 2008). If people are allowed to express their true selves, including their core values and beliefs, in what they do, they will derive personal meaning from their work, and it will subsequently influence their job-related attitudes (Shuck, Reio, & Rocco, 2011). Individuals with high levels of job fit are able to work within a level of emotional and physical comfort which could result in higher performance as such individuals are also more likely to carry out their job duties with enthusiasm and energy (Shuck et al., 2011). Resick et al. (2007) posit that an individual's fit with multiple components of the work environment has far reaching implications for employees' overall well-being.

Olivier and Rothmann (2007) explain that because people want to give expression to their unique and creative self-concepts, they will seek roles which will allow them to do so. This explanation ties into Shamir's (1991) self-concept-based theory which postulates that individuals will find a job meaningful when the job activities match the individual's self-concept. The results of May et al.'s (2004) study showed that work role fit was positively associated with psychological meaningfulness. Olivier and Rothmann (2007) confirmed this when their study identified work role fit as the strongest predictor of psychological meaningfulness. The positive relationship can be ascribed to the fact that people derive meaning from activities where they are comfortable to express their true nature. Deriving meaning from work activities allows individuals to experience optimal levels of engagement at work. Similarly, Rothmann and Rothmann (2010) found that work role fit was the best predictor of psychological meaningfulness and employee engagement. Warr and Inceoglu (2012) reported that poor work role fit was associated with lower levels of well-being.

The following hypothesis is formulated regarding the relationship between work role fit and psychological meaning:

Hypothesis 4: Work role fit is positively related to psychological meaningfulness.

#### **4.1.2 Supervisory relations**

Supervisory relations can have a major impact on an individual's sense of psychological safety in the work environment (May et al., 2004). Supervisors who are supportive, caring and transparent are more likely to foster a work environment in which employees feel safe to take initiative and to invest more of themselves (Edmondson, 1999). These supervisors are likely to show genuine concern for the needs and feelings of employees, to provide a platform for open communication, to develop and empower employees, and to solve work-related problems effectively (Deci & Ryan, 1987).

Friedlander and Ward (1984) identify three interrelated supervisory styles (attractive, interpersonally sensitive and task-oriented) which determine the quality of supervisor-trainee relationship. Supervisors with an attractive supervisory style are warm, friendly, open and easily approachable by their trainees. Supervisors with an interpersonally sensitive supervisory style are invested, mindful and has a genuine concern for their trainees. Lastly, task-oriented supervisors are goal-orientated, focused and structured in their supervision. Kreitner, Kinicki, and Buelens (2002) maintain that supervisors are regarded as agents or representatives of the organisation, who have the capacity to provide information on organisational goals,

implement policies, schedule work assignments, and set and appraise performance standards. The supervisor, therefore, has to maintain regular contact and form relationships with subordinates in the workplace (Ladebo, 2008). The quality of the relationship between an employee and the supervisor can have a significant impact on the motivation, work attitudes and performance of employees (Ladebo, 2008). From a social exchange theory perspective, an employee, who considers the relationship with their supervisor as fair, positive and satisfactory, are likely to reciprocate the supervisor with positive work attitudes, increased performance and an increase in in-role and discretionary behaviours (Kreitner, Kinicki, & Buelens, 2002).

Central to the theme of supervisory relations is supervisor trustworthiness. May et al. (2004, p. 16) linked the following five categories of behaviour to supervisor trustworthiness: behavioural consistency, behavioural integrity, sharing and delegation of control, accurate and open communication, as well as a demonstration of concern. Behavioural consistency entails behaving the same across time and situations, whilst behavioural integrity refers to congruency between the words and deeds of supervisors (May et al., 2004). Employees are likely to feel afraid and uncertain if supervisors have the tendency to behave unpredictably and hypocritically (Rothmann & Rothmann, 2010). Sharing and delegation of control describe the extent to which supervisors are willing to loosen control and allow employees to participate in decision-making (Rothmann & Rothmann, 2010). Accurate and open communication entails a transparent and accountable supervisory style with positive, constructive feedback to employees. Finally, a demonstration of concern refers to

genuine care, respect and consideration for employees (May et al., 2004). When these supervisor behaviours are present in an organisation, employees are likely to feel psychologically safe, which, in turn, allows them to engage more fully in their work activities. May et al. (2004) provided evidence for this by finding a significant relationship between engagement and psychological safety, with supervisory relations showing the strongest effect. These findings were also in line with results of other studies across different contexts (Deci, Connell, & Ryan, 1989; Edmondson, 1999).

Supervisory support in academic institutions in the form of mentoring programs for faculty members is increasingly regarded as an essential component of faculty success (Wasserstein, Quistberg, & Shea, 2007). Mentoring programs are implemented in education institutions to retain new educators (Andrews & Quinn, 2005), and to create a support system to assist educators with the challenges and responsibilities related to teaching, research and community service (Feiman-Nemser, Carver, Schwille, & Yusko, 1999). Ehrich, Hansford, and Tennent (2004) found that mentored educators benefited from psycho-social support, assistance with classroom teaching, discussions (exchanging ideas, information or problems and receiving advice from peers) and feedback (albeit positive reinforcement or constructive criticism). Moreover, mentoring is associated with several positive outcomes, such as higher job satisfaction and lower levels of turnover intentions (Wasserstein, Quistberg, & Shea, 2007).



The following hypotheses are formulated regarding the relationship between supervisory relations and psychological safety and psychological availability:

Hypothesis 5: Supervisory relations are positively related to psychological safety.

Hypothesis 6: Supervisory relations are positively related to psychological availability.

#### **4.1.3 Co-worker relations**

Co-worker relations describe the nature and quality of the relationships that one has with co-workers. One's relationships with co-workers can be regarded as a potential determinant of both psychological meaning and psychological safety. When individuals experience the benefit of rewarding, interpersonal interactions with their co-workers, they will also experience personal meaning in their work. Rewarding interpersonal interactions refer to being treated with respect and dignity and being appreciated by one's co-workers (May et al., 2004). Contrary to Kahn's (1990) findings, May et al.'s (2004) study revealed an insignificant relationship between co-worker relations and psychological meaningfulness. However, they ascribed this to the job context of their research participants and suggested that future research should measure this relationship in various types of jobs. Interpersonal relationships with co-workers that are characterized as supportive and trusting are bound to foster psychological safety (Kahn, 1990). May et al. (2004) investigated the cognitive and affective nature of interpersonal trust, and found evidence that interpersonal trust and support significantly influences the extent to which people feel psychologically safe in their work environment. Olivier and Rothmann (2007) maintain that the

dependability and reliability of others are associated with cognitive-based trust, and the emotional connection between individuals fosters affective trust.

Kirmeyer (1988) identified two different types of social interactions in the work setting, namely work-related and non-work related. Work-related interactions involve interactions that are directly related to the job, such as issuing and following instructions, requesting assistance, sharing work information and giving feedback and criticism. Non-work related interactions are unrelated to job duties and consist of behaviours like teasing, joking, sharing information about sports, other leisure activities or family and providing emotional support in times of hardship. According to Chadsey and Beyer (2001), both types of interactions are significant in the work environment, albeit for different reasons. Work-related interactions, revolving around the job duties of employees, are critical for the accomplishment and achievement of organisational goals and objectives (Salzberg, Agran, & Lignugaris-Kraft, 1986). Non-work related interactions, on the other hand, are crucial for establishing close social relationships or friendships with co-workers, because it gives individuals the opportunity to share intimate details and discover common interests (Salzberg et al., 1986). The nature and quality of these social interactions in an organisation are likely to be influenced by the culture of the organisation (Chadsey & Beyer, 2001). The culture of an organisation creates the social governance of the work setting, which encompasses the values, expectations and shared meaning in an organisation (Hatch, 1993). Social interactions in organisations are influenced by the extent to which individuals fit in with the culture of their work setting (Wayne & Liden, 1995).

Henderson and Argyle (1985) identified the following three types of social relationships in the work setting: work acquaintances, work friends and social friends. Work acquaintances interact with each other through formal contact which is usually job-related and not necessarily coupled by feelings of liking or disliking. Co-workers who are work friends are relatively closer than work acquaintances. However, their contact is limited to the work setting, and does not include home visits or joint leisure activities outside the work setting. In contrast, social friends have close, mutually satisfying relationships which extend beyond the work setting, and include shared leisure activities, sharing of personal information and frequent home visits.

Occupational stress and burnout are increasingly prevalent in the teaching profession (Boyle, Borg, Falzon, & Baglioni, 1995). Educator burnout is caused by continuous stress related to lack of resources, time pressures, work overload and role ambiguity, inadequate collegial relationships, lack of promotional opportunities, lack of decision-making power and poor quality of students (Jackson & Rothmann, 2005). Research has shown that social support from co-workers can buffer the negative effects of stress (Bonfiglio, 2005). Thus, educators who enjoy satisfying co-worker relations are less burned out. Salami (2011) explains that when educators are confronted with specific job-related difficulty or stress, social support from co-workers can help minimize emotional distress and boost their self-esteem which, in turn, enhances their coping abilities to effectively deal with the job-related problems they are faced with.

According to Lacy and Sheehan (1997), support from colleagues was found to be one of the largest predictors of job involvement and organisational commitment. Social support from colleagues can help to get the work done on time and may therefore alleviate the impact of work overload (Van der Doef & Maes, 1999). Co-workers who share emotional bonds are more likely to be of assistance to one another (Bacharach, Bamberger, & Vashdi, 2005) and share knowledge and information (Reagans & McEvily, 2003). In addition, support from colleagues protects employees from the pathological consequences of stressful experiences (Bakker, Demerouti, & Euwema, 2005). In other words, support can assist an employee in coping with job demands, facilitate performance, and act as a protector against ill health. Co-worker support is an important resource since it can promote better well-being when combined with other job resources. This confirms the notion by Van Emmerik (2002) that support from both the supervisor and colleagues, as well as a supportive departmental climate, can buffer the effect of exhaustion. Research has further shown that supportive relationships among co-workers may lead to positive performance-related consequences for organisations (Shah & Jehn, 1993).

The following hypotheses are formulated regarding the relationship between co-worker relations and psychological meaning and psychological safety:

Hypothesis 7: Co-worker relations are positively related to psychological meaning.

Hypothesis 8: Co-worker relations are positively related to psychological safety.

#### 4.1.4 Resources

Individuals employ a variety of resources when interacting with their work environment. Resources provide an individual with the sense of being in control of their environment (Hobfoll, Johnson, Ennis, & Jackson, 2003). Resources can be physical, psychological, cognitive, social or material (Blase, 1982), and serve as important coping mechanisms and facilitators of successful work outcomes. Resources can be further classified as internal or external (Schwarzer & Greenglass, 1999). Internal resources represent personal variables (psychological, cognitive and behavioural patterns) which can buffer or reduce the impact of stress on an employee (Betoret, 2009). Specific examples of internal resources are perceptions of self-efficacy, professional development, intellectual abilities and active coping strategies (Betoret, 2009). External support entails both social and physical resources (Schwarzer & Greenglass, 1999). Social support may come from colleagues and supervisors, as well as from a spouse, friends and family. Physical resources refer to equipment, computers and other kinds of technology, furniture and infrastructure that enable employees to carry out their job duties. The availability of resources may trigger positive emotions and strengthen motivation in employees (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2012), which may foster higher levels of work engagement and psychological well-being in employees (Boudrias et al., 2011). Moreover, Judge, Locke, and Durham (1997) posit that these resources may play a moderating or mediating role in the relationship between factors in the work environment and important organisational outcomes, or they may even influence the way people understand, interpret and react to their work environment.

Using a job demands-resources theory perspective, Hakanen, Bakker, and Schaufeli (2006) explained that a lack of/or insufficient job resources may have negative effects on educators' well-being and may even increase their levels of burnout. They identified the following five job resources as important motivating factors that foster work engagement and commitment in educators: job control, access to information, supervisory support, an innovative education climate and a healthy social climate. Although mentioning similar resources as important motivating factors for educators, Betoret (2009) cautioned against underestimating social and physical resources of educators. Social support (albeit internal or external) may come from colleagues, administrators and supervisors, as well as from friends and family. Physical resources include didactic resources (computers, software, overhead projectors, printers, photocopiers, textbooks) and infrastructure (labs, office, library, leisure facilities) (Betoret, 2009). When demands of the job exceed the available resources of educators, their motivation and work engagement are threatened (Hakanen et al., 2006).

May et al. (2004) assert that individuals bring along their physical, emotional and cognitive resources when they engage themselves in work activities. Any work activity places physical demands on the human body to varying degrees and requires stamina and energy (May et al., 2004). When these physical resources are depleted, it will result in physical disengagement from one's work. Similarly, work activities also require emotional resources. When work activities stretch the emotional capacities of individuals, people tend to disengage themselves from work. Finally, work activities demand the cognitive resources of individuals, depending on the

nature of the job and the person. People can become overwhelmed with jobs that require more information processing that they can handle, and will detach themselves from their work activities. May and his colleagues (2004) confirmed that the presence of individual resources will lead to greater psychological availability and engagement, while the opposite is also true. A lack of resources will diminish one's psychological availability and ability to engage in work activities.

The following hypothesis is formulated regarding the relationship between resources and psychological availability:

Hypothesis 9: Resources is positively related to psychological availability.

#### **4.1.5 Job enrichment**

As a strategy to redesign work so that people will get turned on to, and become excited about, their work, Hackman, Oldham, Janson, and Purdy (1975) identified three important conditions critical to a person's motivation and job satisfaction, namely: experienced meaningfulness, experienced responsibility, and knowledge of results. Experienced meaningfulness refers to a person's perceptions about the worth and value of the job that he or she performs. Experienced responsibility relates to people's perceptions of the extent to which they are accountable for the outcomes of the effort they put into their jobs. Knowledge of results encompasses people's evaluation of the standard and quality of the outcomes of their job. Hackman et al. (1975) maintain that these three conditions play an important role in a person's internal motivation to continue working to the best of his or her ability.

They further hypothesize that five core job characteristics, namely: skills variety, task identity, task significance, autonomy and feedback elicit the three conditions and enable individuals to express their unique capabilities and skills. Skills variety, task identity and task significance significantly contribute to the meaningfulness of the job (Griffin, Welsh, & Moorhead, 1981). Skills variety has been described as the extent to which the employee gets opportunities to perform activities that require various skills and abilities, while task identity relates to the degree to which the job requires that the employee completes a whole and identifiable task, from beginning to end (Griffin et al., 1981). Task significance refers to the extent that the employee evaluates his or hers' job as having an important impact on the lives of others (Stone & Porter, 1975). Experienced responsibility is significantly influenced by autonomy which describes the degree to which the employee has the freedom, independence and prerogative to schedule his or her own work activities (Stone & Porter, 1975). Finally, feedback contributes to knowledge of results which refers to the extent to which the employee receives an indication of the effectiveness and efficiency of his or her efforts (Orpen, 1979). The job characteristics theory was formulated as a model of job redesign, and was subsequently revised to become the "Job Characteristics Model" (JCM) (Vorster, Olckers, Buys, & Schaap, 2005). This model is measured with the "Job Diagnostic Survey" (JDS) (Hackman & Oldham, 1980).

Job enrichment is also referred to as "vertical job loading", and has been defined by Chung and Ross (1977) as a type of job design that allows employees to perform managerial or supervisory duties and functions, such as increased participation in decision-making, autonomy and more responsibility. Job enrichment can influence



the extent to which people experience meaningfulness at work. May et al. (2004) confirmed the significant relations between job enrichment and psychological meaningfulness. Saks (2006) argues that jobs that come with favourable job characteristics are more likely to be reciprocated with higher levels of engagement. Ivancevich and Matteson (2002) suggest the following steps that organisations can take to enrich jobs: (a) combine task elements, (b) assign whole pieces of work, (c) allow prerogative in the selection of work methods, (d) permit self-paced control and (e) open feedback channels.

Educator absenteeism and turnover are becoming a pervasive problem across the world. Moloi (2007) asserts that this may be indicative of a fundamental problem with the design of educators' jobs. As institutions of Higher Education across the world succumb to the pressure to change to corporate-oriented systems, the roles and work activities of educators and administrators have changed remarkably (Szekeres, 2006). While the transition of Higher Education systems has benefits, it also brought about a drastic increase in student enrolments, decentralization of administrative functions, declining government resources and funding, as well as tighter control over academic work (Szekeres, 2006). For an academic, this translates into an increase in workload, more meaningless paperwork, attendance of meetings and chairing of committees, limited resources to attend conferences and for research and publishing, as well as very little decision-making power over their own work (Thorsen, 1996). This threatens the core functions (teaching, research, and community service) of an academic; but, more importantly, the task characteristics (skills variety, task identity, task significance, autonomy and feedback) that are

essential for intrinsic work motivation are challenged. Task characteristics are predictors of positive outcomes, such as intrinsic work motivation, satisfaction and health (Houkes, Janssen, De Jonge, & Bakker, 2003).

The following hypothesis is formulated regarding the relationship between job enrichment and psychological meaning:

Hypothesis 10: Job enrichment is positively related to psychological meaningfulness.

#### **4.1.6 Rewards and recognition**

Rewards and recognition in organisations are becoming increasingly important for managers and researchers, because dissatisfaction with rewards and recognition has numerous undesirable consequences, such as turnover, workplace deviance, counter-productive, theft, corruption and unethical behaviour (Furnham & Argyle, 1998). The terms rewards and recognition are often used to denote all forms of incentives, such as compensation, fringe benefits, bonuses, promotions and awards for the performance of work activities (Hansen, Smith, & Hansen, 2002).

Recognition and rewards are two fundamentally different mechanisms that drive human motivation, as they are used by managers to attract, retain and motivate employees in organisations (Chiu, Luk, & Tang, 2001). Managers often fail to understand why employees remain demotivated and unhappy despite receiving merit pays and bonuses (Maccoby, 2010). This is an indication that managers fail to distinguish between rewards and recognition. 'Rewards' relates to compensation or remuneration given for work done (Hansen et al., 2002). An important component of

rewards is the instrumentality (i.e. means to an end) it establishes (Kanungo & Mendonca, 1988). In contrast, recognition refers to special attention, notice, honour and acknowledgement for something done (Maccoby, 2010). Using Maslow's (1954) coping theory, Herzberg's (1966) motivation-hygiene theory and Deci's (1975) work on motivation, Hansen et al. (2002) argue that rewards drive extrinsic motivation, while recognition fuels intrinsic motivation.

According to Tang and Tang (2012), educators are notoriously underpaid, compared to comparable jobs in industry. Tang and Tang (2012) further maintain that although educators choose the academic profession for their passion and joy of teaching, learning, creating and validating knowledge, money still remains an important criterion with which they evaluate their success. Pay satisfaction, therefore, influences educators' attitudes, behaviour, and performance (Currall, Towler, Judge, & Kohn, 2005). Educators may also regard insufficient compensation and rewards as a breach of their psychological contract with the organisation. Psychological contracts are individual beliefs regarding reciprocal obligations between themselves and an organisation (Rousseau, 1995). Antoni and Syrek (2012) and Rousseau (1995) distinguished between two types of psychological contracts, namely relational and transactional psychological contracts. A relational psychological contract involves a reciprocal exchange of socio-emotional elements, such as loyalty and support. A transactional psychological contract is based upon the exchange of mainly extrinsic returns, such as pay and benefits for work performed compared to what others receive.

Furthermore, Chalmers (2011) asserts that there is an imbalance in the rewards and recognition systems for academic work, largely due to the fact that institutions of Higher Education attach more status and rewards to research achievements than to teaching. O'Meara (2006) maintains that reward systems should encourage the recognition of teaching, integration and application of knowledge, and in doing so, bring about greater alignment between academic staff rewards and the mission of the institution. Some recommendations for recognizing and rewarding teaching include acknowledging the variety of roles and tasks that staff members undertake, providing professional development and teaching improvement programs and introducing more flexible criteria for promotion that is representative of the actual work activities of academic staff (Winter & Sarros, 2002).

The importance of rewards and recognition can perhaps be better understood by considering the social exchange theory (SET) as a possible theoretical framework for relating rewards and recognition to work engagement. Research by Kahn (1990, 1992) has thus far identified the psychological conditions necessary for engagement to take place. However, little research has been done to explain why employees respond to these conditions with varying degrees of engagement. The social exchange theory (SET) holds that when parties enter into a mutual, interdependent relationship, obligations and expectations are generated (Blau, 1964). The extent to which the parties abide and fulfil their side of the agreement will determine the 'smoothness' of the relationship. Saks (2006, p. 603) maintains that "rules of exchange usually involve reciprocity or repayment rules such that the actions of one party lead to a response or actions by the other party." Thus, organisations pay

employees in terms of compensation and other benefits while employees in turn repay their organisations by being engaged in their jobs to varying degrees, depending also on the additional resources provided by the organisation (Aryee, Budhwar, & Chen, 2002). Since job performance is often used as the basis for compensation and other administrative decisions, employees are more likely to exchange their engagement for resources and benefits provided by the organisation (Aryee et al., 2002). When organisations do not provide these resources, employees are likely to become detached and disengaged from their jobs. According to Saks (2006, p. 603), “the amount of cognitive, emotional, and physical resources that an individual is prepared to devote in the performance of one’s work-roles is contingent on the economic and socio-emotional resources received from the organisation.”

The following hypothesis is formulated regarding the relationship between rewards and recognition and psychological availability:

Hypothesis 11: Rewards and recognition are positively related to psychological availability.

#### **4.1.7 Self-consciousness**

According to Kahn (1990), psychological availability is associated with how secure people feel in their work-roles and status, and is invariably influenced by people’s self-consciousness. Fenigstein, et al. (1975, p. 522) define self-consciousness as “the consistent tendency of persons to direct their attention inward or outward.” When people are self-conscious, they are more likely to be distracted, because they are

focused on the impression they make on others (Doherty & Schlenker, 1991). A further distinction can be made between private self-consciousness and public self-consciousness. Private self-consciousness describes the process of privately contemplating the self, while public self-consciousness refers to becoming aware of oneself as a social object that can be scrutinized by others (Fenigstein et al., 1975). Private self-consciousness is associated with more reliable and valid self-reports, reduced suggestibility and compliance and a better capacity to process self-relevant information (Fromson, 2006). However, private self-consciousness is also associated with high levels of neuroticism, lowered self-esteem and an inclination towards depression (Fromson, 2006). Public self-consciousness may lead to social anxiety and a tendency to comply with others, as an individual may be apprehensive and experience discomfort at the thought of being observed by others (Boyoe, 1981; Froming & Carver, 1981). Individuals who are self-conscious in public are also fearful of receiving criticism and negative evaluations from others (Doherty & Schlenker, 1991). Fenigstein et al. (1975) developed a scale which consists of several domains (private, public and social anxiety) of behaviours indicative of self-consciousness. These domains include: a preoccupation with past, present and future behaviour, sensitivity to inner feelings, recognition of one's positive and negative attributes, introspective behaviour, a tendency to imagine or picture oneself, an awareness of one's physical appearance and presentation, and a concern over the evaluations of others (Boyoe, 1981).

A central tenet of self-consciousness is the over-perception of oneself as the target or victim in a situation, even if it is not necessarily the case (Fenigstein, 1984). Over-

perception stems from a cognitive bias, called egocentricity, where individuals perceive themselves as more related to events than they actually are (Greenwald, 1980). Hutchinson and Skinner (2007) maintain that self-consciousness is also related to individuals' abilities to handle impressions, social rejection and loneliness, and has a direct influence on the self-monitoring behaviour of individuals. Hurlbert and Rosenfeld (1992) explain that a good academic job is measured by two dimensions, namely its rank and the prestige of the employing institution of Higher Education. In the academic profession, rank is associated with tenure. Tenure provides academics with advancement opportunities and access to desirable resources (such as funding for research, secretarial support and a reduced number of classes) (Hurlbert & Rosenfeld, 1992). The prestige of the employing university or college in society plays an important role in the perceptions of status that people ascribe to academics. Furthermore, individuals derive their sense of identity from their work-role in contemporary society (Kammeyer-Mueller, Judge, & Piccolo, 2008). In addition, academics are under increasing pressure to remain relevant in order to gain the respect of other academics. Considering these pressures, academics are at risk of experiencing both private and public self-consciousness.

May et al. (2004) found that self-consciousness did not significantly influence people's psychological availability, and suggested that perhaps only very high levels of self-consciousness might have a negative impact on psychological availability. They further found that self-consciousness had a significant negative influence on psychological safety. Similarly, Olivier and Rothmann (2007) found that self-consciousness was only a statistically significant predictor of psychological

availability and work engagement. Rothmann and Rothmann (2010) found that psychological meaningfulness and psychological safety were positively associated with low self-consciousness.

The following hypotheses are formulated regarding the relationship between self-consciousness and psychological conditions:

Hypothesis 12: Self-consciousness is negatively related to psychological availability.

Hypothesis 13: Self-consciousness is negatively related to psychological safety.

#### **4.1.8 Organisational support**

According to Eisenberger, Huntington, Hutchison and Sowa (1986, p. 501), perceived organisational support refers to "... employees' global beliefs concerning the extent to which the organisation values their contribution and cares about their well-being". Thus, employees' commitment toward the organisation is partly based on their perception of the organisation's commitment to them. This notion of a mutual give-and-take relationship firmly roots the perceived organisational support construct in the social exchange theory (SET) (Blau, 1964). When an organisation provides its employees with relevant and sufficient resources to complete their job tasks, employees, in turn, will fulfil their obligations by being physically and emotionally available to help the organisation reach its objectives (Blau, 1964; Eisenberger et al., 1986). Rhoades and Eisenberger (2002) further posit that perceived organisational support is influenced by the various interactions and experiences that an individual has with the organisation, as well as by the judgements an individual makes concerning the consistency, frequency and sincerity of resources



offered. These resources include both material goods (i.e. pay and fringe benefits) and social goods (i.e. approval, trust, esteem, prestige and a sense of belonging) (Blau, 1964). Thus, perceived organisational support develops as a result of those positive evaluations that an employee makes regarding the actions, policies and traditions of the organisation (Fuller, Hester, Barnett, Frey, & Relyea, 2006).

Perceived organisational support also creates the expectancy that the organisation will reward greater effort on the part of the employee, which further compels the employee to put in more effort (Rhoades & Eisenberger, 2002). Being physically and emotionally available fosters engagement, and thus organisational support may have positive outcomes through employee engagement (Rhoades, Eisenberger, & Armeli, 2001). Saks's (2006) study confirms that perceived organisational support is likely to lead to greater levels of engagement. Saks (2006) further recommends that if organisations want to improve employee engagement, they first need to improve employee perceptions about the support they receive from the organisation. When organisations run programs or projects that address the concerns of employees, employees are more likely to engage more fully in their jobs. Supporting this notion, Rothmann and Joubert (2007) reported that organisational support and growth opportunities were strong predictors of employee engagement in the mining sector.

According to Wetzstein and Broder (1985), educator performance is a dynamic process as it involves three main components, namely teaching, research and service. The achievement of these multi-dimensional, performance requirements require considerable resources and support from the education institution (Webb & Murphy,

2000). Support and resources that educators need to successfully carry out their work include: continuous professional development (CPD) opportunities, teaching facilities and infrastructure, support from peers, departmental heads, administrators, publishing opportunities, efficient recognition and rewards systems, academic networks and supportive institutional policies and practices. Educators' perceptions of the resources and support they receive from the institution can dramatically impact their levels of self-efficacy, engagement and performance (Jacques, Garger, Thomas, & Vracheva, 2012). When education institutions provide educators the support they need to execute their job duties, their commitment toward the institution is strengthened (Tschannen-Moran & Woolfolk Hoy, 2002). In addition, the impact of educators' perceptions of organisational support (self-efficacy, engagement, commitment, increased performance) also has a remarkable influence on students' academic achievement, intrinsic motivation and learning efficacy (Goddard, Hoy, & Woolfolk Hoy, 2000).

Studies (Eisenberger et al., 1986; Eisenberger, Fasolo, & Davis-LaMastro, 1990) showed that employees with high levels of perceived organisational support are more likely to exhibit positive work behaviours, such as decreased absenteeism, increased conscientiousness, an increase in affective commitment and more effective communication with management and co-workers (Allen, 1992). Panaccio and Vandenberghe (2009) demonstrated strong support for the positive relationship between perceived organisational support and affective commitment. Organisational support encompasses both a socio-economical resource and a socio-emotional resource which are reciprocated with positive affect toward the organisation

(Panaccio & Vandenberghe, 2009). Fuller et al. (2006) explain that employees' obligation to the organisation is manifested in terms of increased commitment to the organisation. Organisational support also has broader implications beyond affective commitment. Perceived organisational support influences work performance and the psychological well-being of individuals (Muse & Stamper, 2007).

The following hypothesis is formulated regarding the relationship between organisational support and psychological availability:

Hypothesis 14: Organisational support is positively related to psychological availability.

In addition, the following hypotheses are formulated regarding the indirect effects of antecedent variables and work engagement via the three psychological conditions:

Hypothesis 15: Job enrichment, work role fit, and co-worker relations have an indirect effect on work engagement via psychological meaningfulness.

Hypothesis 16: Resources, rewards and recognitions, self-consciousness, and perceived organisational support have an indirect effect on work engagement via psychological availability.

Hypothesis 17: Supervisory relations, co-worker relations, and self-consciousness have an indirect effect on work engagement via psychological safety.

## **4.2 THEORETICAL MODELS OF ENGAGEMENT**

### **4.2.1 Job demands-control model/Job demands-control support model (JDC/JDCS)**

Karasek (1979) developed the Job Demands-Control (JDC) model (also known as the Job Strain model) in an attempt to investigate the relationship between work and health (Van der Doef & Maes, 1999) and the occurrence of mental strain in the workplace (Hausser, Mojzisch, Niesel, & Schulz-Hardt, 2010). The model focuses on two dimensions of the work environment, namely job demands and job control. Job demands refer to aspects of the work, such as workload, time pressures, role conflict and emotional and physical demands (Karasek, 1985; Van der Doef & Maes, 1999). Job control also referred to as decision latitude describes a person's ability to exercise some level of control over his or her work activities (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Karasek (1979) postulates that high job demands and low control opportunities in a job are likely to lead to increased risk of illness, reduced well-being and mental strain. Two important hypotheses were developed from this model, namely the strain hypothesis and the buffer hypothesis (Demerouti et al., 2001). The strain hypothesis postulates that high-strain jobs are likely to lead to reduced well-being and an increased likelihood of mental or physical illness which could be as a result of the additive or multiplicative effects of the interaction between job demands and control (Hausser et al., 2010; Van der Doef & Maes, 1999). The buffer hypothesis, on the other hand, posits that control buffers the negative impact that job demands have on well-being (Hausser et al., 2010). In a study on nurses,

Yperen and Hagedoorn (2003) reported that job control buffered the impact of job strain.

During the 1980's, this model was criticized for neglecting an important coping mechanism in the work environment, namely social support (Van der Doef, Maes, & Diekstra, 2000). Johnson (1989) maintains that social support has a positive impact on people, and it can possibly buffer the negative impact of high job demands on health and well-being. This inclusion of social support in the job demand-control model resulted in the development of the Job Demand-Control-Support (JD-CS) model (Van der Doef et al., 2000). This model proposed that a high level of social support moderates the negative effects of high strain (Hausser et al., 2010) and that high demands, low control and low social support could have adverse effects on an individual (Van der Doef & Maes, 1999). Mcclenahan, Giles, and Mallett (2007) applied this model to a group of academics at a UK university and found evidence that high strain was associated with poor health and less job satisfaction.

#### **4.2.2 Job Demands-Resources model (JD-R)**

Job resources are defined as the physical, social or organisational aspects of the job that may counter job demands, as well as the associated physiological and psychological costs which facilitate the achievement of work goals or stimulate personal growth, learning and development (Schaufeli & Bakker, 2004). Job resources are available on various levels. These resources can either be at organisational level (e.g. salary, career opportunities, job security), interpersonal

level (e.g. support from supervisor and co-workers, team spirit), the organisation of work (e.g. role clarity, participative decision-making) and the level of the task (e.g. performance feedback, skills variety, autonomy) (Rothmann & Jordaan, 2006, p. 88). Bakker, Albrecht, and Leiter (2011) maintain that job resources can play an intrinsic motivational role, because they satisfy basic needs, such as the need for autonomy, belonging and competence. Likewise, job resources can also play an extrinsic motivational role, in that they foster dedication and positive organisational citizenship behaviours (Bakker et al., 2011). When individuals have all the necessary resources they need, they are more likely to invest their energy in personal resources in their work (Christian et al., 2011).

In contrast, job demands are the physical, psychological, social or organisational aspects of the job that require sustained physical and/or psychological effort and that are, therefore, associated with certain physiological and/or psychological costs, such as pressure from work, work overload and emotional demands (Rothmann & Jordaan, 2006, p. 88). Examples of job demands include a heavy workload, role ambiguity, role conflict, lack of support and stressful events. According to Meijman and Mulder (1998), job demands are not necessarily negative. They may, however, turn into job stressors when an individual is unable to recover from the high levels of effort it requires to deal with job demands. When these types of job demands and unfavourable working conditions persist, employees will increasingly feel the strain on their physical bodies and psychological health (Christian et al., 2011). Bakker and Demerouti (2006), however, warns that many studies have come to rely on a “laundry-list” of factors that predict employee well-being, and that the interplay

between these predictive factors, contextual factors and personality dispositions may be more complex than previously thought.

The Job Demands-Resources model has been used to understand the effects of two categories of work characteristics, namely job demands and job resources, on the well-being of employees (Rothmann et al., 2006). This model posits that job demands might result in distress or burnout, and job resources are likely to lead engagement. Several international (Bakker & Demerouti, 2006; Demerouti et al., 2001; Schaufeli & Bakker, 2004) and South African studies (Rothmann et al., 2006; Rothmann & Barkhuizen, 2008; Rothmann & Jordaan, 2006) provided evidence for the robustness of this model to explain the influence of job resources and job demands on the psychological well-being of employees.

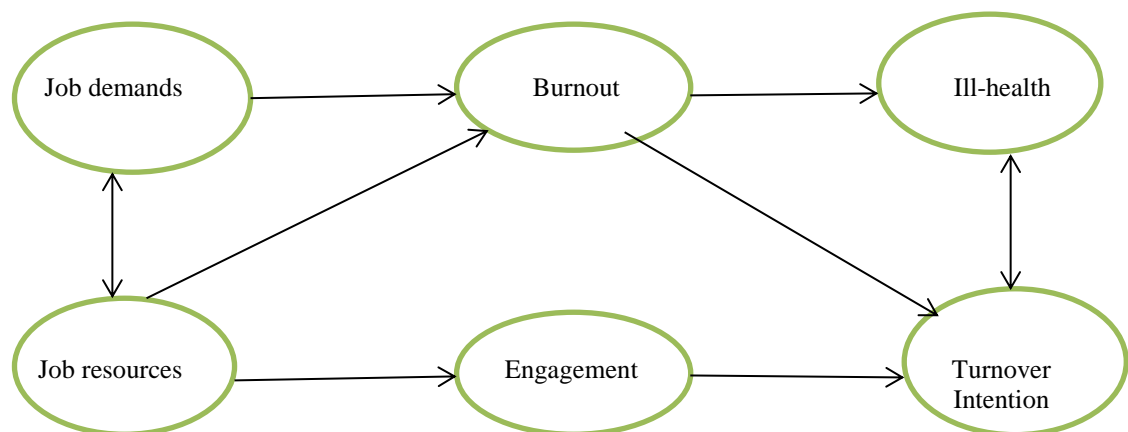
Parasuraman and Alutto (1981) posit that traditionally research on organisational stress has focused predominantly on role conflict and role ambiguity as the main sources of stress in organisations. They further argue for the focus on antecedents of various situational stressors which they conceptualized as environmental conditions or situations, which if left unchecked, will have some undesirable consequences for an individual. Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964) maintain that sources or antecedents of stress vary systematically among the different roles, positions and levels in the organisational hierarchy. Considering the fact that work engagement has a multitude of positive outcomes for both the individual and the organisation, researchers have placed a great deal of emphasis on identifying antecedent variables of engagement in order to increase levels of engagement among

employees (Rich, LePine, & Crawford, 2010). To this end, the following antecedent variables have been identified: work-role fit, supervisory relations, co-worker relations, resources, job enrichment, rewards, self-consciousness and organisational support. In line with the orientation of positive psychology, these antecedent variables will be measured in relations to psychological conditions, work engagement and outcome variables.

Various theories and models have been developed to conceptualize the relationship between job demands and job resources. Initial studies focused mainly on burnout as the outcome of a lack of job resources and excessive job demands. However, evidence reveals that even when individuals are faced with excessive job demands, they can still engage in work activities (Schaufeli & Bakker, 2004). This has led to the inclusion of the concept of engagement in studies about job resources and job demands. Demerouti et al. (2001) developed the Job Demands-Resources (JD-R) model in which they conceptualized the relationship between job resources (versus demands), burnout and work engagement. This model further postulates that although each occupation has its own specific work characteristics, it is possible to divide these characteristics into two broad categories: namely job demands and job resources (Demerouti et al., 2001). It further suggests that two job-related psychological processes, namely energy and motivation, are aroused by work characteristics (Bakker & Demerouti, 2006). People mobilise their energy resources to steel themselves against the strain of high work demands. However, when individuals are subjected to prolonged periods of high work demands, coupled with continuous strain, they may suffer from acute fatigue (Jackson & Rothmann, 2005).



This may lead to chronic health problems and a decrease in well-being. Likewise, when organisations fail to provide individuals with job resources, such individuals are likely to withdraw and become demotivated, rendering them unable to cope with job demands and pressures to achieve work goals (Jackson & Rothmann, 2005). Research thus far has yielded inconsistent and conflicting results concerning the relationship between job demands and engagement, but there appears to be consensus among scholars that job demands do not significantly predict work engagement. The Jobs Demands-Resources model (as developed by Demerouti et al., 2001) is depicted in Figure 2.



*Figure 2.* A model of the Job Demands-Resources (JD-R) (Demerouti et al., 2001)

Rich et al. (2010, p. 835) suggest that the job demands-resources model fails to recognise that individuals make important distinctions among types of job demands. Grounded in the assumptions of the transactional theory of stress (Lazarus & Folkman, 1984), these scholars argue that job demands can either be appraised as hindrances or challenges. Hindrances are those factors or circumstances that are

regarded as stressful, and which prohibit an individual from attaining goals and functioning optimally (LePine, Podsakoff, & LePine, 2005). Examples of hindrances include role conflict and ambiguity, organisational politics, bureaucracy and day to day hassles. Job demands that foster self-efficacy, personal growth and achievement are considered to be challenges (LePine et al., 2005). Examples of challenges are excessive workloads and responsibility, as well as time pressures. While acknowledging the role that individual characteristics play in the appraisal process, individuals tend to be fairly consistent in the way they appraise work-related stressors (Rich et al., 2010).

Whether a job demand is appraised as a challenge or a hindrance influences an individual's beliefs and emotions about the demand, and will subsequently determine the coping mechanism the individual will use to deal with the demand. For example, an individual who has to deal with an unsupportive and malicious supervisor on a daily basis is likely to feel helpless and frustrated, and as a result may fail to perform. On the other hand, individuals who are challenged by time pressures may look for creative ways to manage their time more effectively, such as delegating tasks and setting priorities. In doing so, the individual copes effectively with the challenge and might become more engaged. From the aforementioned examples, it can be concluded that hindrances result in negative emotions and passive coping mechanism, while challenges lead to positive emotions and more active and innovative ways of coping with job demands (Rich et al., 2010).

