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205522068

OCCUPATIONAL STRESS AND WORK
ENGAGEMENT AMONG SPECIAL NEEDS
EDUCATORS IN THE UMLAZI DISTRICT OF
KWAZULU-NATAL

INDUSTRIAL PSYCHOLOGY

MASTERS RESEARCH REPORT

A dissertation submitted to the Faculty of Humanities, Development and Social Science at the University of KwaZulu-Natal (Howard College), Durban, in partial fulfilment of the requirements for the Degree: Master of Social Science (Industrial Psychology).

Durban, 2010

DECLARATION

Submitted in partial fulfilment of the requirements for the degree of Master of Social Science, in the Post-graduate Programme in Industrial Psychology, University of KwaZulu-Natal, South Africa.

I declare that this dissertation is my own unaided work. All citations, references and borrowed ideas have been duly acknowledged. I confirm that an external editor was not used. It is being submitted for the degree of Master of Social Science: Industrial Psychology in the Faculty of Humanities, Development and Social Science, University of KwaZulu-Natal, South Africa.

None of the present work has been submitted previously for any degree or examination in any other University.

Annelieze C. Williams

Date

Acknowledgements

I would like to express my gratitude and appreciation to the following people, each of whom played a significant role in my life throughout this challenging year:

- My supervisor, Dr Thandi Mogojo, whose guidance, expertise and overall valuable input I could not have done without.
- The Director of the Department of Education (Umlazi District) for granting permission to conduct the research study.
- The principals, deputy principals and educators, whose time and co-operation lie at the heart of this research report.
- My parents, for providing unconditional love, support and encouragement.
- My dearest friends, Chetan and Yuveshen, who ensured I maintained some balance in my life.
- Mr Ray Ramdass and Ms Indirani Naidoo for their statistical expertise.
- The Industrial Psychology Masters lecturers and class.

Abstract

The present research study attempted to determine if special needs educators, who reported being engaged in their work, were more likely to appraise perceived stressful work situations as a welcomed challenge as opposed to an unwelcomed threat. This study was undertaken in order to build on the minimal body of existing empirical research in three areas: (a) the occupational stressors experienced by special needs educators, (b) work engagement among special needs educators, and (c) the relationship between work engagement and the appraisal of perceived occupational stress. It achieves these ends by determining: (a) which occupational stressors reported by special needs educators were perceived as being the most stressful, (b) if special needs educators were engaged in their work and the extent thereof, and (c) the impact of work engagement on the perception of occupational stress by special needs educators.

A quantitative, non-experimental, cross-sectional, ex post facto research design was employed for the collection and analysis of data. Data was gathered from seven special schools in the Umlazi District of KwaZulu-Natal. These special schools provide high levels of support to learners with severe intellectual (learning) disabilities. A sample of $N = 86$ voluntary participants was obtained, comprising $N = 12$ males and $N = 74$ females. Data was generated via self-report survey-type questionnaires, which were divided into three parts: (1) a section requesting biographical information, (2) the Occupational Stress scale – a survey instrument intended to generate data relating to the demands and resources perceived by participants, and (3) the Work Engagement scale – a survey instrument intended to generate data relating to the participants perceived levels of engagement at work.

All data were analysed using SPSS version 15.0 for Windows (SPSS Inc., Chicago, Illinois, USA). The results revealed that inadequate pay and benefits was a major source of perceived occupational stress, and that special needs educators were highly engaged in their work. Support for the hypothesis of an inverse relationship between work engagement and perceived occupational stress was attained. In addition, analyses of biographical variables in relation to perceived occupational stress provided support for the Transaction Model of Stress.

Stress management interventions for special needs educators of severe intellectually (learning) disabled learners were recommended, the strengths and limitations of the present study noted and avenues for future research suggested.

Note: The opinions and conclusions expressed herein are solely that of the researcher.

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Chapter One: Introduction

1.1. Occupational Stress in Mainstream and Special Needs Education

Occupational stress among mainstream educators at primary, secondary and higher education levels is a topic that has received much attention (e.g. Jackson and Rothmann, 2006; McCarthy, Lambert, O'Donnell and Melendres, 2009). Studies investigating occupational stress among special needs educators, however, are few and far between (e.g. Johnson, Gold and Vickers, 1982; Male and May, 1997). The present study endeavours to build on this minimal body of empirical research.

1.2. Types of Occupational Stress

In investigating occupational stress, it is important to take cognisance of the different types and consequences thereof:

1.2.1. Negative Occupational Stress: is abnormal pressure that is harmful and damaging to an individual's health and well-being. It represents an imbalance between what needs to be achieved in the workplace and the employee's ability to meet those demands (Holmes, 2005; Sarafino, 2006).

1.2.2. Positive Occupational Stress: is beneficial, constructive and motivational. It represents a balance between what an employee is expected and able to achieve in the workplace,

even though demands may be challenging (Holmes, 2005). According to Sarafino (2006), employees who feel positive about demanding situations are able to enjoy the challenges they present due to better morale and confidence. Being less overwhelmed, they are more capable of drawing on available resources to meet the demands. In this manner, positive stress protects the employee against the ill-effects commonly associated with negative stress.

Within the context of the present study, negative stress undermines the quality of a special needs educator's work performance. This in turn reduces his/her ability to meet the daily needs of learners, erodes motivation and promotes professional dissatisfaction. The result is a sense of alienation from the academic institution, which manifests as absenteeism and turnover (Brownell, 1997; Chrisholm et al. 2005; Male and May, 1997).

1.3. Antecedents of Occupational Stress in Mainstream and Special Needs Education

A review of the sources of stress reported in literature and previous research (see Table 1 below) reveals that the occupational stressors experienced by mainstream and special needs educators are both similar as well as different (Bubb and Earley, 2005; Brownell, 1997; Devonport, Biscomb and Lane, 2008; Fimian, Pierson and McHardy, 1986; Fisher, Katz, Miller and Thatcher, 2003; Holmes, 2005; Male and May, 1997; Olivier and Williams, 2006; Steyn and Kamper, 2006). While the similarities are due to the fact that some occupational stressors are inherent within the field of education, the differences can be attributed to the nature of special needs education.

Table 1: Occupational Stressors reported by Mainstream and Special Needs Educators

| STRESSOR | FACTORS |
|--|---|
| Professional Demands | <ul style="list-style-type: none"> ▪ Work (over) load ▪ Administration ▪ Time constraints ▪ Responsibility for learners with significant learning needs |
| Interpersonal Relationships | <ul style="list-style-type: none"> ▪ Challenging learner behaviour (indiscipline) ▪ Pressure from parents ▪ Quality of relationships with colleagues |
| Role-based Stressors | <ul style="list-style-type: none"> ▪ Lack of support from key stakeholders (i.e. principal, parents, Department of Education and the community) ▪ Lack of recognition and/or appreciation ▪ Managing support staff ▪ Communicating with learners with differing levels of potential/ability |
| Career Development | <ul style="list-style-type: none"> ▪ Job (in)security ▪ Inadequate training ▪ Lack of promotion opportunities and/or career prospects |
| Factors relating to the Academic Institution | <ul style="list-style-type: none"> ▪ Inadequate salary and poor financial rewards ▪ Shortage of resources and funding ▪ Lack of control and influence ▪ Poor working conditions and/or environment ▪ Structural changes |
| Home-work Interface | <ul style="list-style-type: none"> ▪ An erosion of the boundaries between home and work due to taking work home in the form of marking, preparing for the day ahead and mentally replaying various scenes of the day |

1.4. The Nature of Special Needs Education

Learners with severe intellectual (learning) disabilities experience barriers to learning due to below average levels of intellectual functioning and development in comparison to non-disabled learners of the same chronological age (Olivier and Williams, 2006). Given their diminished conceptual and reasoning abilities, these learners are more dependent upon their educators, comprehend less academic material, are often inattentive and impatient with their learning

assignments, and require intense supplementary instruction (Wilson, Cone, Bradley and Reese, 1986).

Due to the demonstrated discrepancies between ability and achievement, learners with learning deficits cannot sufficiently benefit from, or develop and progress by means of mainstream education. Rather, they require specialised education and high levels of support. In order to overcome academic deficits and facilitate learning, the curriculum within special needs schools is adapted and highly structured in order to meet the unique barriers to learning and development demonstrated by each individual learner (Olivier and Williams, 2006; Wilson et al. 1986).

The professional role of special needs educator presents a paradox. Empathic and sympathetic educators, who have an inherent desire to help, form strong relationships with learners and become committed to special needs education. This attachment to learners and dedication to the professional role puts special needs educators in a unique position of being vulnerable to heightened levels of occupational stress (Brownell, 1997).

As evident from the discussion thus far, special needs education is a field riddled with demands coupled with inadequate resources which, in turn, can significantly affect an educator's psychological experience of his/her work. According to Bubb and Earley (2004, p. 10) "unless the well-being of individual (educators) and the profession as a whole is improved, the standards of education and the educational experience of (learners) will suffer". The identification of perceived stressors may assist in promoting the well-being of special needs educators via the development and/or adjustment of stress management interventions, which address their unique

circumstances.

1.5. Occupational Stress and Work Engagement

The focus of past research has been on the negative outcomes or experiences of stress (i.e. burnout e.g. Male and May, 1997). The present study endeavours to provide a focus on the positive outcomes or experiences of identified stressors (i.e. work engagement).

1.6. Why is Work Engagement Important?

Work engagement is significant for the good health of an employee. It is related to positive work affect, which assists in the derivation of positive benefits from demanding or stressful work. It is also related to positive organisational outcomes, such as job satisfaction and low turnover intention (Barkhuizen and Rothmann, 2006; Rothmann and Jordaan, 2006).

1.7. Work Engagement in Mainstream and Special Needs Education

While work engagement among mainstream and educators employed within higher academic institutions has been investigated, these studies have focused on elucidating the predictive relationship between job demands and resources, and burnout and work engagement respectively (e.g. Barkhuizen and Rothmann, 2006; Rothmann and Jordaan, 2006). The present study adopts a different approach, by seeking to investigate, firstly, if special needs educators are engaged in their work – as determined by the presence of three positive psychological states i.e. vigour,

dedication and absorption; and secondly, if being engaged in one's work influences the perception of stress. It is hypothesised that work engagement is negatively related to the (negative) experience of stress. Thus, special needs educators who are engaged in their work will be more likely to appraise their work situations as a challenge, and their work performance and well-being is less likely to suffer as a result.

1.8. Aim and Objectives of the Present Study

The aim of the present study is to investigate the impact of work engagement on special needs educators' appraisal of perceived occupational stress within special schools providing high levels of support for severe intellectually (learning) disabled learners. In light of the scarcity of existing empirical enquiry into occupational stress and work engagement within the field of special needs education, the following objectives were also undertaken: (1) to identify the occupational stressors perceived by special needs educators, and (2) to determine if special needs educators are engaged in their work and the extent thereof.

1.9. Research Problems: Key Questions to be Asked

Following from the above, the research problems are as follows:

- 1.9.1. Which factors inherent in the professional role are perceived as being most stressful by special needs educators of severe intellectually (learning) disabled learners?

- 1.9.2. Are special needs educators of severe intellectually (learning) disabled learners engaged in their work or not?
- 1.9.3. Does work engagement impact the appraisal of perceived stress among special needs educators of severe intellectually (learning) disabled learners or not?

Chapter Two: Literature Review

2.1. Introduction

According to McLean (1979), the meaning or value of work represents two sides of one coin. While the work setting and professional role can be regarded as a source of stressful demands or pressures, they can also prove to be a fruitful resource. Based on this statement, it will be negligent to presume that all individuals in the employ of a given occupation will experience the same amount of stress; or that stressful work will result in negative outcomes for employee well-being, and in turn, organisational functioning.

Within the context of the present study, the very nature of the professional role affects special needs educators' experience of their work. This is due to their close interaction with learners who demonstrate severe intellectual (learning) disabilities and require high levels of support (Male and May, 1997). On the one hand, such contact can be physically and emotionally exhausting (Johnson et al. 2005), over and above the common occupational stressors experienced by mainstream educators. On the other hand, being a part of a profession that can be viewed as providing a valuable service (Basikin, 2007), may impact special needs educators' perception of occupational stress, to the extent that identified stressors are regarded as resulting in positive outcomes or experiences.

2.2. Defining Occupational Stress

Sarafino (2006), states that occupational stress consists of a physical and a psychological component, which can be examined in three ways. These three approaches describe

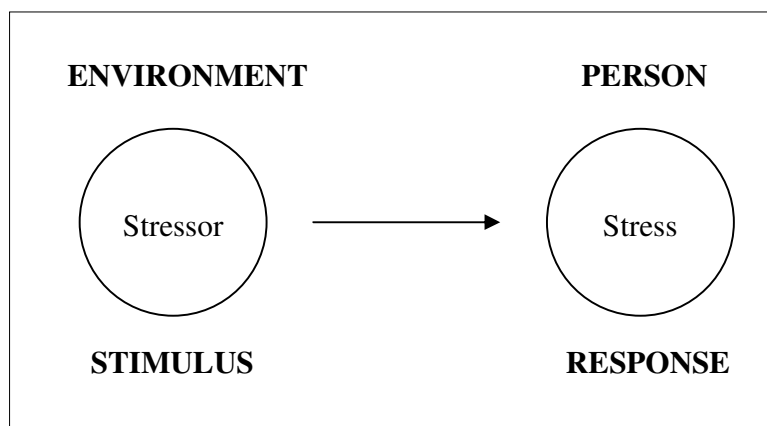
stress as: (1) a stimulus, (2) a response, and (3) a process (Quine and Pahl, 1991; Sarafino, 2006).

2.2.1. Stimulus-based Definitions of Stress

Stimulus-based definitions adopt an environmental focus, whereby stress is defined in terms of negative events or situations arising from external pressures i.e. “any characteristic of the job environment which poses a threat to the individual” (Pinneau, 1975 in Sulsky and Smith, 2005, p. 5). These physical and/or psychological demands are referred to as stressors, and are considered to encroach upon an individual, thus resulting in disruptive experiences (Lazarus and Folkman, 1984; Quine and Pahl, 1991; Sarafino, 2006; Sulsky and Smith, 2005).

Applied to the context of the present study, a stimulus-based definition of stress views special needs educators as passive recipients. In other words, their interaction with learners who demonstrate severe intellectual (learning) disabilities may result in demands which exceed their capabilities for dealing with them (Steyn and Kamper, 2006).

Figure 1: Diagrammatic Representation of Stimulus-based Stress

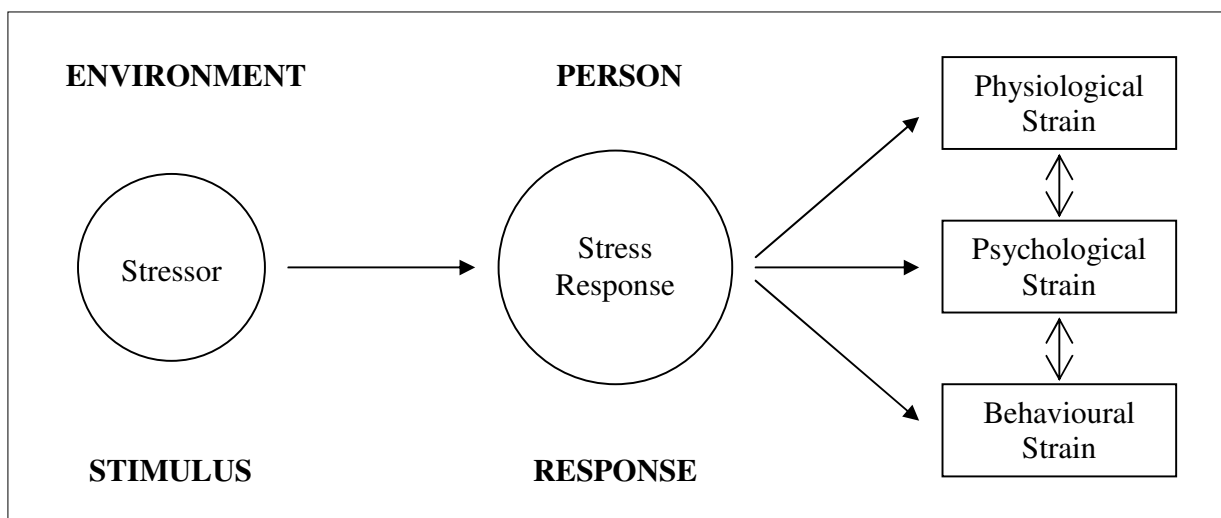


Although popular, stimulus-based definitions support the fallacy that no stress is best. In addition, as the perceptions of the individual are not taken into account, this approach to defining occupational stress fails to consider the verity that no two people respond to the same stressor in a similar fashion, and that an individual’s response to a stressor may change over time (Steyn and Kamper, 2006; Sulsky and Smith, 2005).

2.2.2. Response-based Definitions of Stress

Response-based definitions refer to a state of stress, which is the result of an individual’s reaction to a stressor. This “non-specific response to any demand” (Selye, 1956 in Sulsky and Smith, 2005, p. 5), is referred to as strain. Strain stems from environmental changes that disturb homeostasis and may be physiological, psychological or behavioural (Lazarus and Folkman, 1984; Quine and Pahl, 1991; Sarafino, 2006).

Figure 2: Diagrammatic Representation of Response-based Stress

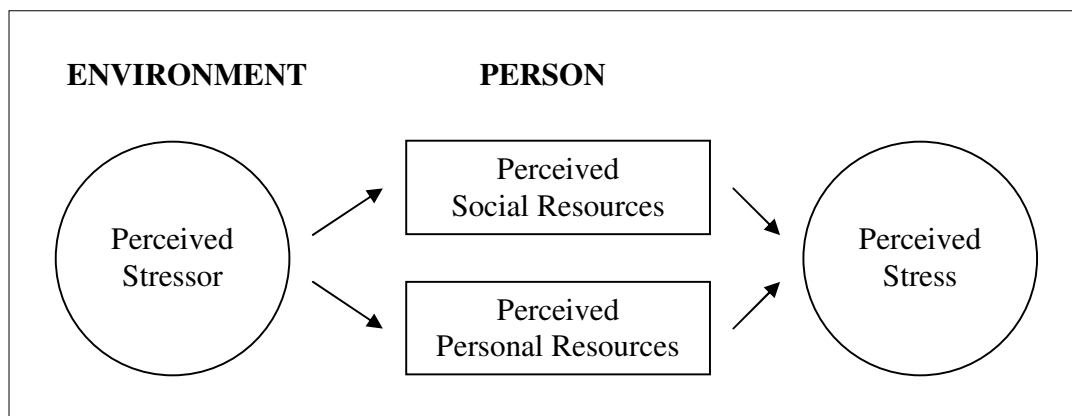


Response-based definitions, which also view special needs educators as passive recipients who are subject to pressure from resultant occupational stress (Steyn and Kamper, 2006), are limited in application as they fail to consider the source of stress. For example, the administration of certain drugs can cause the body to mimic the stress response in the absence of a stressful stimulus (Sulsky and Smith, 2005). In addition, because the manifestations of strain are not unique to stress, they can be attributed to other medical conditions (Steyn and Kamper, 2006).

