

**WELL-BEING OF EDUCATORS IN SELECTED SECONDARY SCHOOLS IN
NAMIBIA**

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF

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ABSTRACT

This study focussed on job and personal factors that educators ($N = 502$) in Namibian secondary schools need for increased work engagement, positive work outcomes and decreased intention to resign. A quantitative approach with a field survey design has been used with a non-random convenience sample of educators. Measurement instruments used were: Antecedents Scale, Work-role Fit Scale, Psychological Conditions Scale, Work Engagement Scale, Organizational Commitment Scale, Turnover Intention Scale, the Organizational Citizenship Behaviour Scale and a biographical questionnaire. Measurement models were tested using confirmatory and exploratory factor analyses. Descriptive statistics, internal consistencies of measures and correlations were analysed (using SPSS 19.0). Multivariate analyses of variance and hierarchical regression analyses were conducted to test direct and indirect effects of independent variables on mediators and dependent variables.

The findings indicated that work-role fit and job enrichment, via psychological meaningfulness, had the strongest effects on the work engagement of educators. Work-role fit, job enrichment and resources affected emotional engagement. Commitment was affected by work-role fit, job enrichment, co-worker relations, supervisor support, sense of coherence, psychological meaningfulness and autonomy. Educator turnover increased with poor work-role fit, lack of personal resources, a weak sense of coherence and lack of psychological meaningfulness. Male (compared with female) educators experienced higher levels of depression. Female (compared with male) educators struggled with somatic complaints, social dysfunction and

anxiety. Principals and Heads of Departments showed the highest organizational citizenship. Concerning age groups, educators older than 55 years showed highest work-role fit, where-as educators under the age of 35 indicated lowest work-role fit.

Poor co-worker relations, low psychological safety, a weak sense of coherence and a lack of personal resources contributed to somatic symptoms. Poor co-worker relations, low job enrichment, lack of resources, weak sense of coherence, feeling unsafe and not feeling psychologically available impacted anxiety/insomnia. Poor work role fit, poor job enrichment, poor co-worker relations, low supervisor support, lack of resources, weak sense of coherence, low psychological availability and low autonomy increased social dysfunction. Low personal resources, a weak sense of coherence and a lack of psychological safety contributed significantly to depression.

Indirect effects indicated that psychological safety (feeling rejected) transferred the effects of poor work-role fit, co-worker relations, cognitive resources and sense of coherence to somatic symptoms. Psychological safety (not feeling appreciated) transferred the effects of poor co-worker relations and a lack of physical/emotional resources to somatic symptoms. Psychological availability influenced the relationship between work-role fit, job enrichment and cognitive resources on the one hand and anxiety on the other hand. Psychological safety (feeling of rejection) influenced the relationship between work-role fit, co-worker relations, cognitive resources and sense of coherence on the one hand and anxiety on the other hand. Psychological availability influenced the relationship between work-role fit, job enrichment and cognitive resources on the one hand and social dysfunction on the

other hand. Psychological availability also influenced the relationship between job enrichment and supervisor trust on the one hand and social dysfunction on the other hand. Psychological safety (feeling rejected) influenced the relationship between work-role fit, co-worker relations, cognitive resources and sense of coherence on the one hand and depression on the other hand.

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DEDICATION

To Carolin – the most dedicated educator in Namibia! Thanks for touching the souls of thousands of children in Namibia in the positive and kind way you do.

To Carmen and Anke – if only you will ever understand how much you taught me about life by just looking at life through your eyes. You are great educators!

DECLARATIONS

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

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Manfred Janik

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Date

CHAPTER 1

INTRODUCTION

This dissertation is about the well-being of Namibian secondary school educators as well as the employee and organizational outcomes thereof.

Chapter 1 focuses on the background and motivation for the study, the problem statement, justification for the study, as well as research objectives and methodology used in this study.

1.1 BACKGROUND AND MOTIVATION FOR THE STUDY

Occupations that focus primarily on other human beings are generally regarded as high stress occupations (George, Louw, & Badenhorst, 2008; Pisanti, Gagliardi, Razzino, & Bertini, 2003; Schamer & Jackson, 1996; Vanderberghe & Hubermann, 1999; Van Zyl & Pietersen, 1999). According to Näring, Briët, and Brouwers (2006), education is a human-oriented profession, which is often marked by a high level of stress and a subsequent high level of burnout, owing to, amongst other factors, high job demands (Dalgard, Mykletum, Rognerud, Johansen, & Zahl, 2007; Raschke, Dedrick, Strathe, & Hawkes, 1985). There is substantial evidence that a significant number of educators worldwide struggle with high levels of distress and burnout (Borg, 1990; Boyle, Borg, Falzon, & Baglioni, 1995; Chaplin, 2008; Jackson,

Rothmann, & Van de Vijver, 2006; Johnson et al., 2005; Kyriacou, 2001; Pisanti et al., 2003; Rasku & Kinnunen, 2003). A study on Belgian secondary school educators to establish the relationship between job conditions and physical/psychological health outcomes confirmed that increased distress at work is related to increased levels of educator burnout (Kittel & Leynen, 2003). The same findings were confirmed in studies with Dutch, Finish and Italian educators (Pisanti et al., 2003; Rasku & Kinnunen, 2003; Verhoeven, Kraaij, Joeke, & Maes, 2003). High work stress is often linked to poor general well-being for educators, which might prompt a higher intention to leave the teaching profession (Chaplin, 2008).

Any workplace exerts demands on the employee (Meijman & Mulder, 1998). Educators might experience the demands of the workplace as either distress (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001b) or eustress (Rothmann & Jordaan, 2006). Eustress can be defined as positive, enjoyable stress that provides the human body with a healthy amount of adrenalin to be able to adhere to workplace demands. Eustress leads to work engagement, pleasure and enthusiasm which educators experience in their workplace activities, despite the high job demands placed on them (Rothmann & Jordaan, 2006). When employees work in an environment where they experience eustress, higher levels of work engagement will be one of the long-term results (Hallberg & Schaufeli, 2006), which will again lead to positive organizational outcomes like organizational commitment (Blizzard, 2002), a high level of general well-being and health (Jones & Hodgson, 1998), high levels of organizational citizenship behaviour or extra-role behaviour (Leiter & Bakker, 2012), and low turnover intention (May, Gilson, & Harter, 2004).

Furthermore, the concept of eustress is closely connected to positive psychology through the concepts of hedonia (pleasures of the mind, body and avoidance of pain) and eudaimonia (deeper level of perceived happiness) (Adler & Matthews, 1994; Peterson, Park, & Seligman, 2005). Happiness entails the experience of joy, satisfaction and positive well-being as well as the perception that one's life is good, meaningful and worthwhile (Seligman, 2002). Many positive outcomes are associated with human beings who experience a deep-seated happiness, like better attention span, better recovery from ill health, protection from the onset of illness and longevity (Seligman, 2008). Research indicates three routes towards happiness, namely pleasure, meaningfulness and engagement (Peterson et al., 2005). Seligman, Parks, and Steen (2004) indicate that individuals control meaningfulness and engagement better than pleasure.

As individuals spend a third of their lives engaged at work (Wrzesniewski, McCauley, Rozin, & Schwartz, 1997), they tend to build their identities around work (Meyers, 2007). Educators, in particular, are, in lay terms, often regarded as being on duty 24 hours per day. Thus, if work circumstances for educators could be as such that they find meaningfulness, engagement and pleasure, they will be happy workers, which will benefit education in Namibia in general. Because of the organizational outcome benefits that accompany employee happiness (engagement, meaningfulness, pleasure) and a positive attitude, one cannot envision that a non-happy, negative employee can be productive. Schaufeli et al. (2001) found that individuals who scored high on work engagement also exhibited high energy and self-efficacy levels. Bakker and Demerouti (2008) also found that the positive nature of work

engagement helps employees to form their own feedback in terms of appreciation, recognition and success. Schaufeli and Van Rhenen (2006) reported a strong connection between positive emotions and the experience of work engagement. It was also found that engaged workers experience fewer psychosomatic complaints, which is an indication that engagement and general health are positively related (Demerouti, Bakker, De Jonge, Janssen, & Schaufeli, 2001a; Schaufeli, Taris, & Van Rhenen, 2008). In addition it is important to notice that research found that an absence of burnout does not mean the automatic presence of work engagement and employee happiness (Schaufeli & Bakker, 2004; Shirom, 2003). Thus, even in the absence of burnout, employers have to provide work circumstances that foster a positive work environment and engagement.

Distress can be regarded as the negative stress that inhibits and limits employees (educators) in the fulfilment of their job duties. According to Huhtala and Parzefall (2007), work-related distress develops when work is at once burdensome and produces little internal and/or external reward. Work-related distress seems to occur, amongst other factors, where high job demands combine with a lack of opportunities for exerting influence and control (Karasek & Theorell, 1990). Thus, educators who experience a lack of autonomy at work, for example, will most probably experience increased distress levels. Furthermore, when educators find that the demands of their job overshadow the resources of their job (like incentives), they might experience high distress, low general well-being and evaluate the job situation negatively (Demerouti et al., 2001b).

Distress might impact negatively on the general well-being of the employee (Lee & Ashforth, 1996; Rothmann, Mostert, & Strydom, 2006). Punch and Tuettmann (1990) listed a range of symptoms that are associated with educator distress like rashes, cardiovascular disease, deterioration of relationships and work performance, anxiety, confused thinking, feelings of inadequacy, panic, phobias, depression, chronic fatigue and burnout (Betoret, 2006). Distress and poor well-being can lead to burnout and leaving the job. Rieg, Paquette, and Chen (2007) found that in the United States of America, 25% to 50% of new educators resign during the first three years of teaching owing to their inability to handle the high levels of distress in the profession. In a study in Britain, Punch and Tuettmann (1990) found that secondary school educator distress levels were twice those of the general population. Johnson et al. (2005) found the education profession to be one of the six most stressful occupations out of a comparison of 26 occupations. It was also found that educators with high levels of distress experience low job satisfaction, less commitment to teaching and a stronger desire to resign (Jepson & Forrest, 2006). Kyriacou (2001) indicates that educator distress is related to poor educator/learner rapport, less educator work effectiveness, low levels of self-efficacy and increased incidence of educator burnout.

Burnout is often regarded in literature as the negative opposite of work engagement (Schaufeli & Bakker, 2012) and a result of high distress levels (Chaplin, 2008; Guglielmi & Tatrow, 1998). Burnout has been described as a specific kind of occupational distress-reaction among individuals who work directly with human beings, like educators, because of the demanding and emotionally charged

interpersonal relationships these workers experience at work (Maslach & Schaufeli, 1993). The incidence of burnout was found to be especially high with educators (Winzelberg & Luskin, 1999). Impaired job satisfaction is seen as an immediate consequence of burnout (Schaufeli & Enzmann, 1998). A functional national educator corps will thus attempt to escape from distress and burnout at all costs as the consequences are so devastating for the educator, the workplace and the general public who is served by the workplace.

The assumption that job resources may serve as a buffer against the impact of job demands and accompanying distress reactions including burnout (Bakker, Demerouti, Taris, Schaufeli, & Schreurs, 2003b) correlates with the Job Demand-Resources (JD-R) Model of Karasek (1979). The JD-R postulates that every occupation has its own specific risk factors associated with job stress and burnout (Bakker, Demerouti, De Boer, & Schaufeli, 2003a). These factors can be divided into two main groups: job demands and job resources. According to Demerouti et al. (2001b), employees of organizations which are high in demands and low in resources might experience a high level of distress and low levels of well-being. Research indicates that badly designed jobs or high job demands deplete employee's mental and physical resources, which leads to low energy levels and health problems. Thus, the absence of job resources leads to increased distress, a lack of educator motivation, cynicism, and reduced extra role performance (extra role performance is also called citizenship behavior which refers to doing more at work than is formally expected) (Bakker et al., 2003b; Demerouti et al., 2001b), to mention just a few.

Job demands and resources are negatively related, since job demands, such as high work pressure and emotionally demanding interactions with learners, may negatively interact with the mobilisation of job resources of educators. For example, positive job resources such as social support and feedback may reduce the impact of job demands (Demerouti et al., 2001b). The Conservation of Resources (COR) theory (Hobfoll, 1998) explains the effects of job resources on employees. According to this theory, people strive to obtain, retain and protect what they value. As job resources are regarded as positive to employees, they will attempt to protect these resources. Social support, job enhancement opportunities, autonomy, participation in decision-making, and psychological and physical well-being are such job resources (Lee & Ashforth, 1996). Workload, role ambiguity, role conflict and stressful events in general are examples of job demands (Rothmann & Jordaan, 2006). When employees cannot access job resources that exist in the external environment (i.e., supervisor support), they cannot reduce the negative effects of job demands (i.e., difficult parents of learners) on themselves and they cannot achieve their work goals. According to the COR theory, employees will then attempt to reduce the discomfort of the impact of job demands and withdraw and reduce their discretionary inputs (Hobfoll, 1998). The overburdened educator who does not have access to resources will thus withdraw in an effort at self-preservation, which might impact negatively on the quality of education.

Research identified various factors that play an important role in determining whether educators experience their job demands as eustress or distress. Amongst these factors are work-role fit (Ford, 2012), job enrichment (Hackman & Oldham,

1975, 1980), workplace relations such as those with co-workers (Vinarski-Peretz & Carmeli, 2011) and supervisors (Kahn, 1990), job resources (Schaufeli, Bakker, & Van Rhenen, 2009), rewards and recognition at work (De Villiers-Scheepers, 2011), organizational support experienced (Wayne, Shore, Bommer, & Tetrick, 2002) and dispositional factors like sense of coherence of educators (Antonovsky, 1987; Eriksson & Lindstrom, 2005). Job distress in combination with negative levels of these mentioned factors negatively influence work commitment and intention to leave the job (Klassen & Chiu, 2011). If these factors are experienced by educators at significantly positive levels, job demands might be experienced as eustress.

Work engagement is regarded as a crucial guard against employee distress and burnout and in some instances is even regarded as the opposite pole of burnout (Hakanen, Bakker, & Schaufeli, 2006). It is, therefore, essential that educators should experience significant levels of work engagement. Certain psychological conditions also play a role in work engagement of educators. These psychological conditions are psychological safety, psychological meaningfulness, psychological availability (Kahn, 1990; May et al., 2004) and autonomy (Spreitzer, 1995). Factors like work-role fit, job enrichment and co-worker relations have been shown to influence psychological meaningfulness, whilst supervisor relations and co-worker relations influence psychological safety and job resources influence psychological availability (May et al., 2004).

This study thus envisions that work engagement, achieved through certain job factors (e.g., work-role fit, job enrichment) and psychological conditions (e.g.,

meaningfulness, safety, autonomy and availability) will be a major protection against uncontrolled job demands, distress, burnout and ill health. By being engaged, the Namibian secondary school educators are thus anticipated to experience positive organizational outcomes (e.g., organizational commitment) and low intention to leave the profession.

Many studies all over the world attempt to establish the route towards educator well-being. Moriana and Herruzo (2006) conducted a study on variables related to sick leave taken by Spanish secondary school educators. The sample comprised 200 educators who were divided in two groups: one group diagnosed with psychiatric challenges and the other group without any such diagnosis. The groups shared the same organizational variables like number of students and workload. The researchers compared the two groups in an attempt to identify variables which increased the development of psychiatric conditions and thus sick leave. The study concluded that the most significant variables relating to psychiatric sick leave were competitiveness and hostility as related to type A personality traits, emotional exhaustion and job dissatisfaction. This is an indication of the crucial role social support, emotional support and job satisfaction play in the overall well-being of educators.