The following hypotheses are formulated regarding the relationship between job resources, job demands and work engagement and turnover intention:

Hypothesis 18: Job resources (social support, growth opportunities, and salaries) contribute to work engagement.

Hypothesis 19: Job demands (work overload, time pressures, and unsupportive supervisors) detract from work engagement.

#### **4.2.3 Comprehensive burnout and engagement model (COBE)**

This job demands-resources model was later extended and confirmed by Schaufeli and Bakker (2004) to become the Comprehensive Burnout and Engagement (COBE) model. This model encompasses the following two psychological processes: an energetic and a motivational process (Jackson, Rothmann, & Van de Vijver, 2006). The energetic process establishes the relationship between job demands and health problems via burnout (Rothmann & Joubert, 2007). In contrast, the motivational process links job resources with organisational outcomes through work engagement (Rothmann & Jourbert, 2007). It also includes additional components, such as health impairment and organisational withdrawal. This model further posits that burnout occurs as a result of high job demands and a lack of job resources, which is related to health problems and turnover intention, and it acts as mediator between job demands and health problems (Jackson et al., 2006). Engagement, on the other hand, is predicted by the availability of job resources, and mediates the relationship between job resources and turnover intentions (Schaufeli & Bakker, 2004).

#### **4.2.4 The Conservation of Resources theory (COR)**

Building on earlier studies of stress (Lazarus & Folkman, 1984; McGrath, 1970; Selye, 1950; Spielberger, 1966), Hobfoll (1989) developed the Conservation of Resources (COR) theory which provided an important framework for understanding the processes that lead to burnout. By considering notions of instinctual tendencies of humans to seek pleasure (Freud, 1900) and strive for self-preservation and enhancement (Pearlin, Lieberman, Menaghan, & Mullen, 1981), this theory posits that when valuable resources are lost, threatened or insufficient, individuals cannot withstand the potential harmful consequences of high job demands (Hobfoll, 1989). Therefore, individuals will endeavour to protect what they have, and if they fail to do so, they are likely to experience a sense of loss and might reduce the effort they put into their jobs (Halbesleben, 2006). Based on this central tenet, Hobfoll (1989, p. 516) defined psychological stress as "...a reaction to the environment in which there is (a) the threat of a net loss of resources, (b) the net loss of resources, or (c) a lack of resources gain following the investment of resources". Resources in this context is defined as "... those objects, personal characteristics, conditions or energies that are valued by the individual or that serve as a means for attainment of these objects, personal characteristics, conditions, or energies" (Hobfoll, 1989, p. 516). These resources are important because they hold both instrumental value, as well as symbolic value for people (Halbesleben, 2006). When people's resources are depleted, they are likely to feel vulnerable; whereas a resource surplus is likely to lead to positive well-being (Hobfoll, 1989). Halbesleben (2011) observes that the investment of resources by individuals is an important component of understanding

the outcomes of engagement. In other words, engaged employees are better able to reinvest resources which subsequently will lead to positive organisational outcomes (Halbesleben, 2011). Rothmann and Joubert (2007) further note that an excessively demanding work environment is likely to have insufficient resources. Examples of resources include control, opportunities to participate in decision-making and job autonomy. Role ambiguity, work pressure and workload are examples of job demands.

Various studies have repeatedly confirmed that job resources, such as social support from co-workers, performance feedback, skills variety, autonomy and opportunities for growth are positively associated with work engagement (Bakker, 2011; Bakker et al., 2008; Schaufeli & Bakker, 2004). When people have access to job resources, they are more likely to achieve goals successfully. To this effect, studies such as those of Halbesleben (2011), Hakanen, Schaufeli, and Ahola (2008) and Schaufeli, Bakker, and Van Rhenen (2009) have shown that there is a positive relationship between job resources and work engagement (Bakker, Albrecht, & Leiter, 2011). Various studies have consistently provided evidence that job demands and job resources are significant predictors of work engagement (Simpson, 2009). Likewise, Shuck et al. (2011) provided evidence for a significant relationship between the availability of resources and an employees' intention to leave the organisation. Employees who perceive that they have the necessary physical, emotional and psychological resources available are less likely to have intentions to leave the organisation (Shuck et al., 2011).

The availability of job resources may minimize the impact of job demands on the individual, which allows the individual to engage in work activities. Consequently, work engagement is positively related to job resources (Schaufeli & Bakker, 2004), while a relatively weak relationship was found between job demands and work engagement for individuals who had high job resources (Hakanen, Bakker, & Demerouti, 2005). Other literature (Schaufeli & Bakker, 2004) reveals that job demands do not predict engagement. Thus far, it appears that the relationship between job demands and work engagement is ambiguous at best. Crawford et al. (2010) argue that job demands either appear to be unrelated to work engagement, detract from engagement or promote engagement. Rothmann and Jordaan (2006) maintain that although more research should be done to investigate the relationship between job demands and work engagement, it appears that individuals can still experience work engagement despite high job demands. They cited a study by Watts and colleagues (1991) that found that academics were very satisfied with their jobs despite long working hours, work overload and a lack of support. Rothmann and Jordaan (2006) subsequently hypothesized that job resources would lead to work engagement of academics in Higher Education institutions, and job demands would lead to low work engagement of academics in Higher Education institutions. Their results showed that certain job resources, such as growth opportunities, organisational support and career advancement, predicted work engagement while job demands, such as work overload, related positively to the dedication component of work engagement, especially when organisational support was low.

Using a two-factor model of work engagement (consisting of vigour and dedication), Rothmann and Jordaan (2006) found that both vigour and dedication of academics were strongly related to growth opportunities in the job, and had a moderate relationship with organisational support. This means that perceived opportunities for growth are likely to energize and foster loyalty in academics even if organisational support is insufficient or lacking. Their study also found that there was a weak relationship between job demands and work engagement, and that organisational support acted as mediator between these two constructs (Rothmann & Jordaan, 2006). This means that when academics experience high levels of organisational support, they are still likely to be dedicated, regardless of the level of job demands they face.

When institutions of Higher Education fail to provide their employees with the necessary job resources (e.g. organisational support, growth opportunities, career advancement opportunities and social support), employees are likely to become demotivated, uncommitted and detached from their work (Coetzee & Rothmann, 2005). For academics at Higher Education institutions to engage in their work, the following two conditions must be met: first, they must be provided with the necessary job resources; and secondly, the work environment must provide them with the opportunity to utilize their abilities and skills optimally (Coetzee & Rothmann, 2005). When these conditions are not met, employees cannot brace themselves against the potential negative influences of high job demands and, as a result, cannot achieve their work goals or develop themselves professionally. Rothmann and Jordaan (2006, p. 95) state that employees "... will defend themselves

against resources lost, by disengaging from their jobs.” The results of Rothmann and Jordaan’s study (2006) show that job resources and work engagement are inextricably linked, and that academics are more likely to engage in their work when they perceive that they have the necessary job resources. Rothman and Jordaan have singled out growth opportunities as the most significant job resources, followed by organisational support and advancement. This could be due to the fact that there is considerable pressure on academics to attain higher qualifications and to publish. Growth opportunities also influence the psychological meaningfulness that individuals attribute to their jobs, and it appears that work engagement decreases if academics experience less variety, learning opportunities and autonomy (Barkhuizen & Rothmann, 2008). Finally, a supportive organisational environment is associated with work engagement, possibly because it makes academics feel psychologically safe (Barkhuizen & Rothmann, 2008).

According to Rothmann et al. (2008), there is enough evidence in the literature that shows that resources in the academic profession have deteriorated significantly over the past two decades. These resources include sufficient salaries, supportive climate, professional autonomy and job control. Research conducted by Gillespie et al. (2001) showed that half the staff members of the Higher Education institutions that participated in the study expressed concern with their increasingly limited decision-making power, as decisions made by management were based heavily on corporate and financial consideration with little regard to the interests and needs of staff members. As a result, staff members felt they no longer had control and autonomy over their roles, rendering them powerless and helpless (Gillespie et al., 2001).



### **4.3 WORK ENGAGEMENT IN ACADEMIA**

One thing that scholars, researchers and consultants agree on in the field of organisational psychology is the fact that the world of work is changing rapidly. Not only are organisational structures changing, careers and jobs are increasingly becoming more complex. To survive in the new world of work, employees are required to have a diverse set of skills, as well as the ability to fulfil multiple roles simultaneously. Traditionally, academics were oblivious to these changes in the work environment, as they enjoyed the peace and tranquillity of the proverbial ‘ivory tower’. However, as more and more institutions of Higher Learning turned to a corporate style of management, the traditional role of the academic changed considerably (Barkhuizen & Rothmann, 2006). Besides teaching and research, academics have to act as entrepreneurs, facilitators, marketers and managers (Barkhuizen & Rothmann, 2006). These multiple roles have implications for the work performance of academics.

Being an academic can be regarded as a ‘calling’. It calls for a unique passion for research and a willingness to forego the monetary benefits that are often associated with the corporate world. For most academics the sacrifice is worth it, since they enjoy ‘academic freedom’ and the prestige of being an academic. The nature of an academic’s work is an immense source of intrinsic satisfaction, providing opportunities for personal and professional growth. However, in recent decades, this has changed remarkably. There have been widespread complaints of work-overload and a decrease in resources. Student numbers are increasing every year; academics

are burdened with tedious administrative tasks, and there is increasing pressure to publish. At the same time, research funding is decreasing, academic salaries are lagging behind and job resources are dwindling.

However, Barkhuizen and Rothmann (2006) note that despite these widespread complaints, most academics still engage in their work. They describe this state of engagement as being suspended in time with an intense task focus, coupled with pleasurable emotions and high levels of enthusiasm. Various studies (Doyle & Hind, 1998; Watts et al., 1991) reported that almost half of the participants found their work intrinsically motivating, rewarding and enjoyable.

Barkhuizen and Rothmann (2006) further suggest that, if Higher Education institutions want to promote work engagement, they should focus on the following domains. First, academics must be provided with the essential resources to do their work. This could include teaching equipment, as well as more challenging tasks and the availability of assistants. Secondly, academic leaders play an important role in promoting work engagement. Academic leaders can achieve this by initiating reward and recognition systems for good performance, maintain fairness in all aspects, open communication about problems and issues as they arise, assist staff members in goal setting and, lastly, stay connected to employees by frequently enquiring after their professional development and personal functioning. Thirdly, work engagement can be promoted by strengthening the self-esteem of academics through capacity building and positive emotional cues.

#### **4.3.1 Work engagement and demographic variables of academics**

Since employee engagement has very real outcomes and benefits for both the individual and the organisation, recent studies of employee engagement have started to investigate the influence of various demographic variables on individuals' levels of engagement. Barkhuizen and Rothmann (2006) maintain that age and gender have frequently been related to work engagement. In particular, older employees are likely to be more engaged in their work, and men appear to be more engaged in their jobs than women. This is perhaps due to the fact that women are likely to have more responsibility at home, and this could distract them from their jobs. Kinman (2001) reported that women experienced more intense levels of pressure than their male counterparts and, as a result, struggled to engage themselves in their jobs. Barkhuizen and Rothmann (2006) found no statistically significant differences between the work-engagement of academics across different age groups, and also no significant differences were found between the work engagement of male and female academics.

Barkhuizen and Rothmann (2006) further mention that very little research has been done to test the relationship between work engagement, qualification and job level. They subsequently hypothesize that academics with post-graduate qualifications are more engaged than academics with lower levels of qualifications. Results of their study showed that academics with a doctoral degree were more engaged in their jobs than those with a four-year or honors degree. Their study further provided evidence that professors were significantly more absorbed and dedicated to their work than

junior and senior lecturers. Thus, higher levels of education are associated with higher levels of work engagement. A possible explanation for this is the fact that in most instances senior academics are mainly involved in the more meaningful activities of academia, namely teaching and researching. Finally, Olsen (1993) posits that tenured staff members of academic institutions are more satisfied with their jobs and has lower levels of perceived stress than new staff members. The results of Olsen's (1993) study confirmed this position; however, she reiterates that the socialization of the first three years of employment at an organisation is crucial for the development of professional satisfaction.

The following hypotheses are formulated regarding the relationship between work engagement and gender, between work engagement and age, between work engagement and qualifications, and between work engagement and tenure:

Hypothesis 20: Male staff members are more likely to be engaged in their work than female staff members.

Hypothesis 21: Older (senior) staff members are more likely to be engaged in their work than younger (junior) staff members.

Hypothesis 22: Employees with post-graduate degrees (doctoral and professorships) are more engaged in their work activities than staff members with lower level qualifications.

Hypothesis 23: Tenured employees are more engaged in their work than new employees.

### **4.3.2 Engagement: the good, the bad, and the ugly**

Given the volatile and fast-paced world that we live in today where the emphasis is on performance and output, the engagement construct has shed some hope for the world of work and has certainly gained widespread international attention (Shuck et al., 2011). Not only does engagement help to explain the quality of an individual's participation in role activities, it may also be a key ingredient and predictor for employee and organisational success. Several studies have provided evidence of the benefits that work engagement has for organisations (Bakker et al., 2011). It stands to reason then, that engagement would be encouraged and fostered by organisations in order to derive maximum benefits. However, the inevitable danger of this would best be described by the old adage 'too much of a good thing'. Recent studies have raised questions about high levels of engagement over time and their implications for an individual's work-life balance. Such intense and sustained levels of engagement could have negative consequences for an individual, of which burnout is but one example (Schaufeli, Taris, & Van Rhenen, 2008). Extreme levels of engagement can also be associated with workaholism which is considered a negative form of engagement (Rothbard & Patil, 2012). Workaholism generally describes a situation where individuals are intensely absorbed and devoted to their jobs; this causes such individuals to spend an exorbitant amount of time on work activities (Schaufeli et al., 2008). It is often an individual's family and social lives that are sacrificed for the sake of work, with negative consequences for the individual. George (2011) maintains that highly engaged employees are likely to have less time and energy for other activities outside of work, especially if they strongly identify with their job.

Bakker et al. (2011) state that there are certain conditions where work engagement could lead to bad performance. First, high levels of arousal that come from high engagement might distract from cognitive performance. Secondly, it has been hypothesized that high positive affect associated with engagement may lead to 'heuristic processing' of information where more complex information processing might be required. Thirdly, the absorption component of engagement may potentially lead to unhealthy behaviours, in that employees might become so involved in their work that they forget to maintain themselves and their personal relationships.

Drazin, Glynn, and Kazanjian (1999) suggest that, instead of sustained engagement, it is more beneficial and effective to take frequent breaks (time-outs) while working. They further maintain that this allows the individual to replenish his or her energy and to rejuvenate his or her mind, which could lead to increased performance. Subsequent research (Elsbach & Hargadon, 2006; Levinthal & Rerup, 2006; Sonnentag, Niessen, & Neff, 2010) provided further evidence for this notion.

### **4.3.3 Nurturing engagement**

Concerning a previous allusion to the positive relationship between engagement and performance, it is important to understand how greater work engagement can be fostered (Simpson, 2009). First, work engagement can be encouraged by providing psychological safety to individuals. When people feel psychologically safe, they are more likely and able to fully immerse themselves in a particular role or task. Feeling psychologically unsafe requires a great deal of energy and intense emotional control

which distracts and detracts from an individual's ability to fully engage in a role or work activity. Psychological safety is developed by providing coaching leadership, contextual support and autonomy for employees (Rothbard & Patil, 2012).

The second factor contributing to work engagement is maintaining a balance between the job demands and job resources that an individual has (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). 'Job demands' refers to those conditions that put an individual under pressure and strain, and is often a result of time pressures, high-priority work, shift work and physical demands (Rothbard & Patil, 2012). Job demands in themselves, though, are not necessarily detrimental and could potentially increase engagement, as individuals become more absorbed in their work activities in order to achieve a certain goal or to finish a specific task. However, it is important that the individual does not become overwhelmed by these job demands, but should have sufficient resources available to sustain a positive level of engagement (Xanthopoulou et al., 2007). These resources often come in the form of perceived control, as well as managerial and co-worker support (Rothbard & Patil, 2012).

Other factors that contribute to increased work engagement are core self-evaluations and the self-concept (Bakker, Albrecht, & Leiter, 2011). Core self-evaluations refer to the extent to which an individual identifies with his or her role in order to get more meaning from his or her work (Rothbard & Patil, 2012). The self-concept, which includes components, such as self-esteem, self-efficacy, locus of control, identity and perceived social impact, is an important determinant of how psychologically available an individual is at work (Bakker et al., 2011). It also determines an

individual's core beliefs about his or her capabilities, security and confidence in the world (Rothbard & Patil, 2012). These factors appeal to the intrinsic motivation of individuals to both engage in their work and to exert high levels of energy in their jobs.

#### **4.3.4 Implications for work performance**

Although limited studies have been done to examine the relationship between work engagement and job performance (Bakker et al., 2008), various theoretical and empirical studies have provided evidence that engagement is a strong predictor of employee performance (Kahn, 1990, 1992; Schaufeli et al., 2002; Simpson, 2009) and positive business results (Harter, Schmidt, & Hayes, 2002). Bakker et al. (2011, p. 5) state that "*contemporary organisations need employees who are psychologically connected to their work; who are willing and able to invest themselves fully in their roles; who are proactive and committed to high quality performance standards.*" However, Saks (2006) cautions that engagement is an individual-level construct and thus any business results must first impact individual-level outcomes. Saks (2006) further maintains that employee engagement will be related to individuals' attitudes, intentions, and behaviours.

According to Barkhuizen and Rothmann (2006), employee engagement is particularly relevant for employee wellbeing and work behaviour for various reasons. Firstly, engagement is regarded as a positive experience. Secondly, it is associated with good health and a positive emotional state at work. Thirdly, engagement can



buffer the effect of a stressful work environment. Finally, engagement has positive relations with other outcome variables, such as commitment, turnover intentions and job satisfaction, which could affect employee performance.

Bakker (2011) suggests that there are four reasons why engaged employees perform better than disengaged employees. Firstly, engaged employees are more likely to experience and express positive emotions such as gratitude, joy and enthusiasm which enable them to cope more effectively. Secondly, engaged employees are healthier than disengaged employees. This means that they are sufficiently fit to use their skills and abilities optimally to do their work. Thirdly, engaged employees create opportunities and personal resources for themselves which allow them to go the extra mile and to perform well. Finally, engagement can rub off on other employees in the immediate environment (Bakker & Xanthopoulou, 2009). This means that engagement can be transferred from one person to the next, especially in a team context where people are required to work closely together. Several studies have provided evidence of the positive relationship between work engagement and job performance (Bakker, 2011). Engaged employees are more likely to go beyond what is expected of them and put the interests of the group or organisation ahead of their own.

However, critiquing the work of scholars, such as Bakker and Schaufeli, George (2011, p. 54) maintains that literature on work engagement tend to depict engagement "... as a win-win situation for everyone", and has mainly been written from a business point of view. Employees benefit from the high energy, positive and

fulfilling state that characterizes engagement, and organisations benefit from the high performance that is said to result from work engagement (Beal, Weiss, Barros, & MacDermid, 2005). In this light, employees actually contribute more of themselves to their jobs. Employees enter into an exchange relationship with organisations whereby they invest their skills, abilities and experience in their jobs, while they in turn receive reasonable outcomes, such as compensation (Saks, 2006). To date, studies of work engagement have focused mainly on how to get more out of employees. George (2011) argues that if employees contribute more, surely they should be compensated for it. Literature thus far has sold the idea of work engagement as a personal reward of its own, and has largely ignored the reality of economic instrumentality. Beal et al. (2005) suggest that future research should pay attention to the extrinsic outcomes that employees work for. In an earlier study, Saks (2006) also recommends organisations to be cognizant of the importance of social exchange for employee engagement. In particular, organisations need to provide employees with the resources and benefits they need in order to facilitate higher levels of employee engagement. He cautions, however, that this would depend very much on the context of the organisation, and managers should take the time to establish what resources and benefits are most highly valued by employees. These desired resources and benefits are most likely to be reciprocated with high levels of engagement.

George (2011) further criticises Bakker and his colleagues' (2011) notion that engaged employees are more likely to create and actively change their jobs in order to perform better. She argues that perhaps employees try to do more of the tasks that

they enjoy, and avoid or decrease the tasks they find tedious. She also questions whether engagement is the fun and positive experience portrayed in the literature. Being highly engaged entails hard work and a lot of sacrifice, and often engagement is required to perform a “necessary evil” (George, 2011, p. 57). In this sense, engagement is not always the positive experience that it is professed to be.

#### **4.4 CHAPTER SUMMARY**

In this chapter, the antecedents (work role fit, supervisory relations, co-worker relations, resources, job enrichment, rewards and recognition, self-consciousness, and organisational support) of work engagement were defined and discussed. This chapter also explained the concept of work engagement in relation to burnout as a model of psychological well-being and the most relevant and recent research findings that lends support to the robustness of this model. The major theoretical frameworks (i.e. JDC, JDSC, JDR, COBE, COR) that underlie this model were also discussed.

Chapter 5 focuses on the organisational and individual outcomes of work engagement. The following three outcomes are defined and discussed in terms of their theoretical frameworks, previous research findings, and relevance in the academic context: organisational commitment, turnover intention and ill-health.

## **CHAPTER 5**

### **OUTCOMES OF WORK ENGAGEMENT**

The focus of this chapter is to discuss three important outcomes of engagement, namely organisational commitment, turnover intention and ill-health. These outcomes carry both personal and organisational consequences and have been linked to prior engagement research. These outcomes are explained in terms of their definitions, theoretical frameworks and relevant research findings in order to validate their robustness and relevance to this study.

#### **5.1 OUTCOMES OF ENGAGEMENT**

Literature has shown that variables, such as turnover intention and organisational commitment amongst others, are prominent outcomes of engagement (Simpson, 2009). Earlier researchers, such as Maslach, Jackson, and Leiter (1996) proposed that the presence of job demands and the absence of particular resources can lead to various negative effects, such as physical illness, staff turnover and absenteeism.

##### **5.1.1 Organisational commitment**

The world of work has witnessed unprecedented changes during the past few decades (Cascio, 1995) due to changing workforce demographics (Howard, 1995), advances in technology (Coovert, 1995) and global competitiveness (Davis, 1995). These changes directly impact how organisations function and subsequently affect the

employee-organisation relationship (Meyer, Allen, & Topolnytsky, 1998). An important element in the employee-organisation relationship is the job security that organisations traditionally offered to employees (Meyer et al., 1998). Unfortunately, organisations are no longer able to offer employees job security, and this has important implications for employee morale, commitment, performance and organisational success (Meyer et al., 1998). Klein and Izzo (1996) observe that organisations and employees are experiencing a commitment crisis in which the expectations of both parties are incongruent.

A considerable body of literature has been developed on organisational commitment, focusing on the affective bond between employees and their employing organisation (Mowday, 1998). However, despite this “voluminous body of literature” (Mowday, 1998, p. 387), there has been a lack of consensus among scholars with regard to its definition, measurement and conceptualization (Meyer & Allen, 1991). Initial research streams distinguished between attitudinal and behavioural commitment, where attitudinal perspectives focused largely on the precursors of commitment while the behavioural perspectives directed their research efforts to studying the factors that reinforced commitment and the actions that occurred as a result of it (Meyer & Allen, 1991). Although being criticized for delivering a “laundry list” (Reichers, 1985, p. 467) of organisational commitment antecedents, Meyer and Herscovitch (2001) described the research findings on organisational commitment as unsystematic and inconsistent.

Meyer, Stanley, Herscovitch, and Topolnytsky (2002), however, state that recently there has been some agreement on the multidimensionality of the commitment construct, and that the antecedents, correlated variables and consequences of commitment are different across its dimensions. Irving, Coleman, and Cooper (1997) further note that organisational commitment comes in different forms, as well as different foci, such as commitment toward one's supervisor (Becker, 1992), career (Blau, 1985) and profession (Morrow & Wirth, 1989) amongst others.

### **5.1.2 Defining organisational commitment**

Mowday, Steers, and Porter (1979, p. 226) define organisational commitment as “the relative strength of an individual's identification with and involvement in a particular organisation.” This definition of organisational commitment contains three important elements, namely an acceptance of the organisation's goals, a willingness to work hard for the organisation and a desire to remain with the organisation (Siu, 2002, p. 530). Organisational commitment has also been described as a psychological state and an attitude (Allen & Meyer, 1990), or an affective bond (Mathieu & Zajac, 1990). O'Reilly and Chatman (1986, p. 493) define organisational commitment as “the psychological attachment felt by the person for the organisation; it will reflect the degree to which the individual internalizes or adopts characteristics or perspectives of the organisation.” Arguing that organisational commitment is an attitude, Solinger, Van Olffen, and Roe (2008, p. 80) propose the following definition of organisational commitment:

*Organisational commitment is an attitude of an employee vis-à-vis the organisation, reflected in a combination of affect (emotional attachments, identification), cognition (identification and internalization of its goals, norms, and values), and action readiness (a generalized behavioural pledge to serve and enhance the organisation's interests) (Solinger et al., 2008, p.80).*

Meyer and Herscovitch (2001, p. 301) observe that definitions of organisational commitment encompass two central features, namely that it is a stabilizing force and that it provides a direction for behaviour.

### **5.1.3 A theoretical framework of organisational commitment**

Meyer and Allen (1987a) developed the three component model (TCM) of commitment which dominated organisational commitment research up to date. They defined organisational commitment in terms of the following three dimensions: affective, continuance and normative commitment. Affective organisational commitment (AC) is described as a personal attachment to one's organisation that results from shared values and interests (Meyer & Allen, 1987a). Continuance commitment (CC) refers to a strong desire to remain with the organisation, and normative commitment (NC) is defined as the willingness to invest considerable effort and energy in the organisation (Meyer & Allen, 1991). Continuance commitment is based on an employee's perception of the costs that result from leaving the organisation, while normative commitment is based on a sense of

obligation to remain with the organisation (Meyer & Allen, 1991). Allen and Meyer (1990, p. 3) summarize the crux of the three-component model as follows:

*“Employees with strong affective commitment remain because they want to, those with strong continuance commitment because they need to, and those with strong normative commitment because they feel they ought to do so.”*

Describing organisational commitment as a psychological state, Meyer and Allen (1991) argued that the three components of commitment will have different antecedents and implications for the work context. Mowday et al. (1982) maintain that affective commitment is predicted by the following four categories of antecedents: personal characteristics, structural characteristics, job-related characteristics and work experiences. Personal characteristics refer to both demographic features, such as age, sex, education and job tenure and dispositional factors, such as the need for achievement, autonomy and locus of control amongst others (Meyer & Allen, 1991). Organisational structure encompasses factors, such as participative decision-making and the development of policies and procedures (Meyer & Allen, 1987b). With the combination of objective job characteristics and subjective work experiences, the underlying rationale for using work experiences as antecedents of organisational commitment is the assumption that employees are likely to be committed to the organisation if they have positive experiences that satisfy their needs and that are congruent with their core values (Meyer & Allen, 1987b). Specific work experience variables include: perceived equity in reward distribution (Lee, 1971; Rhodes & Steers, 1981), organisational support (Eisenberger



et al., 1986; Eisenberger et al., 1990), supervisor relations (DeCotiis & Summers, 1987), job challenge (Meyer & Allen, 1987b) and opportunity for advancement (O'Reilly & Caldwell, 1980). Steers (1977) maintains that work experiences exert the most influence over organisational commitment, more than any of the other categories.

According to Meyer and Allen (1991), continuance commitment develops as a result of an evaluation of the costs associated with leaving the organisation. Borrowing from Becker's (1960) theoretical framework of side-bets, Meyer and Allen (1991) explain that individuals consider the investments they have made in terms of time, energy, experience and skills in their current job and the gains or rewards received versus that of alternative job opportunities. The cost associated with leaving the organisation will ultimately determine the individual's course of action. Finally, normative commitment develops as a result of an individual's experiences before and after entry into the organisation (Allen & Meyer, 1990). Individuals are likely to develop normative commitment if significant others have worked for the organisation or if they have expressed strong sentiments of loyalty to the organisation (Meyer et al., 1998). Normative commitment can also be influenced by "rewards in advance" where the organisation incurs considerable costs, be it for training, relocation or others on behalf of the individual (Meyer et al., 1998). This creates a sense of obligation to be committed or loyal to the organisation to pay off the debt. Meyer et al. (1998) conclude that the three components of commitment attach the individual to the organisation and influences leaving behaviours to varying degrees. Moreover, this model also has important implications for employee

outcomes, such as citizenship behaviours, performance and absenteeism (Meyer et al., 2002; Meyer & Maltin, 2010).

Organisational commitment is a complex construct (Irving et al., 1997) and a considerable number of studies have questioned and commented on its measurement and construct validity (Jaros, 2007). In particular, it has been argued that affective commitment and normative commitment are too highly correlated with each other to infer discriminant validity (Jaros, 2007). However, studies conducted in Taiwan (Chang, Chi, & Miao, 2007) and China (Chen & Francesco, 2003) found that there was construct distinctiveness between affective commitment and normative commitment. Applying the three-component model outside North-America (as suggested by Allen & Meyer, 1996), Kipkebut (2010) found a strong, positive correlation between affective commitment and normative commitment in a Kenyan study. In a meta-analysis of the three components of commitment across cultures, Meyer, Stanley, Jackson, McInnis, Maltin, and Sheppard (2012) suggest that commitment is influenced by a country's core cultural values. For instance, in Japanese cultures where there is strong emphasis on collectivism, employees are more likely to remain with an organisation due to normative commitment (Randall, 1993). In collectivist cultures importance is placed on social ties, unity and duty rather than on emotional attachment (Meyer et al., 2012) which would explain the higher levels of normative commitment found in these cultures. In addition, Meyer, Allen, and Smith (1993) demonstrated that the three-component model of organisational commitment was scientifically sound across occupations. Irving et al.

(1997) maintain that this has important implications for understanding context-specific factors that tie employees to their organisations.

#### **5.1.4 Affective organisational commitment**

The construct 'affective commitment' has been investigated by scholars as early as the mid-1970's when Mowday et al. (1982) termed it "attitudinal commitment" (Kell & Motowidlo, 2012). According to Chalofsky and Krishna (2009), affective commitment has consistently been identified as having the strongest, positive relationship with favourable organisational outcomes, and has also been more thoroughly researched than the other dimensions of commitment (Mathieu & Zajac, 1990). Meyer et al. (1998) maintain that organisations that derive competitive advantage from its workforce should ideally do so from a workforce with high levels of affective commitment. Employees with high levels of affective commitment identify with the values of the organisation (Angle & Lawson, 1993) and would want this relationship to continue. Affective organisational commitment has consistently been linked to turnover and turnover intention (Meyer & Allen, 1991). Meyer and Allen (1991) explain that the affective attachment that bonds employees and organisations as a result of positive work experiences is likely to diminish thoughts and intentions of leaving the organisation.

### **5.1.5 Predictors of organisational commitment and its relation to other variables**

Commitment is a two-way street, in that if organisations want to foster affective commitment they need to provide employees with a supportive work environment (Chalofsky & Krishna, 2009). Research has consistently shown that there is a positive relationship between perceived organisational support (POS) and organisational commitment (Chalofsky & Krishna, 2009; Eisenberger et al., 1986; Shore & Wayne, 1993). This means that an employee is likely to be loyal to an organisation if the organisation provides sufficient support and resources. Similarly, He, Lai, and Lu (2011) found that types of organisational support, such as managerial support and co-worker relations, had a positive effect on affective commitment in the hotel industry in China.

In a longitudinal study, Panaccio and Vandenberghe (2009) demonstrated that affective organisational commitment mediated the relationship between perceived organisational support and psychological well-being. Arguing from a social exchange perspective, they explained that when employees received valuable resources, they reciprocated in kind through showing greater affective commitment toward the organisation. Furthermore, employees who are experiencing affective commitment are likely to have better coping mechanisms to deal with work stressors, feel confident to do their jobs, and have better self-esteem, which contribute to their overall sense of psychological well-being (Panaccio & Vandenberghe, 2009). In this sense, organisational commitment is a significant moderator of work stress (Cohen,

1993; Siu, 2002). In support of this notion, Meyer and Maltin (2010) maintain that research has consistently showed that there is a strong positive relationship between affective organisational commitment and indicators of psychological well-being, physical and mental health, job satisfaction and life satisfaction.

Using a different approach, Shuck et al. (2011, p. 430) hypothesize that affective commitment is an antecedent rather than an outcome of engagement, arguing that the emotional qualities of affective commitment can compel "... employees to willingly engage in behaviour directed toward desired organisational outcomes ...". They further explain that the engagement that follows provide employees with a sense of emotional fulfilment which is indicative of someone who is engaged. Results of their study revealed that both affective commitment and employee engagement significantly predicted turnover intention behaviour. This suggests that employees first develop an emotional connection with their organisation before they become engaged, and this influences their turnover intention behaviours.

Saks (2006) maintains that empirical research has provided evidence for a relationship between engagement and organisational commitment. Scholars have argued that work engagement and organisational commitment are so closely related that the two constructs can be used interchangeably (Rothmann & Jordaan, 2006). However, Maslach et al. (2001) make a clear distinction between the two concepts by explaining that organisational commitment describes a feeling towards the organisation, and work engagement refers to the work itself. Rothmann and Jordaan (2006) further explain that people can be engaged in their work but not committed to

the organisation, or committed to the organisation but not engaged in their work. Winter, Taylor, and Sarros (2000) confirmed this when they found that although academics engaged in their work activities, they did not necessarily feel attached to the institution. Engagement has been found to be positively related to organisational commitment and negatively related to intention to leave the organisation (Saks, 2006). Thus, an engaged employee is likely to be dedicated to the organisation and would not have any intention of leaving the organisation. Kanste (2011) also shows that work engagement is positively linked to the three dimensions of organisational commitment. Work engagement and the dimensions of organisational commitment also significantly influence the indicators of well-being (Kanste, 2011).

The following hypothesis is formulated regarding the relationship between organisational commitment and work engagement:

Hypothesis 24: Work engagement significantly predicts affective organisational commitment.

#### **5.1.6 Organisational commitment in academia**

The 'new' academic environment saw the emergence of more multifaceted work-roles (Hinshaw, 2001). Administrators are continuously challenged to provide academics with a work environment and roles that fosters academic excellence (Gormley & Kennerly, 2010). Investigating how work-roles and organisational climate influence organisational commitment for staff members of a nursing faculty, Gormley and Kennerly (2010) found that role ambiguity, role conflict was negatively

related to organisational commitment. In addition, staff members' perceptions of the organisation's climate significantly influenced their levels of commitment toward the organisation (Schroder, 2008). Gormley and Kennerly (2010) further explain that affective commitment allows staff members to experience positive energy in their work environment, which subsequently influences their productivity and sense of well-being.

Kipkebut (2010) examined the influence that human resource management practices had on the levels of organisation commitment of university staff members in Kenya. She hypothesized that pay satisfaction, promotional opportunities, training opportunities, job security, performance appraisal, participative decision-making, career development and perceptions of distributive justice would significantly predict the various dimensions of organisational commitment. The results of the study confirmed these hypotheses. Career development significantly predicted affective and normative commitment for both administrative and academic staff members. Meyer and Smith (2000) explain that career development opportunities foster loyalty and emotional attachment to the university. When considering opportunities for decision making, Kipkebut (2010) found a significant positive relationship between organisational commitment and decision making opportunities, explaining that when employees participated in decision making, it conveyed that they were trusted and that their input was valued. Promotional opportunities impacted positively on all three commitment dimensions. Employees who perceived that promotion opportunities were available and fair were likely to develop strong emotional attachment and loyalty to the university. Similarly, job security was found to be a

significant predictor of all three commitment dimensions. Job security provided employees with a sense of continued employment which was likely to enhance positive cognitions, emotions and behaviours toward the university. Training opportunities significantly predicted affective commitment. Providing training opportunities to employees satisfy the need for professional development, resulting in the development of strong affective bonding. Satisfaction with their remuneration significantly predicted the affective commitment of academic staff. Perceived fairness of remuneration increased the emotional attachment to the organisation. Performance appraisal was a significant, positive predictor of affective commitment among administrative staff. The performance appraisal process was tied to decisions relating to compensation and other benefits, as well as the future of employees at an organisation, and did, therefore, influence the attachments that employees formed with the organisation. Finally, distributive justice significantly predicted all three dimensions of commitment of both administrative and academic staff. Perceptions of fairness with regard to the distribution of resources significantly increased the commitment levels of university employees. In general, the study showed that academic staff displayed higher levels of commitment than administrative staff (Kipkebut, 2010). This indicated that administrative staff felt undervalued by the university.

According to Winter and Sarros (2002), academics' evaluation of their work environment is manifest in two broad work attitudes, namely job involvement and organisational commitment. An academic expressing commitment to the university indicates a willingness to remain a member of that institution and to exert



considerable effort on its behalf, while academic involvement in his or her job implies a positive and relatively complete state of engagement in core aspects of the self in the job (Winter & Sarros, 2002). Viljoen and Rothmann (2009) found that academic staff showed lower levels of commitment under the following conditions: balancing demands of their work and personal lives, unreasonably high workloads, lack of autonomy in the workplace and other job-specific aspects, such as time pressures, role overload and the poor remuneration they receive.

In a study investigating the predictors of organisational commitment among staff members of a private Christian university, Schroder (2008) found that factors, such as organisational policies and administration, the nature of the job, working conditions and achievement amongst others, were strong predictors of organisational commitment, which would subsequently influence staff members' decision to stay with the university. In addition, salary was also identified as a significant predictor of organisational commitment (Schroder, 2008).

Jauch, Glueck, and Osborn (1978) maintain that academics are increasingly conflicted between professional commitment and organisational commitment. Academics have a passion for the work they do. Unfortunately, they have to carry out their work under increasingly stressful and demanding conditions. Jauch et al. (1978) found that professional commitment accounts for more of the variance in academics' research productivity than organisational commitment.

## 5.2 TURNOVER INTENTION

In the current global economy where there is an increasing shortage of qualified and competent employees (De Lange, De Witte, & Notelaers, 2008), organisations are continuously challenged to retain and motivate their employees (Ployhart, 2006). Fakunmoju, Woodruff, Kim, Lefevre, and Hong (2010) state that employee turnover has been identified as a major problem in organisations because it increases recruitment and training costs. In fact, recruitment and training costs of a new employee can run up to 200% of his or her annual salary (Griffeth & Hom, 2001). Moreover, it also disrupts the continuance and quality of service delivery to clients (Fakunmoju et al., 2010). Cascio (1982) feels that high turnover rates can have a detrimental impact on a nation's economy. Shahnawaz and Jafri (2009, p. 159) conclude that employee turnover "...involves considerable visible and hidden costs." However, Shahnawaz and Jafri (2009) argue that some degree of turnover can be beneficial to organisations as it allows for new ideas which may challenge stale perspectives.

Harrington, Bean, Pintello, and Mathews (2001) explain that an employee's decision to leave the organisation is a process, from initial thoughts of leaving to actual steps of finding alternative employment. During this process, an employee may still change his or her mind about leaving the organisation, which makes it important to understand the factors proceeding and influencing this decision (Fakunmoju et al., 2010). The early theoretical models of employee turnover, referred to as "the traditional wisdom models", linked employee turnover to job attitudes, such as job

satisfaction, involvement and commitment (Shahnawaz & Jafri, 2009). Subsequent research identified various organisational factors that predicted intention to leave, such as occupational stress, exhaustion and low levels of supervisor support (Fakunmoju et al., 2010), and even dispositional characteristics that predict turnover intentions (Mobley, Griffeth, Hand, & Meglino, 1979; Zimmerman, 2008). Sjöberg and Sverke (2000) suggest that additional research is needed to establish the exact nature of the relationship between proposed predictors and turnover intention. Since the literature uses the terms “intention to leave” and “turnover intention” interchangeably, the rest of the discussion will do the same. The following sections define turnover intention and summarize the results of studies that investigated various variables related to turnover intention across occupations. The summary aims to include only the most relevant variables associated with turnover intention, in order to remain within the boundaries of the research objectives of this study.