2.2.3. Process-based Definitions of Stress

Process-based definitions of stress are relational in nature, in that they define stress as the result of continuous, reciprocal interactions and adjustments (i.e. transactions) between environmental stimuli (i.e. stressors) and individual responses (i.e. strain). Stress occurs when environmental demands (physical and/or psychological) are perceived as exceeding an individual's resources (social and personal i.e. physiological and psychological) within a given person-environment transaction (Lazarus and Folkman, 1984; Quine and Pahl, 1991; Sarafino, 2006; Sulsky and Smith, 2005).

Figure 3: Diagrammatic Representation of Process-based Stress



Beehr and Newman (1978) provided the following process-based definition of occupational stress: "... a condition wherein job-related factors interact with the worker to change his/her psychological or physiological condition such that the person is forced to deviate from normal functioning" (in Sulsky and Smith, 2005, p. 6).

According to Steyn and Kamper (2006), process-based definitions of stress recognise special needs educators as active participants in their experiences of stress, which is the result of their perceptions of external demands and inability to meet these demands.

2.2.4. The Present Study

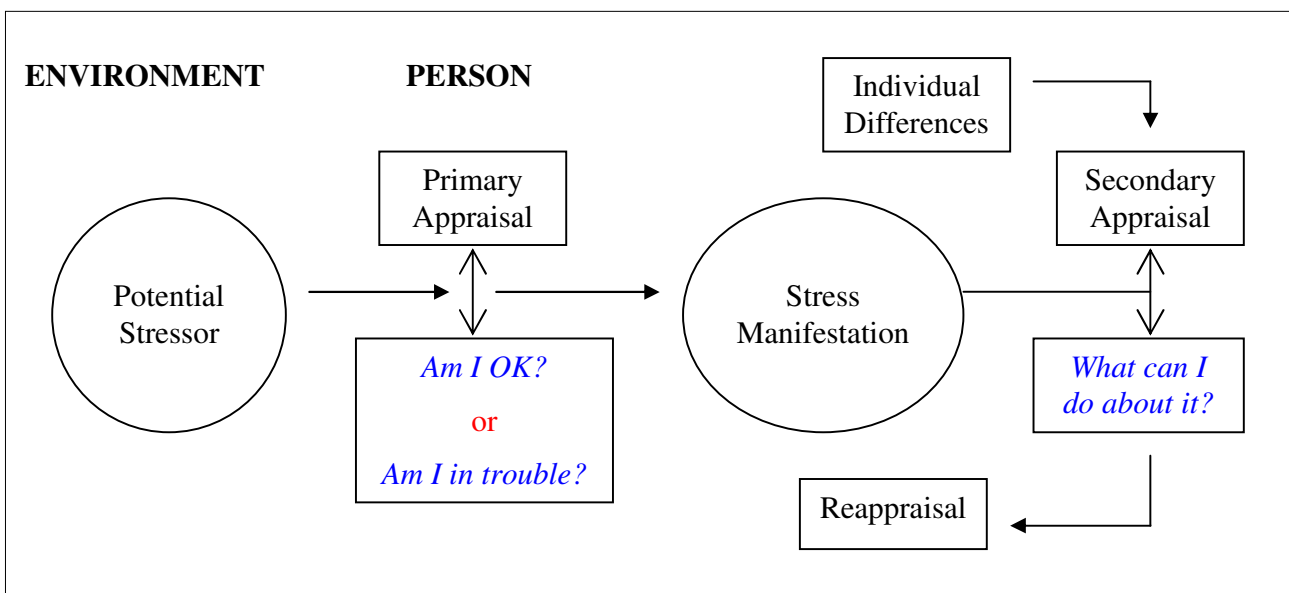
For the purposes of the present study, stress will be defined as "an excess of perceived demands on an individual's perceived ability to meet them" (Bubb and Earley, 2004, p. 69). As this is a process-based definition, the magnitude or intensity of occupational stress experienced is viewed as being dependent on the special needs educator's evaluation of demands and resources, and not the actual demands and resources themselves. This evaluation is termed 'cognitive appraisal', and is central to Lazarus and Folkman's (1984) Transactional Model of Stress.

2.3. The Transactional Model of Stress

The Transactional Model hypothesizes that when an individual is faced with a stressor, a cognitive appraisal of that stressor is undertaken in order to determine its significance for his/her physical and psychological well-being (Jackson and Rothmann, 2006). According to this model, stress is the result of three interactive processes i.e. the individual's perception of the stressor, his/her appraisal thereof, and the subsequent subjective responses (Steyn and Kamper, 2006).

The subjective experience of stress is situational, such that each individual responds differently when confronted with the same stressor (Steyn and Kamper, 2006). In addition, an individual's appraisal of demands and resources in a given situation differs from an appraisal made by the same individual under other circumstances (O'Donnell, Lambert and McCarthy, 2008).

Figure 4: Transactional Model of Stress



2.3.1. Cognitive Appraisals

Cognitive appraisal is defined as “an evaluative process that determines why and to what extent a particular transaction or series of transactions between the person and the environment is stressful” (Lazarus and Folkman, 1984, p. 19). According to Lazarus and Folkman (1984), cognitive appraisal reflects a changing relationship between the person and the environment. It involves judgement and discrimination based on past experience, which enables an individual to

categorise, interpret and predict the significance of multifaceted environmental characteristics in relation to his/her well-being.

Cognitive appraisals intervene between environmental stimuli and the stress reaction, and takes place at three levels (Brannon and Feist, 2004; Lazarus and Folkman, 1984; Sulsky and Smith, 2005):

- Primary appraisal: refers to the initial evaluation of the stimuli,
- Secondary appraisal: refers to the determination of resources to deal with the perceived stressor, and
- Reappraisal: refers to any change in the primary appraisal as a result of the assessment of coping resources or new information.

2.3.2. Primary Appraisals

The primary appraisal occurs first in time, but is not first in importance (Brannon and Feist, 2004). It refers to the individual's awareness that something of importance to him/her is at stake. This awareness is based on the individual's perception of how stressful an external event is, and whether or not it threatens his/her physical and/or psychological well-being (Ogden, 2004; Sarafino, 2006; Sulsky and Smith, 2005). Common questions an individual will ask during the primary appraisal are: "Am I in trouble or being benefited now or in the future, and in what way?" (Lazarus and Folkman, 1984, p. 31).

Primary appraisals give meaning to an event or situation, which the individual judges as being

irrelevant, benign-positive or stressful (Dewe, 1991; Lazarus and Folkman, 1984; Quine and Pahl, 1991).

2.3.2.1. Irrelevant Primary Appraisals

Environmental stimuli appraised as being irrelevant are not perceived as stressors. Because the individual will neither gain nor lose from entering into the transaction, irrelevant environmental stimuli have no implications for his/her well-being (Lazarus and Folkman, 1984; Sulsky and Smith, 2005).

2.3.2.2. Benign-positive Primary Appraisals

Events or situations are appraised as being benign-positive when the outcomes of the transaction are perceived as positive and hold the promise of enhancing well-being. This type of appraisal is characterised by positive psychological states, such as happiness and exhilaration (Lazarus and Folkman, 1984; Simmons and Nelson, 2001; Sulsky and Smith, 2005). According to Lazarus and Folkman (1984), benign-positive appraisals are also characterised by apprehension, anxiety and guilt. This is due to fear individuals may have regarding the potential loss of desired psychological states, or having to endure harm (to be discussed) at a later stage.

2.3.2.3. Stressful Primary Appraisals

Environmental stimuli are appraised as being negative or stressful when the outcome of the

transaction is believed to lead to harm/loss, threat or challenge (Lazarus and Folkman, 1984; Brannon and Feist, 2004; Quine and Pahl, 1991; Sulsky and Smith, 2005; Simmons and Nelson, 2001).

- Harm/Loss

A transaction resulting in harm/loss is one in which the individual has already incurred some physical and/or psychological damage. According to Brannon and Feist (2004), stressful appraisals of harm result in feelings of anger, disappointment and sadness.

- Threat

Lazarus and Folkman (1984) referred to threat as anticipated harm/loss. According to Sulsky and Smith (2005), an event or situation is appraised as threatening when it is perceived as exceeding an individual's capacity to deal with the demand. A stressful appraisal of threat produces feelings of worry, anxiety and fear (Brannon and Feist, 2004).

- Challenge

A challenging transaction is one the individual perceives to be very demanding, but at the same time, is confident in his/her capacity to control and/or overcome the demands (Brannon and Feist, 2004; Sulsky and Smith, 2005). Challenging stressful appraisals

present the individual with an opportunity for potential gain or growth, and is characterised by eagerness and excitement (Lazarus and Folkman, 1984).

According to Lazarus and Folkman (1984), threat and challenge are not mutually exclusive. The authors provide the example of a job promotion. On the one hand, there is the potential for the individual to gain knowledge, skills and recognition (i.e. challenge). On the other, a job promotion means an increased work-load (i.e. threat). As evident from this illustration, appraisals of threat and challenge can occur simultaneously.

In light of the aforementioned, it is important to remember that appraisals of threat and challenge remain distinguishable based on their cognitive and affective components, whereby the former is a negative response to a stressor and the latter a positive response (Lazarus and Folkman, 1984; Simmons and Nelson, 2001).

2.3.3. Secondary Appraisals

Following the initial appraisal of an event or situation, the individual ascertains his/her capacity for minimising harm or maximising gains by determining what can be done i.e. assessing his/her ability to control or manage harm, threat or challenge (Brannon and Feist, 2004; Lazarus and Folkman, 1984). Secondary appraisals involve a complex process which includes: (a) assessing the resources available to meet the demand, and (b) evaluating the pros and cons of the chosen response to the stressor (Dewe, 1991; Ogden, 2004; Lazarus and Folkman, 1984; Quine and Pahl, 1991; Sarafino, 2006; Sulsky and Smith, 2005). Salient questions asked by the individual

during the secondary appraisal include: “What options are available to me?”, “Will this alleviate my stress?”, and “What is the likelihood that I can successfully apply the necessary (response) to reduce this stress?” (Brannon and Feist, 2004, p. 109).

According to Lazarus and Folkman (1984), while primary and secondary appraisals originate at different points within a given person-environment transaction, they are interdependent, and interact to determine the magnitude of perceived stress and the strength of the stress reaction.

2.3.4. Reappraisal

Reappraisal takes place in response to information-based feedback from the primary and secondary appraisals of a given person-environment transaction. It involves the modification of earlier appraisals in a manner that serves to either increase or decrease the perceived stress and the subsequent stress response (Brannon and Feist, 2004; Sulsky and Smith 2005).

According to Lazarus and Folkman (1984), reappraisal needs to be distinguished from defensive reappraisal, which is defined as “any effort made to reinterpret the past more positively, or to deal with present harms and threats by viewing them in less damaging and/or threatening ways” (p. 38).

This is an important distinction, as it has implications for an individual’s well-being. Being self-generated, defensive reappraisal precludes a realistic evaluation of environmental demands and pressures, which are downplayed. This discrepancy between an individual’s fictitious

perceptions of reality increases his/her vulnerability to harm/loss and threat (Lazarus and Folkman, 1984).

Within the context of the present study, it is the challenging primary appraisal that is of particular interest. Like that of a benign-positive appraisal, the outcome of a stressful yet challenging appraisal is perceived as holding potential for gain or growth for the individual, as indicated by the presence of positive psychological states (Sulsky and Smith, 2005).

2.4. Studies Supporting the Transactional Model of Stress

Dewe (1991) found primary appraisal to be a significant contributor to variances in reported levels of emotional discomfort among a sample of employees working in an insurance company, who were requested to think about and describe a stressful situation at work, as well as indicate how it made them feel. These variances demonstrate that individuals interpret and give meaning to stressful encounters, and do so in a manner that differs from one another (Dewe, 1991). In the same study, tentative support was also found for secondary appraisal (Dewe, 1991).

According to Devonport et al. (2008), the significant differences in the response to stressors, as demonstrated a sample of higher education lecturers, can be attributed to the process of cognitive appraisal.

O'Donnell et al. (2008) found a 96.06% variance in elementary educators' stress responses within schools, and a 3.94% variance across schools. According to these researchers, the

educators' appraisals of their resources and demands proved to be a stronger indicator of stress than compared to actual differences in environmental demands and resources that existed between schools.

Likewise McCarthy et al. (2009) found that the variance in the experiences of stress had little to do with differences that existed between school contexts, and more to do with individual differences between elementary educators. In other words, each educator's perception of the balance between demands and resources were more predictive of burnout symptoms.

According to the Holistic Model of Well-being, the demands and resources within an organisation may lead to either negative (e.g. burnout) or positive (e.g. engagement) stress outcomes (Rothmann, Mostert and Strydom, 2006). In line with this, the present study seeks to expand on the findings of McCarthy et al. (2009) by investigating the impact of work engagement on special needs educators' perception of demands and resources within special schools providing high levels of support for severe intellectually (learning) disabled learners.

2.5. Definitions of Work Engagement

Although there is general consensus within the literature that work engagement is a "positive, work-related state of well-being or fulfilment" (Bakker, Schaufeli, Leiter and Taris, 2008, p. 188), definitions arise from different schools of thought.

2.5.1. Work Engagement as Work-Role Behaviour

Kahn (1990, p. 694) defined work engagement as “the harnessing of organisational members’ selves to their work roles (by which they) employ and express themselves physically, cognitively, emotionally and mentally during role performances”. In other words, the individual invests his/her personal energies into work-role behaviours (i.e. become physically involved, cognitively alert and emotionally connected) which, in turn, allows for the expression of self (Bakker et al. 2008; May, Gilson and Harter, 2004; Rothmann and Jordaan, 2006).

Engagement is thus viewed as the coupling of self with work-role behaviours, such that the greater the individual’s identification with his/her work-role, the better s/he will perform due to greater physical, cognitive and emotional efforts (Bakker et al. 2008).

According to Barkhuizen and Rothmann (2006), while the extent to which individuals draw on themselves to perform within their professional roles determines the degree of their performances, people utilise varying levels of themselves such that the boundaries between who they are and the roles they occupy are maintained.

2.5.2. Work Engagement as Job Involvement

Roberts and Davenport (2002, p. 21) define work engagement as “a person’s enthusiasm and involvement in his/her job”. According to these researchers, because individuals highly engaged in their work personally identify with their jobs, they work harder and are thus more productive.

Engaged individuals are motivated by the job itself, which is reported as: (a) making good use of their skills and abilities, (b) providing work that is challenging and stimulating, and (c) endowing a sense of personal accomplishment (Roberts and Davenport, 2002; Rothmann and Jordaan, 2006).

2.5.3. Work Engagement as the Anti-thesis of Burnout

Work has the potential to generate ambivalent feelings. For example, work activities which began as being important, meaningful and challenging to an individual become unpleasant, meaningless and unfulfilling. Accordingly, Maslach and Leiter (1997) conceptualise work engagement as the opposite of burnout, which is defined as “an erosion of engagement with the job” (in Rothmann, 2003, p. 18).

Work engagement is thus characterised by energy, involvement and efficacy, which are the direct opposites of the following three burnout dimensions (Bakker et al. 2008; Barkhuizen and Rothmann, 2006; Rothmann, 2003):

- Exhaustion, which refers to an individual’s inability to perform due to “feelings of strain (and) chronic fatigue resulting from overtaxing work” (Hakanen, Bakker and Schaufeli, 2006, p. 498),
- Cynicism i.e. mental distancing/depersonalisation, which refers to the individual’s unwillingness to perform (Jackson, Rothmann and van der Vijver, 2006) due to “an indirect or a distant attitude towards work in general and the people with whom one works, losing one’s interest in work and feeling (that) work has lost its meaning”

(Hakanen et al. 2006, p. 498), and

- Lack of Professional Efficacy, which refers to “reduced feelings of competence, successful achievement and accomplishment both in one’s job and the organisation” (Hakanen et al. 2006, p. 498).

Being considered the anti-thesis of burnout, work engagement is indicated by low scores on exhaustion and cynicism, and high scores on professional efficacy, as assessed by the Maslach Burnout Inventory (Bakker et al. 2008; Barkhuizen and Rothmann, 2006; Rothmann, 2003).

2.5.4. Work Engagement as Distinct from Burnout

According to Schaufeli, Salanova, González-Romà and Bakker (2002), work engagement and burnout are distinct concepts, which should be measured independently and with different instruments. As such, work engagement was defined (and operationalised) in its own right as the persistent, motivational and affective-cognitive state of fulfilment in individuals that is not focused on a particular object, event or behaviour.

Work engagement, as independent of burnout, is characterised by the following three dimensions (Bakker, 2008 et al. 2008; Barkhuizen and Rothmann, 2006; Basikin, 2007; Rothmann and Jordaan, 2006; Rothmann, 2003):

- Vigour: represents a positive affective response to one’s work that is made manifest by high levels of energy and mental resilience, a willingness to invest one’s effort and persistence in the face of demanding work,

- Dedication: refers to being strongly involved in and experiencing a sense of challenge, pride and significance from one's work, and
- Absorption: represents being completely immersed in one's work to the extent that time goes by.

2.5.5. The Present Study

As the present study seeks to investigate the level of work engagement among special needs educators and not burnout, the two concepts will be viewed as distinct from one another. Work engagement is defined as the “energetic state in which the employee is dedicated to excellent performance at work and is confident of his/her effectiveness” (Rothmann, 2003, p. 17).

2.6. Differentiating Work Engagement from Parallel Constructs

Work engagement is a concept in its infancy within work commitment literature. It was birthed in response to the call for researchers to adopt a focus on the positive aspects of organisational psychology (Bakker et al. 2008) i.e. human physical and psychological strengths in the face of adverse circumstances (Barkhuizen and Rothmann, 2006). According to Hallberg and Schaufeli (2006), for new concepts to be considered a valid contribution to given fields of research, they need to be discriminated against other, already existing adjacent constructs. Within the context of the present study, distinctions need to be drawn between work engagement and those constructs to which it is closely related i.e. job flow, job involvement and organisational commitment.

2.6.1. Job Flow

Rothmann and Jordaan (2006, p. 88) define job flow as an individual's "cognitive involvement with an activity". According to Hallberg and Schaufeli (2006), job flow refers to a peak experience, whereby individuals get carried away when performing a task, to the extent that they experience a sense of harmony. May et al. (2004) assert that a state of flow is characterised by focused attention and effortless concentration, complete control when performing the job, loss of self-consciousness and intrinsic enjoyment in completing a task, which present the individual with continuous challenges.

Work engagement differs from job flow, firstly, as the former accommodates for the fact that "individuals vary in the degree to which they immerse themselves in their roles" (May et al. 2004, p. 13). Secondly, engagement requires individuals to exert physical energies in fulfilling their professional roles. These energies, according to May et al. (2004), necessitate that the self be present in the role. Finally, compared to job flow, work engagement proves to be a more comprehensive construct. Not only is the latter a more enduring and stable experience (Hallberg and Schaufeli, 2006), but it also considers individuals' emotional and physical involvement with their work, in addition to their cognitive involvement (May et al, 2004; Rothmann and Jordaan, 2006).

2.6.2. Job Involvement

According to Hallberg and Schaufeli (2006), one can adopt different perspectives when defining

job involvement. These include a focus on how the job: (1) assists in defining an individual's identity, (2) influences an individual's self-esteem or (3) satisfies salient needs and expectations. Within business literature, definitions arise from the first approach. For example, Rothmann and Jordaan (2006, p. 88) define job involvement as "a cognitive state ... that refers to the centrality of a job to an individual and his identity". Potgieter (2003) expands on this definition, stating that job involvement refers to the degree to which individuals: (a) identify with their work, (b) actively participate in the relevant job activities, and (c) consider job performance to be important.