Zembylas and Papanastasiou (2006) conducted a research study on the sources of educator job satisfaction and dissatisfaction in Cyprus. These authors concentrated especially on issues concerning job satisfaction and job dissatisfaction in developing countries, as limited research on this topic had been conducted in developing countries. Zembylas and Papanastasiou (2006) found that educators in developing

countries enter the profession owing to extrinsic motivators like salaries, hours at the workplace and holidays, whereas educators in developed countries enter the profession because of intrinsic motivation. Several studies were also conducted on emotional well-being and job satisfaction of educators in South Africa. Nkonka (1999) studied job satisfaction levels of educators in the Bloemfontein West district in South Africa. Of the 97 respondents, it was found that 68.5% were satisfied with their job conditions. Nkonka thus concluded that educators in the Bloemfontein West district were satisfied with their job conditions. Similarly, Julius (1999) studied the levels of job satisfaction of educators in the Upington district in South Africa. Julius found that 61% of the educators were satisfied with their job conditions. Julius concluded that educators in the Upington district were “moderately” satisfied with their job conditions. Padayachee (1993) conducted a study with Indian educators in Indian secondary schools in the greater Durban area in South Africa and found a high prevalence of burnout with low job satisfaction amongst the educators.

George et al. (2008) conducted a study on job satisfaction among urban secondary school educators in Namibia. The researchers studied extrinsic and intrinsic factors pertaining to job satisfaction and wanted to find out how far job satisfaction and burnout correlates. It was found that urban Namibian secondary school educators showed significant levels of job satisfaction with regard to intrinsic values, thus motivation. A significant negative correlation was found between burnout and job satisfaction among the educators. Thus, when educators felt a high level of emotional exhaustion and/or a high sense of depersonalisation, which resulted in high levels of stress and burnout, they experienced a low level of job satisfaction. Möwes (1997)

conducted a study on the factors, which contribute towards learners' dropout from secondary schools in the Windhoek region. This study found that absenteeism, suspension, cutting classes, grade repetition and learning difficulties were associated with school dropout. Furthermore, poverty, poor home conditions, single parent homes and parental education levels significantly correlated with school dropout. The study showed that educators were in need for additional training to deal with these learner problems and encourage learners to stay in school. Many more studies were conducted on educators in Namibia (see Kudumo, 2000; Möwes, 1999; Mwoombola, 2001; Thekwane, 2000; Zimba, 2000).

According to the National Association of Namibian Teachers Union (NANTU), many of the country's estimated 23 000 educators want to leave the profession owing to high job demands, negative job conditions and few incentives to retain qualified educators (Mseyamwa, 2007). According to NANTU, about 2000 educators in Namibia leave the profession annually, whilst local colleges and universities can produce only 1200 replacements annually (Mseyamwa, 2007). Kandetu (1998) asserts that Namibian secondary school educators are resigning at such an alarming rate that it threatens to paralyse secondary schools in the country, especially in the rural areas. Attrition rates according to the Namibian Ministry of Education Management Information System (EMIS) (2007) statistics for the year 2006-2007 are indicated at the national level to be 6.5% of the total population of Namibian educators. The highest attrition rates for the mentioned period were recorded for the Karas, Khomas and Otjozondjupa educational regions. These concerns of the

Namibia government with regard to escalating educator turnover rates are shared worldwide (Hancock & Scherff, 2010).

Besides the evidence that educators everywhere struggle with high stress levels and high turnover intention, the history of the education system in Namibia indicates additional stressful and challenging conditions for Namibian educators (George et al., 2008). Since Independence in 1990, the Namibian government has faced the huge task of transforming the national education system into an inclusive system (Draft Policy on Inclusive Education, Ministry of Basic Education, Namibia, 2008), in order to rectify the unequal, segregated previous system of Bantu Education of the South African Apartheid regime. Such a transformed Namibian education system gives formal education opportunities to all Namibians up to the age of 16 years (Education Act no 16 of 2001). Transformation means change. Change in the work environment is often regarded as stressful to human beings and can lead to lower general well-being (Verhaege, Vlerick, Gemmel, Van Maele, & De Backer, 2006). Besides the general educator stressors, Namibian educators thus deal with the challenges of this transformation on a daily basis which often leaves them feeling overwhelmed and exhausted (George et al., 2008).

Thus, Namibian educators leave their profession at a significant rate. Educator turnover is a particular concern in Namibian schools because of its implications for future hiring practices and concern for the retention of good educators (Mseyamwa, 2007). This study aims at establishing, within a positive psychological framework, which factors might enhance educator well-being in Namibia, so that Namibian

educators can experience positive psychological conditions, are engaged and organizationally committed, show organizational citizenship behavior (extra-role behavior), are generally physically and psychologically well with a lowered intention to leave the profession.

1.2 STATEMENT OF THE PROBLEM

Teaching is considered to be an inherently stressful occupation (Leung & Lee, 2006; Näring et al., 2006). The profession of education is plagued by a wide variety of job demands like heavy workload, negative attitudes and behaviour of co-workers and learners, lack of promotional prospects, unsatisfactory working conditions, poor relationships with colleagues and superiors, too rapid an advance in technology, changes in the working environment and a non-productive organizational climate (Griva & Joekes, 2003). These job demands require sustained physical and/or mental effort from educators and are, therefore, associated with certain physiological and psychological costs (Demerouti et al., 2001b). Although job resources serve as buffers against the negative effects of job demands, the job resources of educators are often insufficient to cancel the effect of these demands. Job resources are those physical, psychological, and/or cognitive aspects of the job which are functional in achieving work goals, reduce job demands and reduce physiological and psychological costs or stimulate personal growth and development (Bakker, Demerouti, & Euwema, 2005; De Jonge, Le Blanc, Peeters, & Noordam, 2008).

The experience of work engagement is essential for maximum employee (educator) commitment and productivity according to the Job Demands-Resources (J-DR) Model (Bakker et al., 2003a). In a study on educators in Helsinki, Finland, the following model was confirmed by Hakanen et al. (2006):

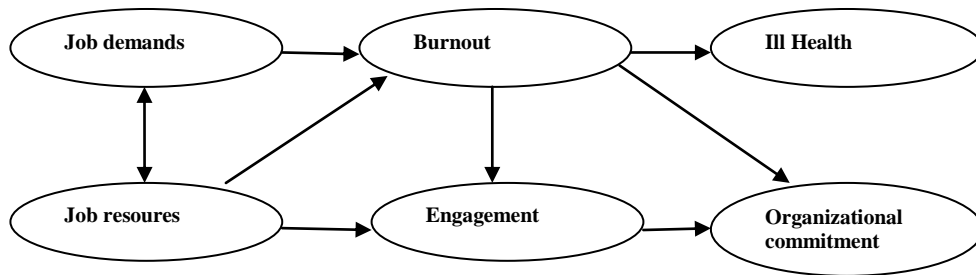


Figure 1. Job Demands Resources Model of Hakanen et al. (2006)

According to Figure 1, work engagement plays a central role in the achievement of healthy organizational outcomes like organizational commitment. In order to prevent well-being problems with educators, it is thus hypothesized for this study that job resources which outstrip job demands will lead towards engagement and positive organizational outcomes.

High job demands with limited job resources are part of the harsh reality of the Namibian primary/secondary school education scenario (Silume, 2013). Overly demanding working conditions with minimal positive job conditions form the breeding ground for burnout and low general well-being among educators (Aronson & Pines, 1988; Demerouti, Bakker, Nachreiner, & Schaufeli, 2000; Wilkerson & Bellini, 2006), which often leads to high educator turnover rates (Mseyamwa, 2007). High turnover rates of educators in Namibia might paralyse schools, especially secondary schools, in the country in future (Kandetu, 1998). Owing to budgetary constraints it will be nearly impossible for the Namibian Ministry of Education to offer Namibian secondary school educators more resources and extrinsic rewards.

It is, therefore, the intention of this study to find (protective) work factors for Namibian educators (that could also be considered as resources) and psychological working conditions of Namibian secondary school educators that will enhance educator engagement. The latter will in turn lead to positive organizational outcomes (Hakanen et al., 2006), like organizational commitment, organizational citizenship behaviour, physical and psychological health and a low turnover intention. Following from the above discussion, a general research question can be formulated:

Which factors contribute towards the well-being of Namibian secondary school educators in such a way that educational standards can increase and turnover rates of educators decrease?

1.3 JUSTIFICATION FOR THE STUDY

Secondary school education is essential in providing the human resources that are needed to build a sustainable, competitive economy in Namibia (Education and Training Sector Improvement Program, 2007) (ETSIP). Export-led growth in countries is linked with an investment in quality post-primary education (ETSIP, 2007). Improved health, reduced infant mortality, better family planning, HIV and AIDS prevention and enhanced social participation are all results of a good secondary school education system (ETSIP, 2007). Secondary school education is a crucial contributor towards individual, national and global development and should be approached with great care in order to maximize its potential.

This study focuses on secondary school education, as this level of education is essential for any growing economy:

“A pressing challenge for Namibia is to break the bottleneck of inadequate outputs at senior secondary level. Shortage of skilled labour acts as one of the most significant brakes to economic growth. It limits the capacity to apply knowledge and technology in production, constrains growth in productivity and hampers Namibia’s international competitiveness. The most significant cause of the shortage is that general education fails to provide the quantity and quality of output required to provide a base for higher level human capital development, especially at the senior secondary level. The most notable way to address skills shortage is to improve the quality and quantity of the throughput (i.e., learners) of the general education system” (ETSIP, 2007, p. 18).

Secondary school education is the crucial link towards higher education with which individuals can better their skills and thus improve their labour market productivity and contribute significantly to the growth of a country (Ngware, Onsomu, Muthaka, & Manda, 2006). Individuals who pursued secondary school education struggle less with poverty and contribute towards the ironing out of huge economic disparities (Ngware et al., 2006). Secondary school education is regarded as the lowest form of education that is required to be able to create modern technologies that are used today (Cohen, 2008). It is also evident that those who have secondary school education are able to control their own fertility, and thus have fewer children and

deliver quality care to their children, which enhances the productive life of a nation (Cohen, 2008).

Furthermore, the secondary school phase deals with human beings in adolescence. Adolescence is the time of identity formation (Gerrig & Zimbardo, 2008). Much of identity construction is the result of feedback from the surrounding environment (Burkitt, 1995). Adolescents are thus sensitive to feedback from their environment. The feedback that adolescents receive from significant others in their lives, such as that from educators, can be a determining factor in how productively they launch into adult life (Gerrig & Zimbardo, 2008; Rice, 2001; Santrock, 2008; Sigelman & Rider, 2009). Two issues are of importance:

- The secondary education phase is crucial as it accommodates human beings in a vulnerable life phase, namely adolescence. The adolescent is in need of careful and sensitive guidance in order to be able to launch in a healthy way into adult life so as to make contributions towards the general well-being of humankind;
- Educators who guide learners during their most vulnerable and decisive life stage need to be engaged, healthy, committed, stable, motivated and prepared to go the extra mile.

The high turnover and transfer rate of educators in Namibia, rapid changes in the education system of Namibia since Independence in 1990 and relative high repetition and drop-out rates of learners are some of the reasons which support the belief that

Namibian educators may struggle with negative work factors in their profession. As a well-seasoned and quality educational system lies at the heart of a good economy, it is crucial to ensure that educators are well, both physically and psychologically, since the healthy, engaged and committed educator will perform and educate well.

Furthermore, relatively few studies in the field of primary/secondary education have been conducted in Namibia (George et al., 2008; Ipinge & Likando, 2012; Mostert et al., 2012). One study was conducted on the level of job satisfaction among urban secondary school educators in Namibia (George et al., 2008). For this study, three hundred and thirty seven (337) educators were selected from 17 government schools in Windhoek. Results showed that significant job dissatisfaction levels prevail amongst secondary school educators. The job dissatisfaction is particularly linked to intrinsic factors of work and those factors which relate to school location and the rank of the educator. Significant positive correlations were found between burnout (emotional exhaustion and depersonalisation) and low job satisfaction.

For this study, work engagement is regarded as a basic means by which secondary school educators in particular can arrive at positive organizational outcomes, low turnover intention, general well-being and high productive output. Engaged employees enjoy many positive outcomes. Studies indicate that work engagement relates positively to both in-role and extra-role performance (Bakker & Bal, 2010; Halbesleben & Wheeler, 2008), high energy and self-efficacy (Schaufeli et al., 2001), a general sense of accomplishment in life (Bakker & Demerouti, 2008), feelings of appreciation, recognition and success (Bakker & Demerouti, 2008),

general positive emotions (Schaufeli & Van Rhenen, 2006), and increased general well-being with fewer somatic complaints (Schaufeli & Bakker, 2004). Engagement is regarded as consisting of work enjoyment, positive and energetic participation in the workplace, positive future career aspirations, buoyancy and low work absenteeism (Parker, Martin, Colmar, & Liem, 2012).

It is, therefore, regarded as crucial to investigate job factors which enhance work engagement of Namibian educators, specifically in secondary schools, and which will lead to positive organizational outcomes, general well-being and a decrease in turnover rates of educators. Protective factors are thus crucial in assisting educators to cope positively with the demands of the workplace and deliver excellent education to Namibian young people.

1.4 RESEARCH OBJECTIVES

The specific research objectives are the following:

- To investigate models of employee well-being in the literature and use such models as a basis for the design of a model for well-being for Namibian secondary school educators;
- To study the current well-being of Namibian secondary school educators;
- To identify the impact of demographic variables on job factors, sense of coherence, psychological conditions (psychological meaningfulness, psychological safety, psychological availability, autonomy), work engagement

and positive organizational and individual outcomes (organizational commitment, organizational citizenship behaviour, turnover intention, general health) of Namibian secondary school educators;

- To test measurement models for work engagement, general health, organizational commitment, orientation to life, psychological conditions and turnover intention;
- To study the impact of job factors on the work engagement of Namibian secondary school educators, including the psychological conditions of that engagement and also the contribution of job factors on positive organizational/individual outcomes of the educators;
- To investigate the impact of psychological conditions of engagement on Namibian secondary school educators' work engagement and positive organizational/individual outcomes;
- To identify the impact of work engagement on Namibian secondary school educators' positive organizational/individual outcomes;
- To evaluate whether job factors of Namibian secondary school educators indirectly impact work engagement via psychological conditions;
- To investigate whether job contextual factors of Namibian secondary school educators indirectly impact positive organizational/individual outcomes via psychological conditions.

1.5 DEFINITION OF KEY TERMS

The *educator* should be regarded in this study as the professional person who educates learners from grade 1 to grade 12. The word “educator”, instead of

“teacher”, is used in this study as this is more in line with the current international academic literature.

The word *school* should be regarded in this study as an organization that includes different stakeholders in education like educators, learners, parents, school boards, the Ministry of Education (Namibia) and educational administrators.

Secondary school educators in Namibia resign from schools at an alarming rate, probably because of harsh job demands with subsequent workplace distress and poor general well-being. Educators thus need to be motivated to become engaged in their work again. *Engaged* individuals are oriented towards a challenging work goal, thus transcending the now and going beyond the immediate situation. Engaged educators are productive employees and an asset to the educational standards of a country. Such educators are energetically and effectively involved in work activities and regard themselves as competent to deal with their work demands (Schaufeli, Salanova, Gonzáles-Romá, & Bakker, 2002; Stander & Rothmann, 2009, 2010; Strümpfer, 2003).

Positive psychological conditions (safety, meaningfulness, availability, autonomy) at work may strengthen the internal confidence of educators, which will in turn foster educator engagement (Vinarski-Peretz & Carmeli, 2011). People experience *psychological safety* and thus feel appreciated at the workplace when they can be truly themselves without having to fear that their self-image, status or career might get hurt. In this way psychological safety serves as encouragement to educators to

express themselves by reducing their fear of humiliation (Edmondson, 1999; Kahn, 1990; May et al., 2004; Olivier & Rothmann, 2007; Vinarski-Peretz & Carmeli, 2011). *Psychological meaningfulness* is experienced in the workplace when the employee feels that the input at work is remunerated with physical, emotional and cognitive energy (Kahn, 1990; May et al., 2004; Olivier & Rothmann, 2007; Vinarski-Peretz & Carmeli, 2011). *Psychological availability* means that the individual feels able to engage the self cognitively, emotionally and physically in the work situation because the nature of the work and the connection between the self and the job allows it (Kahn, 1990; May et al., 2004; Olivier & Rothmann, 2007; Vinarski-Peretz & Carmeli, 2011). *Autonomy* is the degree to which people can resist the demands of the environment and do what they think is best in a given situation. The autonomous educator experiences a sense of choice when initiating and regulating own behaviour to the benefit of the organization (Ryan & Deci, 2006; Van den Broeck, et al., 2011). Autonomy reflects a sense of freedom about how individuals do their own work (Mishra & Spreitzer, 1998). Autonomy relates to the opportunity to select task activities that make sense and to perform in ways that seem appropriate (Quinn & Spreitzer, 1997).