### **5.2.1 Defining turnover intention**

Turnover is described as “...the rate of change in the working staff of an organisation during a defined period” (Shahnawas & Jafri, 2009, p. 159). Briefly defining turnover as “the movement of employees into and out of positions,” Johnsrud and Rosser (1997, p. 4) state that turnover can either be voluntary or involuntary, and can occur as a result of a promotion, demotion or exiting the organisation. When one considers these definitions of turnover, it is clear that the intention thereof can thus be described as the desire or wish to no longer be employed by one’s organisation. Carmeli and Weisberg (2006, p. 193) define turnover intention as “the subjective

estimation of an individual regarding the probability that she/he will be leaving the organisation she/he worked for in the near future.” Mobley (1977; 1982) explain turnover in terms of a “withdrawal cognition process” whereby an individual starts to evaluate the level of satisfaction they derive from their existing job. A negative evaluation will induce thoughts of quitting (Mobley, 1977). These negative thoughts are likely to prompt the individual to search for alternative options of employment. The individual then evaluates the alternative options in terms of viability and personal costs against current employment (Mobley, 1982). A positive outcome of this evaluation process is likely to reinforce the intention to leave (Mobley, 1982). Although the relationship between turnover intention and actual turnover can be moderated by other variables, studies have consistently shown that turnover intention was the strongest predictors of actual turnover behaviour (Steers & Mowday, 1981; Tett & Meyer, 1993; Weisberg & Kirschenbaum, 1991).

### **5.2.2 Predictors of turnover intention and its relation to other variables**

Shuck et al.’s (2011) study showed that affective commitment played a vital role when people made decisions concerning their future behaviour at work. The same study revealed that when people perceived their work to be meaningful, they were less likely to leave the organisation. Alternatively, when people perceived their work as meaningless, they experienced feelings of dejection, boredom and frustration, and eventually left (Maslach et al., 2001). Meaningful work gives people the platform to evaluate their contribution and worth in an organisation (Shuck et al., 2011), if not,

then people are likely to search for better opportunities. This shows that meaningfulness is a significant predictor of intention to leave.

In a study investigating the predictors of turnover intention among Italian nurses, Galletta, Portoghese, Penna, Battistelli, and Saiani (2011) hypothesized that work-role fit, perceived organisational support (POS) and perceived supervisor support (PSS) either had an indirect (through job satisfaction) or a direct effect on nurses' turnover intention. A mismatch between an employee and an organisation can influence employees to change the organisation's characteristics to suit them; they can adjust their expectations of the organisation or, alternatively, look for employment elsewhere (Takase, Maude, & Manias, 2005). Thus, there is a great likelihood that an employee who experiences misfit between him- or herself and the organisation will consider quitting the job. Perceived organisational and supervisor support describe the views that employees have regarding the extent to which their contributions are valued by the organisation and their supervisors (Eisenberger et al., 1986). In reference to the quality of an employees' relationship with his or her organisation, perceived organisational and supervisor support are important indicators of an employee's turnover intentions (Eisenberger, et al., 1986; Tourangeau & Cranley, 2006). Galletta et al. (2011) found that perceived supervisor support played a moderating role between care adequacy and job satisfaction, while perceived organisational support was associated with nurses' job satisfaction and their intention to leave the organisation. Likewise, Dawley, Houghton, and Bucklew (2010) found that perceived supervisor support predicted perceived organisational support, which in turn predicted turnover intention. Similar results were reported by

DeConinck and Johnson (2009) who found that perceived supervisory support (PSS) and perceived organisational support (POS) (through organisational justice) were significantly related to employee turnover intention among a group of salespeople.

In a study investigating turnover intention among a group of social workers, Fakunmoju et al. (2010) found that both individual and organisational factors influenced turnover intentions. Poor supervisory support and occupational stress strongly predicted turnover intention, while factors, such as gender and level of income also predicted turnover intention (Fakunmoju et al., 2010). Results such as these provide important information for administrators concerned with retaining employees because it provides them with a theoretical and empirical base on which to develop employment policies and intervention strategies.

Schaufeli and Bakker (2004) conclude that engagement is negatively related to intention to leave. This means that engaged employees are likely to be committed and satisfied with their jobs and, as a result, choose to remain with the organisation. Halbesleben and Wheeler (2008) further explain that the link between engagement and intention to leave stems from the levels of energy, effort and dedication the individual has invested in the organisation. Arguing from a Conservation of Resources (COR) perspective, Halbesleben and Wheeler (2008) state that individuals consider the investments they have made, together with the resources that the organisation has provided them with, and carefully weigh up the risk of leaving the organisation for alternative employment. They found a significant correlation between engagement and turnover intention.

In a meta-analysis of the predictors of employee turnover, Griffeth, Hom, and Gaertner (2000) found that job dissatisfaction, low psychological well-being and too few job resources significantly predicted employee turnover. Testing a similar hypothesis in a longitudinal study, De Lange et al. (2008) found that low work engagement and insufficient job resources were important predictors of employee turnover. Using the full spectrum of the Job-Demands Resources (JDR) framework, Babakus, Yavas, and Karatepe (2008) attempted to investigate the simultaneous effects of job demands (i.e. role conflict, role ambiguity), job resources (i.e. training, supervisory support, rewards, empowerment) and intrinsic motivation (as a personal resource) on emotional exhaustion and turnover intentions. Emotional exhaustion, described as "... the feeling of being emotionally overextended and exhausted by one's work" (Maslach & Jackson, 1981, p. 101), is one of the burnout dimensions. Individuals who suffer from emotional exhaustion often lack the adequate resources to cope with high job demands, which increase their likelihood of leaving the organisation. Babakus et al. (2008) found that job demands were the best predictor of emotional exhaustion. Furthermore, emotional exhaustion acted as mediator between job demands, job resources, intrinsic motivation and turnover intention, and a negative relationship was found between job resources and turnover intentions (Babakus et al., 2008).

Hang-yue, Foley, and Loi (2005) investigated the impact of specific work-role stressors on employees' turnover intentions in the Asian context. They included the following work-role stressors: role ambiguity, role conflict, role overload and work-family conflict. These work-role stressors were associated with stronger turnover

intentions, with emotional exhaustion and job satisfaction mediating the relationships (Hang-yue et al., 2005).

Marsh and Mannari (1977) mention that turnover is negatively associated with age, seniority, job prestige, earnings and promotion opportunities. Moreover, the following factors also contribute to turnover intentions: job dissatisfaction, poor job challenges, low job achievement and poor relations with co-workers (Marsh & Mannari, 1977). Investigating the causes of turnover intentions and organisational commitment in a Japanese organisation, their study found that women were more likely to leave the organisation than men.

### **5.2.3 Turnover intention in academia**

Research on turnover intention among academics has yielded inconsistent results. Knowledge about the processes preceding university staff turnover can prove to be invaluable, especially to university administrators (Manger & Eikeland, 1990). Various factors, such as the labour market, organisational climate, job and individual factors play an important role in studying university staff members' intention to leave. Using Parjanen's (1979) decision-making theory, Manger and Eikeland (1990) postulate that push and pull factors could explain university staff members' intention to leave. Push factors that compel employees to leave their organisations are of particular importance because they identify context-specific predictors of turnover intention. Although academics consider both intrinsic and extrinsic motivation factors when making decisions about their future with a university, they are more



likely to be influenced by intrinsic motivational factors (Lacy & Sheehan, 1997). Finkelstein (1984) explains that academics value factors, such as professional growth and advancement opportunities and relationships with colleagues (intrinsic motivational factors) much higher than, for example, low salary (extrinsic motivational factor). Manger and Eikeland (1990) further posit that Herzberg's (1973) Motivators and Hygiene (two-factor) theory of job satisfaction can be used to understand the staff members' intention to leave, as all seven motivators (achievement, recognition, the job itself, responsibility, advancement, growth opportunities and status) could potentially be present in the academic work context. Manger and Eikeland (1990) found that poor co-worker relations, job dissatisfaction, and competition for scarce resources, such as status, prestige, power and influence, were strong predictors of staff members' intention to leave. Conflict with co-workers, possibly over scarce resources, could lower job satisfaction, and subsequently lead to turnover intentions.

Rosser (2004) investigated the impact of various significant dimensions of faculty work life on faculty members' job satisfaction and intention to leave. These dimensions include: professional development, administrative support, committee and service work, as well as technical support. Regarding professional development, Plater (1995) maintains that it is important to provide financial support for the activities pertaining to the professional development of university staff members. Professional development often requires extensive travelling to attend conferences and seminars, sabbatical leave and time away from teaching load, as well as additional funds to engage in research activities (Rosser, 2004). These professional

development activities fuel faculty development, which in turn drives the strategic mission of a campus. Professional development significantly predicts faculty members' overall work life satisfaction. Administrative support enables faculty members to focus on their core function, and includes secretarial and office support, library services, teaching materials, tutors or teaching assistants (Johnsrud & Rosser, 2002). Perceived inequitable distribution of support can contribute to feelings of frustration, low job satisfaction and demoralization (Johnsrud & Rosser, 2002).

Committee and service work constitute serving on, and chairing, various committees across the campus (Layzell, 1996). These activities can be time consuming, as well as occupy precious research time of academics. Although considered an important aspect of the scope of an academic's job, these activities can become overwhelming, detracting from faculty members' job satisfaction (Rosser, 2004). Finally, there is increasing pressure on academics to integrate technology into every aspect of teaching, research and service (Groves & Zemel, 2000). Apart from the daunting challenge of learning how to use instructional technology, it also places huge demands on the private and professional lives of academics (Rosser, 2004). The extent to which staff members feel supported in these domains has a significant effect on the quality of their work life and has major implications for their turnover behaviour.

Schroder (2008) finds that it is more expensive to replace employees than to retain current employees. Considering this, it is important that university management and administrators are cognizant of the values of employees, as well as those factors (i.e.

job design, reward systems, human resource policies, etc.) that can enhance employees' commitment toward the organisation. The costs related to turnover are exponential, especially if extensive recruitment measures are used, the organisation provides temporary housing and if relocation is required (Ettorre, 1997), which is often the case with the recruitment of academics.

Results from studies examining the demographic features of staff members with turnover intentions at institutions of Higher Education have been inconsistent, and are often confused with actual turnover behaviour (Dryfhout & Estes, 2010). Johnsrud and Rosser (1997) reported that age and job tenure significantly predicted turnover intention, in that young, untenured employees were those who more likely had the intention to leave the institution. Furthermore, mid-level administrators were more likely to have turnover intentions than their academic counterparts (Johnsrud & Rosser, 1997). Investigating the gender differences in academic turnover intentions, Dryfhout and Estes (2010) found that women were more likely to hold turnover intentions. They attributed this to the fact that female academics often worked in a hostile climate that favoured male colleagues, especially where resources and rewards were concerned. Furthermore, female academics were more likely to be primarily responsible for raising children, which is a daunting challenge because academia has traditionally not accommodated employees' family responsibilities (Bianchi, Milkie, Sayer, & Robinson, 2000).

The following hypothesis is formulated regarding the relationship between turnover intention and work engagement:

Hypothesis 25: Work engagement negatively predicts turnover intention.

Hypothesis 26: Job resources (relationships with colleagues, administrative and technical support and professional development opportunities) are negatively related to turnover intention.

Hypothesis 27: Job demands (a lack of resources, job dissatisfaction and poor relations with co-workers) are positively related to turnover intention.

### **5.3 ILL-HEALTH**

According to Danna and Griffin (1999), concerns for the health and well-being of workers are becoming an increasingly important issue. This is partly due to the fact that factors that influence employee health and well-being can have a significant impact on the financial health and profitability of an organisation. This can come from direct and indirect financial costs, as well as from maladaptive behaviours exhibited by employees (Danna & Griffin, 1999). For example, workers experiencing poor health and well-being in the workplace may be less productive, make lower quality decisions, be more prone to absenteeism, and their overall contribution to the organisation might diminish significantly (Boyd, 1997). Viljoen and Rothmann (2009) reference the following quote concerning the pervasive costs of psychological and health problems within organisations.

*“This relentless upward spiral of health benefit costs is taking its toll throughout industry. Each year corporations are forced to allocate a large share of their*

*operating expenses just to provide employee health benefits, resulting in higher consumer prices or lower profits, or both.”* (Everley & Fieldman, 1991, p. 6)

Research thus far has provided overwhelming evidence of a relationship between occupational stress, burnout and physical and psychological ill-health (Siu, 2002; Winefield, Gillespie, Stough, Dua, & Hapuararchchi, 2002). Occupational stressors are described as aspects of the work environment that lead to physical strain, poor psychological health or diminished well-being of the individual (Beehr, 1995). Physical strain has both long-term and short-term consequences for the individual (Mostert, Rothmann, Mostert, & Nell, 2008). When individuals face enduring strain, their bodies mobilize energy through activating the sympathetic nervous system, which deplete energy levels, exacerbate exhaustion and overtax the physiological system (Bakker & Demerouti, 2006). Long-term effects include physical illness, such as heart disease, while short-term effects manifest as physiological responses, such as high blood pressure and the suppression of the immune system (Burke, Greenglass, & Schwarzer, 1996; Mostert et al., 2008). Kinman (2001) further elaborates that strain impacts the individual on different levels, namely on a cognitive level (i.e. poorer decision-making ability and creativity), a behavioural level (i.e. increased absenteeism, irritability, substance abuse and poor time management), a physical level (i.e. increased headaches, digestive disorders, cardiovascular diseases) and a psychological level (i.e. anxiety, depression, low self-esteem). The results of various studies have unanimously demonstrated that unmanaged levels of stress, which can lead to burnout, have a negative and potentially fatal impact on physical health and well-being of individuals (Coetzee &

Rothmann, 2005). In particular, high levels of stress have been associated with physical symptoms, such as sleeping difficulties, headaches, colds and other viral infections, as well as psychological problems, such as burnout, depression, anxiety, irritability, chronic fatigue and an increase in negligent behaviour at work (Hothopf & Wesseley, 1997). These symptoms have also been linked to various stress-related medical conditions, such as coronary heart disease, migraines, ulcers and hypertension (Viljoen & Rothmann, 2009). Other symptoms include allergies, migraines, and frequent bouts of colds and flu (Jackson, Rothmann, & van de Vijver, 2006).

Viljoen and Rothmann (2009) caution that ill health cannot be presumed to be a direct consequence of workplace stress. Individuals have different levels of susceptibility to illness due to predisposition factors or lifestyle habits. Moreover, other factors outside the workplace could contribute to the development of stress-related illnesses (Viljoen & Rothmann, 2009). Cooper and Cartwright (1994) explain that the combination of work-related stressors and the stress of everyday life can result in negative physical and emotional outcomes which place excess demands on an individual's mind and body.

### **5.3.1 Defining ill-health**

Although health and well-being are inextricably linked, it is perhaps necessary to first make a distinction between the two constructs. These two concepts tend to be regarded as two salient person-related concepts that are often described along the

following dimensions: physical, emotional, psychological and mental dimensions with terms such as “psychological well-being”, “mental health”, “physical well-being” and “subjective well-being” (Danna & Griffin, 1999). According to the World Health Organisation (1998), health is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity. Danna and Griffin (1999) conceptualize health as consisting of psychological ill-health symptoms, such as frustration, anxiety, depression, physical symptoms, such as raised blood pressure, heart conditions and general physical health. Warr (1990) describes health as a sub-component of well-being, and defines the term well-being to describe a person’s overall experience in life. He, furthermore, suggests that it essentially reflects a person’s self-described happiness.

### **5.3.2 Predictors of ill-health and its relations to other variables**

Historically, issues of health and well-being would not have been taken seriously, were it not for the development of government regulations that attempted to protect workers against exploitation in the workplace (Baker & Green, 1991). As the field of occupational health and safety gained popularity, research initiatives were directed toward the antecedents of health and well-being (Danna & Griffin, 1999). Three major areas in the work context which affected the health of workers were identified (Smith, Kaminstein, & Makadok, 1995). The first factor was hazardous working conditions that lead to illnesses and diseases (Smith et al., 1995). Specific work hazards under investigation included ergonomic related hazards (Bruening, 1997), increasing prevalence of lung diseases due to environmental toxins (Figura, 1997),

sick-building syndrome (World Health Organisation, 1983), sexual harassment (Glomb, Richman, Hulin, & Drasgow, 1997) and the safety culture of organisations (Manuele, 1997). They mentioned a second factor, stressful working conditions, that could cause a host of behavioural, medical and psychological problems (Quick, Horn, & Quick, 1986). Danna and Griffin (1999) outlined various sources of work stress, such as intrinsic job factors (i.e. work overload or underload, shift work, long hours, travel, risk and danger, new technology, physical work environment), role in the organisation (i.e. role ambiguity, role conflict, responsibility for others), relationships at work (i.e. relationships with colleagues, subordinates, and superiors), career development, organisational structure and climate (i.e. poor communication, politics, downsizing, lack of participative decision-making) and home/work interface. Finally, the third factor was the influence of personality characteristics or work environment on an individual's health (Smith et al., 1995). The two most commonly researched personality factors are Type A personality and locus of control (Danna & Griffin, 1999). Type A personalities are more prone to cardiovascular diseases, and individuals' perceptions of the extent to which they control the events around them, significantly contribute to their health and well-being (Ganster, 1989). Work environments that are prone to emergency situations and job insecurity have been associated with increasing health risks (Smith et al., 1995).

Occupational stressors have consistently been proven as having a direct impact on the health and well-being of individuals (Danna & Griffin, 1999). Attempting to identify the main predictors of both physical and psychological ill-health among health care workers in the United Kingdom (UK), Michie and Williams (2003) found



that work demands (such as high workload, long hours, and pressure), lack of autonomy and a lack of managerial support significantly influenced the physical and psychological health of employees.

Wilson, DeJoy, Vandenberg, Richardson, and McGrath (2004) posit that the health and well-being of employees are affected by the organisation's characteristics, policies and procedures and structure. The interaction of these factors is believed to contribute to a healthy work organisation. Wilson et al. (2004, p. 567) define a healthy work organisation as "...one characterized by intention, systematic, and collaborative efforts to maximize employee well-being and productivity by providing well-designed and meaningful jobs, a supportive social-organisational environment, and accessible and equitable opportunities for career and work-life enhancement." Confirming the hypotheses of their study, Wilson et al. (2004) demonstrated that job design, organisational climate and job climate contributed to individuals' psychological work adjustment (conceptualized as job satisfaction, organisational commitment, psychological empowerment and perceived job stress) which ultimately impacted on the health and well-being of individuals.

According to Schaufeli, Taris, and Van Rhenen (2008), the limited research done on work engagement and perceived health thus far, has shown that engagement is unrelated to health problems. In fact, engaged individuals are likely to enjoy good physical and mental health, because they regulate the time spend on being engaged (Schaufeli et al., 2008). This means that such individuals are capable of maintaining a healthy balance between work and non-work activities. Engaged employees are

less likely to suffer from back and neck problems and symptoms of anxiety and depression (Peterson et al., 2008). Demerouti, Bakker, De Jonge, Janssen, and Schaufeli (2001) found evidence of a moderate negative relationship between engagement and psychosomatic health symptoms, such as headaches and chest pains.

Job demands and a lack of resources are a stark reality in most organisations, and have a negative impact on individuals' ability to engage in work activities. In an attempt to expand and validate the Job Demands-Resources (JD-R) model as a balanced approach to understand both the negative and the positive aspects of well-being, Schaufeli, Bakker, and Van Rhenen (2009) explain that well-being is an outcome of a strain (burnout) and motivation (engagement) process. Job demands cause strain and health impairment as the individual tries to cope with stressful aspects of the job, while job resources foster engagement which protects the individual against the strain of handling job demands and motivates personal growth and self-development (Schaufeli et al., 2008). Examining this notion in a longitudinal study, Schaufeli et al. (2009) found that job demands and resources did predict burnout and engagement respectively. Burnout was further related to health problems and turnover intentions for the individual while engagement, which is likely to promote good health and well-being, mediated the relationship between job resources and turnover intentions (Schaufeli et al., 2009). Hakanen, Schaufeli, and Ahola (2008) argue that more longitudinal research is necessary to determine the causal relationship between burnout and specific indicators of ill-health.

Arguing from a positive psychology perspective, Ryff and Singer (2008) posit that living a eudaimonic life may have health benefits for individuals. Supporting this notion, Lyubomirsky (2008) concludes that happy, positive people are more resilient, enjoy stronger immune systems, and are physically healthier. When individuals experience self-acceptance, maintain positive relations with others, strive toward personal growth, purpose in life and autonomy, and achieve environmental mastery, they will not only take better care of themselves, neurobiological processes will enhance their immune systems (Ryff & Singer, 1998). Although research in this area is still limited, preliminary studies found correlations between the various dimensions of psychological well-being and better neuroendocrine regulation, lower inflammatory markers, lower levels of glycosylated hemoglobin (marker of insulin resistance), and longer periods of REM sleep (Ryff & Singer, 2008).

### **5.3.3 Ill-health in academia**

Rothmann and Essenko (2007) note that, since the health of staff members of Higher Education institutions has significant implications for the quality of their service delivery, it is important to identify the causes of burnout and ill-health in the academic context. In an attempt to test a structural model of ill-health, Rothmann and Essenko (2007) and Rothmann, Barkhuizen, and Tytherleigh (2008) found strong support for the notion that job demands and a lack of job resources significantly predicted burnout which in turn, led to physical and psychological health problems for staff members of South African universities. Investigating the most significant occupational stressors in relation to specific outcomes, such as organisational

commitment, ill health and turnover intention in a South African university, Mostert et al. (2008) found that none of the occupational stressors (i.e. job control, resources, and communication and work relationships) included in the study significantly predicted physical ill health. Work overload (as a dimension of job control), however, significantly predicted psychological ill-health. University staff members who were pressured by excessive work demands under time constraints were likely to experience anxiety and depression (Mostert et al., 2008).

Similar results were found by Coetzee and Rothmann (2005) who identified work overload as the most prominent occupational stressor for staff members at Higher Education in South Africa. They also concluded that specific occupational stressors influenced staff members' levels of organisational commitment, as well as increased their psychological ill-health and physical ill-health. Hakanen et al. (2008) found that job demands, such as excessive workload, demanding work content and poor work environment, predicted burnout over a period of three years.

Dale (2004) maintains that, even though the work of academics are largely sedentary, it still involves repetition, force, difficult postures and sporadic breaks which are all exacerbating factors for developing musculoskeletal disorders (MSDs). In particular, older academics are at risk of developing MSD-related symptoms, and it is, therefore, essential that their work capacities should match their workloads (Dale, 2004).

The following hypothesis is formulated regarding the relationship between ill-health and work engagement:

Hypothesis 28: Work engagement negatively predicts ill health.

#### **5.4 CHAPTER SUMMARY**

This chapter summarized three important outcomes of engagement and burnout, namely organisational commitment, turnover intention and ill-health. Each of these outcomes was defined and discussed in relation to other variables as demonstrated by previous studies. These outcomes were also discussed in the academic context.

The following chapter contains a detailed outline of the research design and research procedures that were used to conduct this study. It further explains the measuring instruments, as well as the statistical analyses that were carried out.

## **CHAPTER 6**

### **METHODOLOGY**

This chapter outlines, in detail, the research methodology that was used to conduct this study. More specifically, it delineates the research design, the target population and sample, and the research instruments with which constructs were measured. Furthermore, it also describes the research procedures and specific statistical analyses with which the data were analysed.

#### **6.1 RESEARCH DESIGN**

This research study is both quantitative and qualitative in nature. The quantitative research approach was chosen as it collects data in the form of numbers and use statistical types of data analysis (Terre Blanche & Durrheim, 1999). A survey design was used to reach the research objectives. Data collected from the surveys were statistically analysed to answer the research questions. The specific design is a cross-sectional design, in which a sample is drawn from a population at a given point in time (Hair et al., 2010). This design is suitable when the aim of the study is predictive and descriptive by nature (Shaughnessy & Zechmeister, 1997).

A qualitative dimension was included to capture the beliefs, thoughts and experiences of participants otherwise not measured by the survey questionnaire. Bryman (2004) argues that although quantitative approaches to research are highly valued, especially in the physical and natural world, it might not be sufficient in the social sciences “...

for researching the underlying mechanisms that drive actions” (Krauss, 2005, p. 762) and thoughts of people. He further advocates for a more pragmatic approach in which quantitative and qualitative research methods are complementary as opposed to using an either/or approach.

## **6.2 PARTICIPANTS**

The population for this research included the entire academic (permanent and contract), administrative and technical staff (permanent and contract) complement of the University of Namibia, across the various campuses and centres around the country. The total staff complement of the University of Namibia was 887 staff members ( $N = 887$ ) at the time data collection commenced and so the total population was thus targeted. According to Gravetter and Forzano (2006), a population is the entire set of individuals of interest to a researcher. A total of 306 responses ( $n = 306$ ) were obtained which provides for a 35% response rate. The characteristics of the participants are displayed in Table 1.

Table 1

*Demographic Characteristics of the Participants (n = 306)*

<b>Item</b>	<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
Gender	Male	151	49.3
	Female	154	50.3
Age	19 - 28	56	18.3
	29 - 34	60	19.6
	35 - 41	69	22.5
	42 - 48	45	14.7
	49 - 55	38	12.4
	56 +	23	7.5
	Marital status	Single	125
Divorced		23	7.5
Widowed		8	2.6
Married		138	45.1
Living with a partner		11	3.6
Qualifications	Gr. 12 certificate	28	9.2
	Diploma	43	14.1
	Postgrad Diploma	15	4.9
	Degree	77	25.2
	Master's Degree	90	29.4
	Doctoral Degree	43	14.1
Job tenure	0 – 1 year	59	19.3
	1.1 – 2 years	47	15.4
	2.1 – 3 years	41	13.4
	3.1 – 5 years	37	12.1
	6 – 9 years	39	12.7



	10 + years	61	19.9
Job position	Tutor/Assistant lecturer	34	11.1
	Lecturer	91	29.7
	Senior lecturer	18	5.9
	Associate professor	7	2.3
	Professor	6	2.0
	Technical staff	56	18.3
	Officer	56	18.3
	Senior Officer	18	5.9
	Assistant director	5	1.6
	Director/Librarian	7	2.3
	Years at the organisation	0 – 1 year	48
1.1 – 2 years		31	10.1
2.1 – 3 years		34	11.1
3.1 – 5 years		28	9.2
6 – 9 years		43	14.1
10 +		102	33.3
Type of contract	Contract	80	26.8
	Permanent	219	73.2

Table 1 shows that 50.3% of the total sample was females and that the majority of participants were between 35 years and 41 years (22.5%). As far as marital status was concerned, 45.1% of participants were married, 41.0% were single, 7.5% were divorced, 3.6% were living with a partner, and 2.6% of participants were widowed. Table 1 further shows that 29.4% of participants had a Master's degree as highest qualification, and that the majority (19.9%) of respondents had occupied their current job position for ten or more years. Lecturers constituted 29.7% of participants, while

18.3% of participants were either technical staff members or administrative officers. 33.3% of participants had been in the employment of the university for ten or more years. Finally, the majority (73.2%) of participants were permanently employed by the university.

### **6.3 MEASURING INSTRUMENTS**

A structured survey (questionnaire) comprising scales from various measuring instruments was used. The questionnaire also included the following demographic variables: age, gender, marital status, level of education/qualifications, job tenure, job position, years at the organisation and type of contract. The following scales were used: The Antecedents Scale, the Psychological Conditions Scale, The Work Engagement Scale, Organisational Commitment Scale, Turnover Intention Scale and the General Health Questionnaire (GHQ-28). Moreover, the questionnaire included two open-ended questions designed to obtain additional information on the perceived helping and restraining factors that individuals experienced on the job.

#### **6.3.1 The Antecedents Scale (AS)**

##### **6.3.1.1 Rationale and description**

The Job-Demands Resources model posits that each occupation has unique work characteristics that influence the well-being of employees (Bakker et al., 2005). These work characteristics can either serve as job demands or job resources. Job

demands are physical, social or organisational aspects that require excessive mental and physical effort while job resources, in contrast, can be any physical, psychological, social or organisational aspect of the job that buffers the effects of job demands, enhances performance and stimulates personal growth (Bakker et al., 2005). The following work characteristics had been hypothesized as antecedents of work engagement in this study: work role fit, supervisory relations, co-worker relations, resources, job enrichment, rewards and recognition, organisational support and self-consciousness.

The three item scale of the *Work Role Fit Scale* (WRFS), adapted from May et al. (2004), was used to measure work role fit. This scale essentially measured the extent to which individuals felt that their self-concepts were congruent and compatible to their jobs (Kristof, 1996). Supervisory relations investigated individual's perceived support from, and interactions with, their supervisors. Positive interactions with supervisors have been associated with interpersonal trust and psychological safety (May et al., 2004). Relationships with co-workers influence the meaning that individuals derive from their work (May et al., 2004). Co-worker relations can also be a significant source of belonging and support for an individual that, in turn, can buffer the detrimental impact of stressors (Olivier & Rothmann, 2007). Resources capture the physical, emotional and cognitive resources that individuals garner to engage in their work-roles (May et al., 2004). When these resources are depleted or insufficient, an individual will be more prone to suffer from burnout. Job enrichment pertains to the quality of job content and the meaningfulness that employees experience (May et al., 2004). Saks (2006) suggests that meaningfulness mediates

the relationship between job enrichment and engagement. Rewards and recognition are particularly important for the development of engagement, because for employees it is a direct and tangible measure of a return on (physical, cognitive and emotional) investment. Maslach et al. (2001) suggest that a lack of or insufficient rewards and recognition can lead to burnout. Perceived organisational support relates to perceptions that employees hold concerning the extent to which the organisation cares about their well-being and values the contributions they make (Saks, 2006). Positive evaluations about the organisation's support are likely to lead to favourable outcomes through engagement. Finally, self-consciousness refers to an excessive preoccupation about oneself and the impression that one makes on other people (May et al., 2004). Such a preoccupation is likely to distract an individual from becoming engaged in a work-role.

#### **6.3.1.2 Administration, scoring and interpretation**

The initial scale of work role fit incorporated items from the various conceptualizations of the construct (Cable & DeRue, 2002). In the current study, work role fit was measured by three items (e.g., "My job 'fits' how I see myself", "The work I do on this job helps me satisfy who I am", and "My job fits how I see myself in the future").

Supervisory relations were measured by ten items ( $\alpha = .95$ ) (May, 2003) (e.g. "My supervisor is committed to protecting my interests" and "My supervisor helps me solve work-related problems").

Co-worker relations were measured by ten items ( $\alpha = .93$ ), as adapted from May et al. (2004). This scale represented individual's interactions and relationships with their co-workers and the extent to which there is mutual trust and respect between the parties (e.g. "My interactions with my co-workers are rewarding" and "My co-workers and I have mutual respect for one another").

Resources were measured by a scale of eight items ( $\alpha = .91$ ) developed by May et al. (2004). This scale measured the physical, emotional and cognitive resources individuals possess that will enable them to become engaged in their work (e.g. "I feel tired before my workday is over", "I feel emotionally drained from my work" and "I can't think straight by the end of my workday").

Job enrichment was measured by averaging six of the initial 15 items ( $\alpha = .85$ ) from the Job Diagnostic Survey (JDS; Hackman & Oldham, 1980) (May et al., 2004). This scale measured five job-related dimensions: skills variety, task identity, task significance, autonomy and feedback (May et al., 2004). Examples of items on this scale include: "To what extent does your job permit you to decide on your own?" and "To what extent does doing the job itself provide you with information about your work performance?" This scale was measured on a seven point Likert scale with response options ranging from 1 (*very little*) to 7 (*very much*).

Rewards and recognition were measured by a ten-item scale ( $\alpha = .80$ ) developed by Saks (2006). Rewards and recognition measured the extent to which individuals received various outcomes (such as "a pay raise", "a promotion" and "more

challenging work assignments”) for performing their jobs well (Saks, 2006). A seven-point Likert scale with response options 1 (*very little*) to 7 (*very much*) was used for this scale.

Organisational support was measured by a ten-item scale, adapted from Saks (2006) ( $\alpha = .89$ ). This scale measured how individuals perceived support that they received from the organisation. Examples of items on this scale included “My organisation cares about my opinions” and “Help is available from my organisation when I have a problem”.

Self-consciousness was measured by three items ( $\alpha = .83$ ) (May et al., 2004). The Self-consciousness scale measured the extent to which an individual experienced public or private self-consciousness (e.g. “I worry about how others perceive me at work” and “I worry about being judged by others at work”).

A seven-point agreement-disagreement Likert scale varying from 1 (*strongly agree*) to 7 (*strongly disagree*) was used for the antecedent scale, except for the Job enrichment and rewards and recognition scales. Respondents who chose options 1 and 2 were likely to vary between ‘disagree’ to ‘strongly disagree’. Response options 3 to 5 indicated moderate sentiments, while responses 6 and 7 showed strong agreement. The scale of each antecedent variable was relatively short, straightforward and easy to administer.

### **6.3.1.3 Reliability and validity**

A principal component analysis showed that the work role fit items yielded good factor loadings, which demonstrated the validity of the scale. Furthermore, the item communalities were also regarded as acceptable, ranging from .75 to .83 ( $\alpha = .88$ ). The reliability of the WRFS was confirmed by Olivier and Rothmann (2007) in a study of antecedents of work engagement at a multinational oil company in South Africa ( $\alpha = 0.90$ ).

The factor structure of the supervisory relations scale was confirmed by a principal component analysis. Factor loadings ranging from .67 to .82 were obtained for this scale ( $\alpha = .95$ ). Rothmann and Rothmann (2010) confirmed the reliability of the supervisory relations items in a study investigating the antecedents of employee engagement in various South African organisations ( $\alpha = .95$ ).

A principal component analysis showed that the co-worker relations scale was factorable. Factor loadings ranging from .64 to .87 were obtained for this scale ( $\alpha = .94$ ). Rothmann and Rothmann (2010) confirmed the reliability of the co-worker relations scale in a study investigating the antecedents of employee engagement in various South African organisations ( $\alpha = .94$ ).

A principal component analysis showed that the seven items measuring resources yielded acceptable factor loadings, ranging from .49 to .78 ( $\alpha = .84$ ). Olivier and Rothmann (2007) obtained a Cronbach alpha ( $\alpha = .91$ ) for this scale in their

investigation into the antecedents of employee engagement in a South African multinational oil company.

The factor structure of Job enrichment was confirmed with four items obtaining factor loadings of between .40 and .81 ( $\alpha = .74$ ). Saks (2006) lent support to the reliability of this scale ( $\alpha = .79$ ) in a study examining the antecedents of employee engagement across various occupations and organisations. The reliability and factorial validity of the Job Diagnostic Survey in the South African context was confirmed by Buys, Olckers, and Schaap (2007) on a sample of 677 employees at various South African organisations.

A principal component analysis confirmed the factor structure of rewards and recognition with factor loadings between .53 and .80 ( $\alpha = .77$ ). Saks (2006) reported an alpha coefficient of .80 using this scale on a sample of 102 employees at a Canadian University in Toronto.

The factor structure of the organisational support scale was confirmed by a principal component analysis. Factor loadings of .30 to .88 were obtained ( $\alpha = .82$ ). Saks (2006) confirmed the reliability of the organisational support scale on a sample of 102 employees at a Canadian University in Toronto. Rothmann and Jordaan (2006) reported an alpha coefficient of .92 for this scale in a study examining the job demands, job resources and work engagement of academic staff in Higher Education institutions in South Africa.



A principal component analysis confirmed the factor structure of self-consciousness. The three items measuring self-consciousness demonstrated construct validity with loadings of -.78 to -.86 ( $\alpha = .86$ ). Olivier and Rothmann (2007) reported an alpha coefficient of .86 for self-consciousness in a study of antecedents of work engagement among 200 employees of a South African multinational oil company.

#### **6.3.1.4 Motivation for inclusion**

Antecedent variables have important implications for positive work behaviours, such as satisfaction, commitment toward the organisation and intention to leave (Olivier & Rothmann, 2007). This study includes a good balance of various job demands and job resources to identify the most significant predictors of work engagement. The majority of the antecedent scales have been used in South African studies, demonstrating their reliability and appropriateness for the context of this study.

### **6.3.2 The Psychological Conditions Scale (PCS)**

#### **6.3.2.1 Rationale and description**

Psychological availability, psychological meaningfulness and psychological safety were measured with *The Psychological Conditions Scale*. May et al. (2004) suggest that these psychological conditions have an impact on the extent to which an individual engages in his or her work role. Psychological availability measured the extent to which individuals are cognitively, physically and emotionally available to

do their work as conceptualized by Kahn (1990). Psychological meaningfulness measured the perceived meaning that people derive from their work-related activities (May et al., 2004). Finally, Psychological safety measured the extent to which people felt comfortable to be their true selves, without fearing negative consequences for doing so (May et al., 2004).

### **6.3.2.2 Administration, scoring and interpretation**

The response options ranged from 1 (*strongly agree*) to 7 (*strongly disagree*) on a seven-point Likert scale for each psychological condition scale. Psychological availability was measured by eight items ( $\alpha = .85$ ) (May et al., 2004). An example of the items on this scale is “I am confident about my ability to do my job”. Psychological meaningfulness was measured by six items ( $\alpha = .90$ ) as adapted from Spreitzer (1995) and May (2003), and was measured by items, such as “The work I do is meaningful to me” and “The work that I do on this job is worthwhile”. Psychological safety was measured by seven items as opposed to the three items ( $\alpha = .71$ ) used by May et al. (2004). Examples of items on this scale included “It is safe to take a risk in my section” and “Individuals in my section are able to bring up problems and tough issues”.

### **6.3.2.3 Reliability and validity**

Principal component analysis showed acceptable factor loadings which confirmed the discriminant validity of the constructs. The reported Cronbach alphas for

Psychological availability, Psychological meaningfulness and Psychological safety were .92, .94, and .57 respectively. The reliability of this scale was confirmed by studies, such as those conducted by Olivier and Rothmann (2007) and Rothmann and Rothmann (2010) ( $\alpha = .92$  and  $\alpha = .91$  respectively) across various industries in South Africa.

#### **6.3.2.4 Motivation for inclusion**

The psychological conditions scale was included in this study because the respective psychological conditions could provide important insight into the processes that foster work engagement. May et al. (2004) suggest that the three psychological conditions mediate the effects of antecedent variables on work engagement. The inclusion of the psychological conditions scale was, therefore, significant as it explained the development of work engagement.

### **6.3.3 The Work Engagement Scale (WES)**

#### **6.3.3.1 Rationale and description**

The *Work Engagement Scale* (WES; May et al., 2004) was used to measure Work engagement. In line with the global call for a more positive approach to psychology, engagement has been coined the “antipode of burnout” (Schaufeli et al., 2002). Work engagement has been described as the investment of physical, emotional and

cognitive energies of oneself in a work-role (Rich et al., 2010), and together with burnout, it acts as an indicator of employee wellness (Rothmann & Joubert, 2007).