According to May et al. (2004), work engagement differs from job involvement as the former concerns itself with the manner in which the individual employs him/her-self when performing the job. On the one hand, work engagement can be thought of as an antecedent to job involvement, in that individuals deeply engaged in their professional roles may come to identify with their jobs (May et al. 2004). On the other hand, being engaged in one's work does not necessarily imply that the job is central to an individual's identity (Rothmann and Jordaan, 2006).

2.6.3. Organisational Commitment

Organisational commitment is defined as "a state in which an employee identifies with an organisation and its goal" (Jackson et al. 2006, p. 266). Dipboye, Smith and Howell (1994, p. 171) expand on this definition, stating that organisational commitment refers to an individual's "readiness to exert effort on behalf of the organisation, acceptance of organisational goals and

values, and desire to remain with the organisation". Potgieter (2003) and Fisher et al. (2003) assert that organisational commitment, as a construct, is multidimensional, consisting of: (a) affective commitment i.e. the emotional attachment an individual forms with the organisation, and the affective response to job characteristics (Hallberg and Schaufeli, 2006), (b) continuance commitment i.e. perceived costs of leaving the organisation, and (c) normative commitment i.e. an individual's obligation to remain with the organisation.

Work engagement differs from organisational commitment as the former focuses on the job itself. On the one hand, work engagement can be thought of as an antecedent to organisational commitment. The assumption here is that those individuals, who are highly engaged with their work, identify with the organisation (Jackson et al. 2006). On the other hand, it is not uncommon for individuals to be engaged with their work, but not identify with the organisation (Rothmann and Jordaan, 2006).

2.7. Approaches to Investigating Work Engagement

Previous research investigating work engagement has focused on its relationship with: (1) job demands, (2) job resources, and (3) psychological conditions.

2.7.1. Job Demands and Work Engagement

Job demands refer to those physical, psychological, social and/or organisational aspects of the job that have the potential to result in strain. Tasks that have to be completed require the

individual to exert high levels of sustained effort (physical and/or mental) in order to maintain expected standards of performance. On the one hand, job demands can be viewed as challenges represented by work. On the other hand, they lead to negative responses when they exceed the individual's capability to deal with them (Hakanen et al. 2006; Rothmann and Jordaan, 2006, Rothmann et al. 2006).

Jackson et al. (2006) differentiate between quantitative and qualitative job demands. The former refers to workload (i.e. the amount of work required and the time available to complete it), while the latter refers to emotional demands (i.e. affective responses).

According to Rothmann and Jordaan (2006), research investigating the relationship between job demands and work engagement is scarce. However, studies have demonstrated that individuals can experience work engagement in situations of high demand. For example, Doyle and Hind (1998) found that despite having to work long hours, coupled with work overload and lacking support, female academics working in higher education institutions reported being satisfied and intrinsically motivated by their jobs, which they perceived as being enjoyable and potentially rewarding. Kinman and Jones (2003) reported that both male and female academics in their sample thrived on the fact that their work was stressful. This supports the earlier statement that job demands can be viewed as a challenge.

2.7.2. Job Resources and Work Engagement

Job resources refer to those physical, psychological, social and organisational aspects of the job

that may: (a) reduce the potential negative responses to job demands, (b) assist in achieving work goals, and (c) foster personal growth and development (Bakker et al. 2008; Hakanen et al. 2006; Jackson et al. 2006; Rothmann and Jordaan, 2006).

According to Rothmann et al. (2006), job resources are located at the following levels:

(a) organisational e.g. salary, (b) interpersonal e.g. team climate, (c) the organisation of work e.g. role clarity and (d) the task level e.g. task significance. The level of task is said to create meaningfulness and safety (to be discussed), which is needed to be engaged (Jackson et al. 2006; Rothmann et al. 2006).

Studies conducted by Schaufeli and Bakker (2004), and Hakanen et al. (2006) provide support for the relationship between job resources and work engagement. According to Bakker et al. (2008), job resources provide both intrinsic and extrinsic motivation; and are most advantageous in sustaining work engagement in situations of high demand. This is supported by a study conducted by Hakanen, Bakker and Demerouti (2005), who found that the relationship between job demands and work engagement was weaker for a sample of dentists who reported high job resources. In addition, Bakker, Hakanen, Demerouti and Xanthopoulou (2007) found a negative relationship between pupil misbehaviour (i.e. job demand) and work engagement in a sample of elementary, secondary and vocational school educators.

2.7.3 Psychological Conditions and Work Engagement

According to May et al. (2004), three psychological conditions form the foundation and

determine the degree of work engagement: (a) meaningfulness, (b) safety and (c) availability.

2.7.3.1. Psychological Meaningfulness

Psychological meaningfulness is defined as “the value of a work goal or purpose, judged in relation to an individual’s own ideals or standards” (May et al. 2004, p. 14). In other words, the individual feels as though s/he is receiving a return on his/her self-investment in work, which provides physical, cognitive and emotional energies. These energies, in turn, facilitate personal growth and motivation to work (Rothman and Jordaan, 2006).

According to Rothmann and Jordaan (2006), psychological meaningfulness occurs when the individual feels useful and valued for his/her contributions, over-and-above being an occupant of a given professional role. There is a sense of being able to give to others and to the job itself via the professional role, and being able to receive from them at the same time. Individuals thus invest themselves in tasks and roles in order to satisfy the personal need for meaning in work (Kahn, 1990).

The degree of meaningfulness an individual experiences at work is influenced by: (a) the characteristics of one’s job e.g. job enrichment, (b) work-role fit i.e. the extent to which the professional role enables the individual to express his/her self-concept, and (c) rewarding co-worker relations i.e. being treated with respect and experiencing a sense of belonging (May et al. 2004; Rothmann and Jordaan, 2006).

2.7.3.2. Psychological Safety

Psychological safety is defined as “feeling able to show and employ oneself without fear of negative consequences to self-image, status or career” (Kahn, 1990, p. 708). A safe environment is one which has boundaries regarding acceptable behaviour. Because individuals understand these boundaries, they are able to express their engagement at work, without fear of reprimand (May et al. 2004).

The extent to which an individual experiences psychological safety at work is determined by trusting and supportive supervisor and co-worker relations. The former is characterised by actions that enhance the individual’s self-determinism e.g. providing positive feedback and developing problem-solving skills. The latter discriminates between cognitive (i.e. dependability of co-workers) and affective (i.e. emotional relationships with co-workers) trust. Support coupled with affective trust is believed to lead to greater psychological safety and work engagement (Kahn, 1990; May et al. 2004; Rothmann and Jordaan, 2006).

2.7.3.3. Psychological Availability

Psychological availability is defined as “an individual’s belief that s/he has the physical, emotional or cognitive resources to engage the self at work” (May et al. 2004, p. 17). It refers to the individual’s assessment of his/her readiness to engage in the professional role in the face of other social roles s/he may occupy.

According to Kahn (1990), individuals are psychologically available to engage in their

professional roles when they have positively assessed their ability to deal with both work and non-work aspects of their lives.

Engaging with work and in the professional role requires physical, emotional and cognitive resources and energies. The extent to which individuals are available to engage is thus influenced by the resources and energies they have at their disposal at a particular moment (Kahn, 1990; May et al. 2004; Rothmann and Jordaan, 2006). Three things are important with regard to physical, emotional and cognitive resources and energies respectively. Firstly, individuals differ in terms of the strength, stamina and flexibility they bring to bear in meeting physical demands (Kahn, 1990; May et al. 2004). Secondly, occupations differ in the frequency, duration and intensity of emotion labour required (Johnson et al. 2005). Thirdly, some professional roles require more information than others (May et al. 2004). These three factors taken together demonstrate the subjective and situational nature of psychological availability and, by extension, work engagement.

In addition to the above, psychological availability is influenced by an individual's perceived work and status security. According to Kahn (1990), security enables the coupling of the self and work, which leads to engagement. Insecurity distracts from work engagement and stems from: (a) a lack of self-confidence in one's abilities and status, (b) heightened self-consciousness, whereby individuals are more concerned with how they are being judged by others rather than doing their jobs, and (c) ambivalence about fit with the organisation, which results in the individual struggling to contribute to work goals they do not perceive as being fulfilling (Kahn, 1990; Rothmann and Jordaan, 2006).

Non-work events or outside activities present a paradox. On the one hand, they have the potential to distract individuals' attention and energies from their work, such that they are less psychologically available to engage in their professional roles. On the other hand, the roles individuals occupy outside of work have been found to reinforce work engagement due to an 'energy expansive' effect. This effect enables individuals to draw on resources and energies generated outside their professional roles (Kahn, 1990; May et al. 2004; Rothmann and Jordaan, 2006).

Of the three psychological conditions, the relationship between psychological meaningfulness and work engagement has received the most attention. For example, in their study of soldiers Britt, Adler and Bartone (2001) found that individuals faced with stressful events and situations can derive positive outcomes due to personal characteristics (e.g. hardiness) associated with the engagement in meaningful work. Hardiness is defined as "personal feelings of control (i.e. the belief that one possesses the resources to cope), a desire to accept challenges (whereby stressors are perceived as opportunities) and commitment (i.e. whole-hearted involvement)" (Ogden, 2004, p. 241). According to a study conducted by Siu (2002), commitment protected a sample of blue- and white-collar employees from the negative outcomes or experiences of stress as it enabled them to attach meaning to their work.

2.8. Linking the Transactional Model and Work Engagement

According to Jackson et al. (2006), meaningful work leads to the cognitive appraisal of an event or situation as challenging but positive i.e. benefiting or enhancing an individual's well-being.

This in turn promotes work engagement, even in demanding conditions. Bakker et al. (2008) elucidate the link between the transactional model and work engagement in the following statement: “engaged employees have a sense of energetic and affective connection with their work, and instead of stressful and demanding they look upon (i.e. appraise) their work as challenging” (p. 188).

Previous research conducted by Simmons and Nelson (2001) provides evidence supporting the relationship between positive perceptions of stress and work engagement in their finding that, despite the stressful nature of nursing, their sample reported being actively engaged in their work. This positive outcome or experience of the demands inherent to the professional role was also found to be significantly related to the well-being of nurses included in the sample.

According to Sulsky and Smith (2005), both person and situation factors influence the primary cognitive appraisal of environmental stimuli as a challenge rather than a threat. As relevant to this study, person-factors include commitment such as being dedicated to one’s job, as determined by the special needs educators’ level of work engagement. Situation-factors include available resources, control and social support, which will be identified using a partial adaptation of A Short Stress Evaluation Tool (ASSET).

Chapter Three: Methodology

3.1. Research Design

The research design adopted in order to achieve the aim and objectives of the study can be classified as a cross-sectional, quantitative, ex post facto, non-experimental design. In other words, data was collected at one point in time, and was recorded and analysed numerically, after the manifestation of the independent variable/s occurred. Thus there was no control or manipulation of the independent variable/s, or the presence of a control group (Neuman, 1997). The advantages of the design include ease of implementation, flexibility, cost and time efficiency. It is limited, however, in that it does not yield causal inferences (Neale and Liebert, 1986).

3.2. The Sample

With permission from the Department of Education, the study was conducted in seven special schools within the Umlazi District. These schools provide high levels of support to learners with severe intellectual (learning) disabilities. The biographical questionnaire and survey instruments were administered to a total sample size of $N = 86$ voluntary participants on mutually agreed upon dates for data collection. The sample size for each special school was $N = 13$, $N = 12$, $N = 11$, $N = 12$, $N = 13$, $N = 7$, and $N = 18$ respectively. The participants, who were employed within the special schools as special needs educators, were a non-probability (purposive) sample invited to participate in the study via a letter of invitation (see Appendix C). This letter was

furnished during the initial meetings held between the researcher and respective heads of schools, and added to the agenda of impending staff meetings.

In terms of the personal demographic characteristics of the sample (see Appendix G, Table G 1), the participants were of working age, ranging from 20 to 65 years of age. The most frequent age category reported was between 40 and 49 years of age, which accounted for 44.2% of the sample. The least frequent (2.3%) was between 20 and 29 years of age. Twelve participants (14%) of the sample were male and seventy-four (86%) were female. The majority of participants were Black (53.3%), which accounted for isiZulu being the most frequently reported language within the sample (51.2%). A second majority were Indian (33.7%), with White (8.1%) and Coloured (4.7%) participants accounting for the minority within the sample. Thirty-five participants (40.7%) spoke English as a first language, four (4.6%) spoke Afrikaans, and one (1.2%) spoke isiXhosa. Other languages (2.3%) reported included Lingala and Kikonga. The lowest level of education indicated by the sample was Grade 12 (4.7%) and the highest a Masters of Education Degree (3.5%). A Diploma in Education (45.3%) was the most frequently reported qualification, followed by the Bachelor of Education (25.6%) and Bachelor of Education Honours Degrees (20.9%) respectively. A majority of the sample were married (66.3%) or single (23.2%). Eight participants (9.3%) were either separated, divorced or widowed and one participant (1.2%) was living with a partner.

As noted in Table G 1 (see Appendix G), a total of 90 responses were recorded for the 'Dependents' variable. Of the $N = 85$ participants who had responded to the question, 10 participants (11.6%) reported having no dependents. The remaining 75 participants (87.2%)

provided an affirmative response to the question, which included 70 single-answer reports and 5 dual-answer reports. Of the five, three participants reported 'children' and 'other' dependents. The remaining two participants reported 'children' and the 'elderly' as dependents.

In addition to the personal demographic characteristics, the sample was required to provide information specifically related to their career history as an educator (see Appendix G, Table G 2). Of the sample ($N = 86$), 65 participants (75.6%) had previously been employed as mainstream educators. From this sub-sample ($N = 65$), a majority of participants (35.4%) were employed for the duration of two to five years in mainstream schools. Nineteen participants reported being mainstream educators for the duration of 6 to 10 years (29.2%) and a further nineteen for over 10 years (29.2%). The remaining four participants (6.2%) were employed at mainstream schools for less than a year.

In terms of special needs education, of the sample ($N = 86$), 58 participants (67.4%) reported having received a special education qualification, over and above the level of education detailed earlier. These qualifications included, but not limited to, Special Education for: Learners with Autism (Certificate), Severe Intellectually Impaired Learners (Diploma), Aurally Impaired Learners (Diploma) and Neurally Impaired Learners (Diploma). A majority of the sample reported being employed as special needs educators for a period of over 10 years (44.2%) and 2 to 5 years (36%) respectively. Twelve participants (14%) reported being special needs educators for 6 to 10 years and the remaining five participants (5.8%) for less than a year.

The sample was also required to indicate the number of learners they were responsible for on a

day-to-day basis. Of the $N = 85$ participants who responded to the question, 67 (78.8%) reported having between 10 and 19 learners in their class. Eight participants (9.4%) were responsible for less than 10 (9.4%) and a further eight (9.4%) for 20 to 29 learners. The remaining two participants reported having between 30 and 39 (1.2%), and over 40 learners (1.2%) in their class, respectively.

3.3 Measuring Instruments

In addition to a self-developed biographical questionnaire (see Appendix F – Section A), quantitative data was gathered by means of the following survey instruments:

- (a) The Occupational Stress scale – an adaptation of the ‘Perception of Stressors’ questionnaire of A Shortened Stress Evaluation Tool (ASSET), and
- (b) The Work Engagement scale - an adaptation of the Utrecht Work Engagement Scale - Short Form (UWES-SF).

Each of the survey instruments will be discussed separately.

3.3.1. The Occupational Stress Scale

ASSET is a self-report instrument that was developed by Cartwright and Cooper (2002) as an organisational stress screening tool. ASSET was previously utilised in research as a measure of stress among educators by Jackson and Rothmann (2006), and Phillips, Sen and McNamee (2007).

ASSET is divided into four questionnaires. For purposes of the present study however, only the 'Perception of Stressors' questionnaire was utilised in order to determine those areas of the job the sample found most stressful. This questionnaire consists of 36 items which reflect seven dimensions or sub-scales (see Appendix H, Table H 1) namely: Work Relationships (8 items), Job Characteristics (8 items), Overload (4 items), Control (4 items), Job Security (4 items), Resources & Communication (4 items) and Work-life Balance (4 items). Pay & Benefits is a single item dimension.

Where necessary, items were customised for the teaching environment and/or rephrased in order to simplify the language used. In addition, the items of each dimension were randomised to avoid response sets i.e. the identification of statements as belonging to the same sub-scale, thus prompting the participant to respond in a uniform manner (Barkhuizen and Rothmann, 2006). Importantly, one item was omitted from the Job Characteristics dimension as it was judged by an expert in the field of special education for over 20 years, Mr. P. J. Williams (Deputy Chief Education Specialist: Umlazi District), as being irrelevant for the purposes of the present study.

Responses to the Occupational Stress scale (see Appendix F – Section B) were scored using a five point Likert-type scale as follows: strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5). With the exception of the neutral response, which as a standard is coded as (3) when capturing data on SPSS version 15.0 for Windows (SPSS Inc., Chicago, Illinois, USA), lower response scores on each item are associated with lower levels of perceived stress in relation to that item, and higher response scores with higher levels of perceived stress. Given this reasoning, reverse coding was utilised for items 5, 16 and 36 as follows: strongly agree (1),

agree (2), neutral (3), disagree (4), and strongly disagree (5).

Previous research (see Faragher, Cooper and Cartwright, 2004) found the measure to be a psychometrically sound instrument for the purposes of screening stress. Jackson and Rothmann (2006) in their study of stress, commitment and health of educators in the North West Province, report reliability coefficients varying from .57 to .79 for all dimensions, except Pay & Benefits which is a single item dimension. Specifically, the reliability coefficients were as follows: Job Security (.57), Resources & Communication (.59), Job Characteristics (.61), Overload (.68), Work-life Balance (.69), Control (.72) and Work Relationships (.79). These values are based on the Guttman split-half coefficient. According to Johnson and Cooper (2003, p. 182) the Guttman split-half reliability coefficient is preferable as “it makes fewer assumptions about the data set (making it more) robust than other tests of internal consistency”.

Studies investigating the validity of ASSET have focused on the convergent and construct validity of the ‘Psychological Well-being’ questionnaire, which was not used in the present study (e.g. Faragher et al. 2004; Johnson and Cooper, 2003). Faragher et al. (2004), in a discussion of the convergent validity of ASSET do, however, report a negative correlation between the ‘Job Characteristics’ dimension and the Job Satisfaction Scale ($r = -.61, p < .01$). This negative correlation is expected as the method of scoring for ASSET is reversed compared to that of the Job Satisfaction Scale.

3.3.2. The Work Engagement Scale

The Utrecht Work Engagement Scale (UWES) is a self-report instrument that was developed by

Schaufeli and Bakker (2003). The original UWES consisted of 24 items, which was subsequently reduced to 17, 15 and 9-item scales. The nine-item scale (also known as the UWES Short Form i.e. UWES-SF), which was previously utilised in research as a measure of work engagement among educators by Basikin (2007), was used for the purposes of the present study.

The UWES-SF consists of three dimensions or sub-scales (i.e. Vigour, Dedication and Absorption), which in turn comprise three items respectively. Where necessary, items were rephrased in order to simplify the language used.