Job factors are aspects relating to a job. Certain job factors contribute towards work engagement (*work-role fit, co-worker relations, job enrichment, supervisor relations, job resources, organizational support and rewards/recognition*). *Sense of coherence* (defined underneath) is a personal resource and also contributes to work engagement. These factors are also regarded as antecedents of engagement and can be mediated through the above-mentioned psychological conditions. Fit refers to the compatibility

between a person and an intended environment (Niessen, Binnewies, & Rank, 2010). *Work-role fit* is the match that an employee experiences between the own self-concept and the work-role. The educator that fits the work-role will show organizational commitment (Cable & Parsons, 2001) and low turnover intention (Saks & Ashforth, 1997). *Job enrichment* is the degree of positive challenge that work tasks pose to the employee so that the work is not experienced as monotonous and the individual has ample of opportunity to grow as an employee and a human being (Hackman & Oldham, 1980). Employees will show higher levels of engagement when they experience their work as providing significance, variety and task identity (Whittington & Galpin, 2010). *Workplace relationships* are relationships in the workplace and to a great degree predictors of workplace climate (Salanova, Agut, & Peiró, 2005). Workplace climate plays a crucial role in the enhancement of productivity of employees. Positive workplace relationships, especially those between supervisor and employee (i.e., head of department and educator) and those between employees (educators at a school), are thus essential for the successful organization (school) (Rafaeli & Sutton, 1987). Workplace relations include co-worker relations and supervisor relations. *Co-worker* relations and supervisor relations are essential relationships that need to be well cared for at the workplace. *Supervisor relations* include aspects like *supervisor trust* and *supervisor support*. *Job resources* are those organizational aspects that assist the employee to achieve work goals, reduce job demands and stimulate personal growth, development and learning. Job resources can be *physical*, *emotional* or *cognitive* (Schaufeli et al., 2009). *Job resources*, in this study, refer to personal resources in terms of cognition

(eg., intellectual knowledge), emotion (eg., feeling good owing to support from colleagues) and physique (feeling physically healthy and strong).

Engagement, organizational commitment and empowerment are amongst the products of an effective *rewards* and *recognition* system of an organization. Rewards and recognition in this context does not only refer to wages, but would include factors like the employee's opportunity to exert influence, general standing, job security, opportunities for occupational development and the general fairness of the work community (Kerr & Slocum, 1987; Saunderson, 2004; Stajkovic & Luthans, 2001). *Organizational support* is the quality of the exchange relationship between the employee and the organization. The educator will feel organizationally supported when holding a perception of being cared for and valued by the school and the education system. This could encourage the educator to incorporate organizational membership and role-status into the own identity, which will again encourage pro-social acts on behalf of the learners and school (Eisenberger, Fasolo, & Davis-LaMastro, 1990; Moorman, Blakely, & Niehoff, 1998).

Sense of coherence is the educator's way of experiencing the world and his/her life within that. It is about the ability of individuals (educators) to concentrate on positive aspects at work even in the face of adverse stressors. Sense of coherence is regarded as a source of educator resilience and protector of health and well-being (Basińska, Andruszkiewicz, & Grabowska, 2011; Høgh & Mikkelsen, 2005; Nielsen, Matthiesen, & Einarsen, 2008). Sense of coherence is regarded as a dispositional factor. Dispositional factors are regarded as personality characteristics that affect a

person's behaviour. Dispositional factors within the organizational context prompt individuals to engage in positive organizational behaviours not because of the context of the work situation but because of the positive or negative personality traits that predispose people to engage in such behaviours (Kacmar, Carlson, & Bratton, 2004). Self-esteem, need for power, locus of control, self-efficacy and job involvement can be regarded as other examples of dispositional factors (Kacmar et al., 2004).

Positive organizational outcomes (organizational commitment, organizational citizenship behaviour, low turnover intention) and a positive individual outcome (general health), are associated with engaged employees, like educators. Commitment is a bond and identification with something or some-one, which takes on a special meaning (Mowday, Steers, & Porter, 1979). *Organizational commitment* is an indication of a person's identification with and involvement in a certain organization. The educator that is committed to the employing school, its learners and the education system in general can also be regarded as following the most effective route to school success (Fink, 1992). In this study, *health* is also called *general well-being*. Health in the workplace encompasses physical health and psychological health. Educator distress can cause mental, physical and behavioural symptoms such as found in burnout, depression and psychosomatic diseases (Houkes, Janssen, De Jonge, & Nijhuis, 2001). The healthy educator will be able to invest energy into the workplace, because no distraction due to ill health is present (Kavanagh, Hurst, & Rose, 1981; Westover, 2008). In this study, educator health has been measured in terms of the presence of somatic symptoms, depression, anxiety

and/or social dysfunction (Goldberg & Williams, 1988). The employee that shows *organizational citizenship behaviour* chooses to engage in extra-role tasks without consideration of formal incentives. This educator does more than is expected and benefits the education system and the learners (Brief & Motowidlo, 1986; Morrison, 1994; Williams & Anderson, 1991). Voluntary *turnover* is the employee's decision to leave the organization (Dess & Shaw, 2001). Job dissatisfaction or more lucrative job opportunities elsewhere can be reasons for turnover intention (Allen, Weeks, & Moffitt, 2005). It can be anticipated that the educator who feels positive about the school where he/she is employed, will not intend to resign.

Rothmann et al. (2006) indicate that *job demands* entail those physical, social and organisational aspects of the job that demand constant physical and/or psychological input from the employee which again brings with it a physical and/or psychological cost for the employee with it (Demerouti et al., 2001b; Hakanen et al., 2006). Job demands would thus include factors such as workload, control, job content and role clarity. Within the education profession, disruptive pupil behaviour, work overload and a poor physical work environment can be regarded as job demands (Bakker et al., 2005; Burke & Greenglass, 1995; Evers, Tomic, & Brouwers, 2004). *Job resources* can be regarded as the opportunities that are offered to employees that reduce the effect of job demands help with achieving work goals and that stimulate growth, learning and development (Demerouti et al., 2001b; Rothmann & Joubert, 2007; Rothmann et al., 2006). Job resources could entail factors like salary, career opportunities, job security, supervisor support, team climate, role clarity,

participation in decision-making, autonomy, performance feedback and meaningfulness of the job (Hackman & Oldham, 1980).

Burnout is often regarded as the opposite of work engagement and is defined as a syndrome of feelings of emotional exhaustion, depersonalisation and reduced personal accomplishment (Maslach, 1982). Emotional exhaustion entails energy depletion and the draining of emotional resources. Depersonalisation refers to the development of a withdrawn and cynical attitude towards the client, in this case the learners and possibly the parents. Personal accomplishment refers to the tendency to evaluate one's work with recipients negatively, and is accompanied by feelings of insufficiency (Demerouti et al., 2000).

1.6 OVERVIEW

An overview of the chapters in this work will be presented now.

Chapter two consists of the literature. The literature review covers the past and present view of education in Namibia in general as well as secondary education specifically. Certain educational statistics are presented and discussed in order to provide the reader with general information about the education environment in Namibia. This chapter also covers educator engagement in the profession of education as well as the psychological conditions of safety, meaning, availability and autonomy that are regarded in organizational psychological literature as essential for the attainment of work engagement. Furthermore, this chapter deals with the

antecedents of work engagement, thus it looks at several popular factors (work-role fit, job enrichment, co-worker relations, supervisor relations, job resources, organizational support and rewards/recognitions) as well as the individual factor of sense of coherence. This chapter also highlights and explains positive organizational outcomes of engagement like organizational commitment, organizational citizenship behaviour (individual and organizational), general educator health and turnover intention. Chapter three is a presentation of the methodology, which contains the research design, demographic information of the participants and a more detailed description of the measuring instruments. The procedure that has been followed during this research and the data analysis form part of this chapter. Chapter four outlines the results obtained through this study. Chapter five contains a discussion of the results. In chapter 6, certain recommendations with regard to the well-being of secondary school educators are presented, where-as in chapter 7 final conclusions are drawn from the work.

1.7 RESEARCH ETHICS

Ethics are crucial when conducting psychological research. Ethics refers to the correct rules of conduct that are prescribed when carrying out research. The researcher has a moral responsibility to protect research participants from any form of harm (McLeod, 2007). During this research study, ethical standards were strictly applied. These standards ensured that no participant was harmed in any way physically or psychologically during the course of the study. All institutions that needed to give their approval for the research study (Ministry of Education via

Permanent Secretaries, Regional Directors and Principals) were contacted and negotiations held. The researcher ensured that accurate information regarding the study was conveyed to the relevant institutions. Every participant had the opportunity to decide whether he/she wanted to participate in the study, thus participation was voluntary. Principals of schools were clearly instructed by both the researcher as well as the Regional Directors not to enforce participation. Every participant that participated in the study received a letter stating the purpose and possible benefits of the study, procedures involved, length of time of the active participation required and the name and contact details of both the researcher and the supervisor of the study. By filling in the questionnaire on an anonymous basis, participant information and contribution was protected. All information gathered from this study was and will be treated strictly confidential. No participant names appeared in the research report. Participants were not deceived in any way during the course of their participation. Participants were aware of the real purpose of the study. McLeod (2007) states that deception of participants in a research process violates participants' right to choose to participate and leads to distrust in psychological research with the public. The researcher did not involve himself in any practice during the research process, for which he is not duly qualified. Records were and will be kept of all research activities. Research findings will be disseminated to interested stakeholders, like the Ministry of Education when findings are officially approved.

1.8 CHAPTER SUMMARY

This chapter introduced the reader to the topic of the study with a thorough background and motivation for the study. The problem of the study area was stated so that the study could be justified. The research objectives of the study were provided whilst the key terms were defined. This chapter also provided an overview of the chapters to follow in this work, as well as comments on research ethics.

Chapter 2 focusses on literature with regard to the well-being of educators in secondary school education in Namibia.

CHAPTER 2

LITERATURE REVIEW

A well-educated, stable and content society is a society that will remain in touch with the developments on the globe and successfully face the challenges that may come on its way. The engaged, healthy, committed and motivated educator is at the core of such a positive society.

Chapter 2 is a discussion on current trends in basic education in Namibia, with a special reference to conditions in secondary school education in the country.

2.1 EDUCATION IN NAMIBIA

The Republic of Namibia is a country in the southwest of the African continent, spreading over an area of 824,269 square kilometres. It is bordered by the Atlantic Ocean to the west with the countries of Zambia, Zimbabwe, Angola, South Africa and Botswana as neighbours. Sixty percent of the Namibian population is situated in the north of the country where the highest rainfall of about 700mm per year occurs. The remaining 40% of the population is dispersed over the rest of the country with higher concentrations of people around the capital Windhoek in the centre and other towns like Swakopmund on the coast to the West, Gobabis in the East and Keetmanshoop in the South. The Namibian population is currently estimated at

approximately 2 million people, of whom nearly 700 000 are school-going learners (EMIS, 2010; EMIS, 2011).

Namibia is a developing country (Country Risk Summary: Namibia, 2004), and is thus faced with numerous challenges with regard to the development of the country and its population. Although the development of Namibia and its people is aided by external sources, the inputs of the local population remains the most crucial as any nation should strive towards self-sufficiency.

Namibia faces many challenges in its development, such as the following:

It is one of the countries in the world with the highest discrepancy in income with 10% of citizens earning 65% of the income, leaving only 35% of incomes to 90% of the population (Sasman, 2011c; SACMEQ, 2005). Economic inequality remained the same between the periods 1993/1994 and 2003/2004 with difference in income extreme between the poorest and the richest (Schmidt, 2009). About 35% of Namibians live on about US \$1.00 per day where-as about 56% of Namibians live on about US \$2.00 per day (Namibia Country Review, 2012);

Since the independence of Namibia in March 1990, unemployment rates have escalated from 36.7% in 2006 (Retief, 2006) to 51% by the end of 2010 (Central Intelligence Agency World Factbook, 2010);

A total of 180 000 people in Namibia are HIV positive. Sixteen thousand of these infected people are children. Namibia has currently 70 000 Aids orphans, which is expected to rise to 250 000 in 2021 (<http://www.unaids.org/globalreport/>).

The fight against poverty, the development of the economy, restructuring of the social order in the country from segregation to a more just and equal system, social upliftment of the nation and further development of the infrastructure and telecommunications are just a few projects that the elected governments have had to attend to since the country gained independence in 1990. Minister Abraham Iyambo (Ministry of Education) indicates that the eradication of poverty in Namibia can only take place if Namibian learners complete their education so that they can contribute to the economy of the country. He is concerned that Namibian parents are good at sending Gr1-Gr12 learners on to the streets without a decent education (Smit, 2011).

In order to be able to look after its own people and own needs as well as being able to compete with the developed world, Namibia is in need of a well-educated and highly functional population. Governor of the Karas region in the south, Mr. Bernardus Swartbooi, argues that if you want to talk about economic development, you cannot leave education behind (Cloete, 2011). Namibian Deputy Minister of Education, David Namwandi also states in this regard: “Education transforms nations, from developing to developed world” (Shipanga, 2011, p. 3). Education contributes towards the economic, democratic and social development of nations (Kubberud, Helland, & Smith, 1999). For this purpose, the Namibian government has realized that quality basic education, embedded in the interrelationship with all

government and private sectors of the country, is the primary point from which to steer comprehensive development in the country. Namibian economist Robin Sherbourne also maintains that: "...we will not succeed economically unless we succeed educationally" (Kisting, 2011e, p. 4).

It is, therefore, clear that an effective education and training system is important for any nation, as it carries a broad range of benefits. These benefits include, amongst others, poverty alleviation, social equity, economic development, better population growth control and improved social conditions for citizens (ETSIP, 2007; NQA, 2006). In developing countries, every year of schooling increases income by 10% for the individual, which also impacts positively on country and global economies (Cohen, 2008). Quality basic education is, therefore, a cornerstone on which tertiary education and later career life rests.

In order to be able to deliver quality education, quality educators are needed (Kuberrud et al., 1999; UNESCO, 1997). In this regard in 1986 Singh, Minister of Human Resource Development in India, mentioned that no education system can rise too far beyond the level of the teachers in it. According to a report by UNESCO (1997) it is stated that if human development is put as the basis of socio-economic strategies, the advancement and working conditions of educators should be attended to. In this regard Minister Abraham Iyambo stated: "The determining factor of a quality education system is the quality of its teachers. We can have the best policies, curriculum and infrastructure, but if we do not have quality teachers, then education will fail" (Hengari, 2011, p. 5; Shivute, 2011, p. 2). For an education system to be

successful it is surely essential that its educators, who function as the main players and guardians of educational standards, are engaged, motivated, committed and, above all, psychologically and physically healthy.

2.1.1 EDUCATIONAL CHANGES IN NAMIBIA SINCE INDEPENDENCE

In 1990 Namibia inherited an education system that was fraught with disparities and inequalities owing to the apartheid system of South Africa, which held sway in Namibia before independence (Mutorwa, 2004). Thus one of the major aims of the newly established Ministry of Basic Education, Sport and Culture, after independence, was to develop an education system that would embrace quality education for all and aimed at access, equity, quality, democracy and lifelong learning.

Just after independence in 1990, a single Ministry of Education replaced the different ethnic and racial education departments in Namibia. In 1995, the Ministry of Higher Education, Vocational Training, Science and Technology came into existence, which indicated a clear line between basic and higher education. However, in March 2005 (see below), the two different Ministries were combined to form one Ministry of Education and the department of culture was moved to fall under the Ministry of Youth, Sport, National Service and Culture.