### **6.3.3.2 Administration, scoring and interpretation**

The 13-item scale ( $\alpha = .77$ ) represented the dimensions of Work engagement as conceptualized by Kahn (1990) (namely Cognitive, Emotional and Physical engagement). An example of the three Cognitive Engagement items includes “I get so into my job that I lose track of time”. Emotional Engagement was measured by six items (e.g. “I am enthusiastic about my job”). Physical Engagement was measured by four items (e.g. “I feel a lot of energy when I am performing my job”). Participants responded using a seven-point Likert scale with anchors (1) *never/almost never* to (7) *almost always/always*.

### **6.3.3.3 Reliability and validity**

A principal component analysis showed that the engagement items yielded good factor loadings, which demonstrated the validity of the scale. Emotional and Physical engagement loaded onto one factor, and Cognitive engagement loaded on a distinguishable factor. These factor structures yielded Cronbach alphas of .94 and .75 respectively. Olivier and Rothmann (2007) reported an alpha coefficient of .72 for the scales of the WES among 200 employees in a multinational oil company in South Africa.

#### **6.3.3.4 Motivation for inclusion**

Engagement is one of the main themes of this study around which the hypotheses have been developed. Work engagement in this study represents the paradigm shift from a pathogenic orientation of psychology to a focus on health, happiness and well-being (Seligman & Csikzentmihalyi, 2000).

#### **6.3.4 The Organisational Commitment Scale (OCS)**

##### **6.3.4.1 Rationale and description**

Organisational commitment was measured by the *Organisational Commitment Scale* (OCS, Rothmann, 2010). Organisational commitment was conceptualized along three distinguishable dimensions, namely affective, normative and continuance commitment (Meyer & Allen, 1987a). However, for the purpose of this study, only affective commitment was measured. Meyer and Allen (1997) argue that employees with strong affective commitment are likely to exhibit positive work behaviour.

##### **6.3.4.2 Administration, scoring and interpretation**

The OCS consisted of five items. The scale measured affective commitment by items, such as “I feel personally attached to my work organisation” and “I feel a strong sense of belonging to my organisation”. Participants responded on a seven-point Likert scale with anchors (1) *strongly disagree* to (7) *strongly agree*.

### **6.3.4.3 Reliability and validity**

A principal component analysis showed that the affective commitment items yielded good factor loadings, which demonstrated the validity of the scale. Furthermore, the item communalities were also regarded as acceptable and were reported as follows: item 1 = .61 ( $h^2 = .61$ ), item 2 = .66 ( $h^2 = .48$ ), item 3 = .80 ( $h^2 = .72$ ), item 4 = .89 ( $h^2 = .67$ ), and item 5 = .89 ( $h^2 = .74$ ). The overall scale reported internal consistency of .89. Swart (2011) obtained a Cronbach alpha coefficient for the OCS of 0.81 in a study investigating the happiness of managers in the agricultural sector in South Africa.

### **6.3.4.4 Motivation for inclusion**

Affective commitment has been described as an “emotional attachment” to the organisation which ties the individual employee to the organisation (Meyer & Maltin, 2010). Affective commitment, therefore, plays an important role in understanding individuals’ decision to remain with the organisation. This scale has been included in the study to identify the antecedents and processes of affective commitment.

### **6.3.5 The Turnover Intention Scale (TIS)**

#### **6.3.5.1 Rationale and description**

Intention to leave was measured by The *Turnover Intention Scale* (TIS; Sjöberg & Sverke, 2000). This scale evaluated the extent to which individuals were thinking of leaving the organisation.

#### **6.3.5.2 Administration, scoring and interpretation**

Turnover intention was initially measured by three items, relating to the likelihood of an individual to leave the organisation (e.g. “I frequently think of quitting my job”). A seven-point agreement-disagreement Likert scale varying from 1 (*strongly agree*) to 7 (*strongly disagree*) was used.

#### **6.3.5.3 Reliability and validity**

A principal component analysis demonstrated that only two turnover intention items yielded good factor loadings. Furthermore, the item communalities were also regarded as acceptable and were reported as follows: item 1 = .62 ( $h^2 = .43$ ), item 2 = .78 ( $h^2 = .57$ ). The overall turnover intention scale reported an acceptable Cronbach alpha of .66. Swart (2011) obtained an internal consistency coefficient for the TIS of 0.83 in a study investigating the relationships between factors contributing to meaningful work, psychological need satisfaction, meaning and purpose in life,

organisational citizenship behaviour and turnover intention among managers in the agricultural sector in South Africa.

#### **6.3.5.4 Motivation for inclusion**

Turnover has been identified as a major problem for organisations. Not only does it have considerable financial implications, it also impacts negatively on the service delivery of an organisation (Fakunmoju et al., 2010). Turnover intention has been included in this study to examine the predictors of turnover intention as a strategic approach to develop possible interventions to curb this phenomenon.

#### **6.3.6 The General Health Questionnaire (GHQ)**

##### **6.3.6.1 Rationale and description**

The *General Health Questionnaire (GHQ 28: Goldberg & Hillier, 1979)* was used to measure individuals' perceived health according to four dimensions: Somatic symptoms, Anxiety and Insomnia, Social dysfunction and Depression. This questionnaire has been translated in over 38 different languages and is available in the following versions: GHQ-60, GHQ-30, GHQ-28, GHQ-12, with the GHQ-28 being the mostly widely used across occupations (Jackson, 2007). The questionnaire was designed to be a self-administered screening tool (Goldberg, 1978).



### 6.3.6.2 Administration, scoring and interpretation

According to Viljoen, Bosman, and Buitendach (2005), high scores on the GHQ indicate a high level of psychological distress, while a low value is indicative of a low level of psychological distress, thus implying a low level of psychological wellbeing. Somatic symptoms were measured by items ( $\alpha = .71$ ), such as “Felt that you are ill?” and “Been having hot or cold spells?” The items were measured on a four point scale varying from 1 (*better than usual or not at all*) to 4 (*much worse or much more than usual*). Items, such as “Felt constantly under strain?” and “Been getting scared or panicky for no good reason?” reflected the anxiety and insomnia dimension ( $\alpha = .79$ ). The items were measured on a four point scale varying from 1 (*not at all*) to 4 (*much more than usual*). Social dysfunction was represented by items ( $\alpha = .74$ ), such as “Felt on the whole you were doing things well?” and “Been able to enjoy your normal day-to-day activities?” The items were measured on a four point scale varying from 1 (*more than usual, better than usual and quicker*) to 4 (*much less, much longer*). Finally, depression was measured by items ( $\alpha = .80$ ), such as “Felt that life isn’t worth living?” and “Found yourself wishing you were dead and away from it all?” The items were measured on a four point scale varying from 1 (*not at all*) to 4 (*much more than usual*). According to Jackson (2007), the GHQ-28 has the advantage of being easy to administer, score and interpret.

### **6.3.6.3 Reliability and validity**

Goldberg and Hillier (1979) reported internal consistency coefficients of .69 to .90 (Viljoen, Bosman, & Buitendach, 2005, p. 26). A study in the insurance industry in Sweden by Isaksson and Johansson (2000), measuring the impact of early retirement following downsizing on individuals' health, obtained a Cronbach alpha coefficient of .86. Willmott, Boardman, Henshaw, and Jones (2008) also provided evidence for the predictive power of the GHQ-28 in a sample of general practitioners and nurses in Mid-Cheshire.

### **6.3.6.4 Motivation for inclusion**

The *General Health Questionnaire (GHQ-28)* is a popular and widely used measuring instrument (Willmott et al., 2004). Jackson (2007) maintain that the GHQ-28 is a reliable tool for measuring well-being from a holistic perspective and for understanding the factors that lead to psychological distress.

## **6.3.7 Qualitative questions**

### **6.3.7.1 Rationale and description**

The following two open-ended questions were included in the questionnaire: "What are the five most important helping factors in your job?" and "What are the five most restraining forces in your job?" The aim of these questions was to investigate the

resources and demands individuals experienced on a daily basis while carrying out their job duties. The rationale for including these questions was "... to optimize the data collection process" (Krauss, 2005, p. 758).

### **6.3.7.2 Administration, scoring and interpretation**

Two qualitative questions were included at the end of the questionnaire. The qualitative data were categorized according to distinguishable items, using Spearman's rank correlations (Field, 2011). Spearman's rank correlation or Spearman's rho (Spearman, 1910) is a process of first ranking data and then applying the Pearson's equation to those rankings (Field, 2011). The purpose of Spearman's rank correlations for this set of data was to evaluate the relationship between contributing factors as identified by individuals with high versus low turnover intention, as well as the relationship between restraining factors as identified by individuals with high versus low turnover intention. Similarly, the relationship between the helping factors as identified by employees with high and low emotional and physical engagement, as well as the relationship between the restraining factors as identified by employees with high and low emotional and physical engagement was assessed.

### **6.3.7.3 Reliability and validity**

In content analysis, reliability is affected by stability, reproducibility and accuracy (<http://writing.colostate.edu/guides/research/content/com2d1.cfm>). Gottschalk (1995)

explains that stability entails re-coding the same data, similarly across time; reproducibility refers to various coders categorizing the themes in the same way, and accuracy refers to classifying text according to a specific standard. Furthermore, Spearman correlation coefficients, as a non-parametric statistic, will be computed to determine a rank order and to apply Pearson's equation to the rank order (Field, 2011).

#### **6.3.7.4 Motivation for inclusion**

This study combines both quantitative and qualitative research as an attempt to understand the work experiences of employees of the University of Namibia. Krauss (2005) maintains that the goal of qualitative research is to understand the unique and complex experiences and behaviour of human beings from their point of view.

### **6.4 PROCEDURE**

Permission to conduct research on campus was first sought from the university's management (Pro-Vice Chancellor for Academic Affairs) and the Human Resources Directorate. A structured questionnaire was used to collect data. A cover letter was attached to each questionnaire, explaining the purpose of the research, the necessary instructions to complete the questionnaire and an assurance of complete confidentiality and anonymity. After permission was granted to conduct research on campus, an initial e-mail was sent out via the institutions' intranet to all staff members requesting their participation in this study. Thereafter, both hard copies and

an electronic version of the questionnaire were distributed to all staff members. A period of one month was allowed for the completion of the questionnaire. After the first four weeks, another e-mail was sent out to staff members reminding them to complete the questionnaire. In order to collect the questionnaires, a central person in each faculty, centre and campus, to whom the completed questionnaires could be delivered in sealed boxes, was identified.

## **6.5 DATA ANALYSIS**

The statistical analysis was carried out with the SPSS20.0 program (SPSS, 2011). Random checks were made with the hard copies of the questionnaires to make sure that the electronic version was captured accurately.

In the first step, principal components analysis (PCA) was conducted to determine whether the variable items used in the questionnaire were distinct from each other. According to Tabachnick and Fidell (2007), principal component analysis is a statistical technique applied to a single set of variables when the researcher is interested in discovering which variables in the set form coherent subsets that are relatively independent of one another. Sets of independent variables that correlate with each other form components (Tabachnick & Fidell, 2007). Exploratory factor analysis was conducted in order to reduce variables to more meaningful and interpretable subsets of data. Rotation methods were used to simplify and clarify the data structure (Costello & Osborne, 2005), and when the oblimin rotation method was used, the pattern matrix was examined. The pattern matrix identifies unique

relationships between each factor and each observed variable in a straightforward manner (Tabachnick & Fidell, 2007). Factor analysis is used to summarize the information from a large number of variables into a much smaller number of variables or factors (Hair et al., 2010).

In the second step, descriptive statistics, such as the means, standard deviations and Pearson correlations were determined to describe the data. Pearson correlation is a statistical technique that helps to identify consistent and systematic relationships between two or more variables (Hair et al., 2010). The practical significance of the correlation coefficients was set at a cut-off point of 0.30 (medium effect, Cohen, 1988).

Multivariate analysis of variance (MANOVA) was used to determine the influence of demographic variables on antecedent variables, psychological conditions, work engagement, outcomes (organisational commitment and turnover intention) and general health. Wilks' Lambda statistics was used to test for statistical significance (Tabachnick & Fidell, 2007). MANOVA tests whether mean differences among groups on a combination of dependent variables are likely to have occurred by chance (Tabachnick & Fidell, 2007).

Regression analysis is a technique used for measuring linear relationships between two or more variables (Hair et al., 2010). In this case, hierarchical regression analysis was used to measure the relationship between the antecedent variables as independent variables and engagement, organisational commitment and turnover

intention as dependent variables. A second hierarchical regression analysis was used to measure the relationship between antecedent variables as independent variables and general health dimensions as dependent variables.

Analyses were done to assess the indirect effects of multiple aspects of psychological conditions on antecedent variables (work role fit, co-worker relations, supervisory relations, resources, job enrichment, rewards and recognition, self-consciousness and organisational support) and outcome variables (organisational commitment and turnover intention), as well as general health.

An omnibus effect was provided for all the independent variables per mediator. Bootstrap procedures suggested by Preacher and Hayes (2009) were used to draw inferences from indirect effects (Swart, 2011).

The qualitative data were analysed using content analysis. Content analysis identifies the main themes embedded in text, with the aim of quantifying verbal or written data (Hair et al., 2010). Spearman rank order correlation was used to determine the rank ordering and correlation coefficients of themes.

## **6.6 RESEARCH ETHICS**

The research proposal was evaluated and approved by the Postgraduate Studies Committee of the University of Namibia. Permission was requested and granted to conduct research on campus with the staff members of the university as research

participants. A cover letter was attached to the questionnaire, explaining the purpose of the study and ensuring that participation in the study was completely voluntary and anonymous. Participants will receive the results of the study if so requested. During data capturing, measures were taken to ensure that data were captured accurately. All sources were cited according to the requirements of the Publications Manual of the American Psychological Association (2010).

## **6.7 CHAPTER SUMMARY**

This chapter elaborately described the research methodology of this study in terms of its research design, participants, procedure, data analysis and the ethical guidelines adhered to. Furthermore, the following measuring instruments were discussed in detail: The Antecedents Scale, The Psychological Conditions Scale, The Work Engagement Scale, The Turnover Intention Scale, Organisational Commitment Scale and the General Health Questionnaire-28. These scales were described in terms of rationale, procedure of administering, scoring and interpreting, as well as the reliability and validity of the scales. The motivation for including these scales in this study was also given.

Chapter 7 contains the results of the various statistical analyses that were conducted to investigate the research objectives that were set out in Chapter 1. Both quantitative and qualitative results are reported and discussed in detail.



## **CHAPTER 7**

### **RESULTS**

This chapter contains a synthesis of both quantitative and qualitative results, and is structured accordingly. The first part of this chapter consists of quantitative results, more specifically measures of construct validity, descriptive statistics and correlation coefficients, differences between groups, hierarchical regression analyses and mediating effects. The second part of this chapter aims to describe the qualitative results using content analysis. The most significant helping and restraining factors contributing to engagement and turnover intention are identified.

#### **7.1 QUANTITATIVE DATA**

##### **7.1.1 Construct validity of the measures**

Exploratory factor analyses were carried out with antecedent variables, psychological conditions, work engagement dimensions, and outcome variables to validate the measurement scales used in this study.

###### **7.1.1.1 Antecedent variables**

Exploratory factor analysis was used to investigate the factor structure of the antecedent variables. As a first step, item communalities for the antecedent variables obtained from these statistical techniques were scrutinized, using .40 as the cut-off

point. All item communalities fell in the range of .51 and .83 and were retained. In social sciences research it is expected to obtain low to moderate communalities of .40 to .70 (Costello & Osborne, 2005).

There has been much debate in the literature concerning the number of factors that should be extracted, as well as the techniques used to achieve this objective (Ledesma & Valero-Mora, 2007). However, there seems to be a general consensus that choosing a suitable factor extraction, such as principal axis factoring, and a rotation method, such as a direct oblimin rotation, control the variables in such a way that optimal results are produced. In order to determine how many factors should be extracted for further analysis, three criteria were used. The first criterion is the Kaiser criterion which states that only factors with Eigenvalues greater than 1.0 should be retained for interpretation (Costello & Osborne, 2005). Factors with an eigenvalue of less than 1.0 are considered insignificant (Hair et al., 2010, p. 364). Table 2 shows that thirteen factors satisfied this criterion.

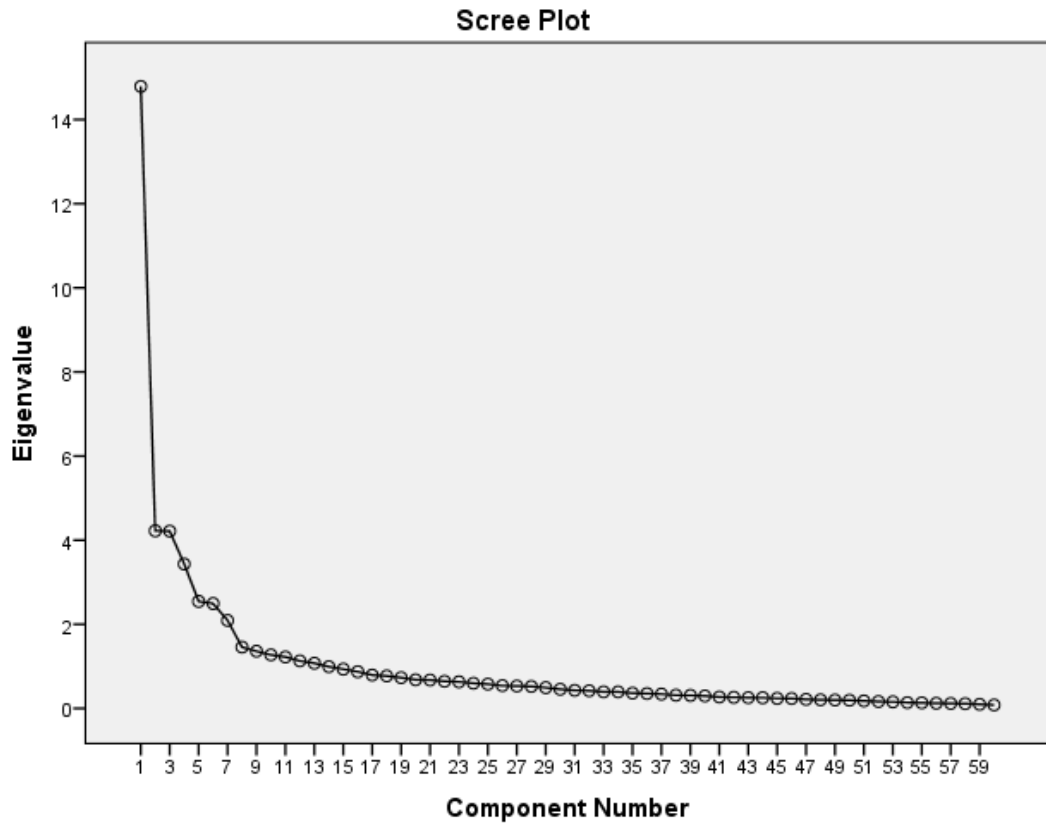
However, a second criterion was used by examining the percentage of the variance that was explained by all factors considered together (Hair et al., 2010). The general rule for this criterion is that the factor solution should account for a minimum of 60% of the total variance (Hair et al., 2010). The results of principal component analysis displayed in Table 2 show that eight factors account for 58.74% of the total variance. Thus eight factors were extracted.

Table 2

*Total Variance Explained by Antecedent Variables*

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	14.79	24.65	24.65
2	4.22	7.04	31.69
3	4.22	7.03	38.71
4	3.43	5.72	44.43
5	2.55	4.24	48.67
6	2.49	4.16	52.83
7	2.09	3.49	56.31
8	1.46	2.43	58.74
9	1.36	2.27	61.01
10	1.27	2.12	63.13
11	1.22	2.04	65.17
12	1.13	1.88	67.05
13	1.08	1.79	68.84

To further determine the amount of factors suitable for extraction, a third criterion was used, namely Cattell's Scree test (Cattell, 1966). A scree test involves examining a graphic display of the Eigenvalues and looking for the natural bend in the data where the curve flattens out (Costello & Osborne, 2005, p.3). Cattell's Scree test (Cattell, 1966), which is a popular method of factor extraction and the logic behind this method is that this point divides the important or major factors from the minor or trivial factors (Ledesma & Valero-Mora, 2007). Zwick and Velicer (1986) indicate that, when analyzing how examiners interpret the Scree test, the results can be very varied, depending on the training received by the examiners and also the nature of the solution. Nonetheless, the Scree test can be more accurate and less variable than the Kaiser criterion method. The scree plot in Figure 3 shows that eight factors lie in the natural curve of the graph, and it was thus confirmed that it is suitable to extract eight factors.



*Figure 3.* Scree plot for antecedent variables

Principle axis factor analysis with a direct oblimin rotation method was conducted, focusing on the eight factors extracted. The analysis yielded an eight-factor solution with a clear structure that was interpretable. However, one variable (Organisational support) was removed from the analysis, as items for this factor loaded on too many other variables. The analysis was repeated, and a seven-factor solution was obtained as shown in Table 3. Tabachnick and Fidell (2007) used the following guidelines (as suggested by Comrey & Lee, 1992) to determine the importance of factor loadings: loadings greater than .71 are considered excellent, .63 very good, .55 good, .45 fair, and .32 poor.

They further asserted that the choice of cut-off for the size of loading to be interpreted remained the prerogative of the researcher, but should make theoretical sense. To this end, a cut-off value of .40 was set for factor loadings as it is deemed the lowest acceptable threshold for factor loadings (Matsunaga, 2010). Table 3 shows the results of a principal axis factor analysis with oblimin rotation for the antecedent variables. All items loaded on their respective factors. No significant cross-loadings were observed.

Table 3

*Factor Loadings for Principal Axis Factor Analysis with Oblimin Rotation for Antecedent Variables*

Item	Code*	Factor						
		1	2	3	4	5	6	7
I feel a real 'kinship' with my co-workers.	CWR21	<b>.87</b>	-.01	.02	-.03	-.04	.07	-.02
I sense a real connection with my co-workers.	CWR19	<b>.85</b>	-.04	-.04	-.07	.00	.08	-.02
I believe that my co-workers appreciate who I am.	CWR18	<b>.84</b>	-.01	.04	.05	.01	.00	-.03
I trust my co-workers.	CWR23	<b>.84</b>	-.01	.03	-.05	.05	-.01	.02
I feel worthwhile when I am around my co-workers.	CWR22	<b>.83</b>	-.02	.04	.03	-.04	.08	-.05
My co-workers value my input.	CWR15	<b>.76</b>	.08	-.02	.02	-.05	-.10	.06
My co-workers and I have mutual respect for one another.	CWR20	<b>.76</b>	.00	-.01	-.02	-.06	-.02	.09
My co-workers really know who I am.	CWR17	<b>.69</b>	.01	.00	.11	.09	.03	-.05
My interactions with my co-workers are rewarding.	CWR14	<b>.65</b>	.08	-.03	.05	-.00	-.06	.03
My co-workers listen to what I have to say.	CWR16	<b>.64</b>	.01	-.09	.04	.02	-.07	.08
My supervisor encourages employees to speak up when they disagree with a decision.	SR9	-.04	<b>.82</b>	.01	-.01	.01	.07	.04
I trust my supervisor.	SR13	.08	<b>.82</b>	-.05	-.08	.01	-.02	-.02
My supervisor encourages me to participate in important decisions.	SR7	-.03	<b>.82</b>	.04	.10	.05	.01	-.02
My supervisor is committed to protecting my interest.	SR11	.05	<b>.82</b>	-.03	-.07	-.02	-.01	.02
Employees are treated fairly by my supervisor.	SR10	.02	<b>.80</b>	-.09	-.06	-.02	-.04	.02
My supervisor keeps informed about how employees think and feel about things.	SR6	-.02	<b>.78</b>	.08	.07	.05	.08	-.01
My supervisor praises good work.	SR8	.05	<b>.78</b>	.06	.01	-.01	.01	-.04
My supervisor encourages me to develop new skills.	SR5	-.09	<b>.76</b>	.02	.12	-.06	.06	.12
My supervisor helps me solve work-related problems.	SR4	.03	<b>.71</b>	-.09	.05	-.07	.03	.06
My supervisor does what he/she says he/she will do.	SR12	.17	<b>.67</b>	.01	-.00	.05	-.03	-.04
I feel emotionally drained from my work.	R 29	.02	-.08	<b>.78</b>	.03	-.02	.01	.01
I feel like I'm at the end of my rope emotionally.	R 28	.03	-.01	<b>.74</b>	.05	.03	.01	-.05
I have problems remembering all the things I need to do at	R 26	-.07	.03	<b>.71</b>	.13	-.05	-.08	.01

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work.								
I feel tired before my workday is over.	R 30	-.04	-.07	<b>.66</b>	-.06	.02	.02	.07
I feel physically used up at the end of the workday.	R 31	.09	-.12	<b>.63</b>	-.07	-.05	.00	.10
I can't think straight by the end of my workday.	R 25	-.03	.11	<b>.60</b>	.00	-.07	-.09	-.06
I find it difficult to focus my attention while at work.	R 24	-.03	.11	<b>.49</b>	-.13	.05	.09	-.08
The work I do on this job helps me satisfy who I am.	WRF2	.03	-.01	-.03	<b>.83</b>	-.01	.02	.13
My job 'fits' how I see myself.	WRF1	-.02	.03	-.01	<b>.82</b>	-.06	-.01	.08
My job 'fits' how I see myself in the future.	WRF3	.10	.03	.00	<b>.78</b>	.02	.07	-.11
I am afraid my failings will be noticed by others.	SC2	-.02	.01	-.02	.07	<b>-.86</b>	-.03	-.01
I worry about being judged by others at work.	SC3	.01	-.02	.04	-.01	<b>-.81</b>	.01	-.06
I worry about how others perceive me at work.	SC1	.04	-.01	.04	-.04	<b>-.78</b>	.08	.05
Public recognition (e.g. employee of the month)	RR56	.03	-.02	.01	.06	-.07	<b>.80</b>	-.07
A reward or token of appreciation (e.g. lunch)	RR57	.02	.09	-.06	-.07	-.08	<b>.66</b>	-.05
A promotion	RR50	-.03	.06	-.01	.07	.02	<b>.61</b>	.18
A pay raise	RR48	.01	-.02	.01	.02	.05	<b>.53</b>	.05
To what extent does your job involve doing a 'whole' and identifiable piece of work?	JE43	.00	.04	-.06	.06	.04	-.01	<b>.81</b>
To what extent does your job permit you to decide on your own?	JE42	.00	.10	-.08	.04	-.07	-.04	<b>.67</b>
To what extent does the job require you to do many different things/tasks?	JE44	.02	-.07	.06	-.04	.03	.07	<b>.56</b>
To what extent does doing the job itself provide you with information about your work performance?	JE47	.13	.12	.07	.08	.05	.06	<b>.40</b>

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\* Key provided with explanation of codes.

Table 4

*Explanation of Codes for Pattern Matrix*

Key	
Code	Explanation of code
CWR	Co-worker relations
SR	Supervisory relations
R	Resources
WRF	Work role fit
SC	Self-consciousness
RR	Rewards and recognition
JE	Job enrichment

Twelve items loaded on to the first factor relating to Co-worker relations. According to Costello and Osborne (2005), a factor with five or more strongly loading items indicates a solid factor. Co-worker relations describe an employee's relationship with co-workers, specifically the interactions, respect and trust in between co-workers. Two items ("Respect from the people you work with" and "I get all the information I need to do my work and plan my schedule") were removed from this factor as they yielded factor loadings of .36 and .23. Table 3 shows 10 items with very good to excellent factor loadings composing Co-worker relations.

Twelve items loaded on the second factor. This factor was labelled Supervisory relations. This factor describes the extent to which the supervisor praises, encourages and treats employees. The second last item ("Praise from your supervisor") was removed from this factor as it reported a loading of .36, which was below the cut-off point. Even though the last item ("To what extent do managers or co-workers let you know how well you are doing on your job") yielded a factor loading value of .56, it was decided to also remove this item in order to increase the reliability of the factor structure. This factor comprised 10 items with high factor loadings.

The third factor was labelled Resources. This factor identifies the emotional, cognitive and physical resources that an employee has available to cope with job demands. Ten items loaded onto this factor and included statements, such as "I feel emotionally drained from my work", and "I can't think straight by the end of my workday", and "I feel physically used up at the end of the workday". However, the



last three items (OS33, OS41, OS36) were removed from this factor as they obtained factor loadings of .33, .30, and .23 respectively. Table 3 shows seven items all relating to Resources loading very well on this factor.

The fourth factor was identified as Work role fit. Initially five items loaded onto this factor. Two items (OS34, R27) were removed from this factor as they yielded factor loadings of .29 and .15 respectively. Work role fit describes the extent to which a person identifies with the work that he or she does, with statements, such as “My job fits how I see myself”, “The work I do on this job helps me satisfy who I am”, and “My job fits how I see myself in the future”.

The fifth factor was labelled Self-consciousness. Three items all relating to Self-consciousness loaded onto this factor. These items describe a person’s fear and worry about being negatively perceived by others. All three items were retained as they yielded relatively high factor loadings.

Eight items loaded on the sixth factor labelled as Rewards and recognition. Even though all factors related to Rewards and recognition, only the first four items on this factor were retained in order to increase the reliability of the factor structure. These items describe very specific types of rewards and gestures of recognition, such as “a pay raise”, “a promotion”, “public recognition”, and “a reward or token of appreciation”. One item (“More challenging work assignments”) had a cross-loading of .35 on factor seven (Job enrichment), and also loaded poorly on the Rewards and recognition factor. This item was excluded during further analysis.

The seventh factor was labelled Job enrichment. Four items loaded onto this factor. Job enrichment describes the extent to which the job offers a variety of tasks, autonomy and a sense of achievement, using questions, such as “To what extent does your job permit you to decide on your own?”, “To what extent does the job require you to do many different things/tasks?”, and “To what extent do managers or co-workers let you know how well you are doing on your job?”.

#### **7.1.1.2 Psychological conditions**

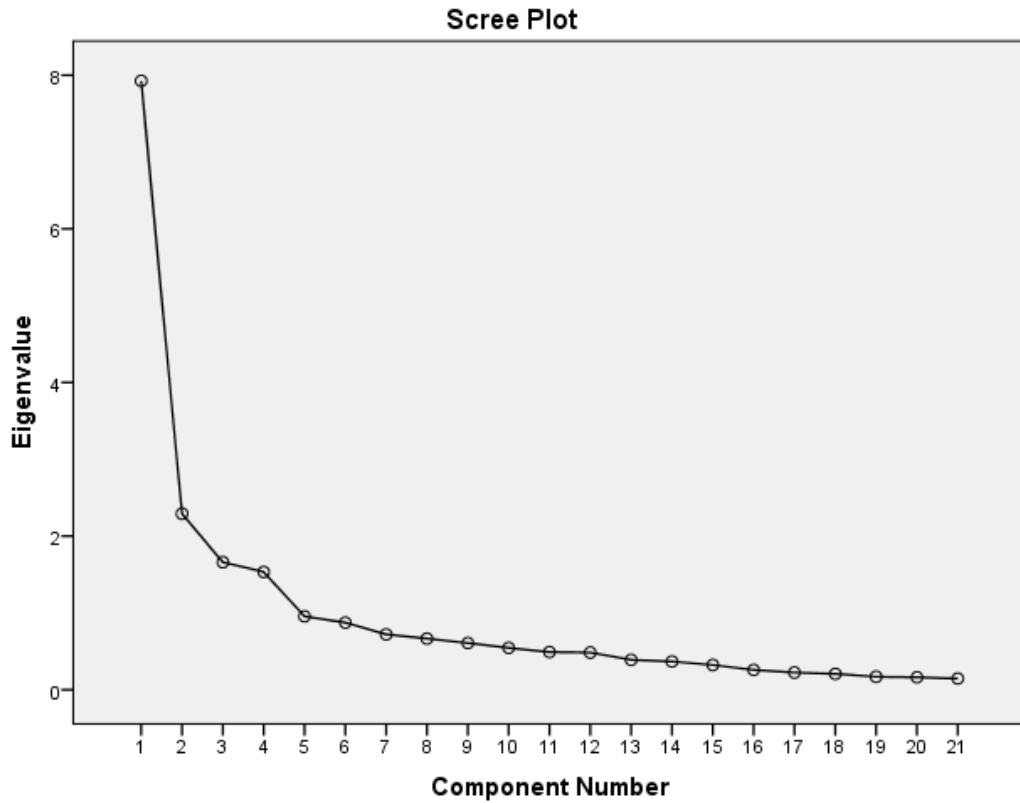
Principal component analysis (PCA) was used to extract the psychological conditions which consist of Psychological meaningfulness, Psychological availability and Psychological safety. The communalities were perused for potential weak items. A cut-off of value of  $> .40$  was used to identify items with weak item communalities. All items for psychological meaningfulness and psychological availability had moderate communality values. However, three items (PS18, PS19, and PS24) on the psychological safety variable yielded communality values below  $.40$ . The three criteria previously used to determine how many factors should be extracted were also applied in this instance. The Kaiser criterion (eigenvalues  $= > 1.0$ ) demarcated four factors for extraction.

Table 5

*Total Variance Explained by Psychological Conditions*

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	7.93	37.74	37.74
2	2.29	10.91	48.65
3	1.66	7.90	56.56
4	1.53	7.30	63.86
5	.96	4.55	

When the total variance explained criterion was considered, it indicated that only the first three factors satisfied the 60% of the variance requirement. The first factor explained 37.74% of the total variance, the second factor explained 10.91% of the variance, and the third factor explained 7.90% of the variance. These three factors accounted for 56.56% of the total variance and were consequently extracted for further analysis.



*Figure 4.* Scree plot for psychological conditions

To confirm the total variance explained result, the scree plot was consulted as a guideline to determine the number of factors for extraction. The scree plot in Figure 4 shows the eigenvalues in descending order. Three factors lie in the natural curve of the graph before it tapers off; thus, confirming that three factors are suitable for extraction. Once it was evident that the results yielded three factors for extraction, a principal axis factor analysis with oblimin rotation method was conducted. This statistical procedure yielded a clear three factor solution as seen in the pattern matrix in Table 6. A minimum loading value of .40 was set as the cut-off point. No significant cross loadings were identified.

Table 6

*Factor Loadings for Principal Axis Factor Analysis with Oblimin Rotation for Psychological Conditions*

Item	Code*	Factor		
		1	2	3
I am confident in my ability to think clearly at work.	PA12	<b>.81</b>	-.04	-.01
I am self-assured about my capabilities to perform my work activities.	PA17	<b>.78</b>	.09	.04
I am confident in my ability to display the appropriate emotions at work.	PA13	<b>.78</b>	.08	.04
I am confident that I can handle the physical demands at work.	PA14	<b>.77</b>	-.04	-.10
I have mastered the skills necessary for my job.	PA16	<b>.75</b>	.03	.02
I am confident about my ability to do my job.	PA15	<b>.74</b>	-.13	-.02
I am confident in my ability to deal with problems that come up at work.	PA11	<b>.70</b>	-.08	.05
I am confident in my ability to handle competing demands at work.	PA10	<b>.60</b>	-.25	.05
The work that I do on this job is worthwhile.	PM7	-.01	<b>-.89</b>	-.02
My job activities are personally meaningful to me.	PM6	-.03	<b>-.87</b>	.04
The work I do is very important to me.	PM5	.04	<b>-.84</b>	.02
The work I do is meaningful to me.	PM4	-.03	<b>-.83</b>	.01
My job activities are significant to me.	PM8	.09	<b>-.82</b>	.00
I feel that the work I do on my job is valuable.	PM9	.13	<b>-.79</b>	-.05
No one in my section would deliberately act in a way that undermines my efforts.	PS23	.02	.05	<b>.74</b>
It is safe to take a risk in my section.	PS21	-.04	.03	<b>.51</b>
Working with my colleagues in my section, my unique skills and talents are valued and utilized.	PS24	-.03	-.27	<b>.43</b>

\* Key provided with explanation of codes.

Table 7

*Explanation of Codes for Pattern Matrix*

Key	
Code	Explanation of code
PA	Psychological availability
PM	Psychological meaning
PS	Psychological safety

Nine items loaded onto factor one which was labelled Psychological availability. One item (PS18) was removed from this factor as it obtained a factor loading of .13. Psychological availability describes a person's confidence in his or her ability to handle challenges and to execute job duties well. This was measured by statements, such as "I am confident in my ability to handle competing demands at work" and "I have mastered the skills necessary for my job". Table 6 shows a relatively clear factor structure for Psychological availability with very good factor loadings.

The second factor was labelled Psychological meaningfulness. Six items all relating to Psychological meaningfulness loaded onto this factor with relatively strong, albeit negative factor loadings. All items were retained for further analysis. Psychological meaningfulness refers to the extent to which a person derives meaning from his or her work activities, and was measured by items, such as "The work I do is meaningful to me" and "The work I do is very important to me".

Six items loaded onto the third factor which was labelled Psychological safety. This factor describes the extent to which a person feels that he or she can trust and rely on the employing organisation. Initially, only one item ("PS23) had a strong factor

loading of .82. This item read “No one in my section would deliberately act in a way that undermines my efforts”. Three items (PS20, PS19, and PS22) were removed as these items reported factor loadings of -.36, .29 and -.12 respectively. Table 6 shows the items loading on the Psychological safety factor with strong to moderate factor loadings.

### **7.1.1.3 Work engagement**

Principal component analysis (PCA) was conducted on the work engagement scale which consisted of 13 items, measuring emotional, cognitive and physical dimensions of engagement respectively. Using  $>.40$  as guideline, the communalities were scanned for potential weak items. Three items (Engagement2, Engagement3, and Engagement5) yielded values below .40.

The eigenvalues and the percentage of variance were computed to determine the factorability of this scale. Table 8 shows that the first two factors had eigenvalues greater than 1.00. However, the first and largest factor accounted for 48.09% of the variance. The second factor accounted for 15.07% of the total variance. Adding the second factor would exceed the 60% variance limit criterion, however, only by a small margin.

Table 8

*Total Variance Explained by Work Engagement Variables*

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	6.25	48.09	48.09
2	1.96	15.07	63.16
3	.944	7.26	70.43

Figure 5 shows the result from a scree test. The graph shows a steep descend from the first factor to the second factor, further providing evidence for the results in Table 8.