Responses to the Work Engagement scale (see Appendix F – Section C) were scored using a five point Likert-type scale as follows: never (1), hardly ever (2), neutral (3), sometimes (4), and always (5). With the exception of the neutral response, high response scores on the Vigour, Dedication and Absorption dimensions are associated with high energy and stamina when working, a strong identification with work that is perceived as being challenging yet meaningful and a feeling of being immersed in work, respectively. Alternatively, low response scores on the three sub-scales are associated with low vivacity and endurance at work, a lack of enthusiasm and pride in one's work and being less wrapped up work, respectively (Schaufeli and Bakker, 2003).

Previous research found the nine-item short form measure to have acceptable psychometric properties (see Schaufeli, Bakker and Salanova, 2006). Schaufeli and Bakker (2003) report Cronbach's alpha coefficients for the 9-item scale varying between .89 and .97.

With regard to validity, Jackson et al. (2006) confirmed the construct validity of the UWES for a sample of educators in South Africa.

3.4. Materials

The self-developed biographical questionnaire and survey instruments were printed in colour on individual A4 sheets of white computer paper, and stapled together with an instruction sheet to form a booklet comprising five pages. Brown A4 self-adhesive envelopes and black pens were also provided.

For the biographical questionnaire, participants were instructed to record one response per item by placing a cross [X] in the numbered box that corresponded with their chosen answer. Lined spaces were provided for responses where a pre-determined answer was absent. Importantly, more than one response was allowed for item number 11.

For the survey instruments, participants were instructed to record one response per item by placing a cross [X] under the box that corresponded with their chosen rating.

3.5. Procedure

3.5.1. Piloting Procedure

The self-developed biographical questionnaire and survey instruments were piloted on a group of five educators at a local academic institution. The booklets were distributed to the group by a

fellow colleague and returned to the researcher in sealed envelopes upon completion. This was done in order to assess the workability of the instrument. As feedback did not indicate any problems, no amendments to the questionnaire were made. Importantly, the five educators did not form part of the sample for this study.

3.5.2. Data Collection Procedure

A letter of request to conduct a research study within the special schools was forwarded to the Director of the Department of Education for the Umlazi District (see Appendix A). This letter outlined who the researcher was, as well as the purpose and aim of the research study.

Information pertaining to what participation would entail and the subsequent feedback of results were included. Issues of informed consent, anonymity and confidentiality were also addressed.

Once permission had been granted, meetings were telephonically arranged with the respective heads of the seven special schools which formed the target population of the research study. During these meetings, a copy of the letter of permission from the Department of Education Umlazi District Director (see Appendix B) was furnished, in addition to a letter of invitation to participate in a research study (see Appendix C). This letter requested that a briefing meeting be arranged in order for the researcher to introduce the purpose and aim of the research study, and invite educators to participate in the data collection session that followed. Educators were notified about the dates and times of the briefing meeting once it had been agreed upon by the researcher and respective heads of school. They were also informed that their attendance did not imply participation, and that they could withdraw prior to handing in a completed questionnaire.

It was stated explicitly that participation was entirely on a voluntary basis, that confidentiality and anonymity were guaranteed, and that educators would not be advantaged nor disadvantaged by their participation in the study or if they opted to withdraw. Further information pertaining to what would be required if they chose to participate and feedback of results were also provided. It was brought to the educators' attention that a completed and returned questionnaire would be taken as a sign of their consent to participate in the research study, over and above the signing of a declaration of informed consent (see Appendix E).

Half-hour timeslots on two individual working days within the academic calendar were allocated to meet with the respective heads of school. Thereafter, seven appointed dates were allocated for the briefing meetings and collection of data, which took place during the time reserved by the special schools for Educator Development Programmes. Half an hour of the hourly timeslot (13h00 – 14h00) was utilised.

Upon arrival at the briefing meeting on the allocated days, educators were presented with an envelope which contained a participant information sheet (see Appendix D), the declaration of informed consent, a booklet (comprising the instruction sheet, biographical questionnaire and survey instruments) and a pen. The participation information sheet, which was similar to the letter of invitation in terms of content, was read out aloud by the researcher, with the participants following in their copies. Having ensured the conditions of participation were understood and agreement to participate attained, participants were requested to sign the declaration of informed consent and return the same to the researcher. Once this had been received, the instructions for completion of the biographical questionnaire and surveys were read out aloud by the researcher.

Thereafter, participants took approximately 15 minutes to complete the questionnaire and surveys, which entailed selecting relevant answers for closed-ended questions and writing down responses in the lined space provided for questions requiring elaboration. Upon completion, participants were instructed to place the booklet within the envelope provided, seal it and return the same to the researcher.

3.6. Data Analysis

Statistical analysis was carried out using SPSS version 15.0 for Windows (SPSS Inc., Chicago, Illinois, USA). A number of descriptive and inferential procedures were utilised in order meet the aim and objectives of the present study, and address the research problems.

Descriptive statistics is concerned with quantitatively summarising the set of data collected from a sample. Inferential statistics utilises descriptive statistics, and is concerned with generalising from a sample in order to make estimates about the population (Behr, 1988; Howell, 1997).

Statistical procedures computed included: (1) descriptive summary statistics, (2) Cronbach's alpha coefficients, (3) multiple regression, (4) Pearson's correlation coefficients, (5) one-way analysis of variance (ANOVA), (6) independent sample t -tests, (7) Kruskal-Wallis ANOVA, and (8) Mann-Whitney U -tests. An overview of each analysis and its purpose within the context of the present study follows.

3.6.1. Descriptive Summary Statistics

Descriptive summary statistics in the form of frequency (i.e. the number of observations) and percentage were computed for: (1) all biographical variables, (2) each item on the Occupational Stress scale, and (3) each item on the Work Engagement scale.

In addition, the mean and the standard deviation were computed for each item and dimension of the Occupational Stress and Work Engagement scales. The mean (M) is a measure of central tendency and represents the arithmetic average of a collection of scores. The standard deviation (SD) is a measure of variability and represents the degree to which scores are dispersed around, or are different from, the mean (Terre Blanche, 2002).

3.6.2. Cronbach's Alpha Coefficient

The Cronbach's alpha coefficient was computed to test the reliability (i.e. stability) of the measuring instruments. Specifically, it was utilised to determine the internal consistency of the items relating to each dimension of the Occupational Stress and Work Engagement scales. According to Murphy and Davidshofer (1998), internal consistency is an estimation of the reliability of a measuring instrument based on the number of items therein, and the average inter-correlations among the items. Finchilescu (2002) presents criteria for reliability, and states that reliability coefficients of .70 are liberal for research instruments, and indicate a high degree of inter-correlation among the items included.

3.6.3. Multiple Regression

Multiple regression analysis is utilised to model complex social phenomena such that the contribution of a combination of independent variables (IVs) can be used to predict a value on the dependent variable (DV) (Tredoux, 2002). In other words, it answers the question of which IVs have a greater effect on the DV.

Within the context of the present study, the individual items of the Occupational Stress and Work Engagement scales were collapsed into eight (see Table 6) and three (see Table 7) dimensions respectively. The responses to the items relating to each sub-scale were averaged to compute the overall score for the respective dimensions of the measuring instruments. Thereafter, multiple regression analyses were computed to determine which dimensions on the Occupational Stress and Work Engagement scales (IVs) contributed the most to the respective overall scores (DV).

3.6.4. Pearson's Correlation Coefficient

According to Behr (1988), correlation coefficients are computed in order to determine: (a) if a relationship exists between two variables, (b) what the direction of the relationship is, and (c) the strength thereof.

Pearson's correlation coefficient (a.k.a. the product-moment correlation coefficient) is represented by r , and falls within the range of -1 to +1. An r of -1 indicates a perfect negative correlation or inverse relationship i.e. as the value of x raises, the value of y falls. An r of +1

indicates a perfect positive correlation i.e. as the value of x raises, the value of y raises and vice versa. An r of 0 indicates no relationship between the two variables (Lachenicht, 2002a). A guideline for the interpretation of the magnitude or strength of r appears in Appendix H (see Table H 2).

Pearson’s correlation coefficient was computed in order to determine whether significant linear relationships existed between the dimensions of the Occupational Stress and Work Engagement scales.

3.6.5 Statistical Tests of Significance

Normal distribution testing was computed in order to determine whether parametric or non-parametric statistical tests of significance would be utilised to further analyse the data.

Table 2: One-sample Kolmogorov-Smirnov Test – Occupational Stress Scale

| DIMENSION | KOLMOGOROV-SMIRNOV |
|---------------------------|---------------------------|
| Work-life Balance | 1.08 |
| Resources & Communication | 0.85 |
| Overload | 1.12 |
| Job Security | 1.11 |
| Control | 1.05 |
| Job Characteristics | 1.31 |
| Work Relationships | 1.41 |
| Pay & Benefits | 2.03 |
| Overall | 0.70 |

The one-sample Kolmogorov-Smirnov test of normality (see Table 2) revealed that the following dimensions of the Occupational Stress scale did not follow an approximate normal distribution: Pay & Benefits, and Work Relationships.

Table 3: One-sample Kolmogorov-Smirnov Test – Work Engagement Scale

| DIMENSION | KOLMOGOROV-SMIRNOV |
|------------------|---------------------------|
| Vigour | 1.35 |
| Dedication | 2.49 |
| Absorption | 1.56 |
| Overall | 1.19 |

As evident from Table 3 above, all three dimensions on the Work Engagement scale did not follow an approximate normal distribution.

The overall scores for the Occupational Stress and Work Engagement scales were used to decide on parametric or non-parametric tests. Because these scores are normally distributed parametric testing was utilised for the analysis of data. However, given the lack of normality for all the dimensions of the Work Engagement scale, the non-parametric tests were computed when significant differences were found.

3.6.5.1. Parametric Statistics

Parametric tests are based on the assumption that the sample is drawn from a normally distributed population, which enables the researcher to estimate the population parameters (Behr, 1988; Howell, 1997).

3.6.5.1 (a) One-way ANOVA

The one-way ANOVA is computed to determine if the means (M) of three or more independent groups are significantly different from one another in terms of one independent variable (Howell, 1997).

ANOVAs were utilised to compare significant differences between the dimensions of the Occupational Stress scale and the categories of the following biographical variables: age, race, level of education, language, tenure and marital status.

3.6.5.1 (b) Independent Sample t-test

The independent sample t-test is computed to determine if the means (M) of two independent groups are significantly different from one another (Nunez, 2002).

Independent sample t-tests were utilised to compare significant differences between the dimensions of the Occupational Stress scale and the following biographical variables: gender, special education qualification and previous employment as a mainstream educator.

3.6.5.2. Non-parametric Statistics

Non-parametric tests are synonymous with distribution-free tests. They do not rely on parameter estimation and are utilised when parametric assumptions are violated (Behr, 1988; Howell, 1997).

3.6.5.2 (a) Kruskal-Wallis ANOVA

The Kruskal-Wallis ANOVA is the non-parametric equivalent for the standard ANOVA. It is computed to determine if the median scores of three or more independent groups are significantly different from one another (Lachenicht, 2002b). The median (M) is a measure of central tendency and represents the middle score in a ranked distribution (Terre Blanche, 2002).

Kruskal-Wallis ANOVAs were used to compare significant differences between the dimensions of the Work Engagement scale and the categories of the following biographical variables: age, race, level of education, language, tenure and marital status.

3.6.5.2 (b) Mann-Whitney U-Test

The Mann-Whitney U-test is the non-parametric equivalent of the independent sample t-test. It is computed to determine if the median scores of two independent groups are significantly different from one another (Behr, 1988).

Mann-Whitney U-tests were used to compare significant differences between the dimensions of the Work Engagement scale and the following biographical variables: gender, special education qualification and previous employment as a mainstream educator.

In the analysis of results, a significance (alpha) level of .05 was used. In order to reject the null hypothesis and accept the alternative hypothesis, the probability (p-value) of the observed score/result must be less than this significance level (Howell, 1997).

3.7. Ethical Issues

Before data collection could begin, permission was required from the board of ethics of the University of the KwaZulu-Natal (Howard College). As the first rule of any ethical study is that no harm be done to the participants, one of the conditions for gaining ethical approval was to ensure that the sample was not considered vulnerable and would not be put at any risk by participating in the study. Informed consent, anonymity and confidentiality were also important considerations.

With regard to informed consent, a participant information sheet (see Appendix D) was distributed informing participants about the purpose and aim of the research. It was stated explicitly that participation was entirely on a voluntary basis, and that no individual would be advantaged or disadvantaged by their participation in the study, or if they opted to withdraw. After setting out what would be required if they chose to participate, it was brought to the participants' attention that completed and returned questionnaires would be taken as a sign of their consent, over and above the signing of a declaration of informed consent (see Appendix E).

Anonymity was guaranteed as participants were not required to provide their names on the questionnaires and were instructed to omit any questions they felt may lead to their identification. In addition, group results and not individual findings were to be reported on. Confidentiality was also guaranteed as only the researcher had access to completed questionnaires, which were destroyed once data was entered onto a spreadsheet.

Chapter Four: Results

4.1. Reliability

Table 4 contains the Cronbach's alpha coefficients for each dimension of the Occupational Stress scale, which varies from .07 to .77. The dimension Pay & Benefits is absent from the table as it is a single-item factor.

Table 4: Cronbach's Alpha Coefficients for the Occupational Stress Scale

| DIMENSION | <u>N</u> of ITEMS | α |
|---------------------------|--------------------------|----------------------------|
| Work-life Balance | 4 | .29 |
| Resources & Communication | 4 | .58 |
| Overload | 4 | .56 |
| Job Security | 4 | .07 |
| Control | 4 | .77 |
| Job Characteristics | 7 | .54 |
| Work Relationships | 8 | .77 |
| Overall | 35 | .88 |

Inspection of Table 4 indicates that the internal consistencies of five dimensions did not compare well with the guideline of .70 reported earlier. In comparison to the guideline of .55 used in basic research (Jackson and Rothmann, 2006), the following dimensions were problematic: Job Security (.07) and Work-life Balance (.29).

Table 5 below contains the Cronbach's alpha coefficients for each dimension of the Work Engagement scale, which varies from .46 to .76.

Table 5: Cronbach's Alpha Coefficients for the Work Engagement Scale

| DIMENSION | <u>N</u> of ITEMS | <i>α</i> |
|------------------|--------------------------|-----------------|
| Vigour | 3 | .46 |
| Dedication | 3 | .68 |
| Absorption | 3 | .76 |
| Overall | 9 | .83 |

As evident from Table 5, the internal consistency of only one dimension, Vigour (.46), did not compare well with the guidelines for reliability, indicating a low degree of inter-correlation among its items.

The overall Cronbach's alpha for the Occupational Stress and Work Engagement scales are above .80 which indicates a high degree of internal consistency among all the items of each measuring instrument respectively.

4.2. Descriptive Summary Statistics

4.2.1. Occupational Stress Scale

Table 6 contains the minimum, maximum, mean and standard deviation values for the 35 items and 8 dimensions of the Occupational Stress scale. This data is presented in order to identify, categorise and rank occupational stressors as perceived by special needs educators of severe intellectually (learning) disabled learners.

Inspection of Table 6 indicates that, on average, the sample perceived the following items

Table 6: Descriptive Summary Statistics – Occupational Stress Scale

| DIMENSION/ITEMS | MIN | MAX | MEAN | SD |
|---|----------|----------|-------------|-------------|
| Work-life Balance | 1 | 4 | 2.61 | 0.72 |
| ▪ I work longer hours than I choose or want to. | 0 | 5 | 2.55 | 1.23 |
| ▪ I work after contact time. | 0 | 5 | 3.16 | 1.36 |
| ▪ I spend too much time travelling to and from work. | 0 | 5 | 2.30 | 1.29 |
| ▪ Work interferes with my home and personal life. | 0 | 5 | 2.42 | 1.21 |
| Resources & Communication | 1 | 5 | 2.50 | 0.85 |
| ▪ I am not informed about what goes on in the academic institution. | 0 | 5 | 2.33 | 1.28 |
| ▪ I am never told I am doing a good job. | 1 | 5 | 2.56 | 1.16 |
| ▪ I was adequately trained for the job. | 0 | 5 | 2.33 | 1.22 |
| ▪ I do not have access to proper equipment and resources required for the job. | 0 | 5 | 2.78 | 1.47 |
| Overload | 1 | 4 | 2.26 | 0.70 |
| ▪ The technology involved with the job is overloading. | 0 | 5 | 2.47 | 1.11 |
| ▪ I have unrealistic deadlines. | 0 | 4 | 2.02 | 0.85 |
| ▪ I have an unmanageable workload. | 0 | 5 | 2.40 | 1.27 |
| ▪ There is not enough time to do the job properly. | 0 | 4 | 2.14 | 1.03 |
| Job Security | 1 | 5 | 2.31 | 0.61 |
| ▪ My job is secure. | 0 | 5 | 2.08 | 1.15 |
| ▪ My job is not permanent. | 0 | 5 | 1.84 | 1.23 |
| ▪ My job is likely to change in the future. | 0 | 5 | 2.90 | 1.29 |
| ▪ My skills may become redundant in the near future. | 0 | 5 | 2.41 | 1.11 |
| Control | 1 | 5 | 2.58 | 1.02 |
| ▪ I have little control over many aspects of the job. | 0 | 5 | 2.98 | 1.35 |
| ▪ I am not involved in decisions affecting my job. | 0 | 5 | 2.64 | 1.48 |
| ▪ My ideas and suggestions are not taken into account. | 0 | 5 | 2.51 | 1.33 |
| ▪ I have little or no influence over performance targets. | 0 | 5 | 2.17 | 1.10 |
| Job Characteristics | 1 | 5 | 2.63 | 0.63 |
| ▪ The physical work conditions are unpleasant. | 0 | 5 | 2.29 | 1.28 |
| ▪ The job involves risk of physical violence. | 1 | 5 | 2.83 | 1.35 |
| ▪ My work performance is closely monitored. | 0 | 5 | 3.13 | 1.26 |
| ▪ The academic institution is constantly changing for the sake of change. | 0 | 5 | 2.99 | 1.26 |
| ▪ I do not enjoy my job. | 0 | 5 | 1.76 | 1.07 |
| ▪ My work is dull and repetitive. | 1 | 5 | 2.19 | 1.09 |
| ▪ I deal with difficult students and parents. | 1 | 5 | 3.22 | 1.20 |
| Work Relationships | 1 | 4 | 2.15 | 0.67 |
| ▪ My boss is intimidating and bullying. | 0 | 5 | 2.02 | 1.30 |
| ▪ I lack support from my boss and colleagues. | 0 | 5 | 2.15 | 1.10 |
| ▪ I am isolated at work. | 0 | 5 | 1.85 | 0.91 |
| ▪ I am not sure what my boss expects from me. | 0 | 5 | 2.26 | 1.17 |
| ▪ I feel colleagues are not pulling their weight. | 0 | 5 | 2.69 | 1.14 |
| ▪ My relationships with colleagues are poor. | 0 | 5 | 1.66 | 0.85 |
| ▪ Others take credit for what I have achieved. | 0 | 5 | 2.50 | 1.08 |
| ▪ My boss is forever fault-finding. | 1 | 5 | 2.07 | 1.05 |
| Pay & Benefits | 0 | 5 | 3.77 | 1.35 |
| ▪ I feel the pay and benefits are appropriate for the nature of the work that I do. | | | | |
| OVERALL | 1 | 4 | 2.60 | 0.52 |

as being the most stressful: insufficient pay and benefits for the nature of the professional role ($\underline{M} = 3.77$, $\underline{SD} = 1.35$), having to deal with difficult students and parents ($\underline{M} = 3.22$, $\underline{SD} = 1.20$), working after contact time ($\underline{M} = 3.16$, $\underline{SD} = 1.36$), and close monitoring of their work performance ($\underline{M} = 3.13$, $\underline{SD} = 1.26$).