2.1.2 STRUCTURE OF THE NAMIBIAN SCHOOL SYSTEM

The Ministry of Basic Education, Sport and Culture and the Ministry of Higher Education, Training and Employment Creation were combined in March 2005 to form the Ministry of Education. The new structure was approved by the Public Service Commission in the Office of the Prime Minister in August 2006. The structure of the Ministry of Education is further divided into four departments as shown in Table 1.

Table 1

Divisions of the Ministry of Education

The Ministry of Education	
<p>Department of Schools/Formal Education Programmes</p> <ol style="list-style-type: none"> 1. Directorate of Programmes and Quality Assurance 2. Directorate of National Examinations and Assessment 3. Directorate of National Institute for Educational Development 	<p>Department of Policy and Administration</p> <ol style="list-style-type: none"> 1. Directorate of General Services 2. Directorate of Planning and Development 3. Directorate of Finance
<p>Department of Lifelong Learning</p> <ol style="list-style-type: none"> 1. Directorate of Adult Education 2. Directorate of Namibia Library and Information Service 3. Directorate of Vocational Education 4. Directorate of Namibia Qualifications Authority (NQA) 	<p>Department of Tertiary Education, Science and Technology</p> <ol style="list-style-type: none"> 1. Directorate of Higher Education 2. Directorate of Research, Science and Technology 3. Directorate of Namibia National Commission for UNESCO

By 2003, Namibia's basic education system was divided into 13 educational regions including Caprivi, Erongo, Hardap, Karas, Kavango, Khomas, Kunene, Ohangwena,

- Three years of junior secondary (Grades 8-10) in English;
- Two years of senior secondary (Grades 11-12) in English.

The duration of compulsory education for Namibian children is 10 years (until the end of grade ten) with the starting age for compulsory education being age six. At the end of Grades 7, 10 and 12, all learners in public schools and many private schools write standardized national exams in order to ensure a uniform national academic standard.

Because of widespread repetition in different grades, a semi-automatic promotion policy was adopted in Namibia in 1996 according to which no learner is allowed to repeat a grade more than once except for Grade 10. Automatic promotion, where learners are transferred to higher grades without having achieved basic competencies, results in educators struggling to cope with low and high achievers at once (Sasman, 2011e). Grade 10 learners who did not comply with the requirements to be promoted to the senior secondary phase (Grades 11 and 12) were only allowed to repeat the grade within mainstream schooling under exceptional circumstances. Otherwise, Grade 10 learners who fail can repeat the grade through the Namibia College of Open Learning (NAMCOL) or similar institutions. Currently, depending on places available at schools, Grade 10 learners who did not meet the requirements for promotion can more readily return to their original school to repeat the grade, provided that their general behaviour was acceptable and the school has place for the applicant.

Table 2 depicts statistics about the square kilometres, population, number of schools, learners and educators in Namibia in 2011.

Table 2

Namibia Square Kilometres, Population, Number of Schools, Learners and Teachers (EMIS, 2011)

Region	Square km	Population (in 2006)	Number of Schools (in 2011)	Number of Learners (in 2011)	Number of Teachers (in 2011)
Caprivi	14538	79826	100	28,974	1271
Erongo	63579	107663	63	30643	1181
Hardap	109651	68249	56	21560	808
Kavango	48463	202694	322	73033	2629
Karas	161215	69329	49	19614	770
Khomas	37007	250262	10	71899	2856
Kunene	115293	68735	55	19250	749
Ohangwena	10703	228384	242	90379	3202
Omaheke	84612	68039	41	16986	610
Omusati	26573	228842	274	86635	3472
Oshikoto	38653	161007	196	59677	2203
Otjozondjupa	105185	135384	70	35651	1252
Oshana	8653	161916	135	51326	2039
Total	824269	2,046553	1703	605627	23039

Table 2 shows that there were 1703 schools in total in Namibia in 2011. The total number of learners to be taught by 23,039 educators was 605,627. Although the Ohangwena region has the second smallest territory, it hosts the most school-going learners (90379).

As this study focuses on secondary schools in Namibia, Table 3 gives statistics about the number of secondary schools and learners in Namibia as well as teacher-learner ratios in secondary schools in 2011.

Table 3

Namibia Square Kilometres, Population, Number of Secondary Schools, Number of Secondary School Learners and Secondary School Teacher-Learner Ratio (EMIS, 2011)

Region	Square km	Population (in 2006)	Number of Secondary Schools (in 2011)	Number of Secondary Learners (in 2011)	Average learner: teacher ratio in Secondary Schools (in 2011)	Number of Secondary School Teachers (in 2011)
Caprivi	14538	79826	11	8909	18.9	472
Erongo	63579	107663	14	9371	23.2	404
Hardap	109651	68249	9	5704	24.1	237
Kavango	48463	202694	14	16747	23.4	715
Karas	161215	69329	8	5480	23.0	238
Khomas	37007	250262	28	24152	22.2	1090
Kunene	115293	68735	7	4085	22.3	183
Ohangwena	10703	228384	18	27641	26.8	1031
Omaheke	84612	68039	8	3725	24.2	154
Omusati	26573	228842	28	28766	23.2	1238
Oshikoto	38653	161007	17	18889	24.5	772
Otjozondjup	105185	135384	13	8808	24.3	363
Oshana	8653	161916	21	19130	23.1	828
Total	824269	2,046553	196	181407	23.5	7725

Table 3 indicates a total of 196 secondary schools for Namibia in 2011. The total number of secondary school learners to be taught by 7,725 educators is 181,407. The Omusati region hosts the most secondary school learners (28,766). These statistics point to the significant difference between the number of primary school learners

(408,804) and secondary school learners (181,407). It can thus be expected that secondary school learner numbers will increase significantly in the next few years, which will exert more pressure on secondary school education.

2.1.3 NAMIBIAN EDUCATION AND TRAINING SECTOR IMPROVEMENT PROGRAMME (ETSIP) AND VISION 2030

In 2006 the Namibian Government introduced an Education and Training Sector Improvement Programme (ETSIP), which is a 15-year strategic plan for the overall improvement of the sector. ETSIP will stretch over three phases of five years each. The first phase of ETSIP spanned the time period 2006/2007 until 2010/2011. ETSIP is regarded as a comprehensive programme that covers the areas of early childhood development and pre-primary education, general education, vocational education and training, tertiary education and training, knowledge and innovation and adult learning as well as lifelong learning (ETSIP, 2007).

The first phase of ETSIP concentrates on quality, effectiveness and efficiency of the general education and training system in Namibia. One of the components that are intended to operationalize the quality of education in Namibia is *the strengthening of educators to ensure that they can effectively facilitate the acquisition of set skills and competencies*. ETSIP itself also needs continuous monitoring. During a mid-term review of ETSIP, a World Bank consultant attached to the programme since 2005, Yves Tencalla, indicated that problems associated with the smooth running of ETSIP are, amongst others, that government lacks real strategic thinking, a weak

accountability culture, delays in some areas, insufficient budget allocations and no mechanisms to assess the impact of education and learning outcomes (Sasman, 2011b). ETSIP is based on the realisation that a weak education and training system cannot reach the goals of development as envisioned by the Namibian government. ETSIP can be regarded as the Namibian Education Ministry's contribution towards the goals of Vision 2030.

Vision 2030 is the Namibian national vision statement and sets as its target that, by 2030, Namibia should be part of the high-income countries, affording all its citizens the same quality of life as one finds in the so-called developed world (ETSIP, 2007). For this to happen, rapid economic growth is required. The Namibian economy needs to be transformed into a knowledge-based economy. In order for all this to take place, a skilled worker force is required. Currently, Namibia experiences a shortage of skilled workers (ETSIP, 2007). Well-educated Namibians are thus a prerequisite for the realization of Vision 2030.

2.1.4 THE STATE OF EDUCATION IN NAMIBIA

The Namibian Education system is struggling. "To say that Namibia has been a perennial underachiever in the education sector is to state the obvious. Prevailing attitudes among industry and general citizen opinion confirm perceptions about the decay of our education sector" (Hengari, 2011: p.3). A former Minister of Education, Nangolo Mbumba, wrote on 3 April 2006 as an introduction of the Education and Training Sector Improvement Programme (ETSIP) guide: "...at the current level of

performance in education, we (Namibians) will not be producing citizens who are capable of making Namibia a knowledge-based economy as is expected of us in Vision 2030” (2007: p.V). The ETSIP guide also indicates that Namibia’s education system is regarded as a “very weak tool for supporting the realisation of national development goals, especially the intended transition to knowledge-driven growth and equitable social development” (ETSIP, 2007: p.2). The national average percentage achieved by Namibian learners in subjects like Mathematics and English is below 50% with the majority of Namibian school-going children performing academically below basic standards (Sasman, 2011f).

Higher institutions of learning can only function well when they take on young people who went through a quality basic education system. Currently, lecturers at higher institutions of learning in Namibia are frustrated with students who come in as first years without having mastered basic competencies like literacy in English, the official language in Namibia. In this regard the University of Namibia introduced a compulsory course in basic English competencies at all levels of entry (courses: ULEA3519 English for academic purposes, and ULEA 3419 English communication and study skills).

As it is evident that the Namibian education system faces numerous challenges and that educational standards are compromised, education stakeholders need to monitor and review strategies for continuous improvement of education. Special attention should be given to the most essential role-players in basic education, namely educators and learners, especially secondary school learners who are being prepared

to be launched into adult life as citizens responsible for nation-building. As learners are only the naïve participants in the process, educators with their pedagogic training should inform and transform learners and thus keep national education standards high. Great responsibility and pressure is thus placed on secondary school educators in particular to prepare the next generation for responsible, positive and engaged citizenship. Therefore, educators in general, and secondary school educators specifically, need huge support (from higher authorities, parents and society) in order to remain engaged (physically, psychologically and cognitively engaged) in their task of education, being prepared to do more than expected (organizational citizenship behaviour), being committed to education and their school (organizational commitment), remain physically and psychologically healthy (general well-being) and decide to stay in education against all the odds (low turnover intention).

2.1.5 CHALLENGES FACED BY THE NAMIBIAN EDUCATION SYSTEM

The education system in Namibia is battling with numerous challenges, which cause substantial difficulties for learners, educators, educational planners and the Namibian nation at large. However, in the spirit of positive psychology (Seligman, 1991), challenges should be regarded as opportunities for growth. Current challenges faced by the basic education system of Namibia can thus, for example, be used to identify ways in which educators can become increasingly engaged, committed and hardworking, physically and mentally well and with low levels of intention to resign.

2.1.5.1 Population growth and its impact on education

The Namibian population growth is currently estimated at 2.6 – 3.0% per annum (SACMEQ, 2005; SACMEQ, 2011), which puts a high demand on available school places. Although the number of cement and brick classrooms in the country increased to 17,619 in 2011 with an additional 1,157 non-permanent structures and another 1,374 classroom structures constructed with corrugated iron or mud, the Namibian government rents about 120 classrooms in the form of tents and church halls. The government constructs annually about 140 classrooms, but this is far lower than the need of 400 classrooms per year. Since 2000, the Namibian government built 189 new schools in Namibia (Retief, 2011). However, the Director of Education of the Erongo Educational Region announced fairly recently that although 23 new grade one classrooms were opened, 400 new first-graders are annually on a waiting list as there is no space for them in the Erongo region schools (Hartman, 2011).

Besides the shortage of classrooms in Namibia, studies indicate that the physical conditions of classrooms in Namibia deteriorated from 1995 to 2000 (SACMEQ, 2005). A shortage of sitting and writing places for learners increased, possibly due to the increase of numbers of learners who are schooling as well as the low rate of repair of broken furniture. In 2000, 3-5% of school-going children in Namibia did not have a chalkboard in their classrooms, 70% of learners did not have a bookshelf in their classroom, and 30% of learners did not have a teacher table or chair in their classroom. The average number of library books in classrooms in 2000 was two books per class (SACMEQ, 2005). The current Deputy Minister of Education, David

Namwandi, indicated that a lack of learning and teaching materials, of hostel facilities, of chairs, desks, beds, mattresses, classrooms, libraries, laboratories and qualified teachers are problems with which the education system in Namibia currently struggles (Shipanga, 2011). Besides all these shortages experienced within the Namibian education system, it should be taken into account that not all Namibian children are yet enrolled at schools. The Minister of Education, Abraham Iyambo, indicates that 97% of Namibian children are enrolled at schools in the country. The aim is to have all Namibian children enrolled in schools by the end of 2015, which will put more pressure on scarce resources.

To function well, educators are in need of physical resources (classrooms, tables, writing boards), cognitive resources (continued training, books) and emotional resources (support from parents) (Schaufeli & Bakker, 2004) (for a discussion on resources, see 2.3.1.4).

2.1.5.2 Education budget

According to Kubberud et al. (1999), the education budget in developing countries often takes the largest chunk of the national budget (as is the case in Namibia). Education took 28.2 % of the Namibian national budget of the 2011-2012-time period (Sasman, 2011a). In order to address the problem of scarce resources in the education system, the education budget of Namibia increased from N\$1.86 billion in 2001/2002 (SACMEQ, 2005) to N\$8,3 billion in 2010/2011, of which, currently, N\$3,7 billion pays the salaries of about 22,063 teachers (Sasman, 2011a, 2011d).

This makes for an average salary of about N\$167,000 per educator per annum. The Namibian education budget already exerts enormous pressure on the national budget. With donor funding that contributes 3.3% and the private sector and parents contributing 3.7%, the government has to settle 93% of the education bill of Namibia (Kisting, 2011c), which leaves little space for sufficiently providing the much needed educational resources and salary increases for educators in the country.

A direct link exists between a budget and availability of resources. If budgetary constraints are a reality, one will find a direct effect on the availability of resources. This is also the case within the Namibian education sector. Only 31.9% of Namibian Grade 6 learners indicated that they have their own textbooks (SACMEQ, 2011). With regard to exercise books and stationery, 73.2% of Grade 6 learners indicated that they had sufficient supplies, which, leaves about 28% of Grade 6 learners with insufficient learning material (SACMEQ, 2011).

If resources are readily available, educators will be more psychologically available to engage deeply in their education task (May et al., 2004) (for a discussion on psychological availability, see 2.2.5.3). Furthermore, low availability of resources together with high job demands often leads to disengagement and burnout (for a discussion on engagement, see 2.2.4).

2.1.5.3 General educator remuneration and living circumstances

Bennell and Akyeampong (2007) found that educators in Sub-Saharan Africa are poorly paid, which is regarded as a key factor in low educator morale and motivation. The Namibian educator strike in October/November 2012 (De Waal, 2012) is an indication of educators' dissatisfaction with their salaries. Low salaries often force educators to take up additional work, which again has a negative influence on the quality of their teaching (Oliveira & Farrell, 1993). It would be reasonable to suggest that an educator should be financially comfortable and well taken care of in order to be able to function optimally within a high stress-working environment. This was not the case with Namibian mathematics and language educators in a study conducted in 2000 with these educators (SACMEQ, 2005; SACMEQ, 2011). The following was found:

- The average educator was not well off in terms of the possessions at home;
- In 1995, 45% of language educators for Grade 6 learners in Namibia indicated that their homes were not in a good condition and urgently needed repairing. In 2000, 49% of these educators indicated that they were unhappy with the condition of their houses, which is an indication of the deterioration of educator housing facilities. Latest indicators are that 57.8% of reading educators, 59.3% of mathematics educators and 51.1% health educators were living in houses with acceptable conditions in 2007 (SACMEQ, 2011);

- In 2000, 85% of mathematics educators for grade 6 learners in the Caprivi region indicated that they were not at all comfortable with their housing conditions;
- About half of the educators in the study indicated that they relied on candles and oil lamps as a source of light.

Ingersoll (2002) found that in the U.S.A poor salaries was the reason for 47% of migration of educators from one school to another, whereas poor salaries was cited as a reason for 45% of educators who were leaving the profession. In support of Ingersoll, Murnane and Olsen (1990) found that the higher educator salaries were, the lower the probability that educators would resign. Murnane and Olsen thus asserted that educators' pay is linked to turnover intention.