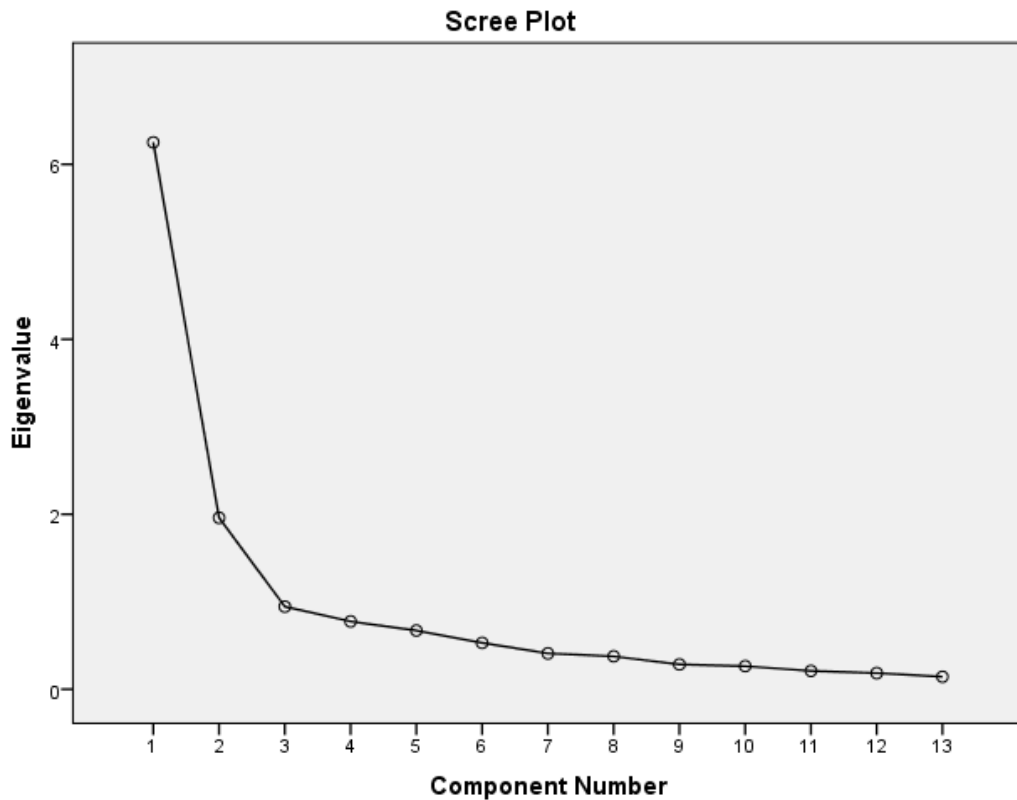


Figure 5. Scree plot for work engagement variable

Principal axis factoring with a direct oblimin rotation method was used to further analyse the underlying variable patterns of engagement. The pattern matrix yielded a



two-factor solution. No significant cross-loadings items were observed.

Table 9

*Factor Loadings for Principal Axis Factor Analysis with Oblimin Rotation for Dimensions of Work Engagement*

Item	Code*	Factor	
		1	2
I feel alive and vital at work.	E&P E12	<b>.90</b>	-.07
I am full of energy in my work.	E&P E11	<b>.90</b>	-.06
I feel physically strong at work.	E&P E13	<b>.84</b>	-.13
I feel a lot of energy when I am performing my job.	E&P E10	<b>.83</b>	-.01
I am enthusiastic about my job.	E&P E8	<b>.81</b>	.09
I feel energized when I work.	E&P E7	<b>.79</b>	.09
I get excited when I perform well on my job.	E&P E9	<b>.74</b>	.02
I am passionate about my job.	E&P E6	<b>.69</b>	.18
When I am working, I often lose track of time.	C E4	-.11	<b>.88</b>
I get so into my job that I lose track of time.	C E1	-.00	<b>.73</b>
I am very absorbed in my work.	C E3	.17	<b>.52</b>

\* Key provided with explanation of codes.

Table 10

*Explanation of Codes for Pattern Matrix*

Key	
Code	Explanation of code
E & P E	Emotional and physical engagement
C E	Cognitive engagement

Table 9 shows nine items measuring both Emotional and Physical engagement items loading onto factor one which was labelled Emotional and Physical engagement.

This factor describes the extent to which a person is mentally and physically involved in his or her work, and was measured by items, such as “I feel I am able to contribute to new ideas” and “I feel physically strong at work.” All items were included in this factor, thus rendering it a strong factor.

The second factor was labelled Cognitive engagement, and consisted of four items. This factor described the level of emotional intensity that a person puts into his or her work, and was measured by items, such as “I get so into my job that I lose track of time” and “I am very absorbed in my work”. One item (“C E2”) had a factor loading of .29, and was, therefore, excluded from further analysis.

#### **7.1.1.4 Outcomes: organisational commitment and turnover intention**

Principal component analysis (PCA) was conducted on two outcome variables namely: Organisational commitment and Turnover intention. The communality values of these variables were examined to identify poor items. Only one item (TI21) reported a communality value well below 0.40, and was excluded from further analysis.

Principal component analysis was further used to extract the factorable variables. To satisfy the three criteria previously used, the eigenvalues and the total variance explained values were first scrutinized. The first and largest factor explained 47.59% of the total variance and consisted of Organisational commitment items. The eigenvalues in Table 11 show that two factors exceeded the Kaiser criterion ( $> =$

1.00). Together, these two factors accounted for 63.97% of the total variance, which exceeds the 60% variance limit criterion, however only by a small margin. Two factors were thus extracted. The scree plot in Figure 6 confirmed this.

Table 11

*Total Variance Explained by Outcome Variables*

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	3.80	47.59	47.59
2	1.31	16.38	63.97
3	.93	11.64	75.61

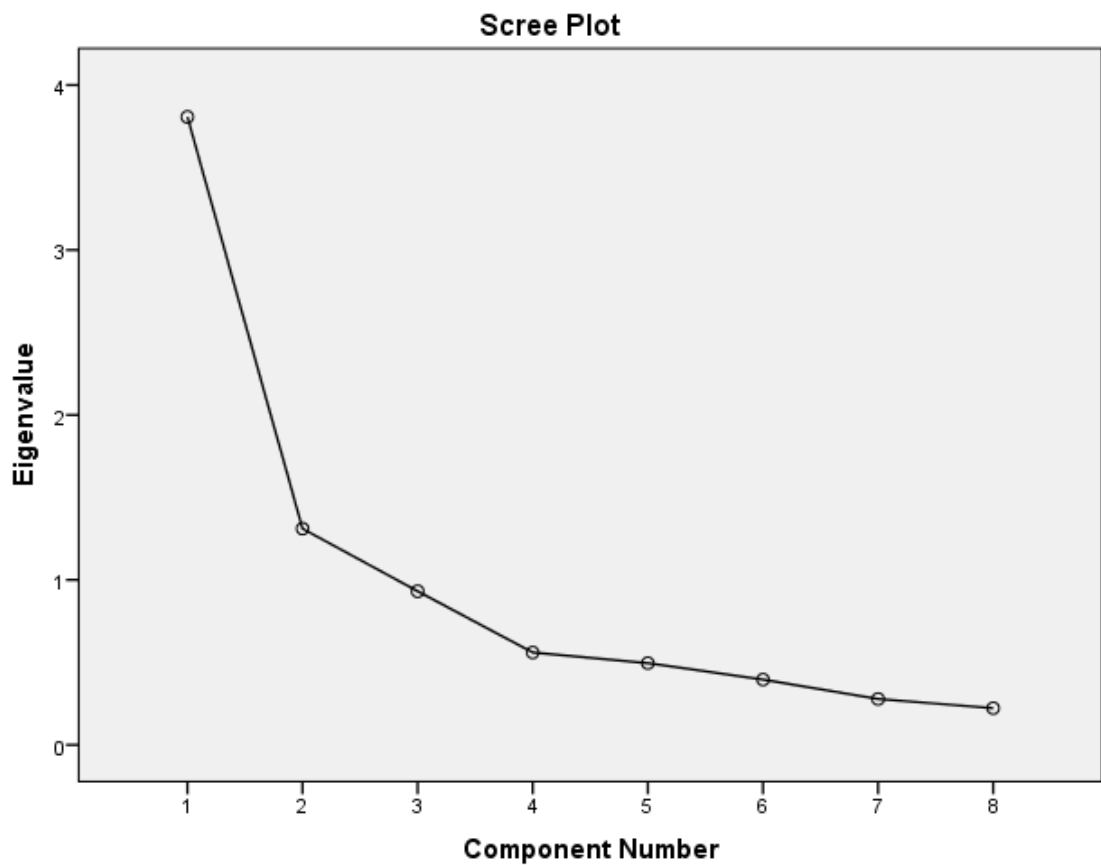


Figure 6. Scree plot for outcome variables

Principal axis factor analysis with a direct oblimin rotation was conducted on the two outcome variables. This statistical procedure yielded a clear two factor solution as seen in Table 12.

Table 12

*Factor Loadings for Principal Axis Factor Analysis with Oblimin Rotation for Outcome Variables: Organisational Commitment and Turnover Intention*

Item	Code*	Factor	
		1	2
I feel a strong sense of belonging to my organisation.	OC18	<b>.89</b>	.08
I feel personally attached to my work organisation.	OC16	<b>.89</b>	.10
I am proud to tell others I work at my organisation.	OC17	<b>.80</b>	-.03
I really feel that problems faced by my organisation are also my problems.	OC15	<b>.66</b>	-.06
Working at my organisation has a great deal of personal meaning to me.	OC14	<b>.61</b>	-.29
I am planning to search for a new job during the next 12 months.	TI20	.06	<b>.78</b>
I frequently think of quitting my job.	TI19	-.09	<b>.62</b>

\* Key provided with explanation of codes.

Table 13

*Explanation of Codes for Pattern Matrix*

Key	
Code	Explanation of code
OC	Organisational commitment
TI	Turnover intention

Five items loaded onto the first factor which was labelled Organisational commitment. This variable describes the extent to which a person identifies with, and

develops feelings of attachment and loyalty to an organisation. All five items related to Organisational commitment and were retained for further analysis. The last item (OC14) reported a cross loading of -.29 on the second factor. Tabachnick and Fidell (2007, p. 625) maintain that factor loadings of “.32 or higher on two or more factors” are considered cross-loading items, and that the researcher should decide whether to include or exclude the item during further analysis. In this case, the item was included.

The second factor was labelled Turnover intention, and consisted of two items with relatively good factor loadings. However, Costello and Osborne (2005) maintain that a factor with fewer than three items is generally weak and unstable.

#### **7.1.1.5 Outcome: general health**

Principal component analysis (PCA) was conducted on the third outcome variable namely, General health. Item communalities showed that only one item (GHC7) yielded a value of .43 which is slightly above the cut-off point (>.40). This item was retained.

The results of the principal component analysis further reported eigenvalues and the total variance explained. Table 14 shows that six factors satisfy the Kaiser criterion. However, an examination of the cumulative percentages revealed that the first four factors together accounted for 57.67% of the total variance which is just below the

60% total variance limit. As a result, four factors were extracted. The scree plot in Figure 7 confirms this decision.

Table 14

*Total Variance Explained by General Health*

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	10.26	36.64	36.64
2	2.50	8.91	45.55
3	2.04	7.28	52.83
4	1.35	4.83	57.67
5	1.13	4.04	61.71
6	1.01	3.60	65.31
7	.93	3.31	68.62

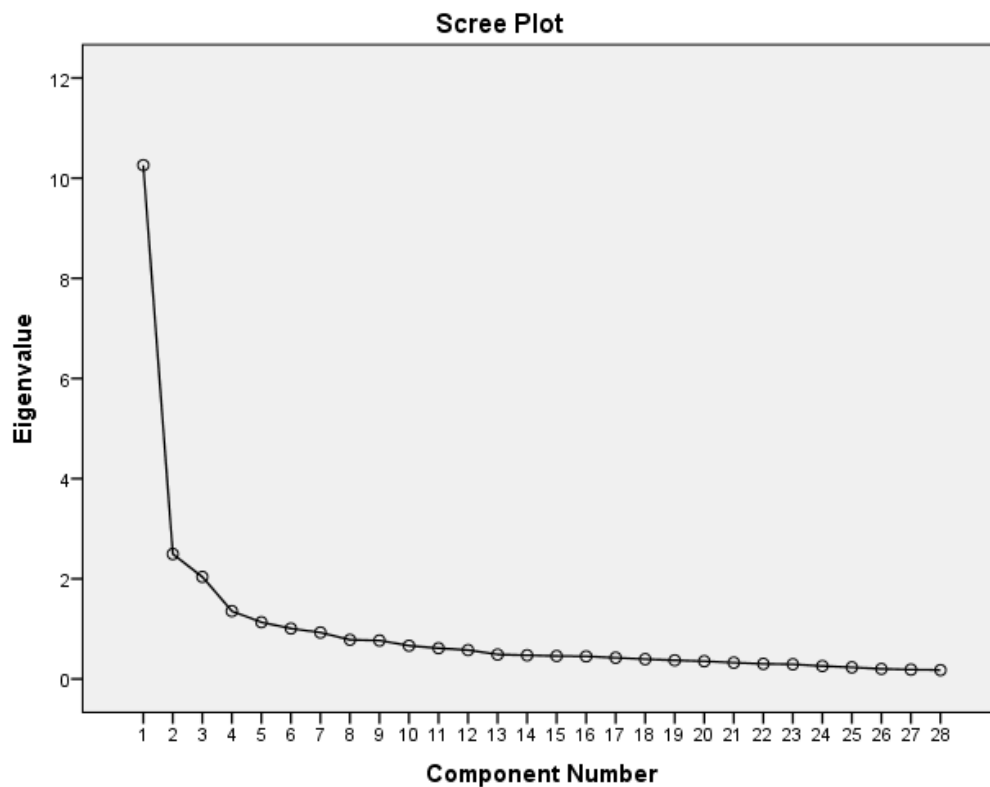


Figure 7. Scree plot for general health

Principal axis factoring with oblimin rotation yielded a clear four-factor solution for the General health variable as seen in Table 15. It is important to note that General health was measured on different dimensions, and not just as physical health. The rationale for this was to take a more holistic approach to a person's overall well-being. The factor structure was also examined for cross-loading items, using the .32 rule-of-thumb (Tabachnick & Fidell, 2007) as a guideline. One item (GHA1) cross-loaded significantly on the fourth factor. This is to be expected since this item related to the fourth factor.

Table 15

*Factor Loadings for Principal Axis Factor Analysis with Oblimin Rotation for Outcome Variable: General Health*

Item	Code*	Factor			
		1	2	3	4
Been getting scared or panicky for no good reason?	GHB5	<b>.81</b>	-.01	-.01	-.02
Felt constantly under strain?	GHB3	<b>.78</b>	.16	.08	.13
Been feeling nervous and strung-up all the time?	GHB7	<b>.78</b>	-.05	.02	-.10
Found everything getting on top of you?	GHB6	<b>.74</b>	-.09	.06	-.06
Had difficulty in staying asleep once you are off?	GHB2	<b>.60</b>	-.04	-.01	.08
Been getting edgy and bad-tempered?	GHB4	<b>.58</b>	-.08	.02	.23
Lost much sleep over worry?	GHB1	<b>.58</b>	-.07	.02	.14
Found yourself wishing you were dead and away from it all?	GHD6	-.04	<b>-.82</b>	-.02	.06
Thought of the possibility that you might do away with yourself?	GHD4	-.02	<b>-.77</b>	.03	.01
Found that the idea of taking your own life kept coming into your mind?	GHD7	-.06	<b>-.74</b>	.01	.01

Felt that life isn't worth living?	GHD3	-.01	<b>-.73</b>	.01	.03
Felt that life is entirely hopeless?	GHD2	.12	<b>-.66</b>	.16	.04
Found at times you couldn't do anything because your nerves were too bad?	GHD5	.25	<b>-.62</b>	-.11	.01
Been thinking of yourself as a worthless person?	GHD1	.07	<b>-.44</b>	.26	.02
Felt that you were playing a useful part in things?	GHC5	.09	.02	<b>.70</b>	-.05
Been satisfied with the way you've carried out your task?	GHC4	.06	-.05	<b>.69</b>	-.05
Felt capable of making decisions about things?	GHC6	-.05	-.22	<b>.64</b>	.07
Felt on the whole you were doing things well?	GHC3	.13	-.08	<b>.56</b>	-.12
Been feeling perfectly well and in good health?	GHA1	-.07	.11	<b>.49</b>	.33
Been getting any pains in your head?	GHA5	.08	-.22	-.14	<b>.74</b>
Felt that you are ill?	GHA4	.06	.01	.20	<b>.68</b>
Been getting a feeling of tightness or pressure in your head?	GHA6	.23	-.15	-.13	<b>.60</b>
Been having hot or cold spells?	GHA7	.16	-.17	-.06	<b>.54</b>

\* Key provided with explanation of codes

Table 16

*Explanation of Codes for Pattern Matrix*

Key	
Code	Explanation of code
GHB	General Health B (Anxiety)
GHD	General Health D (Depression)
GHC	General Health C (Social Dysfunction)
GHA	General Health A (Somatic symptoms)

Nine items loaded on the first factor which was labelled Anxiety. This factor described the extent to which a person experienced pressure and strain, and was measured by items, such as “Felt constantly under strain?” and “Found everything getting on top of you?” Two items (GHC2 and GHC1) were removed from this loading as they yielded factor loading values below .40. Table 15 shows a clear seven item structure for this factor with high factor loadings.



The second factor was labelled Depression. Seven items loaded on this factor. All items related to the factor and reported good to excellent, albeit negative loadings. One item (GHD1) yielded a factor loading of -.45, and was retained for further analysis. This factor measured the extent to which a person felt hopeless and worthless, and whether the person had suicidal thoughts.

Six items loaded on the third factor. This factor was labelled Social dysfunction and measured the extent to which a person felt that he or she could think clearly and rationally, and enjoy everyday activities. Table 15 shows a five item structure for this factor.

Four items loaded on the fourth factor which was labelled Somatic symptoms. Physical well-being measured the person's perceptions of his or her current state of health with items, such as "Felt that you are ill?" and "Been getting pains in your head?" Two items (GHA3 and GHA2) reported factor loadings of .36 and .32 respectively, and were removed from the factor structure.

#### **7.1.1.6 Organisational support**

Organisational support was included in the initial principal component analysis (PCA) on the antecedent variables. Five items loaded on this factor (factor loadings =  $>.40$ ). All five items related to Organisational support and were thus retained. Organisational support describes a person's perceptions of being taken care of by his or her organisation, and is explained by statements, such as "Help is available from

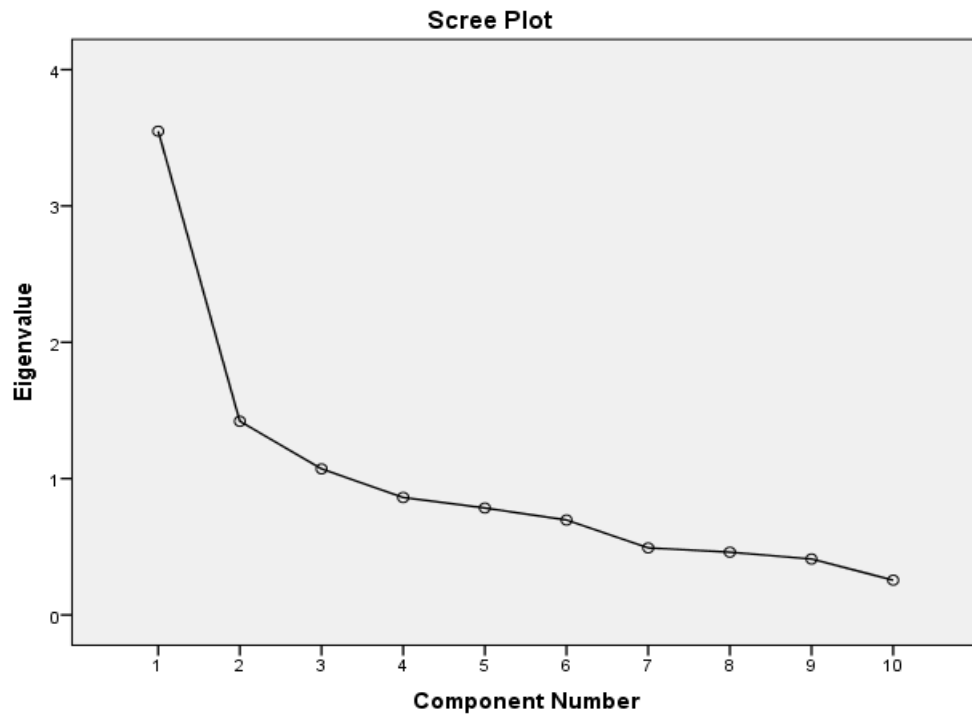
my organisation when I have a problem”, “My organisation is willing to help me if I need a special favour”, and “My organisation would forgive an honest mistake on my part”. However, several Organisational support items loaded onto other factors, and it was decided that a separate analysis should be conducted for this variable.

Table 17 shows the results of a principal component analysis (PCA) for the variable Organisational support. The Kaiser criterion demarcated three factors for extraction. These three factors accounted for 60.41% of the total variance. This was further supported by the scree plot in Figure 8.

Table 17

*Total Variance Explained by Organisational Support*

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	3.55	35.48	35.48
2	1.42	14.21	49.69
3	1.07	10.72	60.41
4	.86	8.61	69.02



*Figure 8.* Scree plot for organisational support

Table 18 shows the results of principal axis factoring with oblimin rotation for the Organisational support variable. Note that this variable also measures different dimensions of Organisational support. No significant cross-loading items were identified.

Table 18

*Factor Loadings for Principal Axis Factor Analysis with Oblimin Rotation for Organisational Support*

Item	Code*	Factor		
		1	2	3
Help is available from my organisation when I have a problem.	OS39	<b>.88</b>	-.06	-.02
My organisation is willing to help me if I need a special favour.	OS38	<b>.79</b>	-.05	.05
My organisation would forgive an honest mistake on my part.	OS40	<b>.57</b>	.11	.04
My organisation cares about my opinions.	OS37	<b>.55</b>	-.19	.23
I do not have access to useful training on the job.	OS33	-.02	<b>.64</b>	.19
My organisation shows little concern for me.	OS36	.16	<b>.46</b>	-.26
Excellent work pays off in this organisation.	OS34	.05	.01	<b>.74</b>
My organisation strongly considers my goals and values.	OS35	.37	-.12	<b>.43</b>

\* Key provided with explanation for codes

Table 19

*Explanation of Codes for Pattern Matrix*

Key	
Code	Explanation of code
OS	Organisational support

Four items loaded on the first factor which was labelled Resources. This dimension measured the extent to which a person believed that an organisation cared for him or her, and that help was available from the organisation. This was measured by statements, such as “My organisation cares about my opinions” and “Help is available from my organisation when I have a problem”. All four items reported very

good factor loadings. The second dimension to Organisational support was identified. Two items loaded on this dimension, all relating to the extent that a person feels taken advantage off by an organisation. One item (OS32) yielded a poor factor loading of .30 and was subsequently removed from the factor structure. The third dimension was identified and measured different types of positive aspects related to an organisation, such as being rewarded for excellent work, receiving the relevant information to do one's work, and finally, that the organisation was cognizant of a person's personal goals and values. Two items loaded on this dimension, both reported factor loadings above .40.

### **7.1.2 Descriptive statistics, reliabilities and correlations coefficients**

Table 20 shows descriptive statistics and Cronbach's alpha coefficients of constructs included in this study. With the exception of two alpha coefficients, the majority of alpha coefficients in Table 20 reported values between .74 and .95 which is considered as acceptable (see Nunnally & Bernstein, 1994). However, Psychological safety and Turnover intention reported alpha coefficients of .57 and .66 respectively. These low alpha coefficients could be due to a small number of items measuring these scales or negatively worded items (Hair et al., 2010).

Table 20

*Means, Standard Deviations, and Reliabilities of Constructs*

Variables	Mean	SD	$\alpha$
1. Work role fit	4.96	1.63	.88
2. Supervisory relations	4.49	1.53	.95
3. Co-worker relations	4.99	1.21	.94
4. Resources	3.28	1.28	.84
5. Job enrichment	4.83	1.22	.74
6. Rewards and recognition	2.68	1.41	.77
7. Organisational support	4.20	1.30	.82
8. Self-consciousness	3.46	1.68	.86
9. Psychological availability	5.82	1.01	.92
10. Psychological meaningfulness	5.58	1.31	.94
11. Psychological safety	4.33	1.27	.57
12. Cognitive engagement	4.57	1.27	.75
13. Emotional/Physical engagement	5.45	1.12	.94
14. Organisational commitment	5.02	1.34	.89
15. Turnover intention	2.87	1.66	.66
16. General health (Somatic)	1.73	.60	.85
17. General health (Anxiety)	1.73	.67	.90
18. General health (Social dysfunction)	1.81	.63	.80
19. General health (Depression)	1.24	.46	.88

The mean values on the 7 point scale demonstrate that the scores for the following antecedent variables: Work role fit, Supervisory relations, Co-worker relations, Job

enrichment and Organisational support were above average. Likewise, the mean values for the following psychological conditions: Psychological availability, Psychological meaningfulness and Psychological safety were above average. Both Cognitive engagement and Emotional and Physical engagement scales obtained above average mean scores. Finally, the mean scores for the outcome variables show that Organisational commitment was above average. Due to the negative scale of turnover intention, the low mean score for turnover intention indicates strong intentions to leave the university. The general health dimensions were measured on a 4 point scale which showed near average mean scores for the Somatic, Anxiety, and Social dysfunction dimensions.

Table 21

*Pearson Correlations of Constructs*

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Work role fit																		
2. Supervisory relations	.33***†																	
3. Co-worker relations	.36***†	.46***†																
4. Resources	-.12**	-.11*	-.12**															
5. Job enrichment	.40***†	.29**	.34***†	-.08														
6. Rewards & recognition	.22**	.30***†	.24**	.02	.28**													
7. Organisational support	.27**	.38***†	.36***†	-.12**	.22**	.32***†												
8. Self-consciousness	.13**	.02	.04	.15**	-.05	.11*	.04											
9. Psychological availability	.32***†	.24**	.42***†	-.24**	.29**	.06	.17**	-.11*										
10. Psychological meaningfulness	.64***††	.30***†	.47***†	-.15**	.40***†	.09	.27**	.02	.56***††									
11. Psychological safety	.23**	.25**	.44***†	-.11*	.30***†	.17**	.26**	.12**	.27**	.27**								
12. Cognitive engagement	.23**	.14**	.23**	-.04	.26**	.01	.04	.09	.36***†	.31***†	.27**							
13. Emotional/Physical engagement	.48***†	.31***†	.47***†	-.18**	.37***†	.09	.30***†	-.00	.44***†	.62***††	.21**	.28**						
14. Organisational commitment	.35***†	.28**	.44***†	-.07	.20**	.18**	.32***†	.10*	.32***†	.53***††	.27**	.23**	.64***††					
15. Turnover intention	-.31***†	-.15**	-.22**	.17**	-.19**	-.06	-.08	.08	-.23**	-.40***†	-.15**	-.11*	-.41***†	-.37***†				
16. Somatic symptoms	-.19**	-.22**	-.23**	.32***†	-.09	-.07	-.16**	.14**	-.19**	-.18**	-.10*	.03	-.32***†	-.21**	.23**			
17. Anxiety	-.23**	-.22**	-.23**	.33***†	-.16**	-.13**	-.14**	.15**	-.31***†	-.20**	-.16**	-.03	-.31***†	-.19**	.33***†	.70***††		
18. Social dysfunction	-.24**	-.21**	-.27**	.12**	-.18**	-.14**	-.18**	.07	-.24**	-.28**	-.10*	-.08	-.42***†	-.41***†	.25**	.41***†	.43***†	
19. Depression	-.17**	-.23**	-.27**	.24**	-.26**	-.09	-.06	.14**	-.37***†	-.23**	-.14**	-.17**	-.27**	-.11*	.25**	.51***††	.57***††	.37***†



\*\* Correlation is significant at the 0.01 level (2-tailed) \*Correlation is significant at the 0.05 level (2-tailed)  
†  $r > 0.30$  (Practically significant effect: medium effect) ††  $r > 0.50$  (Practically significant effect: large effect)

Table 21 indicates that Work role fit is statistically significant related to Supervisory relations ( $r = .33, p < 0.01$ ), Co-worker relations ( $r = .36, p < 0.01$ ), Job enrichment ( $r = .40, p < 0.01$ ), Psychological availability ( $r = .32, p < 0.01$ ), Emotional and Physical engagement ( $r = .48, p < 0.01$ ), Organisational commitment ( $r = .35, p < 0.01$ ), and negatively related to Turnover intention ( $r = -.31, p < 0.01$ ) (all medium effects). Work role fit is also statistically significant related to Psychological meaningfulness ( $r = .64, p < 0.01$ ) (large effect).

Supervisory relations are statistically significant, and positively related to Co-worker relations ( $r = .46, p < 0.01$ ), Rewards ( $r = .30, p < 0.01$ ), Organisational support ( $r = .38, p < 0.01$ ), Psychological meaningfulness ( $r = .30, p < 0.01$ ) and Emotional and Physical engagement ( $r = .31, p < 0.01$ ) (medium effects). Co-worker relations are statistically significant related to Job enrichment ( $r = .34, p < 0.01$ ), Organisational support ( $r = .36, p < 0.01$ ), Psychological availability ( $r = .42, p < 0.01$ ), Psychological meaningfulness ( $r = .47, p < 0.01$ ) and Psychological safety ( $r = .44, p < 0.01$ ) Emotional and Physical engagement ( $r = .47, p < 0.01$ ) and Organisational commitment ( $r = .44, p < 0.01$ ) (medium effects).

Resources are statistically significant related to both General health (Somatic) ( $r = .32, p < 0.01$ ) and (Anxiety) ( $r = .33, p < 0.01$ ) (medium effects). Job enrichment is statistically significant correlated to Psychological meaningfulness ( $r = .40, p < 0.01$ ) and Psychological safety ( $r = .30, p < 0.01$ ) and Emotional and Physical engagement ( $r = .37, p < 0.01$ ) (medium effects). Rewards are statistically significant related to Organisational support ( $r = .32, p < 0.01$ ) (medium effect). Organisational support

shows a statistically significant relationship to Emotional and Physical engagement ( $r = .30, p < 0.01$ ) and Organisational commitment ( $r = .32, p < 0.01$ ) (medium effect). Although Self-consciousness is not statistically significant related to the other constructs, it is moderately related to Psychological safety and the Somatic, Anxiety, and Depression symptoms of General health.

Psychological availability is statistically significant related to Cognitive engagement ( $r = .36, p < 0.01$ ) and Emotional and Physical engagement ( $r = .44, p < 0.01$ ) Organisational commitment ( $r = .32, p < 0.01$ ), and negatively related to Anxiety (General health) ( $r = -.31, p < 0.01$ ) and Depression (General health) ( $r = -.37, p < 0.01$ ) (medium effects). Psychological availability is also statistically significant correlated to Psychological meaningfulness ( $r = .56, p < 0.01$ ) (large effect). Psychological meaningfulness is statistically significant related to Cognitive engagement ( $r = .31, p < 0.01$ ) and negatively correlated to Turnover intention ( $r = -.40, p < 0.01$ ) (medium effects). Psychological meaningfulness is also statistically significant related to Emotional and Physical engagement ( $r = .62, p < 0.01$ ) and Organisational commitment ( $r = .53, p < 0.01$ ) (large effects) Psychological safety is not statistically significant correlated to the other constructs, but it is positively related to both the engagement dimensions and Organisational commitment. Psychological safety is negatively related to Turnover intention and the Anxiety and Depression symptoms of General health.

Cognitive engagement is not statistically significant related to the other constructs, but it does show positive relationships with Emotional and Physical engagement and

Organisational commitment and negative relationships with Turnover intention and Depression (General health). Emotional and Physical Engagement is statistically significant, as well as negatively related to Turnover intention ( $r = -.41, p < 0.01$ ), Somatic symptoms ( $r = -.32, p < 0.01$ ), Anxiety ( $r = -.31, p < 0.01$ ), and Social dysfunction (general health) ( $r = -.42, p < 0.01$ ) (medium effects). It is also statistically significant related to Organisational commitment ( $r = .64, p < 0.01$ ) (large effect).

Organisational commitment is statistically significant correlated, albeit negatively related to Turnover intention ( $r = -.37, p < 0.01$ ) and Social dysfunction (General health) ( $r = -.41, p < 0.01$ ) (medium effects). Turnover intention is statistically significant related to Anxiety (General health) ( $r = .33, p < 0.01$ ) (medium effect).

Somatic symptoms (general health) is statistically significant correlated to Social dysfunction ( $r = .41, p < 0.01$ ) (medium effect) and Anxiety ( $r = .70, p < 0.01$ ) and Depression ( $r = .51, p < 0.01$ ) (large effects). Anxiety is statistically significant related to Social dysfunction ( $r = .43, p < 0.01$ ) (medium effect) and Depression ( $r = .57, p < 0.01$ ) (large effect). Social dysfunction is statistically significant correlated to Depression ( $r = .37, p < 0.01$ ) (medium effect).

### **7.1.3 Differences between groups (MANOVA)**

To investigate the differences between demographic variables (gender, age, qualifications, job tenure, job position, years at the organisation and type of contract)

as independent variables and antecedents, psychological conditions, engagement and outcomes, and health as dependent variables, MANOVA were carried out. The results of these comparisons are reported in Table 22.

Table 22

*MANOVA with Gender, Age, Qualifications, Job Tenure, Job Position, Years at the Organisation, and Type of Contract as Independent Variables and Antecedents, Psychological Conditions, Engagement and Outcomes, and Health as Dependent Variables*

Dependent Variable	Independent Variable	Value	<i>F</i>	<i>df</i>	Error <i>df</i>	<i>p</i>	$\eta^2$
Antecedents	Gender	.93	3.31	7	290	.002	-
Psychological conditions		.97	3.16	3	297	.025	-
Engagement & Outcomes		.94	4.77	4	300	.001	-
Health		.97	2.01	4	299	.094	-
Antecedents	Age	.77	2.11	35	1176	.000*	.05
Psychological conditions		.93	1.44	15	790	.124	-
Engagement & Outcomes		.88	1.90	20	959	.010	-
Health		.92	1.26	20	956	.200	-
Antecedents	Qualifications	.72	2.83	35	1197	.000*	.07
Psychological conditions		.89	2.36	15	804	.002	-
Engagement & Outcomes		.84	2.72	20	976	.000*	.04
Health		.92	1.20	20	973	.250	-
Antecedents	Job tenure	.75	2.35	35	1147	.000*	.06

Psychological conditions		.94	1.25	15	771	.227	-
Engagement & Outcomes		.87	1.95	20	936	.007	-
Health		.89	1.60	20	933	.045	-
Antecedents	Job position	.68	1.80	63	1594	.000*	.05
Psychological conditions		.86	1.64	27	845	.022	-
Engagement & Outcomes		.80	1.84	36	1096	.002	-
Health		.87	1.19	36	1092	.207	-
Antecedents	Years at the organisation	.79	1.94	35	1155	.001	-
Psychological conditions		.94	1.22	15	776	.249	-
Engagement & Outcomes		.88	1.88	20	943	.011	-
Health		.89	1.77	20	940	.020	-
Antecedents	Type of contract	.94	2.82	7	291	.007	-
Psychological conditions		.99	.49	3	298	.691	-
Engagement & Outcomes		.99	1.04	4	301	.387	-
Health		.98	1.96	4	300	.101	-

\* $p < 0.01$

Although gender categories do not, in general, exert a statistically significant effect on antecedent variables, it does, however, influence Co-worker relations ( $p < 0.01$ ;  $\eta^2 = 0.04$ ). It appears that males value relationships with co-workers more than females. Furthermore, males also indicated a better Work role fit than females. However, this difference is not statistically significant.

Table 22 shows that there is a significant effect of age on the dependent variable antecedents,  $F_{(35,1176)} = 2.11$ ;  $p < 0.01$ ;  $\eta^2 = 0.05$ . Analyses of each individual antecedent variables show that age has a statistically significant influence on Work role fit ( $p < .01$ ;  $\eta^2 = 0.09$ ). In particular, groups 4 (42 years – 48 years), 5 (49 years – 55 years) and 6 (56 +) reported the highest levels of Work role fit. Furthermore, these groups also measured higher in Job enrichment levels. However, the difference between the aforementioned age categories and age category 1, 2 and 3 was not statistically significant.

Table 22 showed a significant effect of qualifications on the antecedent variables,  $F_{(35,1197)} = 2.83$ ;  $p < 0.01$ ;  $\eta^2 = 0.07$ . Analyses of each antecedent variable show that qualifications have a statistically significant effect on Job enrichment ( $p < 0.01$ ;  $\eta^2 = 0.08$ ). Individuals with Doctoral degrees (group 6) showed the highest levels of Job enrichment. Although not statistically significant, this group of individuals also reported the highest levels of Work role fit and Co-worker relations, and the lowest levels of Rewards and recognition and Self-consciousness.

Table 22 further shows a significant effect of qualifications on the engagement and outcome variables,  $F_{(20,976)} = 2.72$ ;  $p < 0.01$ ;  $\eta^2 = 0.04$ . Analyses of each dependent sub-variable (Cognitive engagement, Emotional and Physical engagement, Organisational commitment and Turnover intention) show that qualifications has a statistically significant influence on Cognitive engagement ( $p < 0.01$ ;  $\eta^2 = 0.08$ ). More specifically, individuals with Doctoral degrees (group 6) reported the highest levels of Cognitive engagement. Although not statistically significant, these

individuals also reported high levels of Emotional and Physical engagement, commitment to the organisation, and the lowest levels of Turnover intention.

MANOVA analysis showed a significant effect of job tenure as the independent variable on antecedent variables,  $F_{(35,1147)} = 2.35$ ;  $p < 0.01$ ;  $\eta^2 = 0.06$ . Analyses of each antecedent variable show that job tenure has a statistically significant effect on Supervisory relations ( $p < 0.01$ ;  $\eta^2 = 0.08$ ). Job tenure group 1 (lowest to 1 year) valued relationship with supervisors the most while group 6 (10 years +) valued Supervisory relations the least. Although not statistically significant, group 1 also reported high Work role fit and Co-worker relations.

Table 22 shows that there is a significant effect of job position as the independent variable on antecedent variables,  $F_{(63, 1594)} = 1.80$ ;  $p < 0.01$ ;  $\eta^2 = 0.05$ . Analyses of each individual antecedent variables show that job position has a statistically significant influence on work role fit ( $p < .01$ ;  $\eta^2 = 0.11$ ) and Job enrichment ( $p < .01$ ;  $\eta^2 = 0.10$ ). Professors (group 5) demonstrated the highest Work role fit. Moreover, associate professors (group 4) and professors reported the highest levels of Job enrichment.

Finally, although the general model for the influence of type of contract on antecedent variables is not statistically significant,  $F_{(7,291)} = 2.82$ ;  $p < 0.01$ ;  $\eta^2 = 0.06$ , analyses of each individual dependent variable show that type of contract has a statistically significant influence on Rewards ( $p < 0.01$ ;  $\eta^2 = 0.04$ ). Individuals, who worked for the organisation on a contract basis, demonstrated higher levels of



importance on Rewards and recognition, compared to people who are permanently employed.

#### **7.1.4 Hierarchical regression analysis**

The following section entails two hierarchical regression analyses that were conducted. Hierarchical regression analysis is a statistical procedure of measuring the extent to which predictor variables which are theoretically relevant predict an outcome (Field, 2011). In the first hierarchical regression analysis, antecedent variables (Work role fit, Supervisory relations, Co-worker relations, Resources, Job enrichment, Rewards and recognition, Self-consciousness and Organisational support), psychological conditions (Psychological availability, Psychological meaningfulness, and Psychological safety), the engagement dimensions (Emotional and Physical engagement and Cognitive engagement) and Organisational commitment were entered, using four steps, to determine their predictive power on the engagement dimensions, Organisational commitment and Turnover intentions. The second hierarchical regression analysis measured the extent to which antecedent variables (Work role fit, Supervisory relations, Co-worker relations, Resources, Job enrichment, Rewards and recognition, Self-consciousness and Organisational support) and psychological conditions (Psychological availability, Psychological meaningfulness, and Psychological safety) predict the dimensions of General health (Somatic symptoms, Anxiety, Social dysfunction and Depression).