Items that were perceived as moderately stressful include: the academic institution changing for the sake of change ($\underline{M} = 2.99$, $\underline{SD} = 1.26$), not having control over various aspects of the job ($\underline{M} = 2.98$, $\underline{SD} = 1.35$), the possibility of their jobs changing in the future ($\underline{M} = 2.90$, $\underline{SD} = 1.29$), the risk of physical violence on behalf of students ($\underline{M} = 2.83$, $\underline{SD} = 1.35$), and the lack of adequate equipment and resources with which to perform their jobs efficiently and effectively ($\underline{M} = 2.78$, $\underline{SD} = 1.47$).

Low mean scores, which are indicative of low levels of perceived stress, were recorded for the following items: feeling isolated at work ($\underline{M} = 1.85$, $\underline{SD} = 0.91$), the job not being permanent ($\underline{M} = 1.84$, $\underline{SD} = 1.23$), not enjoying the job ($\underline{M} = 1.76$, $\underline{SD} = 1.07$), and poor relationships with colleagues ($\underline{M} = 1.66$, $\underline{SD} = 0.85$).

The results recorded in Table 6 will be revisited after the presentation of the multiple regression analysis for the Occupational Stress scale.

4.2.2 Work Engagement Scale

Table 7 contains the minimum, maximum, mean and standard deviation values for the 9

items and 3 dimensions of the Work Engagement scale. This data is presented in order to determine if special needs educators of severe intellectually (learning) disabled learners were engaged in their work and the extent thereof.

Table 7: Descriptive Summary Statistics – Work Engagement Scale

| DIMENSION/ITEMS | MIN | MAX | MEAN | SD |
|--|------------|------------|-------------|-------------|
| Vigour | 2 | 5 | 4.16 | 0.69 |
| ▪ At work, I feel bursting with energy. | 1 | 5 | 3.91 | 0.99 |
| ▪ At my job, I feel strong and spirited. | 0 | 5 | 4.20 | 1.07 |
| ▪ When I get up in the morning, I feel like going to work. | 1 | 5 | 4.36 | 0.92 |
| Dedication | 1 | 5 | 4.50 | 0.71 |
| ▪ I am enthusiastic about my job. | 2 | 5 | 4.50 | 0.79 |
| ▪ My job inspires me. | 0 | 5 | 4.24 | 1.17 |
| ▪ I am proud of the work I do. | 1 | 5 | 4.77 | 0.68 |
| Absorption | 1 | 5 | 4.22 | 0.79 |
| ▪ I feel happy when I am working intensely. | 0 | 5 | 4.30 | 0.97 |
| ▪ I am engrossed or absorbed in my work. | 1 | 5 | 4.40 | 0.82 |
| ▪ I get carried away when I am working. | 1 | 5 | 3.97 | 1.08 |
| OVERALL | 2 | 5 | 4.29 | 0.62 |

Inspection of Table 7 indicates that, on average, the sample was highly engaged in their work ($\underline{M} = 4.29$, $\underline{SD} = 0.62$). Higher levels of dedication, absorption and vigour were reported for the following items respectively: a sense of pride derived from the nature of the professional role ($\underline{M} = 4.77$, $\underline{SD} = 0.68$), being immersed in the work that they perform ($\underline{M} = 4.40$, $\underline{SD} = 0.82$), and wanting to go to work in the morning ($\underline{M} = 4.36$, $\underline{SD} = 0.92$). Conversely, lower levels of absorption and vigour were recorded for the following items respectively: getting carried away when working ($\underline{M} = 3.97$, $\underline{SD} = 1.08$), and bursting with energy at work ($\underline{M} = 3.91$, $\underline{SD} = 0.99$).

Further analysis of these results will be presented after the multiple regression analysis for the Work Engagement scale.

4.3. Multiple Regression

Tables 8 and 9 contain the unstandardised and standardised beta coefficients for the dimensions of the Occupational Stress and Work Engagement scales, which were significant at the .01 level. This data is presented in order to identify those dimensions which had a greater effect on the overall scores of the respective measuring instruments. The overall scores for each dimension recorded in Tables 6 and 7 will be presented in light of these findings.

Table 8: Multiple Regression Coefficients – Occupational Stress Scale

| DIMENSION | Unstandardised Coefficients | Standardised Coefficients |
|---------------------------|------------------------------------|----------------------------------|
| | β | β |
| Work-life Balance | .125 | .172 |
| Resources & Communication | .125 | .205 |
| Overload | .125 | .168 |
| Job Security | .125 | .147 |
| Control | .125 | .243 |
| Job Characteristics | .125 | .150 |
| Work Relationships | .125 | .160 |
| Pay & Benefits | .125 | .322 |

The standardised beta coefficients in Table 8 indicate that, of the 8 dimensions, Pay & Benefits contributed the most to the overall level of perceived occupational stress reported in Table 6 ($\underline{M} = 2.60$, $\underline{SD} = 0.52$). Moderate contributors include Control and Resources & Communication. The remaining five dimensions of the Occupational Stress scale contributed to the overall score at lower levels.

As mentioned earlier, Table 6 reflects that Pay & Benefits (or rather the lack thereof) was indeed

perceived as being the most stressful factor related to special needs education. Although issues relating to Resources & Communication were perceived as being moderately stressful ($\underline{M} = 2.50$, $\underline{SD} = 0.85$), it was preceded by the dimensions of Job Characteristics ($\underline{M} = 2.63$, $\underline{SD} = 0.63$), Work-life Balance ($\underline{M} = 2.61$, $\underline{SD} = 0.72$) and Control ($\underline{M} = 2.58$, $\underline{SD} = 1.02$). Job (In-) Security ($\underline{M} = 2.31$, $\underline{SD} = 0.61$), Overload ($\underline{M} = 2.26$, $\underline{SD} = 0.70$) and Work Relationships ($\underline{M} = 2.15$, $\underline{SD} = 0.67$) were perceived as being the least stressful by the sample of special needs educators.

Table 9: Multiple Regression Coefficients – Work Engagement Scale

| DIMENSION | Unstandardised Coefficients | Standardised Coefficients |
|------------------|------------------------------------|----------------------------------|
| | β | β |
| Vigour | .333 | .370 |
| Dedication | .333 | .380 |
| Absorption | .333 | .424 |

According to the standardised beta coefficients recorded in Table 9, Absorption contributed the most to the overall level of work engagement reported in Table 7 ($\underline{M} = 4.29$, $\underline{SD} = 0.62$), followed by Dedication and Vigour respectively.

Inspection of Table 7, however, indicates that on average, the levels of Dedication reported by special needs educators were the highest ($\underline{M} = 4.50$, $\underline{SD} = 0.71$), followed by Absorption ($\underline{M} = 4.22$, $\underline{SD} = 0.79$) and Vigour ($\underline{M} = 4.16$, $\underline{SD} = 0.69$). The low values reported for Vigour in both Tables 7 and 9 can be attributed to the low alpha coefficient for the dimension.

4.4. Pearson's Correlation Coefficient

In order to determine if work engagement impacted the perception of occupational stress among

special needs educators of severe intellectually (learning) disabled learners, Pearson’s correlation coefficient analysis was performed. The results are presented in Tables 10 and 11 below.

Table 10: Correlation between Overall Occupational Stress and Work Engagement (N=86)

| | | |
|-----------------------------------|------------|-------------------------------|
| | | Overall Work Engagement Score |
| Overall Occupational Stress Score | r | -.30** |
| | (p) | (.004) |

** Correlation is significant at the .01 level (2-tailed)

Inspection of Table 10 indicates that work engagement is significantly related to perceived occupational stress ($r = -.30$, $p = .004$). The correlation coefficient is negative, which confirms the hypothesis that an inverse relationship exists between the variables, whereby the higher the self-reported scores for work engagement, the lower the self-reported scores for perceived occupational stress. The low correlation coefficient indicates that the relationship between work engagement and occupational stress is a small one (see Appendix H, Table H 2). Thus, the two variables cannot be reliably predicted from each other.

The results presented in Table 11 below indicate statistically significant, low-strength, inverse correlations between the following individual dimensions of work engagement and perceived occupational stress. Firstly, Vigour is significantly related to Work-life Balance ($r = -.31$, $p = .004$), Overload ($r = -.33$, $p = .002$), Job Security ($r = -.27$, $p = .010$), Control ($r = -.30$, $p = .005$) and Job Characteristics ($r = -.34$, $p = .001$). Secondly, Dedication is significantly related to Work-life Balance ($r = -.24$, $p = .023$), Overload ($r = -.25$, $p = .018$) and Job Characteristics ($r = -.21$, $p = .047$). Lastly, Absorption is significantly related to Overload ($r = -.25$, $p = .020$).

Table 11: Correlation between the Dimensions of Occupational Stress and Work Engagement

(N=86)

| DIMENSIONS | | Vigour | Dedication | Absorption |
|---------------------------|------------|--------|------------|------------|
| Work-life Balance | r | -.31** | -.24* | -.19 |
| | (p) | (.004) | (.023) | (.078) |
| Resources & Communication | r | -.20 | -.14 | -.09 |
| | (p) | (.054) | (.184) | (.406) |
| Overload | r | -.33** | -.25* | -.25* |
| | (p) | (.002) | (.018) | (.020) |
| Job Security | r | -.27** | -.16 | -.20 |
| | (p) | (.010) | (.129) | (.054) |
| Control | r | -.30** | -.18 | -.07 |
| | (p) | (.005) | (.082) | (.491) |
| Job Characteristics | r | -.34** | -.21* | -.04 |
| | (p) | (.001) | (.047) | (.673) |
| Work Relationships | r | -.19 | -.08 | -.02 |
| | (p) | (.070) | (.429) | (.848) |
| Pay & Benefits | r | -.06 | -.10 | -.03 |
| | (p) | (.547) | (.335) | (.765) |

** . Correlation is significant at the .01 level (2-tailed)

* . Correlation is significant at the .05 level (2-tailed)

4.5 Statistical Tests of Difference

Data was further analysed to determine which, if any, of the biographical variables of interest played a role in the manner in which participants responded to the survey instruments. The parametric and non-parametric analyses that yielded statistically significant results for the Occupational Stress and Work Engagement scales respectively are presented below.

4.5.1. One-way ANOVA

Tables 12 to 14 contain the mean, standard deviation, F and p values as generated by SPSS

version 15.0 for Windows (SPSS Inc., Chicago, Illinois, USA) for the analysis of difference for each dimension of the Occupational Stress scale and the following biographical variable sub-categories: level of education, language, and marital status.

Table 12: ANOVA – Differences in Occupational Stress for Special Needs Educators with Different Levels of Education (N = 86)

| DIMENSION | MEANS (SD) | | | | | | | | | | F | p |
|---------------------------|-----------------|--------|-------------------|--------|-------------------|--------|--------------------|--------|-------------------|--------|------|--------|
| | Gr. 12 (N=4) | | Ed. Dip (N=39) | | Ed. Deg (N=22) | | Ed. Hons (N=18) | | Ed. Mast (N=3) | | | |
| Work-life Balance | 2.00 | (0.89) | 2.72 | (0.70) | 2.51 | (0.47) | 2.58 | (0.94) | 2.83 | (0.62) | 1.11 | .355 |
| Resources & Communication | 2.06 | (0.62) | 2.42 | (0.77) | 2.90 | (0.90) | 2.19 | (0.91) | 2.92 | (0.62) | 2.41 | .056 |
| Overload | 1.88 | (0.75) | 2.37 | (0.63) | 2.32 | (0.60) | 2.13 | (0.90) | 1.58 | (0.76) | 1.45 | .223 |
| Job Security | 2.44 | (0.13) | 2.42 | (0.67) | 2.45 | (0.49) | 1.90 | (0.54) | 1.92 | (0.28) | 3.26 | .015* |
| Control | 1.56 | (0.71) | 2.53 | (0.87) | 3.07 | (0.99) | 2.26 | (1.20) | 2.83 | (0.76) | 3.01 | .023* |
| Job Characteristics | 2.36 | (0.75) | 2.62 | (0.57) | 2.79 | (0.64) | 2.48 | (0.73) | 2.76 | (0.43) | 0.81 | .517 |
| Work Relationships | 1.35 | (0.34) | 2.10 | (0.53) | 2.51 | (0.70) | 2.05 | (-.80) | 1.88 | (0.32) | 3.66 | .009** |
| Pay & Benefits | 3.00 | (1.63) | 3.64 | (1.22) | 4.14 | (1.20) | 3.78 | (1.59) | 3.67 | (2.30) | 0.81 | .520 |

** . Significant difference at the .01 level

* . Significant difference at the .05 level

Inspection of Table 12 indicates significant differences in the mean scores of perceived occupational stress among special needs educators with different levels of education.

Statistically significant findings were recorded for the following dimensions: Work Relationships ($F = 3.66$, $p = .009$), Job Security ($F = 3.26$, $p = .015$) and Control ($F = 3.01$, $p = .023$).

Of the sample, those special needs educators with a Degree in Education reported the highest levels of perceived stress due to issues of Control ($M = 3.07$, $SD = 0.99$), Work Relationships ($M = 2.51$, $SD = 0.70$) and Job (In-) Security ($M = 2.45$, $SD = 0.49$). In addition, those with a Grade 12 qualification reported the lowest levels of perceived stress due to Work Relationships

(\underline{M} = 1.35, \underline{SD} = 0.34) and Control (\underline{M} = 1.56, \underline{SD} = 0.71). Lastly, those educators with post-graduate degrees perceived Job (In-) Security as being the least stressful in comparison to educators with lower levels of education.

Statistically significant differences in the experience of occupational stress (as measured by ASSET) due to qualification were also found by Jackson and Rothmann (2006). However, these differences were attributed to Work-life Balance and Overload. Specifically, those educators who possessed a teaching diploma reported lower levels of perceived stress due to work-life imbalance, than compared with those with post-graduate qualifications.

Table 13: ANOVA – Differences in Occupational Stress for Special Needs Educators who Speak Different Languages (N = 86)

| DIMENSION | MEAN (SD) | | | | | | F | P |
|---------------------------|-------------------|--------|--------------------|--------|----------------|--------|------|-------|
| | ENGLISH (N=35) | | AFRIKAANS (N=4) | | ZULU (N=44) | | | |
| Work-life Balance | 2.56 | (0.69) | 3.44 | (0.68) | 2.58 | (0.71) | 2.87 | .062 |
| Resources & Communication | 2.46 | (0.84) | 2.13 | (1.10) | 2.55 | (0.88) | 0.45 | .634 |
| Overload | 2.08 | (0.72) | 2.75 | (0.84) | 2.35 | (0.66) | 2.54 | .085 |
| Job Security | 2.15 | (0.62) | 3.25 | (0.93) | 2.32 | (0.51) | 6.48 | .002* |
| Control | 2.49 | (0.90) | 3.44 | (0.96) | 2.59 | (1.09) | 1.58 | .212 |
| Job Characteristics | 2.70 | (0.72) | 2.65 | (0.53) | 2.58 | (0.55) | 0.32 | .725 |
| Work Relationships | 2.11 | (0.62) | 2.47 | (0.48) | 2.15 | (0.71) | 0.51 | .602 |
| Pay & Benefits | 3.66 | (1.45) | 3.75 | (1.89) | 4.00 | (1.12) | 0.68 | .509 |

*. Significant difference at the .05 level

The results in Table 13 indicate significant differences in the mean scores of perceived occupational stress among special needs educators who speak different languages. Statistically significant findings were recorded for Job Security (\underline{F} = 6.48, \underline{p} = .002). Of the sample,

Afrikaans-speaking educators reported the highest level of perceived stress due to concerns about Job (In-) Security ($M = 3.25$, $SD = 0.93$) in comparison with their English and Zulu-speaking colleagues.

In their qualitative study, Olivier and Williams (2006) identified the language barrier as a source of stress as educators, who were required to communicate with learners in a second or third language which they were not fluent in, perceived a loss of valuable teaching opportunities. In light of this, it is not surprising to find that Afrikaans-speaking educators perceived less security within their jobs, as a majority of learners attending the special schools from which the sample was drawn spoke either English or one of the indigenous languages.

Table 14: ANOVA – Differences in Occupational Stress for Special Needs Educators of Different Marital Status (N = 86)

| DIMENSION | MEAN (SD) | | | | | | F | p |
|---------------------------|------------------|--------|-------------------|--------|--|--------|------|-------|
| | SINGLE (N=20) | | MARRIED (N=57) | | SEPERATED/ DIVORCED/ WIDOWED (N=8) | | | |
| Work-life Balance | 2.63 | (0.82) | 2.58 | (0.67) | 2.72 | (0.90) | 0.13 | .87 |
| Resources & Communication | 2.51 | (0.77) | 2.43 | (0.86) | 2.75 | (1.00) | 0.49 | .61 |
| Overload | 2.64 | (0.68) | 2.11 | (0.70) | 2.34 | (0.42) | 4.58 | .01* |
| Job Security | 2.63 | (0.51) | 2.21 | (0.63) | 2.13 | (0.46) | 3.86 | .02** |
| Control | 2.61 | (1.06) | 2.50 | (0.97) | 2.81 | (1.28) | 0.35 | .70 |
| Job Characteristics | 2.62 | (0.64) | 2.58 | (0.57) | 2.84 | (0.85) | 0.61 | .54 |
| Work Relationships | 2.23 | (0.67) | 2.06 | (0.66) | 2.47 | (0.62) | 1.52 | .22 |
| Pay & Benefits | 3.65 | (1.18) | 3.75 | (1.41) | 4.50 | (0.75) | 1.28 | .28 |

** . Significant difference at the .01 level

* . Significant difference at the .05 level

Table 14 reflects significant differences in the mean scores of perceived occupational stress among special needs educators of different marital status. Statistically significant findings

were recorded for Overload ($F = 4.58, p = .01$) and Job Security ($F = 3.86, p = .02$). Of the sample, single special needs educators reported higher levels of perceived occupational stress due to Overload ($M = 2.64, SD = 0.68$) and Job (In-) Security ($M = 2.63, SD = 0.51$) in comparison with their married and separated/divorced/widowed colleagues.

Statistically non-significant results in the mean scores of perceived occupational stress among special needs educators were recorded for the sub-categories of the following biographical variables: age, race and tenure (see Appendix I, Tables I 1 to I 3).

The non-significant findings for age and tenure are in contrast to the significant findings of previous research. Jackson and Rothmann (2006) reported that younger educators experienced higher levels of stress than older educators due to Work-life Balance and Control. In addition, Fimian et al. (1986) found that, of a sample of teachers of learning disabled students, 32.6% felt their views of teaching had become more positive with work experience (i.e. tenure) while 58.5% experienced increasing negative views.