Low salaries might also be the reason why many more female than male educators can be found in the profession. The men in Namibia are often the breadwinners who cannot see their families through on educator salaries. Table 4 reveals the significant imbalance of male/female educators in Namibia. One might ask whether the growing disciplinary problems between learners might be enhanced by the lack of male educators in schools.

Table 4

Number of Female and Male Educators in Namibian Schools (EMIS, 2011)

Educators Male-Female Numbers 2007	Educators Male-Female Numbers 2008	Educators Male-Female Numbers 2009	Educators Male-Female Numbers 2010	Educators Male-Female Numbers 2011
Educator total: 20,333	Educator total: 20,830	Educator total: 21,607	Educator total: 22,072	Educator total: 23,039
Female total: 12,581	Female total: 12,921	Female total: 13,449	Female total: 13,801	Female total: 14,400
Male total: 7,752 (38%)	Male total: 7,909 (38%)	Male total: 8,158 (38%)	Male total: 8,271 (38%)	Male total: 8,639 (38%)

Table 4 indicates a significant difference in the number of female/male (62%/38%) educators in Namibian schools. Over the past five years, the percentage of male educators to female educators has not increased although the number of both male and female educators increased generally.

The UNESCO recommendation concerning the status of educators stipulates the following points with regard to educator salaries (ILO/UNESCO, 1966):

- Educators' salaries should reflect to society the value of the profession to society in general; (lending recognition to the value of profession of education);
- Educators' salaries should compare well to those of other professions that require the same qualifications; (rewarding and recognizing educators appropriately);
- Educators' salaries should make it possible for educators and their families to maintain a decent living standard.

It seems that especially in the developing world, educator salaries are not up to standard (Kubberud et al., 1999). In Namibia, the government employs most educators. The salaries are defined by a certain structure and are, therefore, not individually negotiable. In addition, as in Namibia, many governments link their salary structures for educators to formal qualifications with the result that educators pursue qualifications not so much for the enhancement of their quality as educators as in order to qualify for higher salaries. Educator qualifications do not necessarily enhance teaching quality. Then, very often, with their high academic qualifications, educators become attractive to the private sector where, often, much better salaries await them. At the same time, educators who do not pursue academic qualifications, but who are excellent educators leave the profession as they feel undervalued by the salary system (Kubberud et al., 1999). It was speculated by SACMEQ (2005) whether high demand by Namibian educators for professional development had to do with increase in salaries rather than with learner results.

In addition, with regard to educator salaries, it remains complex in practice for large employers, like the Public Service of Namibia, to reward educators financially for their hard work, as it is such an arduous and staff-intensive task to monitor educator performance. To reward educators on the ground of learner performance can also be a problem as learners also experience numerous social and socio-economic problems and often cannot attend school, thus losing critical school time and consequently performing poorly. Such poor academic performance cannot be blamed on educator performance alone.

Rewards and recognitions are crucial in the endeavour to keep educators engaged, hardworking, committed and healthy in education (De Villiers-Scheepers, 2011), and without the wish to leave the profession (for a discussion on rewards and recognitions, see 2.3.1.5).

2.1.5.4 Impact of poverty on education in Namibia

Whilst salaries of educators remain a crucial factor in quality education it should also be considered that, as earlier indicated, a huge gap exists between the minority of wealthy Namibians and the majority of poor people in Namibia. Educators in Namibia are often confronted with the reality of hungry children from poverty-stricken homes who attend school. Although it is indicated that in 2000, most children in Namibia had sufficient meals per day, with the Kavango region showing slighter lower ratings in this regard (SACMEQ, 2005), a recent report in a Namibian newspaper indicated that nearly 250 000 children at 1214 schools in Namibia receive food from the government. This initiative costs the Namibian Government N\$50 million per year. In addition, projections indicate that another 200 000 learners don't benefit from this feeding system, which means that two thirds of Namibian children don't eat enough at home to support healthy learning abilities (Retief, 2011).

It is so very emotionally draining for educators to attempt to teach hungry learners, that Namibian educators often buy food out of their own pockets for learners (Grobler, 2006). Hungry learners are often a reality in Namibia which impacts negatively on the educator's emotional resources. This serves as an example where

educators need the support of the organization (government, school, private sector) to strengthen them in their huge educational task. Organizational support contributes towards educator engagement (Shore & Tetrick, 1991) (for a discussion on organizational support, see 2.3.1.6).

The low number of healthy learners, who may be hungry, leads to low academic performance, grade repetition and/or consequent school dropout, with emotionally challenged educators.

2.1.5.5 School dropout and repetition figures in Namibia

School dropout levels are a major concern in Namibia. Learner dropout figures are often associated with low academic performance amongst other factors. Besides many other reasons why a significant number of Namibian learners underachieve academically, the engagement, commitment, citizenship behaviour and well-being of educators might play a significant role. Table 5 gives figures of learners who have dropped out of Namibian schools since 2008.

Table 5

School Dropout Figures in Namibia since 2008 (EMIS, 2011)

Region	Learner Dropouts	Learner Dropouts	Learner Dropouts	Learner Dropouts
	2008	2009	2010	2011
Caprivi	459/2%	496/2%	521/2%	651/2%
Erongo	335/1%	376/1%	467/2%	425/1%
Hardap	555/3%	636/3%	619/3%	513/3%
Kavango	2725/4%	2652/4%	2680/4%	2593/4%
Karas	323/2%	433/2%	420/2%	349/2%
Khomas	705/1%	1009/2%	877/1%	817/1%
Kunene	481/3%	927/5%	739/4%	501/3%
Ohangwena	1693/2%	1692/2%	1657/2%	1535/2%
Omaheke	364/3%	473/3%	554/3%	499/3%
Omusati	1254/1%	1336/2%	1290/2%	1157/1%
Oshikoto	1026/2%	1129/2%	1179/2%	1098/2%
Otjozondjupa	741/2%	1054/3%	1326/4%	967/3%
Oshana	895/2%	587/1%	639/1%	519/1%
Total	11591/2%	12800/2%	12968/2%	11641/2%

Table 5 indicates that dropout figures for Namibian learners have remained fairly consistent over the last four years, although the figures are high. The Kavango region has the highest number of learners who dropped out of school during the past four years. It should be kept in mind that learner dropout is not solely the result of poor academic performance. Many other factors can play a role like illness, pregnancy, poor self-discipline, poverty, hunger, discrimination or parents who move from the region.

It is those learners who take grade 10 but do not perform well who contribute mainly towards these high dropout statistics. Grade 10 learners who did not acquire the required academic points to be promoted to Grade 11 are not readily accommodated in schools to repeat Grade 10. These figures are significant. At the end of 2010, 33,570 pupils sat for the grade 10 external examinations. Of these learners, 17,187

passed, leaving 16,383 youngsters who failed (Kisting, 2011a). Thus, by the end of 2010, 48.8% of learners who attempted to complete grade 10 were not successful (Kisting, 2011b). Only limited places are available in schools for Grade 10-learners to repeat Grade 10. For example, at the start of 2010, only 3583 of the about 15 500 Grade 10's who did not meet the requirements for promotion to Grade 11 by the end of 2009 could be re-admitted to Grade 10. The prospective Grade 10 repeaters who do not get a place in schools are often not motivated enough to continue with part-time studies and thus struggle to find direction in life. This can exert a profoundly negative effect on the socio-economic development and political stability of Namibia over the long term. Table 6 indicates the number of Grade 10 learners who were promoted to Grade 11 over the past four years.

Table 6

Promotion Percentages of Grade 10 Learners (EMIS, 2011)

Grade 10	Grade 10	Grade 10	Grade 10
Promotion %	Promotion %	Promotion %	Promotion %
2007	2008	2009	2010
54%	53%	55%	57%

Table 6 indicates that a relatively low percentage of Grade 10 learners passed Grade 10 during the past four years.

Table 7 summarizes repetition rates of grades 1-11 over a four-year time span.

Table 7

Learners that Repeat a Grade in Schools in Namibia (EMIS, 2011)

Repeaters Grades 1-11 2007	Repeaters Grades 1-11 2008	Repeaters Grades 1-11 2009	Repeaters Grades 1-11 2010
93,097	96,706	89,310	89,141
Total enrollments: 567,670	Total enrollments: 571,325	Total enrollments: 576,310	Total enrollments: 580,795
% Repeaters: 16%	% Repeaters: 17%	% Repeaters: 16%	% Repeaters: 15%

Table 7 shows a slight decline of learners who had to repeat a grade between 2007 (93,097) and 2010 (89,141). However, it is still a significant number of repeaters. Figures in Table 7 exclude thousands of Grade 10 repeaters who did not get a place at Namibian schools, school-leavers and learners that are automatically transferred.

Educators with a high sense of coherence will be able to focus on the positive aspects of the relatively high learner dropout and repetition rate in Namibia and see it as a challenge instead of making it an obstacle (Söderfeldt, Söderfeldt, Ohlson, Theorell, & Jones, 2000). If appropriate job factors are favourable, such educators will probably work beyond their scope of duties in order to enable more learners to be promoted to the next grade or to remain in school (organizational citizenship behaviour) (for a discussion on sense of coherence and organizational citizenship behaviour, see 2.3.2 and 2.4.2.2).

2.1.5.6 Educator and learner absenteeism and related behavioural problems

Learner and educator absenteeism is another reason for unsatisfactory academic performance in Namibian schools. Absenteeism rates for Namibian Grade 6 learners

were indicated to be 1.5 days per month whilst Grade 6 learners in the educational regions of Ohangwena, Oshikoto and Oshana appear to be on average more than two days per month (SACMEQ, 2005). In the same study, 95% of grade 6 learners indicated that learner absenteeism was a problem in their school. The SACMEQ (2011) report indicates that 98% of Namibian learners are in schools where learner absenteeism was regarded as a problem.

Besides absenteeism, 70% of Namibian learners indicated a host of problems among learners that influenced academic achievement negatively such as arriving late at school, health problems, skipping classes, fights, classroom disturbances, intimidation of learners, vandalism, cheating, dropping out of school, theft and use of abusive language. In more than 30% of Namibian schools, learners indicated that sexual harassment was a problem (SACMEQ, 2011).

In addition, 70% of grade 6 learners were in schools where principals indicated that educator absenteeism was a problem (SACMEQ, 2005). In general, 68% of educators indicated they are employed at schools where educator absenteeism is a problem (SACMEQ, 2011). Educator health problems, arriving late at school and skipping classes are also regarded as problematic educator behaviour which affects learner academic achievement negatively (SACMEQ, 2011). Twenty six percent of Namibian learners indicated that they were in schools where teachers were guilty of alcohol abuse (SACMEQ, 2011).

2.1.5.7 Parent involvement and parent education level

Home background plays a crucial role in the attitude of learners towards education. Walberg and Paik (2000) found that learners up to the age of 18 years spend 92% of their time under the influence of their parents. It can therefore be anticipated that children who have educated parents will have better support from their parents with schoolwork, which might enhance the overall quality of their schoolwork. Educated parents put a higher emphasis on the importance of academic qualifications of their children than parents who are not well educated (Cohen, 2008). In this way, parents better support educators. Educators then do not have to coach learners about the value of education and can better concentrate on their educating task. A study with fathers of about 5000 Grade 6 learners in Namibia in 2000 indicated the following statistics with regard to parent education (SACMEQ, 2005):

- 6.7 % of fathers had no education at all;
- 32.5% of fathers had some primary education;
- 7.7 % of fathers completed primary education;
- 22.9% of fathers had some secondary education;
- 14% of fathers completed secondary phase;
- 16.3% of fathers had some tertiary education.

About half of the Grade 6 learners in this study indicated in 2000 that their parents helped them with their homework (SACMEQ, 2005). It thus seems that learners are often left alone with their schoolwork, without the necessary parental support that they need. Parent involvement in schools is crucial for successful outcomes with schoolwork. Although many schools attempt in various ways to get parents more involved in school related matters, Namibian educational specialist Justin Ellis found that parents are still not very involved in their children's schools (Sasman, 2011g).

Although supportive co-educator and supervisor relationships are regarded as essential in fostering engagement in educators, parental support for educators could also be regarded as crucial. All forms of support can only benefit educators and learners as well as the education process (for a discussion on supportive relationships at work, see 2.3.1.3.)

2.1.5.8 Educator education level

In the same way that parent education levels could contribute towards healthier learning for learners, educators should be well qualified in order to deliver high quality education in their highly stressful working environment. Education level of educators can be regarded as a cognitive resource with which high work demands can be met. EMIS (2010) statistics indicate that 919 educators in Namibia had, at the time of the research, qualifications lower than Grade 12, whilst 2,919 educators had Grade 12 and 1-2 years of tertiary education and 18 234 educators were in possession of a qualification of more than 2 years tertiary education. Although these statistics

indicate that a high number of educators in Namibia are adequately qualified, SACMEQ (2005) statistics indicate that in 2000 only 13% of language educators of grade 6 learners and 10% of mathematics educators of grade 6 learners had some tertiary education. The English Language Teacher Development Project (ELTDP, 1999) indicated that 43% of upper primary educators did not have a proficiency in English in order to be able to teach properly in English. This concern was also echoed by the Namibia Institute of Democracy who found that 22% of learners said that their educators do not speak understandable English (<http://www.nid.org.na/Publications.htm>; Kisting, 2011e). It seems that in 2000, 75% of Grade 8 learners could speak and understand English well, with Caprivi, Karas and Hardap educational regions having slightly lower rates (SACMEQ, 2005). Especially in the Northern regions of the country, educators seem to have low academic and professional training. In this regard SACMEQ (2005: p. 93) states: “The low academic qualifications of teachers may have an effect on the mastery of the subject matter of the teaching subject.”

Educators who are well-qualified for the position which they hold, might experience eustress because their cognitive resources match or are even higher than their job demands. This again might lead to a subjective feeling of good work-role fit with the educator. The educator who experiences work-role fit and eustress will most probably be engaged (for a discussion on work-role fit, see 2.3.1.1). If the educator feels a good fit with the work-role the work will be psychologically meaningful (for a discussion on psychological meaningfulness, see 2.2.5.2).

In 2000, 14% of principals in Namibia had completed primary education, 17% completed junior secondary school and 38% completed senior secondary school. Only 11% of principals had completed the equivalent of A-levels in 2000, while only 20% of principals reported successful completion of tertiary education (SACMEQ, 2005). Especially in the Kunene, Ohangwena, Omaheke, Omusati, Oshikoto and Oshana educational regions, many principals have received only primary school education.

When principals and heads of departments are well-qualified at the tertiary level, leadership problems might be minimized as educators in schools might accept the authority of someone with higher academic qualifications more readily. A clear hierarchy will be evident and crucial job factors like supervisor support and supervisor trust will thus most probably not be compromised (for a discussion on supervisor support and supervisor trust, see 2.3.1.3.2.1 and 2.3.1.3.2.2). With supervisor support and supervisor trust firmly established the educator will most probably feel psychologically safe at work (for a discussion on psychological safety, see 2.2.5.1).

Educators have limited opportunities for career development. Usually, career development is based on seniority. Educators can become subject heads, heads of departments, principals or educational officers. These promotion posts are limited with differing administrative demands. This means that educators remain for many years in one position and seldom experience the positive incentive of promotion. If educators are promoted, the promotion means a substantive extra load of

administrative work, which is very different from teaching. Promotion in this sense thus means placing a significant amount of administrative work onto the existing workload of the educator. It should be kept in mind that educators are trained to educate. Educating young people, and not administrative work, should be the passion of the secondary school educator. Promotion within education could thus cause problems with the educator's work-role fit.

Limited promotion opportunities in education might lead to a lack of experience of job enrichment with educators. Hackman and Oldham (1980) warn that if individuals do routine work over an extended period of time, like always presenting the same classes with the same learning material, such individuals will become bored. Owing to a subsequent lack of enriching experiences at work, the individual will lack engagement, which can lead to negative organizational outcomes and a lack of psychological meaningfulness (for a discussion on job enrichment, see 2.3.1.2).