Table 23

*Regression Analysis with Antecedents as the Independent Variables and Cognitive Engagement, Emotional and Physical Engagement, Organisational Commitment and Turnover Intention as the Dependent Variables*

Variable	Cognitive engagement		Emotional/ Physical engagement		Organisational commitment			Turnover intention			
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 4
Constant	2.70	1.02	2.68	1.85	1.75	.83	-.34	3.99	4.60	5.32	5.24
Work role fit	.11**	.03	.30**	.09	.18**	.07	.11**	-.25**	-.08	-.06	-.08
Supervisory relations	.01	.01	.01	.02	.02	.03	.02	-.01	-.01	-.01	-.01
Co-worker relations	.17**	.01	.30**	.20**	.31**	.17**	.07	-.11**	-.02	.04	.05
Resources	-.00	.05	-.08	-.06	.01	.03	.06	.12*	.11**	.09	.10*
Job enrichment	.19**	.13**	.15**	.10*	.02	.09	.14**	-.02	.03	.06	.03
Rewards	-.09	-.07	-.11**	-.05	.02	.08	.11**	.02	-.02	-.03	-.01
Self-consciousness	.09	.10*	-.05	-.02	.05	.06	.06	.09	.09	.08	.10*
Organisational support	-.10*	-.12**	.08	.06	.14**	.10*	.07	.03	.06	.08	.09
Psychological availability	-	.25**	-	.06	-	-.02	-.06	-	.04	.05	.03
Psychological meaningfulness	-	.07	-	.39**	-	.50**	.30**	-	-.34**	-.23**	-.17**
Psychological safety	-	.15**	-	-.08	-	.05	.08	-	-.05	-.08	-.06
Cognitive engagement	-	-	-	-	-	-	.04	-	-	.04	.05
Emotional & Physical engagement	-	-	-	-	-	-	.50**	-	-	-.28**	-.18**
Organisational commitment	-	-	-	-	-	-	-	-	-	-	-.20**
$R^2$	.11	.19	.36	.45	.25	.37	.51	.12	.18	.22	.24
$F$	4.63*	6.21*	20.14*	21.15**	11.66**	14.83**	22.30*	5.10*	5.62*	6.24*	6.45*

<i>df</i>	8/295	11/295	8/295	11/295	8/295	11/295	13/295	8/295	11/295	13/295	14/295
$\Delta R^2$	.11	.08	.36	.09	.25	.12	.14	.12	.05	.05	.02
$\Delta F$	4.63*	9.33*	20.14*	15.62**	11.66**	17.83**	40.62*	5.10*	6.25*	8.10*	7.38*
<i>df</i>	8/287	3/284	8/287	3/284	8/287	3/284	2/282	8/287	3/284	2/282	1/281

$p < 0.01$

#### 7.1.4.1 Engagement and outcome variables

Hierarchical multiple regression analyses were carried out with Work role fit, Supervisory relations, Co-worker relations, Resources, Job enrichment, Rewards and recognition, Self-consciousness and Organisational support (step 1), and Psychological availability, Psychological meaningfulness, and Psychological safety (step 2) as independent variables and Cognitive engagement as dependent variable. In step 1, these variables explained 11% of the variance in Cognitive engagement ( $F = 4.63, p < 0.01$ ). Work role fit ( $\beta = .11, p < 0.01$ ), Co-worker relations ( $\beta = .17, p < 0.01$ ), Job enrichment ( $\beta = .19, p < 0.01$ ) and Organisational support ( $\beta = -.10, p < 0.01$ ) yielded significant regression coefficients. In step 2, the addition of Psychological availability, Psychological meaningfulness and Psychological safety explained an additional 8% of the variance ( $\Delta F = 9.33, p < 0.01$ ). Job enrichment ( $\beta = .13, p < 0.01$ ), Self-consciousness ( $\beta = .10, p < 0.01$ ), Organisational support ( $\beta = -.12, p < 0.01$ ), Psychological availability ( $\beta = .25, p < 0.01$ ) and Psychological safety ( $\beta = .15, p < 0.01$ ) obtained significant regression coefficients. This analysis observed a significant increase in the variance explained by the antecedent variables on Cognitive engagement ( $\Delta F = 9.33, p < 0.01$ ).

In a second hierarchical regression analysis, the following antecedent variables: Work role fit, Supervisory relations, Co-worker relations, Resources, Job enrichment, Rewards and recognition, Self-consciousness and Organisational support (step 1) were selected to measure its impact on Emotional and Physical engagement (dependent variable). In step 1, these variables explained 36% of the variance in Emotional and Physical engagement ( $F = 20.14, p < 0.01$ ). Work role fit ( $\beta = .30, p < 0.01$ ), Co-worker relations ( $\beta = .30, p < 0.01$ ), Job enrichment ( $\beta = .15, p < 0.01$ ) and Rewards and recognition ( $\beta = -.11, p < 0.01$ ) yielded significant regression coefficients. In a second step, Psychological availability, Psychological meaningfulness and Psychological safety were included in the analysis and consequently accounted for 45% of the variance in Emotional and Physical engagement ( $F = 21.15, p < 0.01$ ). Co-worker relations ( $\beta = .20, p < 0.01$ ), Job enrichment ( $\beta = .10, p < 0.01$ ), and Psychological meaningfulness ( $\beta = .39, p < 0.01$ ) obtained significant regression coefficients. This analysis shows a significant increase in the variance accounted for in Emotional and Physical engagement ( $\Delta F = 15.62, p < 0.01, \Delta R^2 = .09$ ) by Psychological meaningfulness.

In a third hierarchical regression analysis, the following variables: Work role fit, Supervisory relations, Co-worker relations, Resources, Job enrichment, Rewards and recognition, Self-consciousness and Organisational support were selected to measure its impact on Organisational commitment (dependent variable). In the first step, these variables accounted for 25% of the variance in Organisational commitment ( $F = 11.66, p < 0.01$ ). Work role fit ( $\beta = .18, p < 0.01$ ), Co-worker relations ( $\beta = .31, p < 0.01$ ), and Organisational support ( $\beta = .14, p < 0.01$ ) show statistical significant

regression coefficients. When Psychological availability, Psychological meaningfulness and Psychological safety were entered in step 2, the variance explained increased significantly by 12% ( $\Delta F = 17.83$ ,  $p < 0.01$ ,  $\Delta R^2 = .12$ ). Co-worker relations ( $\beta = .17$ ,  $p < 0.01$ ), Organisational support ( $\beta = .10$ ,  $p < 0.01$ ), and Psychological meaningfulness ( $\beta = .50$ ,  $p < 0.01$ ) yielded significant regression coefficients. Step 3 observed a significant increase in the variance explained (51%) ( $\Delta F = 40.62$ ,  $p < 0.01$ ,  $\Delta R^2 = .14$ ) when Cognitive engagement, and Emotional and Physical engagement were included. Work role fit ( $\beta = .11$ ,  $p < 0.01$ ), Job enrichment ( $\beta = .14$ ,  $p < 0.01$ ), Rewards and recognition, ( $\beta = .11$ ,  $p < 0.01$ ), Psychological meaningfulness ( $\beta = .30$ ,  $p < 0.01$ ) and Emotional and Physical engagement ( $\beta = .50$ ,  $p < 0.01$ ) obtained significant regression coefficients. This analysis observed a statistically significant increase in the predictive value of the Psychological meaningfulness and Emotional and Physical engagement on Organisational commitment.

The following variables: Work role fit, Supervisory relations, Co-worker relations, Resources, Job enrichment, Rewards and recognition, Self-consciousness and Organisational support were entered in a final hierarchical regression analysis to measure their impact on Turnover intention (dependent variable). These variables accounted for 12% of the variance in Turnover intention ( $F = 5.10$ ,  $p < 0.01$ ). The regression coefficients of Work role fit ( $\beta = -.25$ ,  $p < 0.01$ ), Co-worker relations ( $\beta = -.11$ ,  $p < 0.01$ ) and Resources ( $\beta = .12$ ,  $p < 0.01$ ) were statistically significant. In step 2, Psychological availability, Psychological meaningfulness and Psychological safety were included and together these variables accounted for 18% of the variance in

Turnover intention ( $F = 5.62, p < 0.01$ ). Only Resources and Psychological meaningfulness yielded significant regression coefficients ( $\beta = .11, p < 0.01$  and  $\beta = -.34, p < 0.01$  respectively). In step 3, Cognitive engagement and Emotional and Physical engagement were added to the analysis. A slight increase was observed in the total variance accounted for in Turnover intention ( $\Delta F = 8.10, p < 0.01$ ). Psychological meaningfulness ( $\beta = -.23, p < 0.01$ ) and Emotional and Physical engagement ( $\beta = -.28, p < 0.01$ ) were statistically significant. In the final step (step 4), Organisational commitment was included in the analysis, and as a result, accounted for 24% of the variance in Turnover intention ( $F = 6.45, p < 0.01$ ). Resources ( $\beta = .10, p < 0.01$ ), Self-consciousness ( $\beta = .10, p < 0.01$ ) and Psychological meaningfulness ( $\beta = -.17, p < 0.01$ ), Emotional and Physical engagement ( $\beta = -.18, p < 0.01$ ) and Organisational commitment ( $\beta = -.20, p < 0.01$ ) were statistically significant. This analysis yielded a gradual increase (from to 12% to 24%) in the variance accounted for in Turnover intention ( $\Delta F = 7.38, p < 0.05, \Delta R^2 = .02$ ). Psychological meaningfulness, Emotional and Physical engagement and Organisational commitment demonstrated the most influence on Turnover intention. The negative regression coefficients show an inverted relationship between these variables and Turnover intention. Thus, deriving meaning from one's work, being emotionally and physically engaged and committed to the organisation are likely to lead to an individual remaining with an organisation instead of leaving the organisation.

Table 24

*Regression Analyses with Antecedents and Psychological Conditions as the Independent Variables and Dimensions of General Health as the Dependent Variables*

Variable	Depression		Social dysfunction		Anxiety		Somatic symptoms	
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
Constant	1.55	2.00	2.50	2.70	1.82	2.30	1.77	1.80
Work role fit	-.04	-.01	-.13*	-.06	-.14**	-.15**	-.11**	-.10*
Supervisory relations	-.10*	-.10*	-.04	-.05	-.07	-.07	-.09	-.09
Co-worker relations	-.17**	-.10*	-.18**	-.15**	-.11**	-.07	-.14**	-.13**
Resources	.18**	.14**	.05	.04	.26**	.24**	.26**	.25**
Job enrichment	-.15**	-.13**	-.02	-.00	.02	.03	.07	.07
Rewards	-.05	-.06	-.05	-.07	-.10*	-.10*	-.03	-.03
Self-consciousness	.12**	.09	.09	.07	-.15**	-.13**	.14**	.13**
Organisational support	.13**	.12**	-.05	-.05	.03	.02	-.02	-.02
Psychological availability	-	-.24**	-	-.07	-	-.18**	-	-.01
Psychological meaningfulness	-	.03	-	-.12**	-	.06	-	-.01
Psychological safety	-	.01	-	.07	-	.02	-	.01
$R^2$	.17	.21	.12	.14	.19	.21	.17	.17
$F$	7.15*	6.65*	5.01*	4.17*	8.19*	6.70*	7.24*	5.22*
$df$	8/294	11/294	8/295	11/295	8/295	8/295	8/295	11/295
$\Delta R^2$	.17	.04	.12	.02	.19	.02	.17	.00
$\Delta F$	7.15*	4.59*	5.01*	1.8	8.19*	2.39	7.24*	.02
$df$	8/286	3/283	8/287	3/284	8/287	3/284	8/287	3/284

$p < 0.01$

#### 7.1.4.2 General health dimensions

Table 24 depicts the result of a hierarchical regression analysis with antecedent variables and psychological conditions as dependent variables, and Somatic, Anxiety, Social dysfunction and Depression dimensions of General health as independent variable. In the first step, the following antecedent variables: Work role fit, Supervisory relations, Co-worker relations, Resources, Job enrichment, Rewards, Self-consciousness and Organisational support explained 17% of the variance accounted for in Depression ( $F = 7.15, p < 0.01$ ). Supervisory relations ( $\beta = -.10, p < 0.01$ ), Co-worker relations ( $\beta = -.17, p < 0.01$ ), Resources ( $\beta = .18, p < 0.01$ ), Job enrichment ( $\beta = -.15, p < 0.01$ ), Self-consciousness ( $\beta = .12, p < 0.01$ ), and Organisational support ( $\beta = .13, p < 0.01$ ) obtained significant regression coefficients. When psychological conditions (Psychological availability, meaning and safety) were added to the analysis in step 2, the variance explained increased by 4% ( $\Delta F = 4.59, p < 0.01$ ). Supervisory relations ( $\beta = -.10, p < 0.01$ ), Co-worker relations ( $\beta = -.10, p < 0.01$ ), Resources ( $\beta = .14, p < 0.01$ ), Job enrichment ( $\beta = -.13, p < 0.01$ ), Organisational support ( $\beta = .13, p < 0.01$ ) and Psychological availability ( $\beta = -.24, p < 0.01$ ) yielded significant regression coefficients.

In a second hierarchical regression analysis, antecedent variables were analysed to measure its impact on Social dysfunction. In the first step, these variables explained 12% of the variance ( $F = 5.01, p < 0.01$ ). Work role fit and Co-worker relations obtained significant regression coefficients ( $\beta = -.13, p < 0.01$ ;  $\beta = -.18, p < 0.01$ ). With the addition of the psychological conditions in step 2, the variance explained



increased by 2% ( $\Delta F = 1.8, p < 0.01$ ). Co-worker relations ( $\beta = -.15, p < 0.01$ ) and Psychological meaningfulness ( $\beta = -.12, p < 0.01$ ) yielded significant regression coefficients.

The third hierarchical regression analysis measured the impact that antecedent variables (Work role fit, Supervisory relations, Co-worker relations, Resources, Job enrichment, Rewards and recognition, Self-consciousness and Organisational support) have on Anxiety. These variables explained 19% of the variance ( $F = 8.19, p < 0.01$ ). Work role fit ( $\beta = -.14, p < 0.01$ ), Co-worker relations ( $\beta = -.11, p < 0.01$ ), Resources ( $\beta = .26, p < 0.01$ ), Rewards and recognition ( $\beta = -.10, p < 0.01$ ) and Self-consciousness ( $\beta = -.15, p < 0.01$ ) obtained significant regression coefficients. Psychological conditions (Availability, Meaning and Safety) were added in step 2, and the variance explained increased by 2% ( $\Delta F = 2.39, p < 0.01$ ). Work role fit ( $\beta = -.15, p < 0.01$ ), Resources ( $\beta = .24, p < 0.01$ ), Rewards and recognition ( $\beta = -.10, p < 0.01$ ), Self-consciousness ( $\beta = .13, p < 0.01$ ) and Psychological availability ( $\beta = -.18, p < 0.01$ ) obtained significant regression coefficients.

In a final hierarchical regression analysis, antecedent variables (step 1) and psychological conditions (step 2) were entered into analysis to measure their predictive value on the Somatic dimension of General health. Work role fit, Supervisory relations, Co-worker relations, Resources, Job enrichment, Rewards and recognition, Self-consciousness and Organisational support explained 17% of the variance ( $F = 7.24, p < 0.01$ ). Work role fit ( $\beta = -.11, p < 0.01$ ), Co-worker relations ( $\beta = -.14, p < 0.01$ ), Resources ( $\beta = .26, p < 0.01$ ) and Self-consciousness ( $\beta = .14, p$

< 0.01) yielded significant regression coefficients. In step 2, psychological conditions (Availability, Meaning and Safety) were added to the analysis. However, no increase in the variance explained was observed ( $\Delta F = .02, p < 0.01, \Delta R^2 = .00$ ). Work role fit ( $\beta = -.10, p < 0.01$ ), Co-worker relations ( $\beta = -.13, p < 0.01$ ), Resources ( $\beta = .25, p < 0.01$ ) and Self-consciousness ( $\beta = .13, p < 0.01$ ) yielded significant regression coefficients.

### **7.1.5 Indirect effects**

Indirect effects were computed to test whether independent variables (Work role fit, Supervisory relations, Co-worker relations, Resources, Job enrichment, Rewards and recognition, Organisational support, and Self-consciousness) indirectly affected the engagement dimensions (Cognitive, and Emotional and Physical engagement) via the psychological conditions (Psychological meaningfulness, Psychological availability, and Psychological safety). Similarly, the indirect effects of independent variables on the outcome variables (Organisational commitment and Turnover intention) via the engagement dimensions were computed. Finally, the indirect effects of independent variables on the General health dimensions (Somatic symptoms, Anxiety, Social dysfunction, Depression) via the psychological conditions were computed. To measure indirect effects, bootstrap procedures suggested by Preacher and Hayes (in press) were used to determine bias-corrected confidence intervals (CIs). Lower CIs (LCIs) and upper CIs (UCIs) are reported.

### 7.1.5.1 Indirect effects on engagement variables

To test whether Psychological availability influences the relationship between independent variables and Cognitive engagement, indirect effects were computed. The lower CI's and upper CI's are reported with 95% confidence intervals. Table 25 shows the results of the analyses for indirect effects for Cognitive engagement.

Table 25

*Indirect Effects of Independent Variables on Cognitive Engagement via Psychological Availability*

Variable	EFF	SE	LLCI	ULCI
Omnibus	.08	.03	.04	.15
Work role fit	.03	.02	.01	.07
Supervisory relations	-	-	-	-
Co-worker relations	.09	.03	.04	.15
Resources	-.04	.02	-.08	-.01
Job enrichment	-	-	-	-
Rewards	-	-	-	-
Organisational support	-.01	.01	-.03	-.02
Self-consciousness	-.02	.01	-.05	-.00

When the indirect effects on Cognitive engagement were taken into consideration, it indicated that the omnibus effect (and the effects of Work role fit, Co-worker relations, Resources, Organisational support and Self-consciousness) for Psychological availability did not include zeros. The indirect effects of specific independent variables were as follows: Work role fit (effect = .03, SE = .02, LCI = .01, UCI = .07), Co-worker relations (effect = .09, SE = .03, LCI = .04, UCI = .15),

Resources (effect =  $-.04$ , SE =  $.02$ , LCI =  $-.08$ , UCI =  $-.01$ ), Organisational support (effect =  $-.01$ , SE =  $.01$ , LCI =  $-.03$ , UCI =  $-.02$ ), Self-consciousness (effect =  $-.02$ , SE =  $.01$ , LCI =  $-.05$ , UCI =  $-.00$ ). Therefore, the Work role fit, Co-worker relations, Resources and Organisational support indirectly affect Cognitive engagement via Psychological availability.

Analyses were conducted to test for indirect effects of independent variables on Cognitive engagement via Psychological meaningfulness and Psychological safety respectively. The omnibus effect [Psychological meaningfulness (effect =  $-.03$ , SE =  $.04$ , LCI =  $-.05$ , UCI =  $.11$ ), Psychological safety (effect =  $.03$ , SE =  $.02$ , LCI =  $-.00$ , UCI =  $.08$ )] included zeros thus, no significant indirect effects were observed.

Analyses were conducted to determine the indirect effect of independent variables on Emotional and Physical engagement as the dependent variable via Psychological availability, meaning and safety. Significant results are reported in Table 26.

Table 26

*Indirect Effects of Independent Variables on Emotional and Physical Engagement via Psychological Meaningfulness*

Variable	EFF	SE	LLCI	ULCI
Omnibus	.17	.04	.10	.25
Work role fit	.14	.03	.08	.21
Supervisory relations	-	-	-	-
Co-worker relations	.09	.03	.04	.16
Resources	-	-	-	-
Job enrichment	.05	.03	.01	.11
Rewards & recognition	-.04	.02	-.08	-.01
Organisational support	-	-	-	-
Self-consciousness	-	-	-	-

As far as the indirect effects on Emotional and Physical engagement and Psychological meaningfulness are concerned, the omnibus effect (as well as the effects of Work role fit, Co-worker relations, Job enrichment and Rewards) for Psychological meaningfulness did not include zeros. The independent variables reported the following indirect effects: Work role fit (effect = .14, SE = .03, LCI = .08, UCI = .21), Co-worker relations (effect = .09, SE = .03, LCI = .04, UCI = .16), Job enrichment (effect = .05, SE = .03, LCI = .01, UCI = .11), Rewards and recognition (effect = -.04, SE = .02, LCI = -.08, UCI = -.01). Therefore, Work role fit, Co-worker relations, Job enrichment and Rewards and recognition indirectly affect Emotional and Physical engagement via Psychological meaningfulness.

Analyses were conducted to test for indirect effects of independent variables on Emotional and Physical engagement via Psychological availability and Psychological safety respectively. However, these analyses included zeros, and consequently

yielded no significant indirect effects [omnibus effects for Psychological availability (effect = .02, SE = .02, LCI = -.02, UCI = .06) and Psychological safety (effect = -.02, SE = .01, LCI = -.04, UCI = .00)].

#### 7.1.5.2 Indirect effects on outcome variables

Analyses were further conducted to test for indirect effects of independent variables on Organisational commitment via Cognitive engagement and Emotional and Physical engagement. A significant omnibus effect was observed only for Emotional and Physical engagement as reported in Table 27. The omnibus effect for the indirect influence of Cognitive engagement between independent variables and Organisational commitment was as follows (effect = .00, SE = .01, LCI = -.01, UCI = .02).

Table 27

*Indirect Effects of Psychological Conditions as Independent Variables on Organisational Commitment via Emotional and Physical Engagement*

Variable	EFF	SE	LLCI	ULCI
Omnibus	.24	.06	.14	.37
Psychological availability	-	-	-	-
Psychological meaningfulness	.28	.06	.18	.40
Psychological safety	-	-	-	-

As far as the indirect effects on Organisational commitment were concerned, the omnibus effect (and the effects of Psychological meaningfulness), Emotional and Physical engagement did not include zeros. Therefore, Emotional and Physical

engagement had an indirect effect on the relationship between Psychological meaningfulness (effect = .28, SE = .06, LCI = .18, UCI = .40) on the one hand, and Organisational commitment on the other hand.

Analysis was run to test for indirect effects of independent variables on Turnover intention through Cognitive, Emotional and Physical engagement. Only Emotional and Physical engagement reported a significant indirect effect as shown in Table 28. Cognitive engagement obtained the following omnibus effect (effect = .01, SE = .01, LCI = -.02, UCI = .04).

Table 28

*Indirect Effects of Independent Variables on Turnover Intention via Emotional and Physical Engagement*

Variable	EFF	SE	LLCI	ULCI
Omnibus	-.15	.06	-.28	-.06
Psychological availability	-	-	-	-
Psychological meaningfulness	-.18	.06	-.31	-.07
Psychological safety	-.15	.06	-.28	-.06

Table 28 shows that the omnibus effect (and indirect effects for Psychological meaningfulness and Psychological safety) for Emotional and Physical engagement did not include zeros [Psychological meaningfulness (effect = -.18, SE = .06, LCI = -.31, UCI = -.07), Psychological safety (effect = -.15, SE = .06, LCI = -.28, UCI = -.06)]. Therefore, Emotional and Physical engagement had an indirect effect on the relationship between Psychological meaningfulness and Psychological safety on the one hand, and Turnover intention on the other hand.

Finally, analysis were conducted with psychological conditions (Psychological availability, meaning and safety) mediating the relationship between independent variables (Work role fit, Supervisory relations, Co-worker relations, Resources, Job enrichment, Rewards and recognition, Organisational commitment and Self-consciousness) on the one hand and the Somatic, Anxiety, Social dysfunction, and Depression dimensions of General health on the other hand. In the first analysis, no significant effects were observed for the indirect effects of independent variables on the Somatic dimension through any of the psychological conditions [Availability (effect = -.00, SE = .01, LCI = -.03, UCI = .03), Meaning (effect = -.00, SE = .03, LCI = -.05, UCI = .06) and Safety (effect = .00, SE = .01, LCI = -.02, UCI = .02)].

To determine whether psychological conditions (Psychological Availability, - Meaning and -Safety) influenced the relationship between independent variables and the Anxiety dimension of General health, analysis for indirect effects was carried out. Only Psychological availability was found to have had a significant indirect effect, as shown in Table 29. The omnibus effects for Psychological meaningfulness and Psychological safety were (effect = .02, SE = .03, LCI = -.03, UCI = .07) and (effect = .00, SE = .01, LCI = -.01, UCI = .02) respectively.



Table 29

*Indirect Effects of Independent Variables on Anxiety via Psychological Availability*

Variable	EFF	SE	LLCI	ULCI
Omnibus	-.03	.02	-.06	-.00
Work role fit	-.01	.01	-.03	-.00
Supervisory relations	-	-	-	-
Co-worker relations	-.03	.02	-.07	-.00
Resources	.01	.01	.00	.03
Job enrichment	-	-	-	-
Rewards & recognition	-	-	-	-
Organisational support	-	-	-	-
Self-consciousness	.01	.01	.00	.02

When the indirect effects on the Anxiety dimension of general health were taken into consideration, it was found that the omnibus effect (as well as the effects of Work role fit, Co-worker relations, Resources and Self-consciousness) for Psychological availability did not include zeros. Therefore, Psychological availability indirectly effected the relationship between Work role fit (effect = -.01, SE = .01, LCI = -.03, UCI = -.00), Co-worker relations (effect = -.03, SE = .02, LCI = -.07, UCI = -.00), Resources (effect = .01, SE = .01, LCI = .00, UCI = .03), and Self-consciousness (effect = .01, SE = .01, LCI = .00, UCI = .02) on the one hand, and Anxiety on the other hand.

Similarly, analysis to determine indirect effects was conducted to determine whether psychological conditions (Psychological availability, - meaning and - safety) influence the relationship between independent variables and the Social dysfunction dimension of general health. None of the analyses reported significant indirect effects [Psychological availability (effect = -.01, SE = .01, LCI = -.03, UCI = .02),

Psychological meaningfulness (effect =  $-.03$ , SE =  $.02$ , LCI =  $-.06$ , UCI =  $.01$ ), Psychological safety (effect =  $.01$ , SE =  $.01$ , LCI =  $-.01$ , UCI =  $.02$ )].

Finally, the indirect effects of psychological conditions (Psychological availability, - meaning, and - safety) on the relationships between independent variables and the Depression dimension of General health were tested. Only Psychological availability yielded significant indirect effects, as shown in Table 30. The omnibus effects for Psychological meaningfulness (effect =  $.01$ , SE =  $.02$ , LCI =  $-.03$ , UCI =  $.05$ ) and Psychological safety (effect =  $.00$ , SE =  $.01$ , LCI =  $-.01$ , UCI =  $.01$ ) included zeros.

Table 30

*Indirect Effects of Independent Variables on Depression via Psychological Availability*

Variable	EFF	SE	LLCI	ULCI
Omnibus	-.03	.01	-.06	-.01
Work role fit	-	-	-	-
Supervisory relations	-	-	-	-
Co-worker relations	-	-	-	-
Resources	.01	.01	.00	.03
Job enrichment	-	-	-	-
Rewards & recognition	-	-	-	-
Organisational support	-	-	-	-
Self-consciousness	.01	.01	.00	.02

When the omnibus effect (and the effects of the independent variables) for Psychological availability was considered, no zeros was found. Psychological availability thus indirectly effected the relationship between Resources (effect,  $.01$ , SE =  $.01$ , LCI =  $.00$ , UCI =  $.03$ ), Self-consciousness (effect,  $.01$ , SE =  $.01$ , LCI =  $.00$ , UCI =  $.02$ ) and Depression.

## 7.2 QUALITATIVE ANALYSIS

Content analysis was used to categorize the written responses to the two questions pertaining to the contributing and restraining factors of the job. Responses were classified into themes and were subsequently ranked, based on their frequencies with '1' being the highest frequency and "10" being the lowest frequency. These themes aimed to identify low ( $n = 95$ ) and high ( $n = 88$ ) levels of emotional and physical engagement, and low ( $n = 101$ ) and high ( $n = 96$ ) turnover intentions.

### 7.2.1 Themes for emotional and physical engagement

#### 7.2.1.1 Contributing factors: low and high emotional and physical engagement

Theme 1: Office equipment and technology

Table 31 shows that the first theme identified under contributing factors for low emotional and physical engagement was office equipment and technology. Staff members indicated that office equipment and technology, such as computers, printers, telephones, copier machines, overhead projectors, smart board facilities and internet facilities were important resources that enabled them to carry out their job duties. One respondent remarked: *"I won't be able to do my job without my computer and internet facilities, I'm even grateful to have a telephone."* This theme also ranked first as contributing factors for high levels of emotional and physical engagement. Thus, office equipment and technology are main contributors towards emotional and physical engagement.

#### Theme 2: Support from colleagues and supervisor

Support from colleagues and supervisor in the department was ranked second as contributing factors for low emotional and physical engagement (rank = 2). Respondents indicated that friendships and day-to-day positive interactions with their colleagues and supervisor were important sources of support, and contributed to their overall sense of well-being. Respondents also mentioned that when everyone in the department worked well together, it made unpleasant job tasks easier. *“I have a good relationship with my co-workers....just the occasional chat cheers me up.”* *“I appreciate the teamwork and helping each other to achieve a common goal.”* This theme ranked third as high levels of emotional and physical engagement (rank = 3).

#### Theme 3: Personal resources

The third theme identified under contributing factors for low emotional and physical engagement was personal resources (rank = 3). Personal resources include dispositional factors (my own conscientiousness, self-motivation, my passion for my work, the interest for my field), spirituality and religion, and family and friends. *“My belief in God sustains me especially when I have a lot of pressure.”* Another respondent mentioned that *“I believe in being punctual and organised in my work.”* Personal resources were ranked second under factors related to high emotional and physical engagement (rank = 2).

#### Theme 4: Nature of the job

The fourth theme reflecting low emotional and physical engagement was the nature of the job (rank = 4). The nature of the job describes the type of job and motivating

factors related to the job. One respondent indicated that “*I enjoy being an academic; I can make a difference to students.*” “*I enjoy some freedom in choice of teaching content.*” This theme was ranked sixth under high emotional and physical engagement (rank = 6).

#### Theme 5: Working conditions and environment

Working conditions and environment were ranked fifth under low emotional and physical engagement (rank = 5). Working conditions reflected the respondents’ perceptions of the work climate and environment in which they worked. The flexible work hours, autonomy and freedom were factors frequently mentioned by respondents. One respondent stated “*The freedom and space to work independently helps a whole lot.*” Respondents with high emotional and physical engagement identified this theme as of similar importance to resources (rank = 4.5).

#### Theme 6: Resources

The sixth theme identified under contributing factors for low emotional and physical engagement was resources (rank = 6). Resources mentioned by respondents included textbooks, library facilities, financial assistance for research and conferences and networks with other professionals. Resources were ranked similar to working conditions and climate (rank = 4.5) for respondents with high emotional and physical engagement.

#### Theme 7: Remuneration and benefits

Interestingly, there was very little variation in rank ordering for remuneration and benefits for respondents with low and high levels of emotional and physical engagement (low rank = 7, high rank = 6.5 respectively). Remuneration and benefits include issues pertaining to compensation, promotion, rewards and recognition received. One respondent mentioned *“I’m grateful for my salary, at least we get a salary increment every year.”* Another respondent remarked *“Up until recently, I took my medical aid for granted; we have a very good medical aid.”*

#### Theme 8: Management policies and procedures

Management policies and procedures were identified as eighth by respondents with low and high levels of emotional and physical engagement (rank = 8). Management policies and procedures represent all the employment conditions, policies, procedures and administrative processes that staff members come in contact with. One respondent indicated that *“We have access to all the Unam policies on our intranet”* and *“Every year someone from HR explains the Unam policies and procedures to us.”*

#### Theme 9: Research and publishing opportunities

Research and publishing opportunities were ranked similarly for respondents with low and high levels of engagement (low rank = 9.5, high rank = 9 respectively). While research is regarded as one of the core functions of academics, it does not appear to be a major contributor to work engagement. This is reflected in sentiments like *“At least one of my articles was accepted for publication, it’s better than*

*nothing.*” A factor that perhaps influenced the rank ordering of this theme is the fact that respondents constituted of academic, administrative and technical staff, with this theme mainly applicable to academic staff members.

#### Theme 10: Opportunities for professional development

Opportunities for professional development were ranked ninth (rank = 9.5) for respondents with low levels of emotional and physical engagement, and slightly higher (rank = 7) for respondents with high emotional and physical engagement. The University of Namibia has a formal staff development program and a centre for professional development under which staff members are able to further their studies, subject to certain conditions. Staff members of the university are also free (subject to conditions) to pursue other professional development opportunities, such as professional practice, registration with professional bodies, participating in committees, conferences, collaboration with other educational institutions, amongst others. One respondent explained “*I’m allowed to have my own consultancy which is important for staying in touch with industry, and also for my teaching.*”

#### Theme 11: Infrastructure

Infrastructure was ranked tenth (rank = 10) by respondents with low levels of emotional and physical engagement, and higher (rank = 6.5) for respondents with high levels of emotional and physical engagement. Specific examples of infrastructure that were mentioned included office space, shaded parking, restroom facilities, library, laboratory and teaching venues.

Table 31

*Contributing Factors of Employees with Low and High Scores on Emotional and Physical Engagement*

Contributing Factors	Category 1 (Low E&P engagement)		Category 3 (High E & P engagement)	
	Frequency	Rank	Frequency	Rank
	(n = 95)		(n = 88)	
1. Office equipment and technology	89	1	61	1
2. Support from colleagues and supervisor	74	2	45	3
3. Personal resources	34	3	47	2
4. Nature of the job	28	4	18	5
5. Working conditions and environment	22	5	20	4.5
6. Resources	20	6	20	4.5
7. Remuneration and benefits	14	7	9	6.5
8. Management policies and procedures	8	8	4	8
9. Research and publishing opportunities	6	9.5	3	9
10. Opportunities for professional development	6	9.5	6	7
11. Infrastructure	5	10	9	6.5

### **7.2.1.2 Restraining factors: low and high emotional and physical engagement**

Theme 1: Work overload

Table 32 indicates that the most significant restraining factor (rank = 1) for respondents with low emotional and physical engagement was work overload. Work overload entails increasing student numbers, time pressures and deadlines, excessive



administrative tasks, meetings and participation in committees. Some of the sentiments expressed by respondents included “*How am I supposed to publish when I teach for twenty hours per week?*”, “*It seems that we (academics) are becoming the administrators of the university, just too many meetings and administrative paperwork*” and “*Classes are too big, especially first and second year, have a class of 380 students, marking is a nightmare!*” Respondents with high levels of emotional and physical engagement ranked this restraining factor second (rank = 2).

#### Theme 2: Management and supervisory style

Management and supervisory style were ranked as the second (rank = 2) most important restraining factor impeding the emotional and physical engagement of respondents. Prominent factors relating to management and supervisory style included a lack of transparency, limited decision-making authority and ineffective communication by supervisors and management. Some academic respondents expressed their frustration with decisions taken by management with regard to the academic domain without their consultation and input. One respondent remarked “*Management (administrators) are taking all the decisions about my work.*” Respondents with high levels of emotional and physical engagement ranked this theme third (rank = 3).

#### Theme 3: Lack of resources

The third most significant restraining factor (rank = 3) for respondents with low levels of emotional and physical engagement was the lack of resources. Respondents mentioned that sometimes the most basic resources necessary to carry out their job

duties were lacking. For example, one respondent stated that they had one printer in a department consisting of six staff members. Similarly, staff members complained that faculties sometimes shared one photocopier machine. Other complaints included out-of-order overhead projectors and smart boards in lecturing venues, no air conditioning, slow internet, limited access to journals and outdated textbooks. Interestingly, respondents with high levels of emotional and physical engagement identified a lack of resources as the most significant restraining factor hampering their work engagement (rank = 1).

#### Theme 4: Interaction with colleagues

Respondents with low levels of emotional and physical engagement ranked interaction with colleagues as fourth (rank = 4). Respondents mentioned that colleagues sometimes behaved unprofessional, petty and vindictive. “*Some of my colleagues slack off, and we are left with all the work.*” Or “*Some colleagues have no interpersonal skills.*” Respondents with high levels of emotional and physical engagement mentioned interaction with colleagues as the sixth (rank = 6) most important factor hampering their work engagement.

#### Theme 5: Management and administrative policies and procedures

Management and administrative policies and procedures were named fifth (rank = 5) by respondents with low and high emotional and physical engagement. Respondents expressed their annoyance with bureaucratic management procedures and decisions that were taken unilaterally.

#### Theme 6: Working conditions and environment

Respondents with low levels of emotional and physical engagement mentioned working conditions and environment as sixth (rank = 6). Some of the factors relating to working conditions and environment that impeded respondents' ability to engage in their work included restrictive work practices, micromanagement of supervisors, isolation from society and a hostile work environment. Respondents with high emotional and physical engagement identified this theme as the fourth restraining factor (rank = 4).

#### Theme 7: Quality of students

In this theme very little variation was observed on the rank ordering for respondents with low and high levels of emotional and physical engagement (low rank = 7, high rank = 8). Respondents expressed their concern over the calibre of students entering Higher Education. Comments included "*I get frustrated with students who don't read and expect everything to be handed to them*" and "*There are a few good students, but the majority are poor to average quality at best.*"

#### Theme 8: Remuneration and benefits

Similarly, very little variation was observed on the rank ordering for remuneration and benefits for respondents with low and high levels of emotional and physical engagement (low rank = 8, high rank = 7). Interestingly, although remuneration and benefits had always been a bone of contention for educators, this rank ordering suggests that remuneration and benefits were not a major hindrance towards the work engagement of educators. Responses under this theme also included factors, such as

a lack of recognition, appreciation and the rewarding of good performance or extra-role behaviours.

#### Theme 9: Lack of professional development opportunities

Respondents with low and high levels of emotional and physical engagement identified a lack of professional development opportunities as ninth (rank = 9). Some of the comments included “*Other people can make use of staff development, it’s never my turn*” and “*My HOD are always making remarks about my private work, even if it doesn’t interfere with university work.*”

#### Theme 10: Lack of research and publishing opportunities

Likewise, respondents with both low and high levels of emotional and physical engagement identified a lack of research and publishing opportunities as tenth (low rank = 10.5, high rank = 10). Some respondents remarked that they did not have sufficient leadership that could give them guidance to publish. Others mentioned time constraints and pressure from other work tasks that limited them to engage in research and publication.

#### Theme 11: Negative public perceptions of the university

Finally, respondents with low and high levels of emotional and physical engagement mentioned negative public perceptions of the university as rank = 11 and rank 10.5 respectively. Respondents expressed their concerns over increasing scandal and negative publicity about the university, and the perceptions and generalizations that

people form of individuals employed by the university. One responded mentioned “People hear you are a lecturer here and they think you are sleeping with students.”

Table 32

*Restraining Factors of Employees with Low and High Scores on Emotional and Physical Engagement*

	<b>Category 1</b>		<b>Category 3</b>	
	<b>(Low E&amp;P engagement)</b>		<b>(High E &amp; P engagement)</b>	
<b>Restraining Factors</b>				
1. Work overload	61	1	41	2
2. Management and supervisory styles	43	2	34	3
3. Lack of resources	42	3	43	1
4. Interactions with colleagues	39	4	19	6
5. Management and administrative policies and procedures	38	5	21	5
6. Working conditions and environment	20	6	23	4
7. Quality of students	15	7	7	8
8. Remuneration & benefits	13	8	14	7
9. Lack of professional development opportunities	6	9	6	9
10. Lack of research and publishing opportunities	3	10	3	10.5
11. Negative public perceptions of the university	2	11	3	10.5

## **7.2.2 Themes for turnover intention**

### **7.2.2.1 Contributing factors: low and high turnover intention**

#### Theme 1: Resources

Table 33 indicates that individuals with low and high turnover intentions mentioned resources first (rank = 1). Resources include all the office equipment, teaching resources, and technological facilities that an individual needs to carry out her or his job duties. Resources frequently mentioned by respondents were computers, overhead projectors and smart boards, printers, copier, internet, library resources, textbooks, office space and parking space.