4.5.2. Independent Sample t-test

Table 15 contains the mean, standard deviation, degrees of freedom, t and p values as generated by SPSS version 15.0 for Windows (SPSS Inc., Chicago, Illinois, USA) for the analysis of difference for each dimension of the Occupational Stress scale and the following biographical variable sub-categories: special education qualification.

Inspection of Table 15 below indicates significant differences in the mean scores of perceived

occupational stress among special needs educators with and without a special education qualification. Statistically significant findings were recorded for Job Security [$t(84) = -2.69$, $p = .009$].

Table 15: t-test – Differences in Occupational Stress for Special Needs Educators with and without a Special Education Qualification (N = 86)

| DIMENSION | YES (N=58) | | NO (N=28) | | t | df | p |
|---------------------------|---------------|--------|--------------|--------|-------|----|-------|
| | MEAN | (SD) | MEAN | (SD) | | | |
| Work-life Balance | 2.59 | (0.64) | 2.64 | (0.88) | -0.31 | 84 | .755 |
| Resources & Communication | 2.38 | (0.80) | 2.73 | (0.93) | -1.78 | 84 | .078 |
| Overload | 2.28 | (0.69) | 2.21 | (0.75) | 0.45 | 84 | .648 |
| Job Security | 2.19 | (0.55) | 2.55 | (0.66) | -2.69 | 84 | .009* |
| Control | 2.56 | (0.99) | 2.60 | (1.09) | -0.14 | 84 | .887 |
| Job Characteristics | 2.61 | (0.57) | 2.66 | (0.75) | -0.31 | 84 | .755 |
| Work Relationships | 2.19 | (0.66) | 2.08 | (0.70) | 0.61 | 84 | .510 |
| Pay & Benefits | 3.79 | (1.37) | 3.71 | (1.32) | 0.25 | 84 | .802 |

*. Significant difference at the .05 level

Of the sample, those educators with a special education qualification ($M = 2.19$, $SD = 0.55$) reported a lesser degree of perceived occupational stress due to Job (In-) Security than did those educators without the additional qualification ($M = 2.55$, $SD = 0.66$).

Statistically non-significant results in the mean scores of perceived occupational stress among special needs educators were recorded for the sub-categories of the following biographical variables: gender and previous employment as a mainstream educator and (see Appendix I, Tables I 4 and I 5).

The non-significant result for gender supports the findings of Jackson and Rothmann (2006). It

is in contrast, however, to the findings of Phillips et al. (2007), whose sample of female head teachers reported higher levels of perceived occupational stress (as measured by ASSET) due to Overload and Control. In addition, the present finding that previous employment as a mainstream educator (or the lack thereof) did not have any bearing on perceived occupational stress, contrasts that of Olivier and Williams (2006). These researchers found that educators, who were previously employed in mainstream schools, experienced difficulty in adjusting to teaching within special schools due to limitations in their basic training.

4.5.3. Kruskal-Wallis Test

A common trend of statistically non-significant results emerged from the analyses of difference in the mean scores of work engagement among special needs educators and the following biographical variable sub-categories: age, tenure, level of education, race, language and marital status (see Appendix I, Tables I 6 to I 11). Thus, the manner in which participants responded to the Work Engagement scale was not influenced by their individual differences on the aforementioned variables.

The non-significant results for age and tenure support the findings reported by Barkhuizen and Rothmann (2006) in their study of work engagement (as measured by the 17-item UWES) among a sample of academic staff in South African higher education institutions; and Basikin (2007) in his study of work engagement (as measured by the 9-item UWES) among secondary school English teachers in Indonesia. However, the finding for levels of education is in contrast to that of Barkhuizen and Rothmann (2006), who reported that academics with doctoral degrees were more absorbed in their jobs than those with an honours degree.

4.6.4. Mann-Whitney U-test

Tables 16 and 17 contain the mean, standard deviation, degrees of freedom, Z and p values as generated by SPSS version 15.0 for Windows (SPSS Inc., Chicago, Illinois, USA) for the analysis of difference for each dimension of the Work Engagement scale and the following biographical variable sub-categories: gender, and special education qualification.

Table 16: Mann-Whitney U-test – Differences in Work Engagement for Special Needs Educators of Different Genders (N = 86)

| DIMENSION | MALE (N=12) | | FEMALE (N=74) | | Mann-Whitney U | Z | p |
|------------|----------------|--------|------------------|--------|----------------|-------|-------|
| | MEAN | (SD) | MEAN | (SD) | | | |
| Vigour | 4.11 | (0.64) | 4.16 | (0.70) | 412.00 | -0.40 | .686 |
| Dedication | 4.31 | (0.93) | 4.54 | (0.66) | 399.50 | -0.59 | .550 |
| Absorption | 3.45 | (1.20) | 4.35 | (0.63) | 213.50 | -2.92 | .003* |

*. Significant difference at the .05 level

The results in Table 16 indicate significant differences in the mean scores of work engagement among special needs educators of different genders. Statistically significant findings were recorded for Absorption ($Z = -2.92$, $p = .003$). Of the sample, female educators ($M = 4.35$, $SD = 0.63$) reported being more absorbed in their work than their male colleagues ($M = 3.45$, $SD = 1.20$).

Although previous research conducted by Schaufeli and Bakker (2003) revealed that men scored significantly higher on all three dimensions of work engagement, the finding of the present study is to be expected, given the context. Due to their inherent nurturing disposition, female educators tend to be more immersed in the emotion labour involved in special needs education

than their male counterparts. The result, however, is in contrast to the non-significant finding reported by Barkhuizen and Rothmann (2006) and Basikin (2007).

Table 17: Mann-Whitney U-test – Differences in Work Engagement for Special Needs Educators with and without a Special Education Qualification (N = 86)

| DIMENSION | YES (N=58) | | NO (N=28) | | Mann-Whitney U | Z | p |
|------------|---------------|--------|--------------|--------|----------------|-------|------|
| | MEAN | (SD) | MEAN | (SD) | | | |
| Vigour | 4.28 | (0.56) | 3.89 | (0.85) | 582.50 | -2.04 | .04* |
| Dedication | 4.64 | (0.47) | 4.21 | (0.99) | 626.00 | -1.73 | .08 |
| Absorption | 4.29 | (0.62) | 4.07 | (1.05) | 752.00 | -0.43 | .66 |

*. Significant difference at the .05 level

Inspection of Table 17 reflects significant differences in the mean scores of work engagement among special needs educators with and without a special education qualification. Statistically significant findings were recorded for Vigour ($Z = -2.04$, $p = .04$).

Of the sample, those educators with an additional qualification in special education reported higher levels of vigour ($M = 4.28$, $SD = 0.56$) than those without ($M = 3.89$, $SD = 0.85$). This result is to be expected. Due to the added competence and skill possessed by those educators with the additional qualification, they are likely to spend less time on the completion of tasks, and are more confident in light of an enhanced sense of self-efficacy and esteem.

Statistically non-significant results in the mean scores of work engagement among special needs educators and the sub-categories of previous employment as a mainstream educator were reported (see Appendix I, Table I 12).

Chapter Five: Discussion of Results

5.1. Introduction

The results obtained for the present study will be addressed in light of the research problems stated earlier. In answering these key questions, the aim and objectives are achieved as follows: (1) the identification of those factors inherent in the professional role that special needs educators perceived as being the most stressful, (2) establishing whether special needs educators are engaged in their work and the levels thereof, and (3) the impact of work engagement on the appraisal of perceived occupational stress. To reiterate, it is hypothesised that an inverse (negative) relationship exists between work engagement and the perception of occupational stress. Analysis of the findings in relation to previous research will be undertaken where applicable.

5.2. Perceived Occupational Stress reported by Special Needs Educators

At a macro-level, the results of the multiple regression analysis (see Table 8) indicate that, of the eight dimensions of the Occupational Stress scale, inadequate pay and benefits was perceived as being the most stressful factor inherent in the professional role of being a special needs educator to learners with severe intellectual (learning) disabilities. Factors that were perceived as being moderately stressful by the sample include: issues relating to control, and the lack of resources and effective communication. Factors relating to work-life balance, overload, relationships at work, characteristics of the job and job security respectively, were perceived as being less

stressful. The findings related to Job Security and Work-life Balance should be interpreted with caution, however, as the alpha coefficients (see Table 4) for these dimensions were questionable. At a micro-level, 34 (39.5%) and 22 (25.6%) participants respectively ‘strongly disagreed’ and ‘disagreed’ with the statement that the pay and benefits were appropriate for the nature of their work. This result supports the findings of Fimian et al. (1986), whose study on occupational stress (as measured by the Teacher Stress Inventory) reported by teachers of learning disabled and non-learning disabled handicapped students, yielded inadequate salary as the strongest source. At present, special needs educators receive the same remuneration as mainstream educators. Special needs education, however, by its very nature, is far more challenging and demanding than mainstream education. Despite the lower number of learners within the classroom, there is a great deal of added responsibility as special needs educators are expected to diagnose learning needs, and adapt their manner of instruction to afford each learner the opportunity to progress at his/her own pace and within his/her ability (Olivier and Williams, 2006). In light of this, the finding of a perceived lack of appropriate pay and benefits as a major source of occupational stress is to be expected. This finding is of significance for occupational stress research, as high effort coupled with low reward (financial in this case) has been found to detract from employee health and well-being (see Peltzer, Shisana, Zuma, van Wyk and Zungu-Dirwayi, 2009).

With regard to the other factors perceived as being the most stressful by the sample, the above-average level of perceived occupational stress due to having to deal with difficult learners can be attributed to the barriers to learning discussed earlier in this research report. In terms of having to deal with parents, special needs educators often face difficulties as children demonstrating

severe intellectual (learning) disabilities are often neglected by parents, who feel helpless due to their lack of knowledge in caring for and educating their children. As such, these parents expect special schools to take sole responsibility in this regard. In addition, special needs educators are subject to pressure from those parents who have unrealistic expectations due to an over-estimation of their children's level of ability/potential (Olivier and Williams, 2006).

The above-average level of perceived occupational stress due to having to work after contact time reported by the sample in the present study supports the finding of Phillips et al. (2007). In a study of the prevalence and causes of self-reported work-related stress in head teachers, these researchers identified working long hours as one of two main stressors. Because the curriculum within special schools is reported to be adapted according to the differing levels of intellectual ability demonstrated by individual learners (Wilson et al. 1986), special needs educators are required to spend more time preparing different lessons and activities to stimulate interest, and ensure the participation of all learners in the classroom. In addition, learning material may need to be simplified and in-depth explanation provided (Male and May, 1997; Olivier and Williams, 2006). The completion of these tasks often may not be accomplished during normal working hours.

With reference to the factors that were perceived as being the least stressful, the low mean scores reported in Table 6 indicate the likelihood that, on average, the sample perceived good relationships with their fellow special needs educators and as such did not feel secluded at work. According to Fimian et al. (1986), peers are often used as buffers to stress. The results of the

present study go further to suggest that the sample derived a sense of enjoyment from the nature of the professional role, as well as a sense of permanency in their employment.

5.2.1. Differences in the Response to Perceived Occupational Stress

According to Devonport et al. (2008), differences in the manner in which participants responded to perceived occupational stressors can be attributed to the process of appraisal, which is mediated by the unique personal circumstances of each individual. The statistically significant results yielded for the tests of difference in the mean scores of perceived occupational stress (see Tables 12 to 15) thus provide support for the Transactional Model of Stress.

In accounting for the differences in perceived occupational stress due to issues of control reported by those special needs educators who possessed a degree in education (see Table 12), it is assumed that they: (a) have more responsibility than those with Grade 12, and (b) are less able to influence decisions affecting their work than those with higher qualifications.

The low levels of perceived stress due to job insecurity reported by those educators who possessed either post-graduate or special education qualifications (see Tables 12 and 15) are not surprising as their knowledge and skill, and specialised competence and expertise respectively, is likely to provide a sense of job security.

The elevated level of perceived occupational stress due to overload reported by single special needs educators (see Table 14) can be attributed to the likelihood of a lacking support system

outside of the academic institution. In addition, higher levels of perceived stress due to job insecurity is also expected as, in the unfortunate event of retrenchment, single educators do not have a spouse's income to fall back on. While the same can be said for those who are separated/divorced/widowed, it is assumed that some form of support system was established for this group during these adverse life events.

5.3. Work Engagement among Special Needs Educators

The present study is a first in the investigation of work engagement among a sample of special needs educators. Due to the lack of existing evidence to either support or refute the results herein, any interpretation of the findings is speculative.

Analysis of the data recorded in Table 7 indicates that the participants were highly engaged with their work. According to Basikin (2007), the three motives which drive an individual to choose teaching as a profession also keeps them highly engaged. Extrinsic motives include tangible benefits such as shorter workdays and longer vacations, and intangible benefits such as recognition for providing a service. Intrinsic motives stem from the perceived nature of the professional role, which is viewed as being an admirable occupation. Altruistic motives arise from a desire to make a valued contribution to society.

Given the elevated levels of work engagement reported by the sample, it would stand to reason that despite the stressful nature of the professional role, the challenges associated with special needs education can also be stimulating, highly rewarding and result in feelings of personal

accomplishment (Olivier and Williams, 2006). This reasoning echoes the findings of Doyle and Hind (1998), described elsewhere in this research report.

As mentioned earlier, the degree to which an individual is engaged in his/her work is dependent (in part) on the meaningfulness thereof. Accordingly the item: 'I am proud of the work I do', on average, was a major contributor to the high level of overall work engagement (see Table 7). Of the sample, $N = 73$ (84.9%) participants reported 'always' deriving a sense of pride and significance from the nature of the professional role, which is perceived as meaningful. The meaningfulness attached to work is amplified by good relationships with co-workers (May et al. 2004) which, as discussed above, was indeed evident within the sample.

Although the benefits of work engagement for both the individual and the organisation have been purported in literature, because the concept is still in its infancy, the long-term implications thereof are unknown. For example, work engagement is documented as a source of energy and persistence. What remains to be seen, however, are the ramifications of the continuous renewal of energy for health and well-being (Bakker et al. 2008). In addition, the potential of a spill-over effect, due to highly engaged special needs educators experiencing difficulty in uncoupling themselves from work, is also unknown. Finally, there is the danger that perceptions of the job can change. Work that starts out as meaningful, for example, may end up as unfulfilling. According to McCarthy et al. (2009), those educators who remain in their jobs despite low engagement, may experience a decline in their work performance with time.

5.4. The Relationship between Work Engagement and Perceived Occupational Stress

From the correlation analysis (see Table 10), it is evident that an inverse relationship exists between work engagement and perceived occupational stress. In other words, as the levels of work engagement increase, the levels of perceived occupational stress decrease. This result supports the research hypothesis. The strength of the correlation coefficient, however, is low, indicating a small relationship between the variables (see Appendix H, Table H 2). In light of this and the lack of previous research in this area, interpretation of the findings is tentative.

Being subjective in nature, perceived occupational stress is evaluated in terms of its intensity which, in turn, is determined by the process of cognitive appraisal (Laugaa, Rascle and Bruchon-Schweitzer, 2008). The findings of the present study may indicate that work engagement influences the primary appraisal of perceived stress such that it is viewed as a challenge, as opposed to a threat. To reiterate, perceived threat is a negative response to a stressor due to anticipated harm or loss. Perceived challenge, on the other hand, is a positive response to a stressor due to the opportunity it presents for growth or gain (Lazarus and Folkman, 1984). Because work engagement promotes focus and effort in situations of demand, it facilitates positive perceptions of stress (i.e. challenge) and increases an individual's confidence in his/her ability to utilise available resources to deal with the demand. Within the context of the present study, positive perceptions of occupational stress not only protect the sample against the ill-effects of negative stress (e.g. emotional exhaustion), but also enables the special needs educator to derive satisfaction from challenging work, and motivation to better meet the needs of learners.

Despite contributing the least to the overall level of work engagement reported by the sample (see Tables 7 and 9), Vigour was found to be significantly related to five (see Table 11) of the eight dimensions of perceived occupational stress (i.e. Work-life Balance, Overload, Job Security, Control and Job Characteristics). Absorption, which contributed the most to the level of work engagement, was significantly related to only one dimension (i.e. Overload). Thus, a willingness to be at work coupled with above-average to high levels of energy and persistence, was not only more instrumental in curtailing the intensity of perceived stress, but did so across a wider spectrum of factors inherent in the professional role of special needs educator. This could be attributed to the fact that Vigour results in action that drives the individual, whereas Absorption occurs after the fact i.e. it is a result in and of itself.

Dedication appears to be the 'middle-man'. It was second in terms of its contribution to the overall level of work engagement and the number of dimensions it was found to be significantly related to (i.e. Work-life Balance, Overload, and Job Characteristics). This could be an indication that Dedication is both a result of the nature of the professional role and a driving force that elicits positive affect, which enables the special needs educator to derive benefits from stressful work.

5.5. Recommendations

The results obtained in the present study provide a context within which to explore issues relating to stress management interventions for special needs educators of severe intellectually (learning) disabled learners.

Traditional stress management programmes focus only on the causes and consequences of stress. The results of the present study, however, demonstrate that considerable differences exist in the way individuals react to stress. Thus to assist special needs educators prevent excessive occupational stress, the role of his/her appraisal of the demands and resources that lead to stress, and the perception of the nature of the stressor, needs to be explored. By doing so, effective strategies to prevent and/or alleviate perceived occupational stress can be designed in order to improve professional satisfaction, productivity and well-being.

To achieve the aforementioned ends, the following primary, secondary and tertiary stress interventions, which can be implemented at an organisational and individual level, are recommended:

5.5.1. Primary Stress Management Interventions

Primary interventions are aimed directly at eliminating or reducing the sources of stress inherent in the workplace, thus improving work conditions (Fisher et al. 2003).

- Organisational primary interventions attempt to improve the fit between the individual and the workplace as follows (Rothmann, 2003):
 - ✓ The reorganisation or redesign of work to increase control, participation and autonomy.
 - ✓ The facilitation of career development and fostering of social support.

According to Luagaa et al. (2008), the principal can and should play an important role in the

latter by: (a) assisting special needs educators to identify skills and competencies needed for success, (b) creating learning opportunities, and (c) focusing on the specific needs of individual educators in order to provide appropriate logistical, instrumental and social support.

In addition, as work engagement has been found to influence the primary appraisal of perceived stress as a challenge and not a threat, the principal should seek to promote those factors which drive it. According to Roberts and Davenport (2002), these include: (a) the provision of opportunities for career development, (b) encouraging a sense of identification with the academic institution via involvement in decisions which affect work, and (c) fostering a rewarding work environment within which educators receive recognition for their contributions.

According to the findings of the present study, a revision of the state-paid salary and benefits package currently afforded to special needs educators is an important consideration in terms of recognition for their contribution to the field. Despite evidence to support the intrinsic and altruistic motives for choosing special needs education as a profession, the external tangible motive of appropriate remuneration is notably an area of distress, and as such needs to be addressed by the relevant authorities.

- Individual primary interventions are concerned with improving the professional self-concept i.e. “a person’s own perception of his or her sense of worth and abilities in relation to others and the environment” (O’Donnell and Lambert, 2008, p. 152).

By identifying and utilising those personal and situational factors that reinforce feelings of self-

efficacy and positive affect at work, special needs educators will be able to reduce the number of perceived stressors.

5.5.2. Secondary Stress Management Interventions

Secondary interventions focus on the individual, and are concerned with increasing awareness and assisting special needs educators to expand physical and psychological resources, thus enabling them to better manage their own stress (Devonport, 2008; Rothmann, 2003).