2.1.5.9 Violence against educators

Incidents of violence against educators and other staff of the Ministry of Education are on the increase (De Waal, 2011). Part of the reason for the increase in disrespectful behaviour towards educators might be that working conditions for educators decline worldwide whilst their status as professionals deteriorates (Kubberud et al., 1999). An audit of the current state of affairs of education in Namibia indicates, amongst other things, that poor discipline of both educators and learners and poor work ethics of educators in the country deprive learners of up to 50

school days per annum (Sasman, 2011d). Veteran educationist Andrew Matjila states in this regard: "...teachers, have no self-respect anymore" (Kisting, 2011d). Sixty percent of educators who taught in Grade 6 had principals that indicated that laziness of educators was a problem (SACMEQ, 2005). Violence, poor discipline, disrespect and poor work ethics might all be part of the explanation for the deterioration of the status of educators. Poor work ethics influences learner academic achievement negatively which might lead to frustration amongst learners and parents. Learner and parent frustration might be expressed in aggressive acts against educators.

Aggressive acts against educators will increase the demands made on them. If educators do not have sufficient resources to cope with such stress, their intention to resign might escalate (for a discussion on turnover intention, see 2.4.2.3).

2.1.5.10 Class size

For educators, class size is directly linked to workload. The more learners in the class, the more scripts the educator has to mark and the less individual contact with learners is possible. It is also easier to maintain decent academic standards as well as disciplinary standards in a class of 25 learners than in a class of 55 learners. Educators can easily feel overwhelmed when having to attend to large class groups. According to Kubberud et al. (1999), developed countries have typically fewer learners per educator than developing countries. Expensive private schools in developing countries are also known for their smaller class sizes and more individualized educator-learner contact. Statistically, class sizes in Namibia are

averaged at 27 learners per educator (see Table 8). However, in practice, it seems that some classes can have up to 48 learners per educator (Kleinhans, 2011), whilst others have classes of fewer than 20 learners. Often these educators teach large classes at the same time as carrying the burden of limited learning aids because of an inadequate budget for learning resources.

Table 8

Number of Learners per Educator in Schools in Namibia (EMIS, 2011)

Region	Number of learners per educator in 2007	Number of learners per educator in 2008	Number of learners per Educator in 2009	Number of learners per educator in 2010	Number of learners per educator in 2011
Caprivi	26	26	26	25	23
Erongo	28	24	27	27	26
Hardap	28	28	27	27	27
Kavango	29	22	28	28	28
Karas	26	21	25	26	26
Khomas	28	25	26	25	25
Kunene	27	21	26	27	26
Ohangwena	29	13	29	29	28
Omaheke	24	22	28	27	28
Omusati	28	28	26	26	25
Oshikoto	29	28	27	28	27
Otjozondjupa	29	30	29	29	29
Oshana	29	29	27	26	25
Total	28	24	27	27	26

Table 8 indicates that on average the learner-educator ratio is 26:1. Over the past five years one could find, on average, 26 learners per class. However, these statistics (EMIS, 2011) are average statistics and one could expect that certain class groups will contain many more than 26 learners whilst other class groups will contain far fewer than 26 learners. The Ministry of Education in Namibia has set as a goal not to exceed 40 learners per class at the primary level and 35 learners at the secondary level. According to EMIS (2011) statistics, primary schools had on average 28

learners per class and secondary schools had on average 24 learners per class in 2011.

2.1.5.11 Educator turnover

MacDonald (1999) found that turnover rates for educators vary worldwide between 5% and 30%. Certain factors seem to influence educator turnover. Turnover rates seem to be lower in developed countries than in developing countries, like Namibia. Turnover rates of educators also seem to be lower during difficult economic times because people tend to hold onto their jobs when economic times are tough. It also appears that the more qualifications the educator holds the more easily that educator may resign because of receiving other lucrative job offers. Turnover rates also seem in general to be lower in urban areas than in rural areas (MacDonald, 1999).

Furthermore, Chapman and Mulkeen (2003) found that since education as a career is often the “last resort” occupation, too many young people without a passion for education study in this field. As soon as they experience education as a highly stressful working environment they are not motivated to withstand the pressure, experiencing poor work-role fit and leave the profession early, thus raising education turnover rates.

Educator turnover rates are a matter of great concern to the education authorities of Namibia (Booyesen, 2011), just as elsewhere in the world. Table 9, extracted from EMIS, indicates turnover rates of educators for the period 2006 to 2011. EMIS

defines turnover rates as the percentage of educators that left the profession of education altogether within a certain year. The EMIS turnover statistics thus do not include figures of educators who were transferred from one school to another in Namibia.

Table 9

Turnover Rates of Namibian Educators (EMIS, 2011)

Region	Turnover rates of Educators 2006-2007	Turnover rates of Educators 2007-2008	Turnover rates of Educators 2008-2009	Turnover rates of Educators 2009-2010	Turnover rates of educators 2010-2011
Caprivi	9.4%	8.7%	8.0%	15.3%	11%
Erongo	10.6%	11.2%	10.8%	17.4%	15.2%
Hardap	8.6%	12.2%	10.5%	16.7%	13.2%
Kavango	7.4%	7.3%	8.1%	13.6%	16.3%
Karas	10.6%	14.4%	12.6%	18.7%	16%
Khomas	10.5%	12.9%	11.6%	18.6%	24%
Kunene	6.0%	9.4%	8.6%	15.1%	16.2%
Ohangwena	5.1%	6.2%	7.2%	11.2%	20.2%
Omaheke	7.3%	13.3%	10.4%	15.8%	13.9%
Omusati	4.8%	10.1%	6.9%	11.6%	8.8%
Oshikoto	5.4%	7.7%	8.4%	13.6%	11.6%
Otjozondjupa	10.4%	11.3%	10.5%	18.0%	16.5%
Oshana	5.6%	7.9%	6.7%	12.4%	12.2%
Total	8.6%	9.4%	8.7%	14.3%	10%
	Educator total: 20,333 1749 educators left	Educator total: 20,830 1958 educators left	Educator total: 21,607 1880 educators left	Educator total: 22,072 3156 educators left	Educator total: 22,039 2204 educators left

Table 9 indicates that turnover rates of educators in Namibian schools are significantly unstable, increasing from 8.6% during the 2006 to 2007 period to 14.3% during the 2009 to 2010 period. The period 2009 to 2010 experienced the highest turnover rate of educators in Namibia (14.3%). That means that 3,156 educators left the education sector completely. No pattern for turnover can be established between the regions as turnover rates differ significantly from region to region from year to

year. During the 2010 to 2011 period turnover rates amongst Namibian educators were the highest in the Khomas, Ohangwena, and Otjozondjupa educational regions. According to EMIS statistics, taking the average of the past five years, about 2,200 Namibians leave the profession every year. The Minister of Education announced in July 2011 that Namibia is in dire need of 5,000 educators. Although the Minister requested the University of Namibia to start training at least 6000 educators in 2011, only 180 applications were received (Thomas, 2011). Here again, even if more young people would respond on the Minister's request, one wonders whether such young educators-to-be would feel a calling for education. Findings by Rothmann and Hamukang'andu (in press), in a study on educators in Zambia, indicate that educators who do not really experience a calling for education have a high turnover rate. This higher turnover rate is possibly the result of high stress in the profession of education.

According to Klusmann, Kunter, Trautwein, Lüdtke, and Baumert, (2008), educators worldwide leave the education profession at alarming rates. These authors identified characteristics of educators who might leave the profession early:

- Younger educators tend to leave schools faster than older educators (Huberman, 1993; Ingersoll, 2002). A study in Texas indicated that educators with zero to two years of experience were twice as likely to leave teaching than those educators who had been longer in the profession (Hanushek, 2002). Certo and Fox (2002), for example, found that 9.3% of educators in the United States of America in public schools left the profession within the first year of teaching whilst about

20% of educators left the profession before three years and 30% left after five years;

- Educators who teach in the special education stream have higher turnover rates than other educators;
- Educators who teach in ethnically diverse schools leave the profession more quickly than those in ethnically homogeneous schools;
- Educators with high academic ability seem to leave the profession more quickly than others;
- Inexperienced educators seem to leave the profession sooner than others;
- It seems that educators at private schools have higher turnover rates than those at public schools.

Schools that have effective mentoring programmes in place show lower turnover rates of educators. It is difficult for education students to make the transition into the world of work if they are not mentored. Everyday classroom management issues such as time-planning, curriculum development and student discipline are challenging whilst administrative obligations are often overwhelming and demotivating (Unal & Cukur, 2011). Especially when educators' training is not up to standard, they will experience high levels of stress when attempting to handle all the work at school without being mentored, leading them ultimately to resign. In view of difficult circumstances in which Namibian educators have to perform their duties,

they indeed need extensive understanding, support and mentoring from principals, heads of departments and subject advisors. However, in 2000, 25-30% of Namibian learners indicated that they had educators who viewed school inspectors and subject advisors as just looking for faults with them in order to report them to authorities (SACMEQ, 2005). In this situation, supervisor support and supervisor trust are compromised, with negative effects on organizational outcomes.

Ingersoll (2002) found that poor salaries contribute significantly towards higher turnover rates and migrating rates between educators (Kubberud et al., 1999). Especially in Sub-Saharan Africa, it was found that educators are frustrated with their salaries which they perceive as too low and not always received on time. This also leads to educator absenteeism, as educators often have to travel long distances to offices in order to receive their pay (Chapman & Mulkeen, 2003). Gritz and Theobald (1996) furthermore indicate that educators who are not able to make a decent living on their salaries or who see their salaries comparing poorly with those of professionals with the same level of training in other fields tend to leave the field of education quickly.

Other factors that tend to increase turnover rates of educators include: inadequate administrative support, poor student discipline, lack of faculty influence, lack of community support, unsafe environment, lack of student motivation and inadequate time to prepare (Ingersoll, 2002).

A lack of physical resources also tends to cause educators to leave the profession. These conditions include: poor physical work environment, lack of textbooks, poor classroom conditions, high learner-educator ratio, poor quality of co-worker relationships, and lack of administrative support (Ingersoll, 2002).

Job enrichment in the form of ongoing learning opportunities, increased responsibility and the variety of tasks will all play a role in determining educators' decision to resign (MacDonald, 1999). The greater the job enrichment the educator experiences, the lower the intention to leave.

In Sub-Saharan Africa, governments, in an attempt to keep an educator in front of the classroom, will often fill vacant positions with underqualified educators, which may lead to the de-professionalization of the profession (Gaynor, 1998). Kubberud et al. (1999) indicate that educators tend to leave the profession when their status and working conditions are constantly deteriorating. Bennell and Akyeampong (2007) also found that the status of education as a profession in Ghana had deteriorated significantly and that educators are undervalued by society.

According to Ingersoll (2002), the turnover rate for educators in the United States of America (USA) is significantly higher than that in other professions. Almost a third of educators in the USA leave the education profession during their first three years of teaching. Half of the educators leave American schools within five years. Turnover rates in American low-income areas and rural areas are even higher

(Ingersoll, 2002). In August 2002, the National Commission on Teaching and America's Future (NCTAF) held a congress to address, amongst other challenges, the problem of shortage of educators. An alarming and unsustainable number of educators left the profession during their first year of teaching. In 1999 the United States of America hired 232,000 educators who did not teach the year before. However, 287,000 educators left the teaching profession during the same year. Educator turnover was found to be the highest in low-income communities and in private schools. It was found that in 1999, three million educators in the United States of America were not working actively in their professional field.

Survey data of a study conducted in Zambia show that 38.6% of all educators had considered leaving the school in which they were currently employed. In addition, 35.2% of educators in Zambia had considered leaving education altogether. The main reasons they cited for doing this were: that they were married or cohabitating and their partners could support them financially, that they were dissatisfied with school management and administration, that they live far away from the school, or that they were teaching in a large school (Unal & Cukur, 2011). Transfer rates for Namibian educators are also increasing, as indicated in Table 10.

Table 10

Transfer Rates for Namibian Educators (EMIS, 2011)

Region	Transfer rates of Educators 2006-2007	Transfer rates of Educators 2007-2008	Transfer rates of Educators 2008-2009	Transfer rates of educators 2009-2010
Caprivi	4.2%	4.8%	4.4%	8.6%
Erongo	5.6%	7.0%	8.7%	12.9%
Hardap	5.4%	6.1%	9.1%	10.1%
Kavango	4.1%	4.5%	4.8%	7.1%
Karas	6.7%	8.0%	7.2%	15.0%
Khomas	4.5%	4.0%	4.4%	7.5%
Kunene	8.8%	6.1%	8.0%	13.7%
Ohangwena	5.3%	4.3%	7.5%	11.6%
Omaheke	5.8%	4.9%	10.0%	15.2%
Omusati	4.1%	3.9%	7.5%	12.2%
Oshikoto	4.3%	4.8%	6.7%	11.3%
Otjozondjupa	6.5%	5.3%	6.6%	13.4%
Oshana	3.9%	3.1%	4.8%	8.3%
Total	4.9%	4.7%	6.5%	10.6%
	Educators total: 20,333 996 transfers	Educators total: 20,830 979 transfers	Educators total: 21,607 1405 transfers	Educators total: 22,072 2334 transfers

Table 10 shows a significant increase in educator transfers within Namibia and between Namibian schools from 2006 to 2010. During the period 2009 to 2010 the highest transfer figures were found in the Karas and Omaheke educational regions.

2.1.6 GENERAL WORK SITUATION FOR EDUCATORS

The quality of education and work circumstances of educators is deteriorating worldwide (Kubberud, 1993). Teaching is seen as a highly stressful profession (Van der Doef & Maes, 2002). Educators seem to struggle increasingly with burnout, depression, anxiety and physical health problems (Pomaki & Anagnostopoulou, 2003). Increasing poor health in educators appears to be the result of high stress at work (Astapov, Jehle, Maslov, & Pronina, 2001). In a general survey with educators

in Australia, one third stated that their job was highly or very highly stressful (Pithers, 1995). In the Netherlands, 53% of educators who were certified as incapacitated, suffering from work-related mental health problems (Van Horn, Schaufeli, & Enzmann, 1999). Most research done on burnout concerns educators (De Frank & Stroup, 1989; Jackson, Schwab, & Schuler, 1986), which is an indication that education and burnout are interlinked.

A wide variety of negative factors in the profession of education serve as stressors such as limited support, fewer resources, dissatisfaction with rewards, minimal or no autonomy and a global lowering of the status of education as a profession (Gendin & Sergeev, 2002). Koustelios and Kosteliou (1998) found great frustration with low salaries and poor promotion opportunities amongst Greek educators. Classrooms these days round the world have to integrate an increasingly heterogeneous population because of globalisation (Major & Germano, 2008). Thus, besides larger classes, the composition of classes has changed. There is also an increased focus on integrating learners with learning problems and other developmental delays into mainstream schooling (Talmor, Reiter, & Feigin, 2005). These changes in classroom composition require additional flexibility and know-how from educators, as they have to adapt and manage all the differences. Socio-cultural changes also have an impact on schools and educators. Globally the relationships between parents and children and children and educators have changed (Astapov et al., 2001). Educators often have to adapt and readapt to the changes in schools owing to fast changing technology and its general impact on society. With increased stress and decline in the working conditions of educators it cannot come as a surprise that turnover and

transfer rates among educators are higher than in other professions and are still on the increase, which often leads to great shortages of educators (George et al., 2008; Hanushek, Kain, & Rivkin, 2004; Ingersoll, 2002).

Despite all the changes and challenges within the world of work nowadays (such as those in the education profession), work remains important to human beings for several reasons. Apart from earning a livelihood work can give people meaningfulness and fulfilment. However, poor work circumstances can cause ill health and a decision to resign. However, negative effects like mental illness, heart disease, alcoholism, suicide and spouse battering are also reported when people lose their work or resign because of a poor work situation (Bergh, 2004). Therefore the problems at the workplace need to be identified through research and then addressed.