#### Theme 2: Support from co-workers and supervisors

Respondents with low and high turnover intentions identified support from co-workers and supervisors as the second most important contributing factor (rank = 2). Support from co-workers and supervisors entails discussions with colleagues, encouraging conversations, being able to share personal details, and getting professional input in work projects. Respondents further indicated that the academic profession could get lonely at times, with peers and friends often located in other countries. Support from co-workers also helped individuals to deal with challenges and difficult situations.

### Themes 3: Working conditions

Respondents with low turnover intentions further identified working conditions as the third most important contributing factor (rank = 3). Respondents mentioned the following working conditions: flexible hours, supportive climate, autonomy, a sense of control over their work activities and job tenure as important factors that influenced their loyalty towards the organisation. Respondents with high turnover intentions equally identified working conditions and opportunities for professional development (rank = 5.5).

### Theme 4: Personal resources

Respondents listed personal resources (family, religion, friends and their own personality characteristics) as the fourth most important contributing factor (rank = 4). One respondent remarked that *“my family helps me to relax and unwind,”* and another mentioned that *“My interest and passion for what I do keeps me motivated.”* In comparison, employees with high turnover intention mentioned personal resources as the third most important factor (rank = 3).

### Theme 5: Nature of the job

Respondents with low turnover intention identified the nature of the job as the fifth most important contributing factor (rank = 5). The nature of the job refers to the various work activities that make up the total scope of an individual's work. Respondents mentioned that their passion for teaching, the freedom to pursue their own research interests, the opportunity to mentor a junior employee, and also opportunities to serve the broader university community and society, impacted their

decision to remain with the university. Respondents, who were seriously considering leaving the university, listed the nature of the job as the fourth most important contributing factor (rank = 4).

#### Theme 6: Interactions with students

Respondents listed interactions with students as their sixth most important contributing factor (rank = 6). Respondents explained that positive interactions with students made their jobs worthwhile and meaningful, as reported *“I enjoy my work when I have students who are resourceful, disciplined, and excited about their field of study – knowing that I make a bit of difference in their lives, makes me feel good.”* Respondents with high turnover intentions mentioned interactions with students as eighth (rank = 8). This indicates a significant difference in rank ordering, suggesting that individuals who desired to leave the university became detached from their work and students.

#### Theme 7: Rewards and recognition

Respondents with low and high turnover intentions listed rewards and recognition with little variation (low rank = 7, high rank = 6). Rewards and recognition include compensation packages, tokens of appreciation and other benefits (pension, medical aid, funeral cover and housing allowance). The rank ordering indicates that when people nurture thoughts of leaving the organisation, rewards and recognition strategies might not be an effective strategy to foster organisational commitment and retention behaviours.



#### Theme 8: Management systems and policies

Little variation was found in the rank ordering between respondents with low and high turnover intentions and management systems and policies (low rank = 8.5, high rank = 7). Management systems, policies and procedures were described as ineffective, outdated and bureaucratic. This indicates that management systems and policies were not major contributors towards individuals' intention to remain with the organisation.

#### Theme 9: Opportunities for professional development

Respondents with low turnover intentions identified opportunities for professional development as eighth (rank = 8.5). In contrast, respondents with high turnover intention mentioned opportunities for professional development much higher (rank = 5.5). This suggests that opportunities for professional development may be an important factor contributing to individuals' decision to stay with the organisation.

#### Theme 10: Opportunities to do research

Respondents with low and high turnover intentions listed opportunities to do research equally (rank = 9). This result indicates that even when individuals were presented with the opportunity to do research, it might not significantly alter or influence their intention to leave the organisation.

Table 33

*Contributing Factors of Employees with Low and High Scores on Turnover Intention*

Factor	Category 1 (Low TI)		Category 3 (High TI)	
	Frequency	Rank	Frequency	Rank
Contributing factors	(n = 101)		(n = 96)	
1. Resources	95	1	81	1
2. Support from co-workers and supervisors	65	2	52	2
3. Working conditions	42	3	12	5.5
4. Personal resources	38	4	30	3
5. Nature of the job	33	5	13	4
6. Interactions with students	14	6	6	8
7. Rewards and recognition	8	7	10	6
8. Management systems and procedures	6	8.5	7	7
9. Opportunities for professional development	6	8.5	12	5.5
10. Opportunities to do research	4	9	5	9

**7.2.2.2 Restraining factors: low and high turnover intention**

Theme 1: Lack of resources

Table 34 shows that respondents with low turnover intentions mentioned a lack of resources as their first restraining factor (rank = 1). Respondents expressed their annoyance with a continuous lack of resources to carry out their jobs, as evident from the following quote: *“Where I come from, you were provided with everything you*

*need to do your job, not like here.*” Respondents with high turnover intentions listed a lack of resources as the third (rank = 3) restraining factor.

#### Theme 2: Interaction with supervisors and colleagues

Interaction with supervisors and colleagues was identified as second (rank = 2) in respondents with low and high turnover intention. Although interactions with supervisors and colleagues can have some positive results for the individual employee, it can equally threaten one’s job satisfaction and one’s commitment to the organisation.

#### Theme 3: Work overload/demands

Interestingly, respondents with low turnover intentions mentioned work overload as the third most important factor contributing to turnover intention (rank = 3). Respondents with high turnover intentions identified this theme as the most significant factor contributing to turnover intention (rank = 1). Respondents mentioned that increasing student numbers, staff shortages, and increasing administrative work led to feelings of being overextended at work. Increasing work demands may overwhelm employees, and lead to emotional and physical exhaustion, compelling them to leave the organisation.

#### Theme 4: Insufficient rewards and recognition

Little variation was observed between respondents with low and high turnover intentions and perceptions of insufficient rewards and recognition (low rank = 4, high rank = 5). Perceptions of rewards and recognition have an intrinsic and extrinsic

motivation component which could explain the position of its rank ordering. Respondents could not deny the instrumentality of equitable compensation, but at the same time, this was not what had led to their intrinsic motivation. Factors, such as inadequate structures for rewards, recognition and appreciation challenged the intrinsic motivation of individuals.

#### Theme 5: Working conditions

Similarly, little variation was observed between respondents with low and high turnover intentions and working conditions (low rank = 5, high rank = 6). Respondents explained that their working environment was increasingly being controlled by management (administrators), and that the traditional academic working environment was threatened by bureaucratic management practices.

#### Theme 6: Negative public perceptions about the university

Respondents with low turnover intentions identified negative public perceptions of the university as the sixth most important restraining factor (rank = 6). A significant difference was observed for respondents with low and high turnover intentions. Respondents with high turnover intentions mentioned negative public perceptions of the university as the fourth most important restraining factor (rank = 4). This indicates that respondents were affected by negative media reports about the university. This also had important implications for the professional identity of individuals employed by the university.

### Theme 7: Neglect of personal lives

Respondents with low and high turnover intentions identified the neglect of their personal lives as the seventh most important restraining factor (rank = 7). Although ranked last, this theme indicates that employees of the university felt the strain of increasing work demands on their leisure time.

Table 34

#### *Restraining Factors of Employees with Low and High Scores on Turnover Intention*

Factor	Category 1 (Low TI)		Category 3 (High TI)	
	Frequency	Rank	Frequency	Rank
	(n = 101)		(n = 96)	
1. Lack of resources	66	1	42	3
2. Interactions with supervisors and colleagues	64	2	53	2
3. Work overload/demands	51	3	61	1
4. Insufficient rewards and recognition	39	4	23	5
5. Working conditions	24	5	21	6
6. Negative public perceptions about the university	9	6	25	4
7. Neglect of personal lives	3	7	5	7

### 7.3 CHAPTER SUMMARY

This chapter is regarded as the axle of this study. As guided by the research objectives, the following statistical procedures were conducted: the construct validity of all the scales used in this study, descriptive statistics, Cronbach alphas and

Pearsons' correlation coefficients, differences between groups, hierarchical regression analyses, as well as measures for indirect effects. Moreover, two qualitative questions pertaining to helping and restraining factors contributing to emotional and physical engagement and turnover intention were analysed through content analysis and applying Spearman's rank correlations and coefficients to rank orderings.

Chapter 8 serves as the concluding chapter of this study. The main findings are discussed, conclusions are drawn, and various recommendations are made based on these conclusions. Chapter 8 further explains the limitations encountered while conducting this study, and offers suggestions on how to improve future studies.

## **CHAPTER 8**

### **DISCUSSION, CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS**

The final chapter ties the research objectives of the study and the results together in a summary. Important limitations are highlighted, and suggestions on how to overcome such limitations to improve future studies are provided. Finally, recommendations based on the empirical findings of this study, for intervention strategies and possibly future policy development are made.

#### **8.1 DISCUSSION OF RESULTS**

From a positive psychology perspective, and specifically considering two distinct paradigms, namely hedonia and eudaimonia (Ryan & Deci, 2001), psychological well-being in a work context was conceptualised in terms of work engagement. Work-related psychological well-being encompasses elements of pleasure and fulfilment (hedonia). However, the true essence of experiencing work-related psychological well-being entails a quest for meaning, personal growth, and authenticity (eudaimonia) (Ryff & Singer, 2008). Work provides an important avenue from which individuals derive meaning, personal growth, and authenticity. In particular, specific work-related factors play an important role in fostering the psychological conditions that lead to work engagement.

The aim, therefore of this study was to investigate the work-related psychological well-being of staff members at the University of Namibia by, firstly, examining the antecedents and psychological conditions of engagement, and, secondly, investigating the outcomes of engagement. Moreover, this study also aimed to identify the most significant helping and restraining factors associated with work engagement and turnover intention.

### **8.1.1 Work engagement and psychological conditions**

The first three hypotheses of this study related to the relationships between psychological conditions (psychological meaningfulness, psychological availability, and psychological safety) and work engagement. Psychological conditions are important factors through which work engagement is experienced.

Hypothesis 1, which stated that psychological meaningfulness is positively related to work engagement, is accepted. Consistent with the findings of May et al. (2004), Olivier and Rothmann (2007), and Rothmann and Rothmann (2010), psychological meaningfulness had a strong relationship with both engagement (cognitive, and emotional and physical engagement) dimensions. When staff members perceive that there is meaning in their work, it enables and motivates them to invest their energy and attention in their work activities.

Similarly hypothesis 2 of this study is confirmed. Psychological availability was associated with, and predicted both the engagement (cognitive, and emotional and



physical engagement) dimensions. This is contrary to May et al.'s (2004) results, but similar to results obtained by Olivier and Rothmann (2007). An individual with the necessary emotional, physical and psychological resources will be able to engage in her or his work-role (Khan, 1990).

Hypothesis 3, that psychological safety is positively related to work engagement is partially confirmed. The results yielded evidence for a relationship between psychological safety and cognitive engagement. Psychological safety confirms to a person that she or he functions in a protected environment (Kahn, 1990) which means that the individual spends less time worrying about the motives of others, and more time engaged in their work.

### **8.1.2 Antecedents of psychological conditions**

Hypotheses 4 to 14 are related to the relationships between antecedent variables (work role fit, supervisory relations, co-worker relations, resources, job enrichment, rewards and recognition, self-consciousness, and organisational support) and psychological conditions (psychological meaningfulness, psychological availability and psychological safety).

Hypothesis 4 which proposed that work role fit is positively related to psychological meaningfulness was accepted. Employees who experience work role fit are more likely to show positive work-related attitudes, energy and enthusiasm (Shuck et al., 2011). Moreover, employees with work role fit are likely to be creative and take

initiative in their work-role in order to utilize their full potential. When individuals experience work role fit, they are comfortable to express their true nature, and in doing so, they derive meaning from their work. This relationship is consistent with the findings of Rothmann and Rothmann (2010) and Scroggins (2008), and is supported by the finding that work role fit was identified as an important predictor of emotional and physical engagement. Considering the significance of work role fit for the process of finding meaning in ones' work, it is important to elaborate on the processes that foster work role fit perceptions. Work role fit of individuals is enhanced when recruitment and selection strategies are designed and implemented in such a way that core competencies of the applicants are matched to that required by the organisation. This will require careful and systematic screening of the competencies for each job on all levels of the organisation. Furthermore, through periodic performance appraisal reviews, training and development needs may be identified whereby the individual employee is directed into a specific work area that matches his or her interest and abilities.

Hypothesis 5 and 6 which posit that supervisory relations are positively related to psychological safety and psychological availability respectively was rejected. Contrary to Kahn's (1990) and May et al.'s (2004) findings which found support for an association between supervisory relations and psychological safety, in this study supervisory relations were found to be practically and significantly related to psychological meaningfulness. This means that supervisors in the university context play a significant role in the meaning that staff members derive from their work, perhaps through advice, guidance, intellectual stimulation, and support. Furthermore,

a positive relationship was found between supervisory relations and emotional and physical engagement. Interestingly, the results from the content analysis underscored this finding when support from supervisors was identified as the third most significant contributing factor of emotional and physical engagement. Likewise, negative interactions with supervisors detracted significantly from employees' ability to engage in their work activities. Positive psychology advocates for 'positive leadership', also known as authentic leadership whereby organisational leaders act in accordance to their true values, beliefs, and strengths, while helping others to do the same and reach their highest potential (Cooper, Scandura, & Schriesheim, 2005). The type of leadership philosophy that leaders in organisations adopt plays an important role in the levels of well-being of employees, which in turn positively impact on employee performance (Ryan & Deci, 2001).

Hypotheses 7 and 8 of this study, namely that co-worker relations will be positively related to both psychological meaningfulness and psychological safety respectively was accepted. The results showed that co-worker relations correlated practically and significantly with both psychological meaningfulness and psychological safety. Moreover, co-worker relations also had a significant relationship with psychological availability. This means that positive and fulfilling relationships with co-workers enabled employees to invest their emotional, physical and emotional energy to be psychologically present, derive deeper meaning from their work, and feel protected and psychologically safe in their work environment. Co-worker relations, as a form of social support, can provide employees with the necessary motivation to be psychologically available (Shah & Jehn, 1993). Alternatively, interactions with

colleagues were identified as the sixth most important restraining factor detracting from staff members' emotional and physical engagement. This indicates that even though relationships with co-workers are important for psychological meaningfulness, psychological availability, and psychological safety, co-worker relations at the university are problematic as it hinders the engagement of staff members. Various reasons could be ascribed to this, such as diversity issues, and competition for resources and status. Considering that the university has a highly diverse workforce, the university has to focus on diversity management programs as a way to enhance greater understanding between staff members. Furthermore, policies that oversee the equitable distribution of resources should be implemented and monitored.

Hypothesis 9, which states that resources are positively related to psychological availability, was accepted. Similar to May et al.'s (2004) results, the availability of resources were related to psychological availability and emotional and physical engagement. Any work activity places physical, cognitive and emotional demands on the human body to varying degrees and requires stamina and energy. When these resources are depleted, people tend to disengage themselves from work. Moreover, such individuals may develop burnout due to not having the resources to cope with demands from the work environment. When an individual has the physical, cognitive and emotional resources to do their work, they have the capacity to be psychologically available and present to engage in work activities. The university can play an important supporting role in strengthening these resources of individuals in the form of counselling or debriefing platforms, strategies to maintain a healthy

work/life balance, and greater emphasis on health and wellness initiatives for staff members.

As hypothesized, job enrichment was a significant predictor of psychological meaningfulness, thus confirming hypothesis 10. This finding is consistent with the results of May et al. (2004), and it shows that the quality of one's job will influence the meaning that one derives from it. The three dimensions by which job enrichment is characterized, namely experienced meaningfulness, experienced responsibility and knowledge of results, are important indicators of job satisfaction and the internal motivation of individuals to do their job to the best of their abilities. When a job allows an individual to experience these dimensions of job enrichment, such an individual in essence are given the opportunity to perform at his or her most optimal level, and to realize his or her potential. Job enrichment was also practically and significantly related to emotional and physical engagement. Saks (2006) argues that, from a SET (Blau, 1964) perspective, an employee who has an enriched and challenging job is likely to feel obliged to "repay" the organisation with higher levels of engagement. Job enrichment is inherently a job design issue. To create opportunities whereby staff members experience job enrichment, staff members need avenues in which they are challenged to acquire a variety of skills and where they implement and oversee their own work initiatives independently. In addition, greater emphasis has to be placed on the improvement of the current performance appraisal system in order for staff members to receive meaningful feedback, and recognition and appreciation for good performance.

The relationship between rewards and recognition and psychological availability was not significant, thus hypothesis 11 is rejected. Contrary to the results of Saks' (2006) results, rewards and recognition did not contribute to any of the psychological conditions, but were rather significantly and practically related to organisational commitment. The moderate relationship between rewards and organisational commitment may be an indication that for the staff members of the university, rewards and recognition do not necessarily foster engagement, but it does make individuals committed to the university, and less likely to leave the university. In line with the underpinnings of positive psychology, which allude to intrinsic needs fulfilment (Ryan & Deci, 2000), the search for happiness through money or material goods is doomed, because it is unlikely to fulfil psychological needs for personal growth and intimacy, which are central to a person's well-being (Gardarsdóttir, Dittmar, & Aspinall, 2009). Remuneration in academia is a contentious issue. Although the work of academics is intrinsically motivated to a large extent, financial success still remains a significant indicator that goals are being achieved and that performance levels are acceptable (Gardarsdóttir et al., 2009). Staff members of academic institutions are generally highly qualified individuals, and yet their remuneration does not equal that of individuals with the same qualifications in the private sector. Dissatisfaction with remuneration has negative consequences for any organisation, because it may lead to union conflict, sabotage, and high levels of staff turnover. The university management has to consider remunerating staff members for additional work activities, allow staff members to engage in consultation activities (guided by policies) that may generate lucrative income for both the individual and their respective departments (as opposed to the university in general), and provide

incentives for performance outputs, such as publishing journal articles, excellent teaching and organisational citizenship behaviours that compel individuals to go above and beyond their expected job duties.

Self-consciousness was negatively related to psychological availability and psychological safety which confirm hypotheses 12 and 13 of this study respectively. The negative relationship between self-consciousness and psychological availability found in this study was consistent with the results of Olivier and Rothmann (2007). Self-consciousness, as an excessive pre-occupation with one's behaviour and how one is perceived by others, may hinder an individual from bringing themselves fully into their work role. The negative association between self-consciousness and psychological safety perhaps stems from the fact that individuals who are very self-conscious constantly monitor their own behaviour to ensure they do and say the right things, which makes them feel less secure in their work environment. Excessive self-consciousness may be reduced by providing training to staff members and supervisors to enhance interpersonal skills, with specific focus on work values such as integrity, transparency and respect between colleagues.

Hypothesis 14, which posited that organisational support is significantly related to psychological availability, was rejected. No evidence was found in the results to support a significant relationship between organisational support and psychological availability. However, similar to the results of Saks (2006), organisational support was significantly related to emotional and physical engagement and organisational commitment. The implication here is that organisational support does not necessarily

foster any of the psychological conditions, but has a direct impact on the engagement levels of individuals, which may result in positive work behaviours. These results can be explained from a SET (Blau, 1964) perspective that advocates that employees with perceived high organisational support will reciprocate with higher levels of engagement and commitment toward the organisation. Organisational support may be offered in the form of resources such as technology, equipment and infrastructure, emotional support such as counselling services or guidance from mentors, and financial support that will enable staff members to engage in growth and professional development opportunities.

### **8.1.3 Effects of antecedents on work engagement through psychological conditions**

The following three hypotheses are related to the indirect effects of various antecedent variables on work engagement through psychological meaningfulness, psychological availability, and psychological safety. Psychological conditions can significantly influence the relationship between job-related factors and work engagement.

Hypothesis 15 posited that work role fit, co-worker relations, job enrichment, rewards and recognition have a significant indirect effect on work engagement via psychological meaningfulness. Consistent with the findings of Rothmann and Rothmann (2010), this hypothesis is partially confirmed. This study showed that the antecedent variables (work role fit, co-worker relations, and job enrichment) except



for rewards and recognition had an indirect effect on emotional and physical engagement through psychological meaningfulness. Work role fit contributes to the emotional and physical engagement that an individual experiences in his or her work environment, with psychological meaningfulness playing an important role in this relationship. Congruency between an individual's values and self-concept and the work role (Shamir, 1991) allows the individual to engage in their work activities, however this depends on whether an individual derives meaning from his or her work activities. Interestingly, co-worker relations had an impact on emotional and physical engagement through psychological meaningfulness. The interactions that staff members have with their colleagues allow staff members to feel invigorated, challenged and inspired, which fosters engagement in work activities. The extent to which these staff members have meaningful interactions with their colleagues play an important role in their experience of engagement. Likewise, job enrichment had a significant effect on emotional and physical engagement via psychological meaningfulness. When staff members are involved in work activities that allow them to experience autonomy, task identity, task significance, skills variety, and feedback, the implication is that they will derive meaning from their work, and subsequently enjoy greater engagement.

The results further partially confirmed hypothesis 16 which posited that rewards and recognition, resources, organisational support and self-consciousness has an indirect effect on work engagement through psychological availability. The results demonstrated that these antecedent variables influence a person's cognitive engagement, rather than their emotional and physical engagement, through

psychological availability. The initial hypothesis included rewards and recognition, but the results demonstrated the significance of work role fit and co-worker relations on cognitive engagement instead. This hypothesis is thus partially confirmed. Resources entail emotional, physical and cognitive resources that are necessary for individuals to bring themselves fully into their work role. When these resources are depleted, individuals are likely to feel exhausted and burned out, which makes it difficult to be psychologically available or engaged in work activities. Similarly, organisational support plays a crucial role in the cognitive engagement of individuals. Perceptions of support from the organisation enable individuals to engage in their work activities, without frustration and feelings of resentment, which allows them to bring more of themselves into their work role. In line with Rothmann and Rothmann's (2010) findings, the findings in this study indicate that self-consciousness detracts from a person's engagement levels via psychological availability. Excessive self-awareness leads to a preoccupation with the impression one leaves on others (May et al., 2004), which diminishes one's ability to be psychologically available. The identification of work role fit and co-worker relations as having an impact on cognitive engagement through psychological availability has important implications for the work environment. Perceptions of fit with the job enable individuals to become absorbed and psychologically available in their work activities. Likewise, interactions with co-workers may provide a platform for challenging intellectual stimulation, as well as a form of social support which may foster cognitive engagement through psychological availability.

On the contrary, hypothesis 17 stated that supervisory relations, co-worker relations, and self-consciousness had an indirect effect on work engagement via psychological safety. This hypothesis was rejected, since the results did not yield evidence for the indirect effect of these variables on work engagement via psychological safety.

#### **8.1.4 Antecedents of work engagement**

Hypotheses 18 and 19 are related to the relationship between specific job resources and job demands and work engagement.

Hypothesis 18 which stated that specific job resources, namely social support, growth opportunities and salaries contribute to emotional and physical engagement was accepted. Content analysis on the qualitative data concerning the factors contributing to emotional and physical engagement yielded interesting results. Social support from colleagues was ranked as the third most important factor contributing to high levels of emotional and physical engagement. This supported the results of the hierarchical regression analysis, which found that rewarding, interpersonal relationships with co-workers predicted emotional and physical engagement. Interaction with co-workers was an important source of social support which contributed to the meaning that individuals derived from their work environment. Growth opportunities were ranked as the seventh most important factor contributing to emotional and physical engagement. Growth opportunities allow an individual to fulfil important needs relating to personal development and self-actualization. Likewise, salaries and benefits were ranked 6.5 for staff members with high

emotional and physical engagement. Individuals regard rewards as an indication of their worth to an organisation; in other words, rewards are seen as a return on investment (Saks, 2006). Therefore, an individual's ability to derive meaning and engage in her or his work is influenced by perceptions of her or his worth, as indicated by the rewards she or he receives.

Other contributing factors reported by employees, with both poor and strong levels of emotional and physical engagement, were office equipment and technology, and personal resources, such as family, religion, friends and personality factors. This demonstrates that resources, be they technological or personal, and support in the form of relationships with colleagues, significantly contributed to the emotional and physical engagement of employees. When individuals are provided with the resources needed to do their jobs, and they receive support from their co-workers, they are likely to reciprocate by engaging in their work more meaningfully (Saks, 2006). Furthermore, the nature of the job, working conditions, library resources was mentioned (with slight variations in terms of rank ordering) less frequently. Finally, management policies and administrative procedures, research and publishing opportunities, infrastructure, such as leisure facilities, bathrooms and tea lounges, were mentioned as the least important. Job resources play both an intrinsic and extrinsic motivational role, because they satisfy basic needs, such as the need for autonomy, belonging and competence. Likewise, job resources also foster dedication and positive organisational citizenship behaviours (Bakker et al., 2011). When individuals have all the necessary job resources they need, they are more likely to invest their energy in personal resources in their work (Christian et al., 2011).

Hypothesis 19, which stated that the following restraining factors, namely work overload, time pressures and unsupportive supervisors negatively impact on the work engagement of staff members, was accepted. Work overload was ranked as the second most important restraining factor for individuals with high emotional and physical engagement, followed by unsupportive supervisors. Excessive work demands tax individuals' physical, emotional and cognitive resources, which if prolonged, may lead to exhaustion. This can negatively impact on individuals' ability to engage in their work. Time pressures are implicitly experienced when individuals are faced with work overload. Work activities are normally tied to a time line in which these activities should be completed. Consequently, when individuals experience continuous time pressure, the focus becomes on timeously completing work tasks instead of the quality of the work output. Likewise, support from supervisors was identified as an important factor related to psychological meaningfulness. When supervisors do not provide employees with support, guidance and feedback, employees will not be able to derive meaning or be engaged in their work.

Other factors mentioned that detract from emotional and physical engagement included a lack of resources, technology and equipment. Interactions with colleagues, management and administrative policies and procedures, working conditions and the quality of students were mentioned less frequently by employees with both poor and strong levels of emotional and physical engagement. Lastly, the least mentioned restraining factors included remuneration, lack of professional development

opportunities, lack of research and publishing opportunities and negative public perceptions of UNAM.

#### **8.1.5 Biographical variables and well-being**

Hypotheses 20 to 23 related to the relationships between specific biographical data and antecedent variables, psychological conditions and engagement.

As far as the relationship between biographical data and antecedent variables, psychological conditions, engagement and outcomes is concerned, no significant differences were found between the levels of work engagement for male and female staff members. Therefore, hypothesis 20 is rejected.

Hypothesis 21 which posited that senior staff members are more likely to be engaged in their work than junior staff members, was rejected. However, it was found that older staff members (42 + years) experienced more work role fit than their younger colleagues. Though not statistically significant, but worth noting is the fact that older staff members also experienced more job enrichment. This could be attributed to the experience that more senior staff members have gained, as well as their ability to seek out roles that would be qualitatively more challenging and enriching. Byrne (1991) asserts that older staff members of universities have more likely achieved their career aspirations, and that they show greater professional efficacy than younger staff members who still need to find their way through rank, recognition and stature. This notion further supports the findings in this study regarding the

relationship between job position and work role fit and job enrichment. The results show that professors experienced the highest work role fit, while associate professors and professors experienced the highest levels of job enrichment.

Hypothesis 22 which posited that employees with post-graduate degrees are more engaged in their work activities than employees with lower level qualifications was accepted. Moreover, it was found that staff members with doctoral degrees demonstrated the highest level of job enrichment. The attainment of a doctoral degree marks a new chapter in an academic's career, where the emphasis of the work-role shifts to research output and publication. Winter et al. (2000) explain that engaging in motivating core functions satisfies the need for more meaningful work activities. Similar to the findings of Barkhuizen and Rothmann (2006) in a study investigating the work engagement of academic staff in higher education institutions in South Africa, in this study staff members with doctoral degrees also reported the highest level of cognitive engagement and (although not statistically significant) emotional and physical engagement. Thus, staff members with doctoral degrees enjoyed higher levels of job enrichment and work engagement.

Hypothesis 23, posited that tenured employees are more likely to be engaged in their work than new employees was rejected. No significant differences were found in the engagement levels of tenured and non-tenured staff members. However, employees who had been with the university for less than one year valued their relationships with supervisors the most. In contrast, employees with the longest tenure valued supervisory relations the least. New employees of the university were more likely to

rely on the guidance and support of their supervisor than employees with longer job tenure.

#### **8.1.6 Organisational outcomes of work engagement and psychological conditions**

Hypotheses 24 to 27 related to the relationships between work engagement and specific outcomes of engagement, namely organisational commitment, turnover intention, and ill-health.

Hypothesis 24, that work engagement predicts affective organisational commitment was accepted when results of this study confirmed this hypothesis. Consistent with the results of Saks (2006), engagement in this study accounted for significant variance in organisational commitment. Employees who derive meaning from their work have the capacity to be fully engaged in their work activities. When a work environment provides an individual with optimal work conditions, he or she is likely to harbour feelings of commitment, and are less likely to have turnover intentions, as supported by the practically significant correlations between psychological meaningfulness and organisational commitment and turnover intention.

Other factors related to organisational commitment included work role fit, co-worker relations, job enrichment, organisational support and the three psychological conditions (psychological meaningfulness, psychological availability and psychological safety). Commitment to the university can thus be fostered by



enhancing employees' fit with their job, providing opportunities whereby staff members can be involved in enriching work activities, and last but not least, provide support to staff members, be it financial support, resources or moral support.

Hypothesis 25, which posited that work engagement negatively predicted turnover intention, was accepted. This means that if employees are unable to derive meaning from their work and are unable to engage emotionally and physically when doing their jobs, they are likely to develop intentions to leave the university. Shuck et al. (2011) maintain that employees are naturally drawn and inspired to remain in experiences that provide them with meaning. Without meaning, employees are unable to engage themselves in their work, and inevitably, they start to search for alternative opportunities that can provide them with the meaning they seek (Shuck et al., 2011). Kahn (1990) agreed that employees are unlikely to stay in a position where they do not derive meaning, perceive that they make a meaningful contribution, or feel comfortable to show their true selves.

Content analysis on the contributing factors to both low and high turnover intention partially confirmed hypothesis 26. It was posited that relationships with colleagues, professional development opportunities, and administrative and technical support are negatively related to turnover intentions. Relationships with colleagues were identified as the second most frequently mentioned contributing factor related to both low and high turnover intention. Moreover, co-worker relations play an important role in psychological meaningfulness, emotional and physical engagement, and organisational commitment. This means that good co-worker relations are unlikely to

lead to turnover intentions. Furthermore, opportunities for professional development were identified as another significant contributing factor that hinders employees from developing turnover intentions. Professional development can be regarded as an innate need that individuals have to realize their full potential, and as such has important implications for staff members' overall work life satisfaction. Employees will be motivated to stay in a work environment which provides them with professional growth and development opportunities. Professional development opportunities include studies, the attendance of conferences, publishing opportunities, consulting opportunities, and the registration with professional bodies among others. Administrative and technical support was categorized under the theme of management systems and procedures. Management systems and procedures were identified as the seventh most frequently mentioned factor that prevents turnover intentions. Administrative and technical support enables faculty members to focus on their core function, and includes secretarial and office support, library services, teaching materials, tutors or teaching assistants (Johnsrud & Rosser, 2002). Perceived inequitable distribution or lack of such support can contribute to feelings of frustration, low job satisfaction and disengagement.

Other frequently mentioned contributing factors indicated by employees with low and high turnover intentions included the availability of technological resources and equipment, personal resources, the nature of the job, rewards and recognition, positive interactions with students as significant factors buffering against intentions to leave the university. This partially confirms results by DeConinck and Johnson (2009) and Galletta et al. (2011). To prevent turnover intention and staff members

actually leaving the employment, the university has to pay attention to the essential resources of staff members, the design of jobs, and ensure competitive remuneration packages for staff members. In addition, joint cooperation in projects, such as conferences, or community development initiatives may foster positive interactions with students.

The results partially confirmed hypothesis 27 which stated that job demands such as a lack of resources, job dissatisfaction and conflict with co-workers contribute to turnover intention. Employees with low and high turnover intentions identified a lack of resources as a significant restraining factor contributing to turnover intention. Resources in this sense, refers to the equipment, furniture, technology and infrastructure that individuals need to successfully do their work. A lack of resources can generate frustration and reduce efficacy as employees struggle to execute their work activities. Conflict with co-workers, possibly over scarce resources and opportunities, or diversity could lower job satisfaction, and subsequently lead to turnover intentions. Poor co-worker relations can have a negative impact on psychological meaningfulness, engagement and organisational commitment, and ultimately lead to a desire to leave the organisation. Although job dissatisfaction was not implicitly mentioned as a theme under restraining factors leading to turnover intentions, factors such as work overload, insufficient rewards and recognition, working conditions, negative image of the university, and work/life conflict can be argued to significantly challenge an individuals' job satisfaction. Turnover intention has pervasive consequences for an organisation, in terms of costs, loss of production,

and reduced employee morale. Thus, these factors identified by staff members warrant serious attention.

### **8.1.7 Individual outcome of work engagement and psychological conditions**

The final hypothesis is related to ill-health as an individual outcome resulting from the relationship between psychological conditions and work engagement.

Hypothesis 28, which posited that work engagement is negatively related to ill-health, was partially accepted. Emotional and physical engagement demonstrated a significant and negative association with the somatic, anxiety and social dysfunction dimensions of general health. These results confirm Schaufeli et al.'s (2008) assertion that engaged employees enjoy better physical and psychological well-being. Interestingly, engagement was not related to the depression dimension of ill-health. This means that individuals may suffer from depression, regardless of whether they are engaged or not. Furthermore, when staff members experience work engagement, they are unlikely to feel physically ill, experience anxiety or have problems with social interaction. This confirms that engagement has wider implications for individual health, and medical expenses carried by the university.

Although no hypotheses were formulated with regard to the specific dimensions of general health, the following results depict significant findings between various antecedent variables and psychological conditions, and the dimensions of general health.

Relationships with co-worker relations, a lack of resources, and self-consciousness predicted staff members' somatic symptoms. The results in this study further indicated that work role fit, a lack of resources and self-consciousness predicted anxiety. Psychological availability also predicted anxiety. This suggests that employees feel anxious when they perceive that they do not have sufficient cognitive, emotional and psychological resources to do their work. A lack of these resources detracts from a person's confidence to engage in work activities (Rothmann & Rothmann, 2010).

Social dysfunction was predicted by co-worker relations. This implies that relations with colleagues contribute significantly to a person's day-to-day functioning. Social dysfunction was also predicted by psychological meaningfulness. Shuck et al. (2011) argue that without meaning employees start to withdraw themselves, thus leading to feelings of isolation and rejection. The depression dimension of general health was predicted by a lack of resources, low levels of job enrichment, and self-consciousness. A lack of resources, especially in the academic environment where individuals are intrinsically motivated by the job, may cause staff members to feel frustrated and helpless in their work environment. Likewise, low levels of, or a lack of job enrichment will prevent staff members from finding meaning in their work activities. High levels of self-consciousness detracts from a person's ability to be psychologically available, which consequently leads to depression.

## 8.2 CONCLUSIONS

Work engagement and psychological well-being have emerged as important drivers for organisational success (Lockwood, 2007). Engagement benefits both the individual and the organisation. Employees who are engaged are more committed and are more likely to go the extra mile in their work (Lockwood, 2007), while they also tend to report better physical and psychological health (Crabtree, 2005). This study demonstrated the unique interplay of antecedent variables, psychological conditions, work engagement and outcome variables in the work-related psychological well-being of staff members of the University of Namibia. Based on the research objectives of this study, the following conclusions are reached.

The first objective of this study was to conceptualize psychological well-being as an interrelated process that involves work engagement, psychological conditions, antecedent variables and outcome variables. Staff members of the University of Namibia do experience both cognitive, and emotional and physical work engagement, with various antecedent variables that act as drivers to facilitate the psychological conditions necessary to achieve work engagement. However, staff members of the University of Namibia harbour strong intentions to leave the university, and are experiencing depression. Staff members of the University of Namibia experience some level of work-related psychological well-being which is perhaps due to the intrinsically rewarding nature of their work. There are however, various factors threatening their work-related psychological well-being which were identified with subsequent research objectives.

The second objective of this study was to investigate the relationship between work role fit, supervisory relations, co-worker relations, resources, job enrichment, rewards and recognition, self-consciousness, organisational support, and psychological meaning. Work role fit, supervisory relations, co-worker relations and job enrichment were identified as important antecedents and predictors of psychological meaningfulness. Work role fit confirms the congruency and compatibility of the values of the employee and that of the organisation. This allows the employee to search for greater meaning in his or her work activities. Staff members indicated that they do feel a good fit between themselves and their job roles. Job enrichment satisfies an academic's need for engaging, meaningful work activities. Staff members at the university reported average levels of job enrichment. The link between supervisory and co-worker relations and psychological meaningfulness demonstrates the value of friendships with colleagues as an important source of professional support and intellectual stimulation for staff members of the University of Namibia. However, this study showed that interpersonal relationships between colleagues, as well as relationships between supervisors and employees are problematic and greater effort has to be made to enhance these relationships.

Scroggins (2008) emphasizes the importance of meaningful work and engaging experiences in developing attachment and loyalty to the organisation. He further maintains that organisations have thus far been unsuccessful in inspiring employees and provide them with such meaningful and engaging work experiences (Scroggins, 2008). Shamir (1991) proposes a model of work motivation that emphasizes the

importance of congruency between a person's self-concept and his or her job tasks. Central to this theory is the significance of psychological meaningfulness which influences the relationship between a person's self-concept and the job tasks and context (Scroggins, 2008). Insight into how people find meaning in their work can be beneficial to managers, human resource professionals and educators when they are making decision about how to utilize time, energy and precious resources in organisations (McClure & Brown, 2008).

The third objective of this study was to determine the relationship between work role fit, supervisory relations, co-worker relations, resources, job enrichment, rewards and recognition, self-consciousness, organisational support, and psychological availability. In this study psychological availability was related to work role fit, co-worker relations, resources, and self-consciousness. Perceptions by staff members concerning how well they fit in their work significantly influence their psychological availability. The findings showed that relationships with colleagues provided important support which allowed the employee to be psychologically available. The interaction between resources and psychological availability is best understood from a SET (Blau, 1964) perspective that holds that employees reciprocate with increased psychological availability when they are provided with adequate resources. A lack of/or insufficient resources often results in a failure to achieve goals, generating feelings of failure and frustration, and consequently leading to withdrawal behaviour at work, diminished motivation and commitment (Bakker, Demerouti, De Boer, & Schaufeli, 2003). Staff members at the University of Namibia generally reported a lack of personal resources to do their job effectively. Interestingly, it is not only the



personal resources that is lacking, a lack of physical resources were identified as one of the main restraining factors that impact negatively on the emotional and physical engagement of staff members. Staff members also reported high levels of self-consciousness which detracted from their ability to be present cognitively, physically, and emotionally. This indicates that staff members feel that they are constantly under scrutiny which places considerable pressure on them. Consequently, they have difficulty on focusing on their work activities. In addition, staff members feel that they receive very little support from the university and that the rewards and recognition the university provides are very poor.

The fourth objective was to evaluate the relationship between work role fit, supervisory relations, co-worker relations, resources, job enrichment, rewards and recognition, self-consciousness, organisational support, and psychological safety. Although psychological safety only showed a statistically significant relationship with emotional and physical engagement, it was positively related to job enrichment and negatively related to self-consciousness. Perhaps, when employees engage in enriched jobs, it provides them with self-confidence and self-esteem to feel psychologically safe in their work environment. Also, self-consciousness was negatively related to psychological safety. This means that staff members who feel self-aware has difficulty feeling psychologically safe in their work environment.