- Organisational secondary interventions include:
 - ✓ The design and implementation of pre-service and/or in-service training, which will assist new educators to understand and prepare for the magnitude of the commitment required by special needs education (Johnson et al. 1982).
 - ✓ Continued education, in the form of staff development workshops, which will equip educators with the necessary competencies and skills in order to keep abreast with the latest developments in the field (Olivier and Williams, 2006).

- Individual secondary interventions are concerned with the utilisation of cognitive-behavioural techniques:
 - ✓ Cognitive strategies involve the special needs educator changing or restructuring the way in which s/he perceives a stressful situation. This is achieved by substituting destructive negative thoughts with more constructive positive ones (Potgieter, 2003). By reappraising stressful working conditions, the negative effects will be minimised and

stress more effectively managed (Fisher et al. 2003).

- ✓ Behavioural techniques involve the educator identifying effective problem-solving and functional emotional tension reduction strategies e.g. physical exercise (Luagaa et al. 2008).

5.5.3. Tertiary Stress Management Interventions

Tertiary interventions are targeted at the individual, and are concerned with recuperation from stress as opposed to its prevention. In other words, they are implemented in response to the adverse manifestation of perceived occupational stress.

Counselling aimed at improving psychological well-being, and anti-anxiety medication, are some of the options available to special needs educators who are already experiencing symptoms of distress (Fisher et al. 2003; Luagaa et al. 2008; Rothmann, 2003).

Chapter Six: Conclusion

This research report investigated perceived occupational stress and work engagement among special needs educators of severe intellectually (learning) disabled learners. Those factors inherent in the professional role that were perceived as being the most stressful were identified, the levels of work engagement ascertained, and the relationship between work engagement and perceived occupational stress elucidated.

Although occupational stress today is inevitable, negative stress is not. The intensity with which an individual perceives stress depends on an appraisal transaction that considers the characteristics of that individual in relation to environmental properties. When situational demands exceed personal resources, occupational stressors are perceived as being harmful and threatening. When resources match demands, stressors are perceived as challenging. According to Devonport et al. (2008), certain transactional variables have been found to mediate the impact of perceived stress. The findings of the present study indicate that work engagement is one of those transactional variables.

Despite being highly engaged in their work, however, special needs educators reported high levels of perceived stress due to inadequate pay and benefits. While work engagement was found to be inversely related to perceived occupational stress at a macro-level, statistically non-significant results were found at a micro-level. These findings indicate that Vigour, Dedication and Absorption failed to significantly mediate the impact of perceived (negative) stress reported by the sample due to Pay & Benefits. In light of this, the importance of preventing stress via the

identification of those factors that are potentially harmful or threatening, rather than relying exclusively on mediating variables to alleviate the effects thereof, becomes evident. Additional investigation needs to be undertaken in this regard. Given the significance of work engagement for employee health and well-being, however, its role in the appraisal of stress needs to be explored further.

6.1. Strengths and Limitations of the Present Research Study

The present study embodies two notable strengths. Firstly, it defines stress in terms of both demands and resources, as opposed to a single construct (McCarthy et al. 2009). Secondly, it takes cognisance of the role of individual differences in the perception of stress (Dewe, 1991). In other words, the use of a transactional approach adds an additional dimension to the investigation of occupational stress among special needs educators, as it does not simply compare the responses of educators within and between academic institutions. Rather, it highlights the distinction between the presence of an event or situation and the meaning attributed to it. It thus acknowledges that individuals may perceive demands and resources in a manner that differs from the actual nature thereof. In using this approach, special needs educators are not treated as though they are all the same or that they are affected by the work environment in a similar fashion (Dewe, 1997).

A number of limitations were yielded, however, which could have had an impact on the results obtained. These limitations include the research design and the nature of the survey instruments utilised. Each of these will be discussed separately, in addition to the implications of the

employed sampling procedure for the generalisation of the findings.

6.1.1. The Research Design

The non-experimental design utilised has the drawbacks of having no control group, no manipulation of the independent variable/s and no random assignment (Neuman, 1997). With such a design, threats to internal validity are likely to influence results.

In addition, the use of a cross-sectional survey design makes it difficult to prove causal relationships, as the data obtained offers insight into the stress process at one point in time only. It thus fails to provide information on how the stress process unfolds (Dewe, 1991; Jackson et al. 2006).

6.1.2. The Survey Instruments

6.1.2.1. Standard Stress Questionnaires

According to Dewe (1991, 1997) standard stress questionnaires, such as the one utilised for the present study, over-emphasize those factors included in the instrument and ignore those that are not. Thus, there is an inherent risk of failing to consider significant sources of stress, which may have been elicited if qualitative methodologies were utilised.

6.1.2.2. Self-report Measures

The problems associated with self-report measures are widely acknowledged, the most

commonly referred to being: (1) the lack of reliability and validity of self-reports, (2) the potential lack of accuracy of constructs under investigation, and (3) “the possibility that the act of introspection itself may fundamentally alter the experience under scrutiny” (Male and May, 1997, p. 135). In addition, there is an inherent weakness in simply asking participants to provide their personal perceptions, as there is no way of controlling for such subjective measures. Given these drawbacks, caution should be exercised in making causal inferences from correlational findings.

Despite these limitations, however, the use of subjective self-report questionnaires is unavoidable given the key role played by cognitive appraisal in the Transactional Model of Stress upon which the present study is modelled (McCarthy et al. 2009). The appropriateness of self-report data collection in light of the research problems is aptly captured by the following statement: “if a stressor is whatever one perceives as stressful, and if what is stressful for one may not be for another, it follows that self-report becomes the only method that allows access into the subjective experience” (Guglielmi and Tatrow, 1998, p. 83).

6.1.3. The Sampling Procedure

Special schools are categorised according to the type and severity of learning disabilities they are equipped to cater for. As such, the findings of the present study should only be generalised (with caution) to the educator population within those special schools that provide high levels of support to learners with severe intellectual (learning) disabilities within other districts of KwaZulu-Natal. The findings should not be generalised to educator populations in other school

environments, as the nature of the professional role varies according to the disability category being accommodated for. In addition, because demands and resources across provinces are heterogeneous, the findings of the present study should not be generalised to special needs educator populations in other provincial school districts.

6.2. Directions for Future Research

In order to overcome the limitations of the present study, and contribute to the apparent lack of enquiry into occupational stress and work engagement experienced by special needs educators, the following directions for future research are recommended.

This research report only considered special needs educators of severe intellectually (learning) disabled learners. As mentioned above, however, special schools cater for different types of disabilities and provide varying levels of support. Thus, further investigation should be undertaken both within and between differing school contexts. It is also recommended that these studies be expanded to other school districts overseen by KwaZulu-Natal's Department of Education, as well as in other provinces in South Africa.

A second proposed direction for future research in the area of occupational stress in special needs education, concerns the use of qualitative methodologies. In removing the restrictions associated with standard stress questionnaires currently utilised in research, respondents are encouraged to 'open-up' about their experiences, which may lead to the discovery of unidentified or previously overlooked sources of stress.

Following from the above, longitudinal studies are also needed in order to capture the unfolding process of stress (i.e. from perception to reaction), which may lead to a better understanding of occupational stress as experienced by special needs educators. In addition, longitudinal studies may assist in elucidating the long-term affects of work engagement for employee health and well-being, which is currently lacking in existing literature.

Lastly, various other key-players are affected by the stress associated with special needs education. These include members of the support staff, such as therapists (e.g. speech, occupational) and teaching aides. Johnson et al. (2005), in their study of the experience of work-related stress across occupations (as measured by ASSET), found that teachers experienced higher levels of stress than their support staff. Comparative studies of these populations, within the context of special needs education, are needed in order to determine if the impact of demands and resources within academic institutions are uniform, or not.

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APPENDIX A

199 Fulham Road
Reservoir Hills
Durban
4091

14 April 2009

The District Director
Umlazi District
KwaZulu-Natal Department of Education

RE: Request to Conduct a Survey within Special Schools

My name is Annelieze Williams. I am currently completing my Masters Degree in Industrial Psychology at the University of KwaZulu-Natal (Howard College). As part of the programme I am required to conduct a research study.

The area I have chosen to investigate is occupational stress among educators of learners who are experiencing barriers to learning. The aim of this research is to determine the different types of stressors perceived by educators; and the impact their dedication to, or absorption in their work, has on their experience of stress.

I kindly request permission to conduct the research study within the Umlazi District. More specifically, I will be targeting those academic institutions that specialise in the provision of education to learners who require high levels of support due to learning deficits.

Participation in the study will entail signing a declaration of informed consent and the completion of a questionnaire, which will be completed by educators outside "contact time". No educator is to gain or lose in any way from their voluntary participation, or lack of, in the study. Any questions participants feel may infringe on their anonymity and confidentiality may be omitted. Confidentiality is further guaranteed as no persons within the academic institution will be allowed access to the completed questionnaires, which will be placed within the envelope provided, sealed and returned to the researcher.

Upon completion of the study, feedback will be provided to you in the form of an abridged report. Copies of this report will also be forwarded to the heads of school of participating academic institutions who will, in turn, make the reports available to participants upon request.

Your permission to conduct the survey will be appreciated.


I can be contacted on anneliezew@gmail.com or 072 433 3650. My research supervisor, Dr. Thandi Magojo, can also be contacted on magojo@ukzn.ac.za or 082 333 4769.

I await your positive response.

Kind Regards,

Annelieze Williams

APPENDIX B

| | | |
|---|---|--|
|  | <p>PROVINCE OF KWAZULU-NATAL ISIFUNDAZWE SAKWAZULU-NATALI PROVINSIE KWAZULU-NATAL</p> <p>DEPARTMENT OF EDUCATION UMNYANGO WEMFUNDO DEPARTEMENT VAN ONDERWYS</p> | <p>Address: Emaweleni Building Ikheli: Zwe Madlala Rd Adres: Off Mangosuthu Highway, Umlazi 4001</p> |
| | | <p>Telephone: 031 9188510 Fax: 9061451</p> |
| | | <p>Private Bag: Private Bag X08 Isikhwama: Mobeni Seposi: 4060 Privaatsak:</p> |
| UMLAZI DISTRICT | | |
| <p>Enquiries Imibuzo M.G.NTOMBELA Navae</p> | <p>Reference Inkomba OPEN LEARNING GROUP Verwysing</p> | <p>Date Usuku 24 APRIL 2009 Datum</p> |

Ms A Williams
199 Fulham Road
Reservoir Hills
Durban
4091

RE: REQUEST TO CONDUCT A SURVEY WITHIN SPECIAL SCHOOLS IN THE UMLAZI DISTRICT

Your letter dated 14 April 2009 concerning the above refers.

Please be advised that permission is granted to conduct a survey within our schools.



M G NTOMBELA
DISTRICT DIRECTOR: UMLAZI

Letter of Invitation to Participate in a Research Study

DATE: ____/____/____

Good-day

My name is Annelieze Williams. I am currently completing my Masters degree in Industrial Psychology at the University of KwaZulu-Natal (Howard College). As part of the programme I am required to conduct a research study. The area I have chosen to investigate is occupational stress among educators of learners with special education needs. The aim of this research is to determine the different types of stressors perceived by special needs educators, and the impact their dedication to, or absorption in their work, has on the experience of stress.

I would like to invite all special needs educators to attend a briefing meeting, the time and date of which they will be informed, upon mutual agreement and confirmation between the researcher and head of school.

In attending this meeting, educators will be introduced to the researcher, and briefed concerning the purpose and aim of the study. Attendance to this meeting does not imply participation, and should educators be uninterested they may choose to leave. Participation is entirely on a voluntary basis, and no educator is to gain or lose in any way should they choose to volunteer or withdraw.

In the event that educators choose to participate, they will be required to complete a questionnaire which should take approximately 20 minutes. This questionnaire will be completed outside “contact time”. Completed questionnaires will be placed within an envelope that will be provided, sealed and returned to the researcher. Importantly, a completed and returned questionnaire will be taken as a sign of the educators’ consent in participating in the study.

Educators who wish to participate are requested to notify the head of school. Although educators will be required to provide their names in the aforementioned instance, anonymity is guaranteed as they will not be required to provide this information on the questionnaire.

Importantly, it is critical that educators understand this study is not an evaluation of them as employees. Group results will be reported, not individual findings. Confidentiality is also guaranteed as no persons within, or outside, the academic institution will be allowed access to completed questionnaires, which will be destroyed once data has been entered onto a spreadsheet by the researcher.

Upon completion of the study, feedback of results will be provided, in the form of an abridged report, to the head of school. Copies of this report will be made available to participants upon request.

Your attendance to the briefing and participation will be greatly appreciated.

Kind regards,

Annelieze Williams

Participant Information Sheet

DATE: ____/____/____

Good-day

Thank you for taking the time to attend this meeting. My name is Annelieze Williams. I am currently completing my Masters degree in Industrial Psychology at the University of KwaZulu-Natal (Howard College). As part of the programme I am required to conduct a research study. The area I have chosen to investigate is occupational stress among educators of learners with special education needs. The aim of this research is to determine the different types of stressors perceived by special needs educators; and the impact their dedication to, or absorption in their work, has on the experience of stress.

I would like to invite you to participate in this study. Participation is entirely on a voluntary basis, and no educator is to gain or lose in any way should they choose to volunteer or withdraw. In the event that you choose to participate, you will be required to sign a declaration of informed consent; and complete a questionnaire, which should take approximately 20 minutes. Completed questionnaires are to be placed within the envelope provided and returned to the researcher. Importantly, in addition to the declaration, a completed and returned questionnaire will be taken as a sign of your consent in participating in the study.

Although you will be required to provide your name on the declaration of informed consent, your anonymity is guaranteed as you will not be required to provide this information on the questionnaire. In addition, it is critical that you understand this study is not an evaluation of you as an employee. Group results will be reported, not individual findings. Confidentiality is also guaranteed as no persons within, or outside, the academic institution will be allowed access to the completed questionnaires, which will be destroyed once data has been entered onto a spreadsheet by the researcher.

Upon completion of the study, feedback of results will be provided, in the form of an abridged report, to the head of school. Copies of this report will be made available to participants upon request.

Your participation will be greatly appreciated.

Kind regards,

Annelieze Williams

DECLARATION OF INFORMED CONSENT

I _____ (full name of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project, should I so desire, at any time prior to submitting a completed questionnaire.

Signature of Participant

Section A: BIOGRAPHICAL QUESTIONNAIRE**THE FOLLOWING QUESTIONS ARE INTENDED FOR BACKGROUND INFORMATION**

- (1) How old are you?
[1] below 20 years of age
[2] 20 – 29 years old
[3] 30 – 39 years old
[4] 40 – 49 years old
[5] 50 years of age and above
- (2) Are you male or female?
[1] Male
[2] Female
- (3) Are you ... ?
[1] Black
[2] White
[3] Coloured
[4] Indian
- (4) What is your first language?
[1] English
[2] Afrikaans
[3] isiZulu
[4] isiXhosa
[5] Other

If other, please specify.

- (5) What is your highest level of education?
[1] Grade 12
[2] Grade 12 + Education Diploma
[3] Grade 12 + Education Degree
[4] Grade 12 + Education Honours Degree
[5] Grade 12 + Education Masters Degree
[6] Grade 12 + Doctoral Degree
- (6) Have you obtained a Specialised/Remedial Education qualification?
[1] Yes
[2] No

If yes, please specify the level of the qualification (i.e. diploma, degree, etc.)

- (7) How long have you been employed as a Special Needs educator?
[1] less than a year
[2] 2 – 5 years
[3] 6 – 10 years
[4] over 10 years
- (8) How many learners are in your class?
[1] less than 10
[2] 10 – 19
[3] 20 – 29
[4] 30 – 39
[5] more than 40
- (9.1) Have you previously been employed as a Mainstream educator?
[1] Yes
[2] No
- (9.2) If yes, please indicate for how long.
[1] less than a year
[2] 2 – 5 years
[3] 6 – 10 years
[4] over 10 years
- (10) What is your current marital status?
[1] Single
[2] Engaged or living with a partner
[3] Married
[4] Separated, divorced or widowed
- (11) Do you have any dependents?
[1] None
[2] Children
[3] Medically unfit partner or spouse
[4] Elderly
[5] Other

If other, please specify.

Section B: OCCUPATIONAL STRESS SCALE

THE FOLLOWING IS INTENDED TO DETERMINE THE AREAS OF THE JOB YOU FIND STRESSFUL

(NOTE: **SD** = STRONGLY DISAGREE, **D** = DISAGREE, **N** = NEUTRAL, **A** = AGREE, **SA** = STRONGLY AGREE)

| RATE THE FOLLOWING STATEMENTS ACCORDING TO YOUR OWN EXPERIENCE | SD | D | N | A | SA |
|---|-----------|----------|----------|----------|-----------|
| 1. I work longer hours than I choose or want to. | | | | | |
| 2. I am not informed about what goes on in the academic institution. | | | | | |
| 3. My boss is intimidating and bullying. | | | | | |
| 4. The technology involved with the job is overloading. | | | | | |
| 5. My job is secure. | | | | | |
| 6. I have little control over many aspects of the job. | | | | | |
| 7. I work after contact time. | | | | | |
| 8. I am never told I am doing a good job. | | | | | |
| 9. I lack support from my boss and colleagues. | | | | | |
| 10. I have unrealistic deadlines. | | | | | |
| 11. My job is not permanent. | | | | | |
| 12. The physical work conditions are unpleasant. | | | | | |
| 13. I am not involved in decisions affecting my job. | | | | | |
| 14. I am isolated at work. | | | | | |
| 15. I spend too much time travelling to and from work. | | | | | |
| 16. I was adequately trained for the job. | | | | | |
| 17. The job involves risk of physical violence. | | | | | |
| 18. I have an unmanageable workload. | | | | | |
| 19. My job is likely to change in the future. | | | | | |
| 20. My ideas and suggestions are not taken into account. | | | | | |
| 21. I am not sure what my boss expects from me. | | | | | |
| 22. Work interferes with my home and personal life. | | | | | |
| 23. My work performance is closely monitored. | | | | | |
| 24. I do not have access to proper equipment and resources required for the job. | | | | | |
| 25. I feel colleagues are not pulling their weight. | | | | | |
| 26. The academic institution is constantly changing for the sake of change. | | | | | |
| 27. My skills may become redundant in the near future. | | | | | |
| 28. I do not enjoy my job. | | | | | |
| 29. My relationships with colleagues are poor. | | | | | |
| 30. There is not enough time to do the job properly. | | | | | |
| 31. Others take credit for what I have achieved. | | | | | |
| 32. My work is dull and repetitive. | | | | | |
| 33. I have little or no influence over performance targets. | | | | | |
| 34. My boss is forever fault-finding. | | | | | |
| 35. I deal with difficult students and parents. | | | | | |
| 36. I feel the pay and benefits are appropriate for the nature of the work that I do. | | | | | |