2.2 WELL-BEING: WORK ENGAGEMENT AND PSYCHOLOGICAL CONDITIONS

Psychological functioning at the workplace has generally been approached in two ways. The one strand of research has concentrated on causes of stress and burnout and the negative side of emotion and motivation (Kyriacou, 2001). The second strand has focussed on the positive aspects of job challenges such as organizational commitment, job satisfaction and work engagement (Hallberg & Schaufeli, 2006).

This part of the literature review focuses on work engagement as a crucial ingredient to a positive approach towards work in general and the Namibian secondary school

educator specifically. This chapter also emphasizes certain psychological conditions to be the necessary pathway towards educator work engagement.

2.2.1 THE IMPORTANCE OF WORK

From an early age on, work has been depicted as advantageous to human beings. Voltaire already stressed the good nature of work with his belief that work banished three evils of life namely poverty, boredom and vice (Furnham, 1990; Grint, 1992). Sigmund Freud (in Levi, 1992) indicated that the prerequisites for a good life are “Lieben und Arbeiten” (to love and to work). Also with regard to the importance of work in people’s lives, Dolan (2007, p. 6) mentions: “Work is, for many, one of the fundamental activities of human existence.” Noon and Blyton (2002) show that already during childhood, people are judged in terms of their work aspirations. Later on, in the adult years, people are assessed in terms of their employment status and financial income. Hall (1994) states that for the vast majority of people, work is a highly central aspect of their lives. Kopp, Stauder, Purebl, Janszky, and Skrabski (2007) found that especially in middle age, work and working conditions are central in determining psychological well-being and mental health. Bergh (2004) states that the positive development of a self-concept and psychological well-being of human beings are significantly correlated with quality of work involvement and positive accomplishments. Work is important to human beings.

It is difficult to find an encompassing and central definition of work. According to Hall (1994: p. 5), work can be defined as: “...the effort or activity of an individual

that is undertaken for the purpose of providing goods or services of value to others and that is considered by the individual to be work.” Similarly, Noon and Blyton (2002) state that work produces something, involves a degree of necessity or obligation as well as effort and persistence while Bergh (2004, p. 417) defines work as: “... purposeful and meaningful activities which people execute in order to meet and fulfil various physical and psychosocial needs.” These definitions indicate that work involves necessary, purposeful activity in order to deliver goods and/or services that should cater for physical and psychosocial needs. It can thus be inferred that work is positive for humankind.

Sauter, Murphy, and Hurrell (1992) mention that the Protestant work ethic is a definite reason for the centrality of work in the modern human being’s life. According to the Protestant work ethic all people, even the rich, should work, as work has a moral value. People should find out what their talents are and then achieve personal salvation by pursuing their talents in the form of hard work (Furnham, 1990). Work is thus also often regarded as a moral necessity by human beings (Noon & Blyton, 2002).

The awareness of the meaningfulness and importance of work in peoples’ lives has a long history. According to Hall (1994), it is not clear when people started to see their productive labour as work. However, the early hunter-gatherers already produced goods and services of value to others. Hall (1994) indicates further that about 5000 years ago, as the Egyptian and Sumerian cities arose, class differences also developed with kings, nobles and priests forming the noble class. The establishment

of class differences is important in the division of work. Schreuder and Theron (2004) report that the Greeks and Romans of antiquity regarded work as a burden which was meant for slaves, thus referring to these class differences and the division of work. Pursuits such as time to argue and think philosophically, engagement in agriculture or relaxation in the country were regarded rather as the privileged and positive roles for people of higher standing in society. Although the Hebrews also experienced work as drudgery, they acknowledged it as compensating positively for their sins which would lead to deeper spiritual life (Hall, 1994).

The Renaissance was a period during which intellectual reasoning was more valued than physical powers. Thus, during the Renaissance, through work, people learned to master nature and themselves (Schreuder & Theron, 2004). The Industrial period was marked by mass production through the utilization of machines. The employed were required to watch and service machines, making sure that the machines produced. The work became thus monotonous and routine. The rights of employees as well as general working conditions declined significantly. These routine working conditions led to a low work morale and motivation. People started to look for meaning outside the workplace (Tilgher, 1962).

Hall (1994) indicates that the production of services became more important than the production of goods in the post-industrialized world. As people attempt to save time, they contract household work out as a service and rely all the more on time-saving products (Major & Germano, 2008). "Speed" became the focus for the post industrialized worker. The rise of the service industry also gave impetus to the

upcoming of the 24/7 workforce i.e., staffing 24 hours a day, 7 days a week (Major & Germano, 2008). Furthermore, the post-industrialized period focuses on information with regard to the needs of societies (Bergh, 2004; Howard, 1995). Subjects like marketing and consumer psychology (Cant, Brink, & Brijball, 2006) are an indication of the post-industrial focus on the needs of society. Heterogeneity in beliefs, recognition of differences, plurality, paradox, and eclecticism make up the working environment, which requires employees to be flexible and innovative (Schreuder & Theron, 2004). The post-industrial period is also marked by the advances in technology. Computers, cellular phones, pagers and videoconferencing brings formal work on a 24/7 basis into people's homes, shrinking the world into a global village (Kalleberg & Epstein, 2001) and thus requiring complex skills from the work force.

During the post-industrial time, lines between work, family and leisure are increasingly blurred (Hall, 1994). Many people spend significant amounts of time at work or with their work. In this regard one can mention that Namibian educators might only be at the workplace for about six hours, but they spend a significant amount of time after formal school hours with job-related extra-mural activities, administration and preparatory class work.

According to Noon and Blyton (2002), human beings might regard work as an economic and moral necessity. These authors indicate that intuitively one conceptualises work as a necessity in order to sustain life as work provides the financial means to buy what is needed for basic survival. However, the developed

countries often have such fine-tuned social welfare systems in place, that the unemployed receive more money in the form of state grants, than they would receive if they were employed. In this case, one would not regard work as an economic necessity. In Namibia, with its high rate of unemployment and poverty (Schmidt, 2009) work is often associated with economic survival. Strydom (2006) indicates that the social structure of the South African population resembles a triangle with a limited number in the upper class, more in the middle class and the greater part of the population in the lower class. As Namibia was a colony of South Africa, one can assume that the Namibian population still resembles South Africa. In this regard, most Namibians find themselves in the lower socio-economic class, which makes them dependent on work and thus a financial income. One could therefore argue that many Namibians work because of the extrinsic motivation of receiving a salary.

Formal work is important to people. Work in the post-industrialized world is demanding and stressful. However, it is crucial that people experience well-being in order to live productive lives and produce effective work.

2.2.2 WELL-BEING

It seems logical to argue that the educator with a high level of well-being will be able to create optimal learning experiences for learners. Klusmann et al. (2008) agree that an educator's emotional condition might seriously impact quality of education delivered to pupils. The Dorland's Illustrated Medical Dictionary (Dorland, 2007, p. 789) defines psychological well-being as "a state of optimal physical, mental and

social well-being and not merely the absence of disease or infirmity.” Ryan and Deci (2001) indicate that well-being is not primarily only about positive feelings. Rather, well-being encompasses full functioning. To be well, does not mean to avoid and repress negative experiences, but to be able to function fully in the face of negative experiences. Emotional access and congruence are thus more important for subjective well-being than only the pursuit of positive emotions (Ryan & Deci, 2001). Warr (1990) regards psychological well-being as the subjective experience of high levels of positive energy and low levels of negative energy. Psychological well-being is about the pleasantness-based (hedonic) feelings of the person and encompasses the overall effectiveness of psychological and social functioning. Well-being refers to optimal physical and psychological functioning and includes feelings like happiness, self-acceptance, life satisfaction and positive affect (Sin & Lyubomirsky, 2009).

Warr (1994) developed a model of mental health and distinguished between affective well-being, aspiration, autonomy and competence (primary dimensions) and integrated functioning (secondary dimension). Integrated functioning encompasses the four primary dimensions. Affective well-being deals mainly with the pleasure-displeasure continuum. Aspiration within the work context can be compared to intrinsic motivation and refers to the degree that people pursue goals at work. Autonomy refers to the degree that people can follow their own ideas, opinions and actions. Competence refers to a person’s ability to deal with problems and act upon the environment with success (self-efficacy and personal accomplishment).

Educators with positive levels of the above-mentioned dimensions will experience high levels of well-being according to Warr.

Ryff and Singer (2000) argued that employees could flourish when they attain psychological well-being. In this regard Ryff (1989) proposed a model of well-being with six dimensions (Ryff & Keyes, 1995). These dimensions are self-acceptance (the positive evaluation of one-self and one's past life), environmental mastery (the capacity to manage one's life and environment successfully), autonomy (includes self-determination and the ability to resist external sources to influence one's own thinking and acting), positive relations (be genuinely concerned about the welfare of others), personal growth (continuous personal growth and seeking of new opportunities) and purpose in life (the belief that life has purpose and meaning). Educators with positive levels of the above-mentioned dimensions will experience high levels of well-being according to Ryff.

According to Ryan and Deci (2001), well-being is guided by two philosophies namely, hedonism and eudaimonism. Hedonism stipulates that well-being is pleasure and happiness. Especially in psychological studies, hedonism includes the preferences and pleasures of the body as well as the mind. Hedonistic psychology regards well-being as the experience of subjective happiness with a focus on pleasure versus displeasure, including the good-bad dichotomy (Diener, Sapyta & Sue, 1998). The ingredients of happiness are life satisfaction, the absence of negative mood and the presence of positive mood, which all together are called subjective well-being

(Diener, 1984). Ryan and Deci (2001) report that most people feel a positive affect most of the time.

Eudaimonism is more than happiness and includes the actualisation of human potential and the optimisation of one's true nature. Advocates for the eudaimonic approach to well-being argue that well-being cannot be equated to physical and emotional pleasure alone, as the ultimate pursuit towards the subjective experience of pleasure might land a person in deep trouble. Subjective happiness is thus not well-being. Rather, well-being includes people living in tune with their true self and with their activities in accordance with their values. People who are well, are holistically engaged (Waterman, 1993). Ryan and Deci (2000) identified psychological growth, integrity, the experience of well-being, vitality and self-congruence as crucial ingredients of eudaimonia. These authors combined Warr's and Ryff's models of well-being and maintained that an experience of eudaimonia is only possible through the constructs of autonomy, competence and relatedness. Sheldon, Ryan, and Reis (1996) observed that autonomy and competence especially account for a great deal of happiness and vitality in people. Ryff and Singer (1998) found that positive relationships fostered many positive emotions and attitudes in human beings. Of all the factors that influence happiness, relatedness is near the top of the list (Ryan & Deci, 2001).

The interrelationship between physical and psychological well-being is complex. Ryff and Singer (1998) assert that deep emotional states are often the triggers for health and illness. However, physical states do also affect well-being, especially

vitality levels (Ryan & Frederick, 1997). One should keep in mind that there are some people who score low on subjective well-being without any physical symptoms, whilst others can be found who score high on subjective well-being and high on physical symptoms (Ryan & Frederick, 1997).

Wissing and Van Eeden (1997) include the following in their conceptualisation of psychological well-being:

- Cognition: the person experiences his/her own life as meaningful, copes with the demands of life and displays a general feeling of satisfaction;
- Affect: the person experiences more positive than negative feelings and good days outnumber bad ones;
- Behaviour: the person experiences a high level of control, high levels of job satisfaction whilst problems are perceived as challenges. According to Dolan (2007), a feeling of psychological well-being is greatly dependent on an intrinsic feeling of control (Keyes, 2002). Control in this sense encompasses autonomy, participation in decision-making, influence, and power. Dolan (2007) also stresses that an intrinsic feeling of control will neutralize stress factors like pay and security. However, a lack of an intrinsic feeling of control will most probably lead to a negative state of psychological well-being with symptoms like insomnia, headaches, anxiety, exhaustion and possibly coronary and other diseases (Dolan, 2007);

- Self-concept: the person experiences a high feeling of self-worth, thus feeling happy with the self;
- Interpersonal relationships: the person experiences sound human relationships at work, in the family context and socially;
- Symptoms: the person does not suffer in general from symptoms of mental disorder such as clinical depression, high levels of anxiety or frequent and serious somatic symptoms.

The centrality of psychological well-being as a determinant of human health is emphasized by Van Niekerk, Van Eeden, and Botha (2001), who indicate that psychological well-being encompasses three modes of human functioning: the cognitive mode (thinking, reasoning and planning functions of the mind), the affective mode (feeling and emotion) and the behavioural mode (display of constructive and positive behaviour). Any of these modes of human functioning becoming dysfunctional will influence the human being's general health and functioning negatively. For example, an educator who believes that she is not good enough as an educator, might feel sad and depressed, which might lead her to decide to resign as a behavioural consequence of what she thinks and feels. This educator might also experience physical symptoms like chronic headaches due to the stress she experiences before, during and after leaving the teaching profession.

As employees, like educators, spend most of their waking hours at the workplace, much of their well-being is determined by circumstances there. Bergh (2004) mentions in this regard that employment is generally experienced as positive whereas unemployment and “bad” employment are generally experienced as negative and might lead to poor well-being. Dolan (2007) offers different reasons why managers should take the psychological well-being of employees seriously:

- If employees feel that their environments are safe and comfortable, they are more satisfied. Satisfaction is a positive psychological state. Satisfied workers are enthusiastic, and productive workers;
- Unhealthy high levels of occupational stress can lead to poor well-being and thus to poor quality work. It is estimated that 10% of the global workforce suffers from depression which affects employee performance negatively;
- Experts estimate that illness relating to employee stress and thus poor psychological well-being cost governments many millions of dollars annually;
- It seems that employees are increasingly taking their employers to court for compensation for problems derived from stress and thus poor well-being.

2.2.3 WELL-BEING WITHIN A POSITIVE PSYCHOLOGICAL REALM

Psychology often focuses solely on human suffering and has been criticized for emphasizing negative outcomes at the cost of positive outcomes (Rothmann & Jordaan, 2006). For example, studies often indicate the negative effects of job stress (Selye, 1956), without indicating that eustress could actually be an advantage for workers such as educators.

Seligman has formally introduced positive psychology around 1997-1998 (Strümpfer, 2005). Early psychology concentrated greatly on psychopathological symptoms and the origins of psychological well-being. Current trends are rather to view mental health along a continuum of “psychological health ease” and “psychological health dis-ease” (Strümpfer, 2005). According to Strümpfer, Seligman proposed that one can focus in psychology either on the negative (symptoms) as was done in the past – for which clinical psychology and psychopathology are responsible – or psychology can be viewed in terms of the absence of mental symptoms, thus defining psychology in terms of positive mental health, called positive psychology. The question would thus not concern the presence of symptoms, but rather the absence of symptoms. Seligman and Pawelski (2003) contend that a focus on psychological problems cannot contribute towards what makes life most worth living. To improve education outcomes as well as educators’ working environment in Namibia, a sole focus on problems should be actively supplemented by a concentration and development of the positive. The question

should thus not only be on what is problematic, but also what is good and how can the good be extended.

Keyes (2002) proposed that two paths should be followed when defining psychological well-being: psychological illness and psychological health (Seligman & Pawelski, 2003). For psychological illness, psychopathology, clinical psychology and the DSM V are already in use. For psychological health, the already existing “Values in Action Classification” should be refined. Keyes (2002) proposes that psychological health should be measured along a continuum from flourishing to languishing. ‘Flourishing’ would depict excellent psychological well-being with high levels of motivation and energy. ‘Languishing’ would be the lowest level of psychological well-being, encompassing a feeling of emptiness, low energy and low motivation. In order to move upward through this continuum into the direction of flourishing, a person will have to experience eustress, general positive encounters, psychotherapy, and further education, amongst other things. A person who experiences a move into the direction of languishing will experience distress, bereavement, physical illness, retrenchment or unemployment. According to Keyes (2002), excellent psychological well-being would include the absence of psychopathological symptoms and a high level of flourishing. By focussing on certain existing job conditions of educators in Namibia such as work-role fit or relationships at work, the experience of eustress and flourishing can be enhanced without any significant monetary cost.

Sin and Lyubomirsky (2009) found that positive psychology plays a great role in the enhancement of psychological well-being through positive psychology interventions (PPI's). PPI's would entail tasks like writing thank you letters, thinking optimistically, holding on to positive experiences and socializing.