In summary, the significant and practical relations between antecedent variables and psychological conditions were as follows: work role fit, supervisory relations, co-worker relations and job enrichment were practically and significantly related to

psychological meaningfulness; work-role fit and co-worker relations were practically and significantly related to psychological availability; co-worker relations and job enrichment were practically and significantly related to psychological safety.

The fifth objective of this study was to determine the role that psychological meaning, psychological availability, and psychological safety play in the relationships between antecedent variables (work role fit, supervisory relations, co-worker relations, resources, job enrichment, rewards and recognition, self-consciousness, organisational support), work engagement and outcome variables. Work role fit, co-worker relations, resources, and organisational support had an indirect effect on cognitive engagement via psychological availability. Psychological availability develops when staff members experience work role fit, have good relations with their colleagues and supervisors, and have sufficient resources and organisational support. These job contextual factors tie into individual's perceptions of available resources and, consequently, influence their ability to invest cognitive resources in work activities.

Psychological meaningfulness was found to be a significant driver of work role fit, co-worker relations, job enrichment, rewards and recognition, to foster emotional and physical engagement. Staff members derived meaning from experiencing job enrichment, work role fit, co-worker relations, and rewards and recognition, which subsequently enabled them to engage emotionally and physically in their work activities. This demonstrates and confirms the importance of psychological meaningfulness in fostering engagement.

Psychological meaningfulness indirectly affected organisational commitment and turnover intention through emotional and physical engagement. Staff members' commitment and intentions to stay at the university is significantly influenced by the extent to which they experience meaning in their work. When employees feel committed towards their organisation, they are more likely to be able to withstand a less than-ideal-work environment and stressful job conditions. Keeping in mind that the results have shown that staff members harbours strong intentions to leave the university, it is indicative that staff members do not feel psychologically safe in their work environment. This also detracts from staff members' ability to engage themselves in their job tasks.

The results have further showed that staff members of the university reported moderate to high levels of anxiety and depression. Various factors such as work role fit, co-worker relations, resources, and self-consciousness negatively impacts on these health dimensions of staff members. Poor work role fit hinder staff members to occupy their job roles with confidence, which subsequently detracts from their ability to invest their energies into being productive. This holds true for poor relationships with co-workers, a lack of psychological resources, and high levels of self-consciousness. This is of particular concern in view of the fact that the work loads and other imposed daily pressures of staff members are steadily increasing. The realisation of diminished capacity, coupled with increasing strain is detrimental to the emotional stability of staff members. This is often one of the most neglected functions of human resources in organisations (Grawitch et al., 2006). Evidently, this is the case at the University of Namibia.

The sixth objective of this study was to determine the relationships between psychological conditions (psychological meaningfulness, psychological availability, and psychological safety) play in the relationship between antecedent variables and work engagement. Psychological meaningfulness and psychological availability played an important role in the relationship between work role fit, co-worker relations, resources, job enrichment, rewards and recognition, self-consciousness, and organisational support, and both cognitive engagement and emotional and physical engagement. Staff members further indicated that when they experience less psychological availability, their levels of anxiety and depression increases.

The seventh objective of this study was aimed at determining the relationship between work engagement and organisational commitment, turnover intention, and ill-health of staff members of the University of Namibia. Emotional and physical engagement is an important factor related to organisational commitment, turnover intention and ill-health. Moreover, emotional and physical engagement also significantly predicted organisational commitment and turnover intentions of staff members. Work role fit, job enrichment and rewards are important job contextual factors for the development of organisational commitment. These variables enable an employee to derive meaning from her or his work, engage emotionally and physically in work activities, and consequently foster an affective attachment to the university. Likewise, in this study a lack of resources and self-consciousness significantly predicted psychological meaningfulness, emotional and physical engagement and the development of turnover intentions. This confirms that psychological meaningfulness is a strong predictor of emotional and physical

engagement and has important implications for organisational commitment and turnover intentions. If employees fail to be psychologically available, their anxiety and depression increases. Likewise, interactions and relations with co-workers are important for an employee's ability to function normally and effectively.

The eighth objective of this study was to identify the most significant differences regarding the antecedent variables, psychological conditions, engagement dimensions, outcome variables and various demographic variables. Among the differences in demographic variables and job contextual factors, psychological conditions, work engagement and outcome variables, age, qualifications, tenure and job position yielded significant results. Interestingly, no significant differences were found in the gender category. Older, more senior staff members experienced more work role fit and found their work activities more enriching than younger staff members. Staff members with doctoral degrees found their jobs more enriching, perhaps as a result of a new focus on research output that is associated with higher level qualifications. New staff members valued relationships with their supervisor the most. New staff members have to become familiar with the structure and values of the organisation, and come to terms with performance expectations; they are thus more likely to appreciate the support and guidance of supervisors than tenured staff members.

The ninth objective of this study was to investigate the most important contributing and restraining factors contributing to work engagement and turnover intention of staff members of the University of Namibia. The results of this study identified

important job-specific contributing and restraining factors among university staff members and their impact on emotional and physical engagement and turnover intentions. Social support from colleagues, growth opportunities and remuneration are important facilitators of emotional and physical engagement. Staff members further indicated that management policies and administrative processes, research and publishing opportunities, professional development opportunities and infrastructure were also important factors contributing to emotional and physical engagement; it is thus suggesting that these factors might be provided for to a certain extent.

Work overload, management and supervisory style, as well as a lack of physical resources, technology and equipment significantly detracted from staff members' ability to engage in work activities. If workloads, i.e. time allocated for teaching, research activities and community service, are not managed well, the features that first attracted academics to their work will diminish, affecting their intrinsic motivating and engagement levels. Mostert, Rothmann, Mostert, and Nell (2008) indicate that unmanageable workloads and time pressures are significant contributors to psychological ill-health, in particularly as indicated by anxiety and depression symptoms. Staff members at the university feel that their work load is too much, and that their resources, be it technology, equipment, or manpower are not compatible with their work load. Furthermore, staff members feel that the management and supervisory style at the university is problematic and a cause of great concern for the future of the university.

The availability of meaningful co-worker relationships, professional development opportunities and administrative and technical support lessened staff members' turnover intention. Other factors that keep staff members at the university are personal resources, the nature of the job and compensation. Staff members of the University of Namibia harbour strong desires to leave the university and are likely to leave due to a lack of both personal and physical resources, job dissatisfaction and conflict with co-workers. Taris et al. (2001) found that academics did not consider relationships with students and colleagues to contribute to their strain, but rather that structural factors, such as time pressures, a lack of resources and work-overload, contributed to their strain and withdrawal behaviour at work. Interestingly, the findings in this study indicated that the negative perceptions of UNAM that the public holds are also one of the reasons why staff members want to leave the employment of the university.

Boyd et al. (2011) maintain that increasing psychological strain and diminishing energy levels of staff members may create a negative impression of their work environment over time, leading staff members to believe that job conditions are worsening. Whether perceived or real, this negative perception can have a detrimental impact on the engagement and commitment levels of staff members.

The tenth objective of this study was to develop a model of work-related psychological well-being for the staff members of the University of Namibia. Work-related psychological well-being was conceptualized as the result of various job-related factors fostering one or more psychological conditions (psychological

meaningfulness, psychological availability, and psychological safety) to enhance the work engagement of employees. Work engagement, however is impacted by the ratio of job demands and job resources an employee are faced with. Optimal levels of work engagement foster strong feelings of loyalty to the university, and have a positive impact on the health of employees. It is also expected that employees who are engaged and committed to the university will be less likely to harbour desires to leave the university.



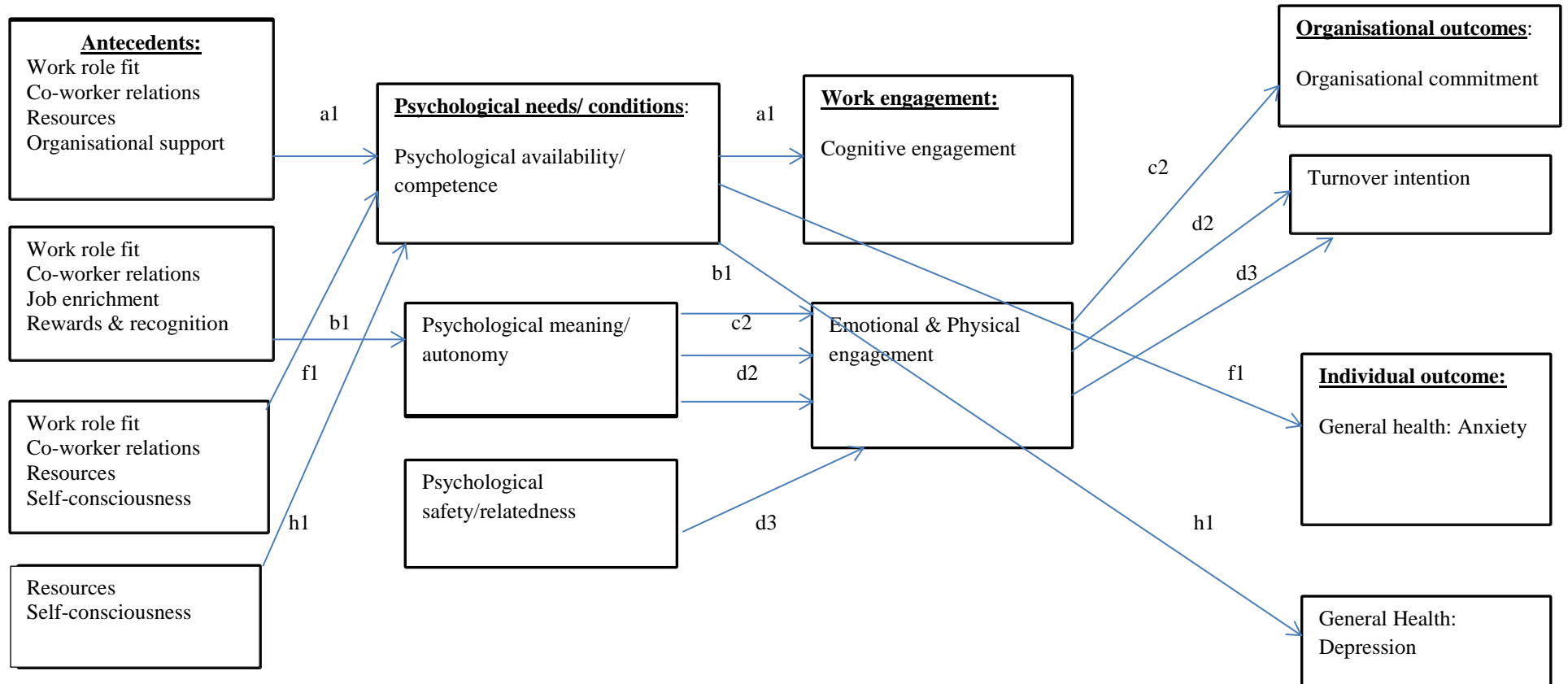


Figure 9. A model of work-related psychological well-being

Table 35

*Explanation of codes for model of work-related psychological well-being*

Code	Explanation
a1	Work role fit, co-worker relations, resources and organisational support indirectly affect cognitive engagement via psychological availability.
b1	Work role fit, co-worker relations, job enrichment, rewards and recognition indirectly affect emotional and physical engagement via psychological meaningfulness.
c2	Psychological meaningfulness has an indirect effect on organisational commitment via emotional and physical engagement.
d2	Psychological meaningfulness has an indirect effect on turnover intention via emotional and physical engagement.
d3	Psychological safety indirectly affects turnover intention via emotional and physical engagement.
f1	Work role fit, co-worker relations, resources, and self-consciousness indirectly affects anxiety (general health) via psychological availability.
h1	Resources and self-consciousness indirectly affects depression (general health) via psychological availability.

According to Hall (1996), organisations are able to serve the interests of employees, and these interests should shape the formulation of organisational policies and practice. To better understand the interests of employees, it is necessary to identify the issues that matter most to staff members (Johnsrud & Rosser, 1997). The

perceptions, thoughts and attitudes of employees ultimately influence their behaviour at, and their attitude to, work; this has broader implications for the individual and the organisation. Organisations often neglect people's issues for the bottom-line output results, without realizing that these issues have a tremendous impact on the engagement and well-being of employees. Employees flourish best when they are in an environment that supports their health and wellbeing (Grawitch et al., 2006). Jobbins (2002, p. 56) comments on the role of universities in developing countries in Africa:

*In a democratic society, healthy universities act as a check on authority, as a watchdog ready to bark at excesses, errors and miscalculation by government. They give their academics a secure platform from which to analyse and criticize without fear of retribution from the state. That role is especially vital in the developing world...as they struggle to compete in a global economy with the technological cards heavily stacked against them (Jobbins, 2002, p. 56).*

### **8.3 LIMITATIONS**

This study was subject to various limitations. Firstly, this study was cross-sectional in nature which limits the generalizability of causality between variables. This was due to the fact that the researcher was bound to a time frame in which the research had to be completed. Future studies should investigate the antecedents and the processes by which engagement develops in a longitudinal design. Secondly, the sample size and sampling procedure of the present study could be improved.

Although the response rate of 35% was adequate for statistical analysis, a higher response rate would have allowed better inferences. During the time that the research was conducted, the University of Namibia went through a process of integrating the Windhoek Colleges of Education into the larger university structure. The researcher took the decision not to include these newly integrated employees into the population of the study because these employees were used to a different work dynamic, work environment, policies and procedures, and management style.

Furthermore, a stratified random-sampling design could have ensured a better representation of the employees across the various centres and campuses of the University of Namibia in order to avoid the risk of having a homogenous sample. A homogenous sample reduces the likelihood of finding significant interactions between groups (Karasek & Theorell, 1990). A third limitation of this study is the use of a self-report questionnaire which increases the risk of “method variance” whereby respondents may have exaggerated responses. A questionnaire was used though because of the combined nature of the study’s research design. It was also used because it is less time consuming than, for example, interviews and focus group discussions, and anonymity are better guaranteed. A fourth limitation entailed the use of a questionnaire printed in English only. Although a level of proficiency in English is expected and assumed from staff members of an educational institution, the questionnaire could have yielded more accurate responses had it been translated to other languages relevant to the population. Finally, only one Higher Education institution was included in the study, and responses were thus context-specific. Consequently, the results may not be generalizable to all Higher Education

institutions or other industries. The researcher took the decision to only focus on the population of the University of Namibia when the other Higher Education institutions refused the request to conduct research on their campuses.

## **8.4 RECOMMENDATIONS**

### **8.4.1 Recommendations to solve the research problem**

The results of this study suggest that management has to develop policies and interventions to promote work engagement and psychological well-being for staff members on all job levels. It is suggested that interventions to promote work engagement and psychological well-being are implemented on a primary level (targeting the work environment), secondary level (targeting staff members), and a tertiary level (targeting management policies and procedures).

On a primary level, the work environment in which the staff members of the University of Namibia work plays an important role in the ability of staff members to engage in their work activities. Working environment and conditions were identified as a significant factor detracting from staff members' ability to engage in their work activities. An attractive physical work environment plays an important role in the work-related well-being of staff members. Specific suggestions to improve the working environment of the university include: the regular maintenance of buildings (i.e. offices, teaching venues, board rooms, and library), parking areas and on-campus roads; the regular maintenance of lawns and gardens on campus; investing in

quality interior decorations; maintaining cleanliness in offices, buildings, and outside environment of the university's campuses; providing sufficient office space, separate restrooms for male and female staff members, and leisure facilities (i.e. tea rooms and lounges); and ensuring the safety and security for staff members and students on all campuses.

On a secondary level, although this study showed that staff members of the University of Namibia do experience work engagement, it is however threatened by excessive job demands and insufficient job resources. Interventions should therefore be aimed at reducing job demands, and increasing the job resources of employees. The most challenging job demands mentioned by staff members were a lack of resources, work overload, and management style. Interventions based on management style will fall under the discussion on tertiary level interventions.

When staff members are continuously expected to perform their work activities with limited or insufficient resources, such staff members run the risk of experiencing exhaustion, and mental weariness, which will threaten their ability to engage in their work activities. Specific resources needed by staff members include: teaching resources (functioning smart boards and classroom technologies), latest textbooks, office equipment and furniture, funding for research and conference purposes, access to reputable online journal portals, and updated library textbooks.

Similarly, staff members reported increasing workloads, with student numbers increasing annually while the number of staff members does not keep pace. In

addition, academic staff reported increasingly administrative duties added to their teaching, research, and service duties. Academic departments are also under increasing pressure to expand the programs they offer which further taxes their ability to cope with their already overburdened workload. Increasing workloads and performance expectations are contentious issues in academia. To relief academic staff of work overload, the university's management has to invest in additional manpower such as administrative assistants, tutors, and teaching staff to relieve academics of mundane administrative tasks and large classes. Alternatively, the practice of shifting more and more administrative tasks to academics has to be reconsidered. In addition, to assist academic staff members with increasing workloads, the university's management will have re-evaluate its infrastructure to ensure that staff members have access to effective and efficient technical and administrative support.

Work role fit, job enrichment, supervisory and co-worker relations were identified as important job-specific factors through which psychological meaningfulness is enhanced. To increase work role fit and job enrichment, training on improving the quality of teaching should be made compulsory. Lecturers on all levels have to undergo training which introduces them to the theoretical discourse of teaching at university level.

Since associate professors and professors reported the highest levels of work role fit, it will be prudent that a mentorship program is implemented whereby younger colleagues are guided to publish scholarly work, to deliver better quality teaching

and to further their studies. This should not merely be done as an exercise of succession planning, but rather as part of an organisational development strategy. Although it is reported that staff members with doctoral degrees reported the highest levels of job enrichment and psychological meaningfulness, it should not be taken for granted. Staff members with doctoral degrees must receive the recognition they deserve in terms of status and compensation. Status and compensation are important internal and external motivating factors which, if lacking, can seriously threaten the job satisfaction and psychological meaningfulness of these staff members. Furthermore, reward and recognition incentives should be improved for good performance and achievement, and should be representative of the total scope of staff members' work activities. It is therefore necessary to also include the area of teaching as a criterion for promotion. Moreover, academic staff members with doctoral degrees should be allowed more time and opportunities for professional development activities.

Moreover, positive interactions between colleagues and supervisors contribute significantly to the psychological availability and psychological meaning of staff members; therefore, interventions, such as team building activities and opportunities for joint research projects among departments and faculties have to be encouraged to increase social support for and well-being of staff members. In terms of supervisor-employee relationships, supervisors and head of departments have to receive training targeting the following areas: leadership skills, conflict management, and interpersonal skills. Also, the infrastructure of the university has to support such endeavours for staff members.



On a tertiary level, extensive consultations have to take place between academics and management, to build an institutional culture of transparency and integrity, especially where decisions affecting the work of academics are concerned. Not only would this encourage participative management, it will also bridge the gap between academics and administrators, and in so doing, contribute to a positive work environment. In addition, as part of strategic planning, the Human Resources Directorate has to develop human risk management plans to address potential human resources risks (i.e. absenteeism, fraud and corruption, staff turnover, employee disengagement, safety risks, diversity problems etc.) which may arise, in order to avoid the incidence of continuous crisis management.

The University of Namibia hosts a highly specialized group of employees with expertise in numerous fields. In fact, this talent pool of individuals sustains the core mandate of the university. In order to prevent or reduce turnover intentions at the University of Namibia, rigorous talent management strategies has to be implemented that focus on the retention and development of staff members.

Finally, the academic profession has an assumed air of status and prestige; however, continuous negative publicity about the university significantly detracts from the pride and prestige from being an academic. The university's management has to embark on an aggressive campaign to sway the negative public perceptions by redefining and communicating the core values of the University of Namibia, as well as recognizing and rewarding the display of these values by staff members.

#### **8.4.2 Recommendations for future research**

Future studies should include other Higher Education institutions in Namibia to establish whether there are any differences in the experienced levels of work engagement and psychological well-being for staff members of these institutions. Results of such studies can be used as a framework for developing engagement and work-related psychological well-being in academia across institutions of Higher Education in Namibia.

In addition, since work role fit, job enrichment, supervisory and co-worker relations are important drivers of psychological meaningfulness, further research is necessary to investigate these job-specific factors.

Future research is also necessary to investigate the impact that the engagement and psychological well-being of staff members of the University of Namibia have on the performance of students. Furrer and Skinner (2003) posited that the academic motivation and performance of students are influenced by the quality of relationships with their educators.

Finally, future studies should also examine the impact of engagement and psychological well-being on performance output as a tangible way to convince management of the value of fostering and fusing psychological principals with business principals in managing organisations.

## **8.5 CHAPTER SUMMARY**

This chapter discussed the conclusions of this study in relation to the initial research objectives and hypotheses. Furthermore, important limitations, such as the research design, limited sample size and sampling procedure, as well as the psychometric properties of the scales used in this study, were highlighted. Finally, recommendations for future practical implementation were made, based on the conclusions of this study.

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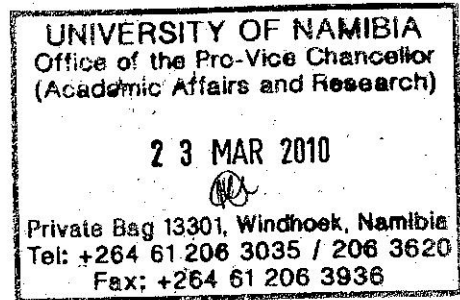
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To : Prof. O.D. Mwandemele  
Pro-Vice Chancellor: Academic Affairs and Research  
Mr. A. Fledersbacher  
The Registrar

CC : Prof. K. Mchombu  
Dean: Faculty of Humanities and Social Sciences

From : Ms. L.A. Marques  
Department of Human Sciences

Date : 22 March 2010



RE : **Permission to collect data at the University of Namibia for Ph.D studies**

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I am a staff member in the Human Sciences Department in the Faculty of Humanities and Social Sciences and am currently enrolled as a Ph.D (Industrial Psychology) student at the University of Namibia. My proposal was approved by the Post-Graduate Studies Committee, Resolution: PGSC/09/721/09 during the course of 2009. The research aims to evaluate the level of wellbeing of staff members of this institution. I would hereby like to request permission to do my data collection at the Unam campus. This would enable me to complete my research project but at the same time, the University would be able to make use of the data collected to consider implementing possible strategies to improve the level of well being of staff members.

Please find attached a summary of my proposal, if you have any further questions or queries please contact me at 081 2888 655 or (061) 206 3056.

*Approved but should first  
liaise with Director of HR if  
there are any legal implications*

*cc: Director HR*

*[Signature]*  
22/03/10

Thank you in advance.

Yours in Education

.....

Ms. L.A. Marques

Department: Human Sciences

Section: Psychology

Tel nr. (061) 206 3056



University of Namibia

Ms. L.A. Marques

Tel: (061) 206 3056

Cell: 081 288 8655

Dear Participant,

Thank you for your time in completing this questionnaire. By doing so, you participate in much needed research into the levels of work engagement that staff members of the University of Namibia experience in their daily working life.

Staff members of the University are delivering an essential service to the nation by delivering quality education and building the capacity of the Namibian workforce. They are constantly exposed to occupational stress and work demands.

The purpose of this research is to determine the levels of work engagement, psychological safety and meaning, and the general health experienced by staff members of the University of Namibia. Furthermore the kind of resources and job demands they experience are also investigated.

Your participation is **voluntary** and **anonymous**. All information received will remain confidential. Your contribution to this study is extremely important and its success depends on the number of participants who complete these questionnaires. Please assist me in submitting a truthful reflection of your thoughts surrounding aspects of your work and work environment.

If you have any enquiries about this questionnaire, please contact me at [lmарques@unam.na](mailto:lmарques@unam.na), or 081 2888 655 / (061) 206 3056, Office Y065 (Y-Block: Ground Floor).

Please complete the questionnaire no later than **15 September 2011**.

Kind regards,

Ms. L. A. Marques

Psychology Section: Human Sciences Department

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## SECTION A: BIOGRAPHICAL INFORMATION

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PLEASE NOTE THAT THE QUESTIONNAIRE IS PRINTED ON THE REVERSE OF EACH PAGE. PLEASE COMPLETE BOTH SIDES OF EACH PAGE AND CHECK THAT ALL THE QUESTIONS HAVE BEEN COMPLETED.

Please answer the following questions by marking the appropriate boxes:

### 1. Gender

Male   
Female

### 2. Age

Please specify your age on the line below.

\_\_\_\_\_

### 3. Marital status

Single   
Divorced   
Widowed   
Married   
Living with a partner

### 4. Highest Qualification

Gr. 12 certificate   
Diploma   
Postgrad diploma   
Degree   
Masters degree   
Doctoral degree

### 5. Job tenure

Please specify the number of years in your current position.

\_\_\_\_\_

### 6. Job position

#### Academic

Tutor/Assistant Lecturer   
Lecturer   
Senior Lecturer   
Associate Professor   
Professor

### 7. Years at the organisation

Please specify the number of years at the organisation.

\_\_\_\_\_

#### Administrative

Technical staff   
Officer   
Senior Officer   
Assistant Director   
Director/Librarian

### 8. Type of contract

Contract   
Permanent

## SECTION B: EXPERIENCES AT WORK

*Please read the following statements and indicate how each statement relates to the work you usually do. It is expected of you to indicate your agreement with each statement by choosing the most suitable response on the 7-point scale. Please circle the number which best represents your opinion on a scale where 1 indicates that you strongly disagree with the statement and 7 indicates that you strongly agree with the statement. You can choose any number on the scale, depending on how much you agree or disagree with the statement.*

		Strongly disagree						Strongly agree
1.	My job 'fits' how I see myself.	1	2	3	4	5	6	7
2.	The work I do on this job helps me satisfy who I am.	1	2	3	4	5	6	7
3.	My job 'fits' how I see myself in the future.	1	2	3	4	5	6	7
4.	My supervisor helps me solve work-related problems.	1	2	3	4	5	6	7
5.	My supervisor encourages me to develop new skills.	1	2	3	4	5	6	7
6.	My supervisor keeps informed about how employees think and feel about things.	1	2	3	4	5	6	7
7.	My supervisor encourages employees to participate in important decisions.	1	2	3	4	5	6	7
8.	My supervisor praises good work.	1	2	3	4	5	6	7
9.	My supervisor encourages employees to speak up when they disagree with a decision.	1	2	3	4	5	6	7
10.	Employees are treated fairly by my supervisor.	1	2	3	4	5	6	7
11.	My supervisor is committed to protecting my interests.	1	2	3	4	5	6	7
12.	My supervisor does what he/she says he/she will do.	1	2	3	4	5	6	7
13.	I trust my supervisor.	1	2	3	4	5	6	7
14.	My interactions with my co-workers are rewarding.	1	2	3	4	5	6	7
15.	My co-workers value my input.	1	2	3	4	5	6	7
16.	My co-workers listen to what I have to say.	1	2	3	4	5	6	7
17.	My co-workers really know who I am.	1	2	3	4	5	6	7
18.	I believe that my co-workers appreciate who I am.	1	2	3	4	5	6	7
19.	I sense a real connection with my co-workers.	1	2	3	4	5	6	7
20.	My co-workers and I have mutual respect for one another.	1	2	3	4	5	6	7
21.	I feel a real 'kinship' with my co-workers.	1	2	3	4	5	6	7
22.	I feel worthwhile when I am around my co-workers.	1	2	3	4	5	6	7
23.	I trust my co-workers.	1	2	3	4	5	6	7
24.	I find it difficult to focus my attention while at work.	1	2	3	4	5	6	7

		Strongly disagree						Strongly agree
25.	I can't think straight by the end of my workday.	1	2	3	4	5	6	7
26.	I have problems remembering all the things I need to do at work.	1	2	3	4	5	6	7
27.	I feel emotionally healthy at the end of the workday.	1	2	3	4	5	6	7
28.	I feel like I'm at the end of my rope emotionally.	1	2	3	4	5	6	7
29.	I feel emotionally drained from my work.	1	2	3	4	5	6	7
30.	I feel tired before my workday is over.	1	2	3	4	5	6	7
31.	I feel physically used up at the end of the workday.	1	2	3	4	5	6	7
32.	I get all the information I need to do my work and plan my schedule.	1	2	3	4	5	6	7
33.	I do not have access to useful training on the job.	1	2	3	4	5	6	7
34.	Excellent work pays off in this organization.	1	2	3	4	5	6	7
35.	My organization strongly considers my goals and values.	1	2	3	4	5	6	7
36.	My organization shows little concern for me.	1	2	3	4	5	6	7
37.	My organization cares about my opinions.	1	2	3	4	5	6	7
38.	My organization is willing to help me if I need a special favour.	1	2	3	4	5	6	7
39.	Help is available from my organization when I have a problem.	1	2	3	4	5	6	7
40.	My organization would forgive a honest mistake on my part.	1	2	3	4	5	6	7
41.	If given the opportunity, my organization would take advantage of me.	1	2	3	4	5	6	7

**Please choose the most suitable response on the following scale. Please circle the number which best represents your opinion on a scale where 1 indicates that you agree very little with the question and 7 indicates that you agree with the question very much. You can choose any number on the scale, depending on your opinion with regard to the questions.**

		Very little						Very much
42.	To what extent does your job permit you to decide on your own?	1	2	3	4	5	6	7
43.	To what extent does your job involve doing a "whole" and identifiable piece of work?	1	2	3	4	5	6	7
44.	To what extent does the job require you to do many different things/tasks?	1	2	3	4	5	6	7
45.	In general, how significant or important is your job?	1	2	3	4	5	6	7
46.	To what extent do managers or co-workers let you know how well you are doing on your job?	1	2	3	4	5	6	7
47.	To what extent does doing the job itself provide you with information about your work performance?	1	2	3	4	5	6	7

	<i>Indicate the extent to which you receive the following outcomes for performing your job well.</i>	Very little						Very much
48.	A pay raise.	1	2	3	4	5	6	7
49.	Job security.	1	2	3	4	5	6	7
50.	A promotion.	1	2	3	4	5	6	7
51.	More freedom and opportunities.	1	2	3	4	5	6	7
52.	Respect from people you work with.	1	2	3	4	5	6	7
53.	Praise from your supervisor.	1	2	3	4	5	6	7
54.	Training and development opportunities.	1	2	3	4	5	6	7
55.	More challenging work assignments.	1	2	3	4	5	6	7
56.	Public recognition (e.g. employee of the month).	1	2	3	4	5	6	7
57.	A reward or token of appreciation (e.g. lunch)	1	2	3	4	5	6	7

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### SECTION C: PSYCHOLOGICAL DIMENSIONS

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*Please read the following statements and indicate how each statement relates to the psychological dimensions of your work environment. It is expected of you to indicate your agreement with each statement by choosing the most suitable response on the 7 - point scale. Please circle the number which best represents your opinion on a scale where 1 indicates that you strongly disagree with the statement and 7 indicates that you strongly agree with the statement. You can choose any number on the scale, depending on how much you agree or disagree with the statement.*

		Strongly disagree						Strongly agree
1.	I worry about how others perceive me at work.	1	2	3	4	5	6	7
2.	I am afraid my failings will be noticed by others.	1	2	3	4	5	6	7
3.	I worry about being judged by others at work.	1	2	3	4	5	6	7

		Strongly disagree						Strongly agree
4.	The work I do is meaningful to me.	1	2	3	4	5	6	7
5.	The work I do is very important to me.	1	2	3	4	5	6	7
6.	My job activities are personally meaningful to me.	1	2	3	4	5	6	7
7.	The work that I do on this job is worth while.	1	2	3	4	5	6	7
8.	My job activities are significant to me.	1	2	3	4	5	6	7
9.	I feel that the work I do on my job is valuable.	1	2	3	4	5	6	7
10.	I am confident in my ability to handle competing demands at work.	1	2	3	4	5	6	7
11.	I am confident in my ability to deal with problems that come up at work.	1	2	3	4	5	6	7
12.	I am confident in my ability to think clearly at work.	1	2	3	4	5	6	7
13.	I am confident in my ability to display the appropriate emotions at work.	1	2	3	4	5	6	7
14.	I am confident that I can handle the physical demands at work.	1	2	3	4	5	6	7
15.	I am confident about my ability to do my job.	1	2	3	4	5	6	7
16.	I have mastered the skills necessary for my job.	1	2	3	4	5	6	7
17.	I am self-assured about my capabilities to perform my work activities	1	2	3	4	5	6	7
18.	If you make a mistake at work, it is often held against you.	1	2	3	4	5	6	7
19.	Individuals in my section are able to bring up problems and tough issues.	1	2	3	4	5	6	7
20.	People in my section sometimes reject others for being different.	1	2	3	4	5	6	7
21.	It is safe to take a risk in my section.	1	2	3	4	5	6	7
22.	It is difficult to ask colleagues at work for help.	1	2	3	4	5	6	7
23.	No one in my section would deliberately act in a way that undermines my efforts.	1	2	3	4	5	6	7
24.	Working with my colleagues in my section, my unique skills and talents are valued and utilized.	1	2	3	4	5	6	7

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## SECTION D: WORK OUTCOMES

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*Please read the following statements and indicate how each statement relates to various work outcomes. It is expected of you to indicate your agreement with each statement by choosing the most suitable response on the 7 - point scale.*

**Scale:**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>Never / Almost never</b>	<b>Very infrequently</b>	<b>Quite infrequently</b>	<b>Sometimes</b>	<b>Quite frequently</b>	<b>Very frequently</b>	<b>Almost always / Always</b>

		Never/Almost never	Very infrequently	Quite infrequently	Sometimes	Quite frequently	Very frequently	Almost always / Always
1.	I get so into my job that I lose track of time.	1	2	3	4	5	6	7
2.	I am rarely distracted when performing my job.	1	2	3	4	5	6	7
3.	I am very absorbed in my work.	1	2	3	4	5	6	7
4.	When I'm working, I often lose track of time.	1	2	3	4	5	6	7
5.	I feel I am able to contribute new ideas.	1	2	3	4	5	6	7
6.	I am passionate about my job.	1	2	3	4	5	6	7
7.	I feel energized when I work.	1	2	3	4	5	6	7
8.	I am enthusiastic about my job.	1	2	3	4	5	6	7
9.	I get excited when I perform well on my job.	1	2	3	4	5	6	7
10.	I feel a lot of energy when I am performing my job.	1	2	3	4	5	6	7
11.	I am full of energy in my work.	1	2	3	4	5	6	7
12.	I feel alive and vital at work.	1	2	3	4	5	6	7
13.	I feel physically strong at work.	1	2	3	4	5	6	7

**Please choose the most suitable response on the following scale. Please circle the number which best represents your opinion on a scale where 1 indicates that you strongly disagree with the statement and 7 indicates that you strongly agree with the statement. You can choose any number on the scale, depending on how much you agree or disagree with the statement.**

		Strongly disagree						Strongly agree
14.	Working at my organization has a great deal of personal meaning to me.	1	2	3	4	5	6	7
15.	I really feel that problems faced by my organization are also my problems.	1	2	3	4	5	6	7
16.	I feel personally attached to my work organization.	1	2	3	4	5	6	7
17.	I am proud to tell others I work at my organization.	1	2	3	4	5	6	7
18.	I feel a strong sense of belonging to my organization.	1	2	3	4	5	6	7
19.	I frequently think of quitting my job.	1	2	3	4	5	6	7
20.	I am planning to search for a new job during the next 12 months.	1	2	3	4	5	6	7
21.	If I have my own way, I will be working for this organization one year from now.	1	2	3	4	5	6	7

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## SECTION E: GENERAL HEALTH

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### General Health Questionnaire

**I would like to know if you have had any medical complaints, and how your health has been in general, over the past few weeks. Please answer ALL the questions on the following pages simply by marking the answer that mostly applies to you.**

HAVE YOU RECENTLY.....					
<b>A</b>	<b>Been feeling perfectly well and in good health?</b>	Better than usual	Same	Worse	Much worse
<b>1</b>					
<b>2.</b>	<b>Been feeling in need of a good tonic?</b>	Not at all	No more than usual	Rather more than usual	Much more than usual



3.	<b>Been feeling run down and out of sorts?</b>	Not at all	No more than usual	Rather more than usual	Much more than usual
4.	<b>Felt that you are ill?</b>	Not at all	No more than usual	Rather more than usual	Much more than usual
5.	<b>Been getting any pains in your head?</b>	Not at all	No more than usual	Rather more than usual	Much more than usual
6.	<b>Been getting a feeling of tightness or pressure in your head?</b>	Not at all	No more than usual	Rather more than usual	Much more than usual
7.	<b>Been having hot or cold spells?</b>	Not at all	No more than usual	Rather more than usual	Much more than usual
<b>B</b>					
1	<b>Lost much sleep over worry?</b>	Not at all	No more than usual	Rather more than usual	Much more than usual
2.	<b>Had difficulty in staying asleep once you are off?</b>	Not at all	No more than usual	Rather more than usual	Much more than usual
3.	<b>Felt constantly under strain?</b>	Not at all	No more than usual	Rather more than usual	Much more than usual
4.	<b>Been getting edgy and bad-tempered?</b>	Not at all	No more than usual	Rather more than usual	Much more than usual
5.	<b>Been getting scared or panicky for no good reason?</b>	Not at all	No more than usual	Rather more than usual	Much more than usual
6.	<b>Found everything getting on top of you?</b>	Not at all	No more than usual	Rather more than usual	Much more than usual
7.	<b>Been feeling nervous and strung-up all the time?</b>	Not at all	No more than usual	Rather more than usual	Much more than usual
<b>C</b>					
1.	<b>Been managing to keep yourself busy and occupied?</b>	More than usual	Same	Rather less	Much less
2.	<b>Been taking longer over the things</b>	Quicker	Same	Longer	Much longer

	<b>you do?</b>	than usual			
3.	<b>Felt on the whole you were doing things well?</b>	Better than usual	Same	Less well	Much less well
4.	<b>Been satisfied with the way you've carried out your task?</b>	More satisfied	Same as usual	Less satisfied	Much less
5.	<b>Felt that you are playing a useful part in things</b>	More than usual	Same	Less useful	Much less
6.	<b>Felt capable of making decisions about things?</b>	More than usual	Same	Less so	Much less
7.	<b>Been able to enjoy your normal day-to-day activities?</b>	More than usual	Same	Less so	Much less
D 1.	<b>Been thinking of yourself as a worthless person?</b>	Not at all	No more than usual	Rather more than usual	Much more than usual
2.	<b>Felt that life is entirely hopeless?</b>	Not at all	No more than usual	Rather more than usual	Much more than usual
3.	<b>Felt that life isn't worth living?</b>	Not at all	No more than usual	Rather more than usual	Much more than usual
4.	<b>Thought of the possibility that you might do away with yourself?</b>	Not at all	No more than usual	Rather more than usual	Much more than usual
5.	<b>Found at times you couldn't do anything because your nerves were too bad?</b>	Not at all	No more than usual	Rather more than usual	Much more than usual
6.	<b>Found yourself wishing you were dead and away from it all?</b>	Not at all	No more than usual	Rather more than usual	Much more than usual
7.	<b>Found that the idea of taking your own life kept coming into your mind?</b>	Not at all	No more than usual	Rather more than usual	Much more than usual

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**SECTION F: PERSONAL COMMENTS**

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*Please answer the following two questions.*

1. What are the five most important helping factors (resources) in your job?

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2. What are the five most restraining forces (challenges/demands) in your job?

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Thank you for your participation!