Section C: WORK ENGAGEMENT SCALE

**THE FOLLOWING IS INTENDED TO DETERMINE THE EXTENT TO WHICH YOU ARE DEDICATED TO, OR
ABSORBED IN, YOUR WORK**

| RATE THE FOLLOWING STATEMENTS ACCORDING TO YOUR OWN EXPERIENCE | NEVER | HARDLY EVER | NEUTRAL | SOME TIMES | ALWAYS |
|---|--------------|------------------------|----------------|-----------------------|---------------|
| 1. At work, I feel bursting with energy. | | | | | |
| 2. I am enthusiastic about my job. | | | | | |
| 3. I feel happy when I am working intensely. | | | | | |
| 4. At my job, I feel strong and spirited. | | | | | |
| 5. My job inspires me. | | | | | |
| 6. I am engrossed or absorbed in my work. | | | | | |
| 7. When I get up in the morning, I feel like going to work. | | | | | |
| 8. I am proud of the work I do. | | | | | |
| 9. I get carried away when I am working. | | | | | |

Table G 1: Personal Demographic Characteristics of the Sample

| VARIABLE | TOTAL | CATEGORY | <u>N</u> | % |
|--------------------|---------------|---------------------------------|----------|------|
| Age | <u>N</u> = 86 | 20 – 29 | 2 | 2.3 |
| | | 30 – 39 | 24 | 27.9 |
| | | 40 – 49 | 38 | 44.2 |
| | | 50 and above | 22 | 25.6 |
| Gender | <u>N</u> = 86 | Male | 12 | 14 |
| | | Female | 74 | 86 |
| Race | <u>N</u> = 86 | Black | 46 | 53.5 |
| | | White | 7 | 8.1 |
| | | Coloured | 4 | 4.7 |
| | | Indian | 29 | 33.7 |
| Language | <u>N</u> = 86 | English | 35 | 40.7 |
| | | Afrikaans | 4 | 4.6 |
| | | isiZulu | 44 | 51.2 |
| | | isiXhosa | 1 | 1.2 |
| | | Other | 2 | 2.3 |
| Level of Education | <u>N</u> = 86 | Grade 12 | 4 | 4.7 |
| | | Diploma in Education | 39 | 45.3 |
| | | Bachelor of Education | 22 | 25.6 |
| | | Bachelor of Education Honours | 18 | 20.9 |
| | | Masters of Education | 3 | 3.5 |
| Marital Status | <u>N</u> = 86 | Single | 20 | 23.2 |
| | | Engaged/ Living with a partner | 1 | 1.2 |
| | | Married | 57 | 66.3 |
| | | Separated, divorced or widowed | 8 | 9.3 |
| Dependents | <u>N</u> = 90 | None | 10 | 11.1 |
| | | Children | 66 | 73.3 |
| | | Medically unfit partner/ spouse | 2 | 2.2 |
| | | Elderly | 7 | 7.8 |
| | | Other | 5 | 5.6 |

Table G 2: Professional Characteristics of the Sample

| VARIABLE | TOTAL | CATEGORY | N | % |
|--|---------------|------------------|----------|----------|
| Previous Employment as a Mainstream Educator | <u>N</u> = 86 | Yes | 65 | 75.6 |
| | | No | 21 | 24.4 |
| Tenure as a Mainstream Educator | <u>N</u> = 65 | Less than a year | 4 | 6.2 |
| | | 2 – 5 years | 23 | 35.4 |
| | | 6 – 10 years | 19 | 29.2 |
| | | Over 10 years | 19 | 29.2 |
| Special Education Qualification | <u>N</u> = 86 | Yes | 58 | 67.4 |
| | | No | 28 | 32.6 |
| Special Needs Educator Tenure | <u>N</u> = 86 | Less than a year | 5 | 5.8 |
| | | 2 – 5 years | 31 | 36.0 |
| | | 6 – 10 years | 12 | 14.0 |
| | | Over 10 years | 38 | 44.2 |
| Number of Learners in Class | <u>N</u> = 85 | Less than 10 | 8 | 9.4 |
| | | 10 – 19 | 67 | 78.8 |
| | | 20 – 29 | 8 | 9.4 |
| | | 30 – 39 | 1 | 1.2 |
| | | 40 and over | 1 | 1.2 |

Table H 1: Dimensions of the 'Perception of Stressors' Questionnaire

| DIMENSION | DESCRIPTION |
|---------------------------|--|
| Work-life Balance | Sources of stress relating to the extent to which the demands of work interfere with people's personal and home life. |
| Resources & Communication | Sources of stress relating to the equipment/resources available at work and the effectiveness of communication in the workplace. |
| Overload | Sources of stress relating to workload and time pressures. |
| Job Security | Sources of stress relating to the level of job security perceived by employees. |
| Control | Sources of stress relating to the amount of control people have over their work. |
| Job Characteristics | Sources of stress relating to the fundamental nature of the job itself. |
| Work Relationships | Source of stress relating to the contact people have at work with their colleagues/managers. |
| Pay & Benefits | Sources of stress relating to pay and benefits. |

Table H 2: Interpretation of the Magnitude of r

| VALUE OF r (+ or -) | INTERPRETATION |
|----------------------------|---|
| < .2 | Almost no relationship |
| .2 – .4 | Low correlation, small relationship |
| .4 – .7 | Moderate correlation, substantial relationship |
| .7 – .9 | High correlation, strong relationship |
| .9 – 1.0 | Very high correlation, very reliable relationship |

Table I 1: ANOVA – Differences in Occupational Stress for Special Needs Educators in Different Age Categories (N = 86)

| DIMENSION | MEAN (SD) | | | | | | | | F | p |
|---------------------------|--------------------|--------|---------------------|--------|---------------------|--------|-----------------------|--------|------|-----|
| | 20-29 yrs (N=2) | | 30-39 yrs (N=24) | | 40-49 yrs (N=38) | | 50 and over (N=22) | | | |
| Work-life Balance | 2.25 | (0.00) | 2.46 | (0.67) | 2.55 | (0.72) | 2.90 | (0.73) | 1.80 | .15 |
| Resources & Communication | 3.00 | (0.35) | 2.31 | (0.79) | 2.59 | (0.97) | 2.49 | (0.73) | 0.74 | .57 |
| Overload | 2.75 | (0.70) | 2.26 | (0.58) | 2.13 | (0.77) | 2.43 | (0.69) | 1.22 | .30 |
| Job Security | 2.75 | (0.70) | 2.29 | (0.54) | 2.20 | (0.58) | 2.47 | (0.72) | 1.25 | .29 |
| Control | 3.00 | (0.35) | 2.26 | (0.89) | 2.56 | (1.17) | 2.91 | (0.81) | 1.70 | .17 |
| Job Characteristics | 2.86 | (0.20) | 2.59 | (0.62) | 2.62 | (0.68) | 2.67 | (0.59) | 0.14 | .93 |
| Work Relationships | 2.13 | (0.17) | 2.11 | (0.54) | 2.16 | (0.79) | 2.18 | (0.62) | 0.05 | .98 |
| Pay & Benefits | 4.00 | (1.41) | 3.54 | (1.44) | 3.84 | (1.32) | 3.86 | (1.35) | 0.31 | .81 |

Table I 2: ANOVA – Differences in Occupational Stress for Special Needs Educators belonging to Different Race Groups (N = 86)

| DIMENSION | MEAN (SD) | | | | | | | | F | p |
|---------------------------|-----------------|--------|----------------|--------|-------------------|--------|------------------|--------|------|-----|
| | BLACK (N=46) | | WHITE (N=7) | | COLOURED (N=4) | | INDIAN (N=29) | | | |
| Work-life Balance | 2.60 | (0.70) | 2.96 | (0.60) | 2.88 | (1.09) | 2.50 | (0.72) | 0.96 | .41 |
| Resources & Communication | 2.54 | (0.85) | 2.36 | (0.70) | 2.56 | (1.12) | 2.46 | (0.90) | 0.12 | .94 |
| Overload | 2.38 | (0.63) | 2.43 | (0.47) | 2.50 | (1.13) | 1.99 | (0.75) | 2.17 | .09 |
| Job Security | 2.35 | (0.50) | 2.46 | (1.04) | 2.44 | (0.62) | 2.17 | (0.66) | 0.75 | .52 |
| Control | 2.60 | (1.08) | 2.86 | (0.99) | 2.69 | (1.40) | 2.46 | (0.90) | 0.32 | .80 |
| Job Characteristics | 2.57 | (0.57) | 2.70 | (0.40) | 3.04 | (1.08) | 2.66 | (0.69) | 0.74 | .52 |
| Work Relationships | 2.17 | (0.72) | 2.32 | (0.50) | 2.19 | (0.92) | 2.08 | (0.60) | 0.2 | .83 |
| Pay & Benefits | 3.83 | (1.25) | 3.29 | (1.25) | 5.00 | (0.00) | 3.62 | (1.54) | 1.57 | .20 |

Table I 3: ANOVA – Differences in Occupational Stress for Special Needs Educators with Different Tenures (N = 86)

| DIMENSION | MEAN (SD) | | | | | | | | F | p |
|---------------------------|-----------------|--------|-------------------|--------|--------------------|--------|--------------------|--------|------|-----|
| | < 1 yr (N=5) | | 2-5 yrs (N=31) | | 6–10 yrs (N=12) | | > 10 yrs (N=38) | | | |
| Work-life Balance | 2.15 | (0.99) | 2.45 | (0.65) | 2.58 | (0.71) | 2.80 | (0.71) | 2.15 | .09 |
| Resources & Communication | 2.25 | (0.96) | 2.65 | (0.99) | 2.48 | (0.69) | 2.41 | (0.78) | 0.55 | .64 |
| Overload | 1.80 | (0.64) | 2.23 | (0.68) | 2.25 | (0.78) | 2.34 | (0.71) | 0.86 | .46 |
| Job Security | 2.00 | (0.39) | 2.46 | (0.66) | 2.40 | (0.60) | 2.19 | (0.58) | 1.62 | .19 |
| Control | 1.60 | (0.60) | 2.52 | (1.02) | 2.58 | (0.97) | 2.75 | (1.03) | 1.99 | .12 |
| Job Characteristics | 2.31 | (0.52) | 2.75 | (0.71) | 2.69 | (0.65) | 2.55 | (0.56) | 0.99 | .40 |
| Work Relationships | 1.78 | (0.47) | 2.09 | (0.71) | 2.26 | (0.57) | 2.21 | (0.68) | 0.79 | .50 |
| Pay & Benefits | 3.80 | (0.83) | 3.61 | (1.40) | 3.67 | (1.49) | 3.92 | (1.34) | 0.31 | .81 |

Table I 4: t-test – Differences in Occupational Stress for Special Needs Educators of Different Genders (N = 86)

| DIMENSION | MALE (N=12) | | FEMALE (N=74) | | t | df | p |
|---------------------------|----------------|--------|------------------|--------|-------|----|-----|
| | MEAN | (SD) | MEAN | (SD) | | | |
| Work-life Balance | 2.71 | (0.53) | 2.59 | (0.75) | 0.51 | 84 | .60 |
| Resources & Communication | 2.29 | (0.84) | 2.53 | (0.86) | -0.89 | 84 | .37 |
| Overload | 2.44 | (0.84) | 2.23 | (0.68) | 0.95 | 84 | .34 |
| Job Security | 2.31 | (0.50) | 2.30 | (0.63) | 0.04 | 84 | .96 |
| Control | 2.58 | (1.26) | 2.57 | (0.98) | 0.02 | 84 | .97 |
| Job Characteristics | 2.61 | (0.63) | 2.63 | (0.63) | -0.12 | 84 | .90 |
| Work Relationships | 2.33 | (0.77) | 2.12 | (0.65) | 0.96 | 84 | .33 |
| Pay & Benefits | 4.08 | (1.37) | 3.72 | (1.35) | 0.87 | 84 | .38 |

Table I 5: t-test – Differences in Occupational Stress for Special Needs Educators in terms of Previous Employment as Mainstream

Educators (N = 86)

| DIMENSION | YES (N=65) | | NO (N=21) | | t | df | p |
|---------------------------|---------------|--------|--------------|--------|-------|----|-----|
| | MEAN | (SD) | MEAN | (SD) | | | |
| Work-life Balance | 2.66 | (0.78) | 2.44 | (0.46) | 1.22 | 84 | .22 |
| Resources & Communication | 2.54 | 0.92) | 2.36 | (0.60) | 0.85 | 84 | .39 |
| Overload | 2.20 | (0.71) | 2.42 | (0.68) | -1.20 | 84 | .23 |
| Job Security | 2.30 | (0.61) | 2.13 | (0.63) | -0.03 | 84 | .97 |
| Control | 2.66 | (1.06) | 2.31 | (0.84) | 1.38 | 84 | .17 |
| Job Characteristics | 2.69 | (0.66) | 2.44 | (0.47) | 1.62 | 84 | .10 |
| Work Relationships | 2.20 | (0.73) | 2.01 | (0.40) | 1.12 | 84 | .26 |
| Pay & Benefits | 3.85 | (1.32) | 3.52 | (1.43) | 0.94 | 84 | .34 |

Table I 6: Kruskal-Wallis – Differences in Work Engagement for Special Needs Educators in Different Age Categories (N = 86)

| DIMENSION | MEAN (SD) | | | | | | | | CHI SQUARE (χ^2) | df | p |
|------------|--------------------|--------|---------------------|--------|---------------------|--------|-----------------------|--------|----------------------------|----|-----|
| | 20-29 yrs (N=2) | | 30-39 yrs (N=24) | | 40-49 yrs (N=38) | | 50 and over (N=22) | | | | |
| Vigour | 4.50 | (0.24) | 4.14 | (0.68) | 4.24 | (0.72) | 4.00 | (0.65) | 2.85 | 3 | .41 |
| Dedication | 5.00 | (0.00) | 4.50 | (0.74) | 4.61 | (0.52) | 4.26 | (0.91) | 4.41 | 3 | .22 |
| Absorption | 4.67 | (0.47) | 4.08 | (1.04) | 4.32 | (0.56) | 4.15 | (0.84) | 1.11 | 3 | .77 |

Table I 7: Kruskal-Wallis – Differences in Work Engagement for Special Needs Educators with Different Tenures (N = 86)

| DIMENSION | MEAN (SD) | | | | | | | | CHI SQUARE (χ^2) | df | p |
|------------|-----------------|--------|-------------------|--------|--------------------|--------|--------------------|--------|----------------------------|----|-----|
| | < 1 yr (N=5) | | 2-5 yrs (N=31) | | 6-10 yrs (N=12) | | > 10 yrs (N=38) | | | | |
| Vigour | 4.33 | (0.62) | 4.04 | (0.80) | 4.25 | (0.65) | 4.19 | (0.62) | 0.81 | 3 | .84 |
| Dedication | 4.47 | (0.76) | 4.42 | (0.89) | 4.50 | (0.59) | 4.58 | (0.56) | 0.14 | 3 | .98 |
| Absorption | 4.27 | (1.01) | 4.09 | (1.03) | 4.36 | (0.45) | 4.28 | (0.61) | 0.33 | 3 | .95 |

Table I 8: Kruskal-Wallis – Differences in Work Engagement of Special Needs Educators with Different Levels of Education (N = 86)

| DIMENSION | MEANS (SD) | | | | | | | | | | CHI SQUARE (χ^2) | F | p |
|------------|-----------------|--------|-------------------|--------|-------------------|--------|--------------------|--------|-------------------|--------|----------------------------|---|-----|
| | Gr. 12 (N=4) | | Ed. Dip (N=39) | | Ed. Deg (N=22) | | Ed. Hons (N=18) | | Ed. Mast (N=3) | | | | |
| Vigour | 4.33 | (0.72) | 4.05 | (0.72) | 4.26 | (0.47) | 4.28 | (0.84) | 3.78 | (0.69) | 3.65 | 4 | .45 |
| Dedication | 4.58 | (0.83) | 4.31 | (0.87) | 4.61 | (0.47) | 4.76 | (0.45) | 4.67 | (0.57) | 5.28 | 4 | .25 |
| Absorption | 3.84 | (2.11) | 4.09 | (0.83) | 4.30 | (0.58) | 4.52 | (0.40) | 4.00 | (0.67) | 4.22 | 4 | .37 |

Table I 9: Kruskal-Wallis – Differences in Work Engagement of Special Needs Educators belonging to Different Race Groups (N = 86)

| DIMENSION | MEAN (SD) | | | | | | | | CHI SQUARE (χ^2) | df | p |
|------------|-----------------|--------|----------------|--------|-------------------|--------|------------------|--------|----------------------------|----|-----|
| | BLACK (N=46) | | WHITE (N=7) | | COLOURED (N=4) | | INDIAN (N=29) | | | | |
| Vigour | 4.15 | (0.71) | 4.00 | (0.38) | 4.25 | (0.74) | 4.18 | (0.73) | 1.25 | 3 | .74 |
| Dedication | 4.42 | (0.83) | 4.28 | (0.77) | 4.59 | (0.63) | 4.68 | (0.44) | 2.32 | 3 | .50 |
| Absorption | 4.12 | (0.92) | 4.29 | (0.52) | 4.84 | (0.19) | 4.28 | (0.62) | 3.75 | 3 | .28 |

Table I 10: Kruskal-Wallis – Differences in Work Engagement of Special Needs Educators who Speak Different Languages (N = 86)

| DIMENSION | MEAN (SD) | | | | | | CHI SQUARE (χ^2) | df | p |
|------------|----------------|--------|-----------------|--------|-------------|--------|-------------------------|----|-----|
| | ENGLISH (N=35) | | AFRIKAANS (N=4) | | ZULU (N=44) | | | | |
| Vigour | 4.15 | (0.70) | 4.09 | (0.42) | 4.14 | (0.72) | 0.22 | 2 | .89 |
| Dedication | 4.64 | (0.45) | 4.17 | (1.03) | 4.39 | (0.84) | 1.66 | 2 | .43 |
| Absorption | 4.29 | (0.60) | 4.59 | (0.42) | 4.14 | (0.92) | 0.91 | 2 | .63 |

Table I 11: Kruskal-Wallis – Differences in Work Engagement of Special Needs Educators of Different Marital Status (N = 86)

| DIMENSION | MEAN (SD) | | | | | | CHI SQUARE (χ^2) | df | p |
|------------|---------------|--------|----------------|--------|------------------------------------|--------|-------------------------|----|-----|
| | SINGLE (N=20) | | MARRIED (N=57) | | SEPARATED/ DIVORCED/ WIDOWED (N=8) | | | | |
| Vigour | 4.00 | (0.72) | 4.21 | (0.68) | 4.25 | (0.66) | 1.54 | 2 | .46 |
| Dedication | 4.35 | (0.82) | 4.58 | (0.64) | 4.46 | (0.87) | 0.79 | 2 | .67 |
| Absorption | 3.98 | (1.18) | 4.25 | (0.64) | 4.67 | (0.35) | 3.24 | 2 | .19 |

Table I 12: Mann-Whitney U-test – Differences in Work Engagement for Special Needs Educators in terms of Previous Employment as Mainstream Educators (N = 86)

| DIMENSION | YES (N=65) | | NO (N=21) | | Mann-Whitney U | Z | p |
|------------|------------|--------|-----------|--------|----------------|-------|-----|
| | MEAN | SD | MEAN | SD | | | |
| Vigour | 4.13 | (0.70) | 4.24 | (0.66) | 614.50 | -0.59 | .55 |
| Dedication | 4.48 | (0.69) | 4.57 | (0.77) | 572.50 | -1.09 | .27 |
| Absorption | 4.31 | (0.62) | 3.95 | (1.14) | 580.00 | -0.95 | .34 |