According to Seligman and Pawelski (2003), happiness is a state of well-being or pleasurable experience. Seligman (1991) found that happy people are more successful in a wider variety of areas in their lives like work or interpersonal relationships, are less depressed and report a general good physical health. Happiness is regarded as a cause and consequence of many desirable life outcomes, for example with career (Lyubomirsky, King, & Diener, 2005). Csikszentmihalyi (1999) states that happiness is the ultimate goal of life. Therefore the question would be: "What makes people happy?" It might be that employees, such as educators, think that external motivation like salaries would cause ultimate happiness. Csikszentmihalyi (1999), however, finds that people living in the wealthiest industrialized Western nations with great peace and security are not significantly happier than their predecessors who did not know these lucrative circumstances. Csikszentmihalyi (1999) found that inhabitants of Germany and Japan are some of the wealthiest on the planet, but also show significant low levels of happiness. Therefore, having money to spend, does not necessarily lead to greater psychological well-being. In addition, a low negative relationship has been found between material and subjective well-being (Csikszentmihalyi, 1999). Happiness is, therefore, not something that happens to people. Happiness is something that human beings can create. For example, Csikszentmihalyi (1999) concludes that faith in the spiritual can enhance

subjective well-being. A happy and pleasant educator will exert a more positive impact on education in Namibia than a burdened and stressed one.

Csikszentmihalyi (1999) also shows how “flow” produces psychological well-being. With flow, this author means the pleasant feeling that people gain when they perform a task for the enjoyment of that task. In this way, people become “lost” in their work activities and have the experience that “time flies”. Csikszentmihalyi (1999) comes to the conclusion that happiness will be experienced if a person has the ability to produce flow from whatever he/she is doing. Csikszentmihalyi (1999) indicates that when a job is too challenging for the skills that the person owns, anxiety and distress will be experienced. If the person has more skills than the challenges of the work can pose to the individual, boredom will most probably ensue. When challenges and skills are in balance, the employee will become lost in the work activity and might experience flow and thus happiness. Work-role fit is thus essential to the overall well-being of the Namibian educator, as it produces the essential positive condition of flow.

From the above discussion it becomes clear that one of the crucial ways in which to improve the education environment in Namibia is to view well-being through the perspective of positive psychology. Work engagement and antecedent conditions thereof, such as psychological meaningfulness, psychological availability (competence and mastery), psychological safety (relatedness) and autonomy are important dimensions of psychological well-being at work.

2.2.4 WORK ENGAGEMENT

Engaged employees are essential to the successful organization. Increasingly intense global competition requires maximization of employee inputs. Growing evidence suggests a positive relationship between the engagement level of the employee and positive organizational outcomes (Harter, 2001; Simpson, 2008) like job satisfaction, motivation and lower turnover intention (May et al., 2004). Engaged individuals show higher levels of personal initiative, willingness to learn (Sonnentag, 2003) and commitment towards their organizations (Blizzard, 2002). Engaged employees cause organizational profitability to increase (Harter, Schmidt, & Hayes, 2002). Highly motivated, engaged and less stressed employees can cause a significant increase in organizational productivity, whilst negative emotions, stress, burnout and disengagement are associated with impaired health of the employee and increased costs for the organization (Brief & Weiss, 2002; Salanova et al., 2005).

For this study the secondary school is regarded as an organization. Educators are regarded as the employees. Learners are the products delivered. For effective learning to take place in secondary schools (thus forming of well-educated learners), educators need to be engaged. Elstad, Christophersen, and Turmo (2011) emphasize that ample research studies underline the significant role that educators play in the positive learning outcomes of learners. In addition, Barkhuizen and Rothmann (2006) indicate that despite the fact that engagement is a positive experience in itself, it is related to positive work affect and good health including low levels of depression, distress and psychosomatic complaints. Engagement has such positive

consequences for the educator, school and learner that it can be regarded as practically impossible that a school could function without engaged staff members.

2.2.4.1 Definition of work engagement

Engaged employees are energetic, dedicated (Leiter & Bakker, 2012), and enthusiastically involved in their work (Bakker et al., 2008). High energy and strong identification with one's work also indicates high levels of work engagement. According to Leiter and Bakker (2012), engaged individuals are oriented towards a challenging work goal, thus transcending the now and going beyond the immediate situation. Engaged individuals invest their energy in their work without any limits and are intensively involved in it (Rothbard, 2001). This means that engaged individuals are totally absorbed by their work, paying full attention to what they are busy with at work. Roberts and Davenport (2002) describe work engagement as the personal involvement in the job and the motivation that the individual obtains from the work.

Although many definitions and descriptions of work engagement exist, this concept is usually defined in terms of organizational commitment (refer to 2.4.2.1) and extra-role behaviour (refer to 2.4.2.2) (Leiter & Bakker, 2012). According to Roberts and Davenport (2002), organizational commitment and engagement are closely related, but not identical. Organizational commitment deals with the organization, where-as engagement is concerned with work. Saks (2006) also differentiates between job engagement and organizational engagement. Job engagement concerns immediate

work-roles and/or work tasks. Organizational engagement concerns engagement with the employer.

Engagement, job involvement and flow are constructs that are closely related to each other (May et. al., 2004). According to Brown (1996b), job involvement consists of the strength of the link between the work the person does and his/her identity. The question would thus be whether a job is central to the individual and his/her identity. In this sense, job involvement will depend on whether the job is able to satisfy major needs of the worker (Kahn, 1990). Job involvement is cognitively established and depends on how the individual subjectively thinks about the link between his/her identity and the job (May et al., 2004).

Csikszentmihalyi (1990) regards flow as a holistic sensation that a person experiences when busy with work. During this sensation the person does not experience a separation between self and environment. Thus, when experiencing flow, the person loses a sense of consciousness of self when busy with work and does not need external motivation and reward/recognition to continue doing good quality work. The flow experience seems to typically develop when challenging tasks are completed successfully (refer to job enrichment 2.3.1.2).

Work engagement can be regarded as an overarching concept that also incorporates job involvement and flow. Therefore Leiter and Bakker (2012) regard the worker who experiences flow also as the employee who is engaged. In the same sense, May et al. (2004) indicate that engagement can be seen as an antecedent to job

involvement as individuals who experience a deep sense of engagement when doing their work, will also identify strongly with their work. Furthermore, according to May et al. (2004), work engagement differs from job involvement and flow in that engagement not only involves cognitive aspects but also emotional and physical aspects. Therefore, work engagement can be conceptualised to be more than either job involvement or flow but at the same time includes job involvement and flow.

Leiter and Bakker (2012) identified eight concepts from the literature on work engagement. These are extra-role (citizenship) behaviour, personal initiative, job involvement, organizational commitment, job satisfaction, positive affectivity, flow and workaholism. Extra-role behaviour is the willingness of a person to do more than is expected or going beyond the work description (organizational citizenship behaviour). Personal initiative is persistence and pro-activity that is related to energy. Job involvement has to do with how strongly a person identifies with the job and is thus in direct opposition to the burnout concept of cynicism. Organizational commitment is related to job involvement, thus dealing with identification with the job. The difference between job involvement and organizational commitment is that with commitment a binding force comes into existence between the person and the job, thus it is not only a voluntary identification. Job satisfaction deals with a pleasurable state that one develops because of the nature of the job. It involves calmness, contentment, serenity and relaxation. Positive affectivity is regarded as being a context-free dispositional trait (owning the tendency to be positive in general in the face of adversity – not only bound to the work context) where-as engagement is a domain-specific psychological state. Flow is a state of optimal positive sensation,

which is experienced during short-term peak periods. Flow resembles the absorption that is found with engaged individuals. However, absorption is rather an enduring and persistent experience. Workaholism might seem to be related to engagement. However, the difference is that engaged individuals do not feel the compulsive drive which is found with workaholics. The definitions of these eight concepts that appear to be related to engagement show that they cannot be compared to the more comprehensive concept of engagement, but rather can be seen as related components of engagement (Leiter & Bakker, 2012).

Kahn (1990, 1992) regarded the state of work engagement as stemming from a state called psychological presence. Psychological presence is a state in which the individual can authentically express his/her true facets of the self fully. In this state, individuals can invest their true beliefs, values, thoughts, feelings, inclinations and relationships in their work. Kahn (1990) described work engagement as that phenomenon where people find that they can express themselves physically (through their physical tasks), emotionally (in their relations to co-workers; although engagement is offered as an individually experienced phenomenon, it has an impact on colleagues, Leiter & Bakker, 2012), and cognitively (mental alertness) in and through their work-roles. According to this definition of engagement, people can use different degrees of themselves (physically, emotionally and cognitively) when engaging in their work-roles.

The more people fulfil their work-roles by drawing on their selves, the higher the degree of engagement of the individual at work. Rothmann and Rothmann (2010)

emphasize that the more individuals draw on their selves to complete work tasks, the more impressive the results. One can thus postulate that the self and the work-role are in some kind of negotiation where the self invests in the work-role (work-role fit, refer to 2.3.1.1) whilst at the same time the work invests into the self (job enrichment, refer to 2.3.1.2). Engagement allows the self to simultaneously employ and express itself whilst connecting the self to others (co-worker relations, refer to 2.3.1.3.1) and to the work. Kahn thus depicts the engaged individual as forming a bond between self and work whilst at the same time keeping the boundary of the “I”. Kahn (1990) also states that the investment of the self into the work-role leads to a fulfilment of the human spirit at the work place. Individuals who are engaged become physically involved, cognitively vigilant and emotionally connected within the workplace (Kahn, 1990).

According to Schaufeli and Bakker (2004) work engagement is characterised by vigour, dedication and absorption (Schaufeli et al., 2002). *Vigour* is the continued positive response that the worker produces when in contact with co-workers and the work place. Vigour also comprises of high levels of energy, mental resilience, willingness to work hard and an optimistic persistence, even if circumstances at work are not positive. *Dedication* is the feeling of significance from the work that is done but also the pride, inspiration and enthusiasm when doing the job. Dedication will also include the willingness to deal with problems as if they are challenges. *Absorption* includes a sense of timelessness and transcends the here and now because one forgets time when deeply absorbed in work. This leads to the fact that engaged individuals produce the product that the organization and the customer expects.

Leiter and Bakker (2012) regard vigour as a behaviour-energetic component, dedication as an emotional component and absorption as a cognitive component. Previous studies have confirmed a three-factor model (physical, emotional, and cognitive engagement) for engagement through factor analysis (Demerouti et al., 2001; Schaufeli & Bakker, 2004).

In line with the definition of work engagement of Kahn (1990), work engagement is measured on a cognitive, emotional and physical level in this study.

2.2.4.2 Prerequisites of work environments that foster engagement

Schaufeli and Bakker (2004) refer to research findings that some people experience high job demands, but they do not suffer from burnout. On the contrary, it seems as if such individuals welcome and enjoy hard work and high job demands. Seligman and Csikszentmihalyi (2000) explain this phenomenon within a positive psychological paradigm and regard such employees as engaged in their work. In this sense work engagement is postulated as a protective factor against job demands, work stress and burnout. Positive psychology marries work goals with physical and mental employee well-being and as such puts the concept of engagement as an antithesis to burnout (Maslach, Schaufeli & Leiter, 2001). Hallberg and Schaufeli (2006) found one of the outcomes of engagement is reduced burnout and health problems. Leiter and Bakker (2012) indicate that environments that want to foster engagement should offer challenging tasks (job enrichment) to workers, excellent management (good supervisor relations like supervisor support and supervisor trust), a stable work

environment and nurture strong connections between corporate and individual values (work-role fit). Loehr and Schwartz (2003) regard the availability of resources, especially physical resources (external and personal resources) as antecedents of engagement.

Barkhuizen and Rothmann (2006) found that the variables of age and gender in particular correlate with work engagement. Thus, older employees tend to show higher levels of engagement than younger employees. Older university students seem to engage in work better than younger students (Schaufeli et al., 2002). According to Schaufeli and Bakker (2003), although small differences were measured, it seems as if males are more engaged in their work than females on all the engagement aspects of vigour, dedication and absorption.

2.2.4.3 Disengagement and factors that lead to employee disengagement

When an employee leaves the work-role, disengagement from work occurs as self and work-role do not match anymore (Rothmann & Jordaan, 2006). The employee who becomes disconnected from the work severs true identity, thoughts and feelings from the work. Self and work-role become disconnected. Disengaged individuals show low commitment towards their organisations (Blizzard, 2002). Disengaged individuals struggle with a lack of commitment and low motivation (May et al., 2004). Any successful employer would thus attempt at all costs to keep employees engaged.

Disengagement from work can be the result when an employee feels overwhelmed or threatened with the work-role for one or other reason, which will lead to withdrawal (Aktouf, 1992; Hochschild, 1983). Within education, factors like overload, inordinate time demands, poor co-worker relationships, large class sizes, lack of resources, isolation, fear of violence, role-ambiguity, limited promotional opportunities, lack of autonomy, learner disciplinary problems, poor remuneration and poor image of the profession can lead to high levels of stress, burnout and ill health (Jackson, Rothmann, & Van de Vijver, 2006) and thus eventually disengagement. Demerouti et al. (2001) found that when employees experience a lack of job resources in the presence of high job demands, they may become disengaged from their work (Buys & Rothmann, 2010).

From the above discussion on work engagement, it is anticipated that work engagement contributes positively to positive organizational and positive individual employee (educator) well-being/health outcomes.

Kahn (1990) delineated three factors that contribute towards work engagement. These three psychological conditions namely psychological safety, psychological meaningfulness and psychological availability impact on work engagement (Rich, Lepine, & Crawford, 2010; Rothmann & Rothmann, 2010). Spreitzer (1995) defined nearly the same psychological conditions as Kahn, namely meaning, competence (availability), self-determination (autonomy) and impact. Kahn (1990) and Spreitzer (1995) indicate that when people are in work-roles, they employ evaluations with regard to meaningfulness, safety, availability and autonomy. They will thus ask

themselves whether the work activity is meaningful to their life, whether they would be safe when performing the work, whether they are psychologically, physically and cognitively available enough in order to fulfil the requirements of the work-role and whether the work-role allows them to act autonomously. Therefore, if employees experience a lack of meaningfulness, safety, availability and/or autonomy at the workplace, it may influence their level of engagement with their work negatively (Chen & Chiu, 2009; May et al., 2004; Saks, 2006; Sonnentag, 2003). These psychological conditions of work engagement are discussed next.

2.2.5 PSYCHOLOGICAL CONDITIONS

Based on the research of May et al. (2004) and Spreitzer (1995) four psychological conditions, namely psychological safety, psychological meaningfulness, psychological availability and autonomy could impact work engagement.

2.2.5.1 Psychological safety

An organizational climate of safety leads to employees feeling positively appreciated and confirmed at the workplace. A negative safety-experience will most probably lead towards a feeling of rejection with accompanying negative consequences. Unsafe psychological conditions would include ambiguity, unpredictability and threatening situations (May et al., 2004). Under such harsh circumstances, individuals will probably disengage from work and be hesitant to attempt new and creative actions at work.

According to Kahn (1990), people experience psychological safety and thus feel appreciated at the workplace when they can truly be themselves without having a fear that their self-image, status or career might get hurt. Safe psychological conditions at the workplace will allow individuals to express themselves freely but at the same time will ensure that employees clearly know the boundaries that should not be overstepped. When feeling psychologically safe, employees know that the surrounding interpersonal context is safe (Zhang, Fang, Wei, & Chen, 2010). Psychological safety is thus context specific.

Edmondson (1999) indicates that a supportive and non-controlling supervisor establishes a feeling of safety with employees. The supportive supervisor will be sensitive to the needs and feelings of subordinates, provide positive feedback, encourage subordinates to vent their concerns, assist in the development of new skills and actively solve work-related problems (Deci & Ryan, 1987). Kahn (1990) indicates that positive and supportive relationships between employees will also encourage a feeling of safety at the workplace.

Psychological safety within the organization is a team phenomenon where a shared belief exists that members of the team should feel safe about interpersonal risk taking. This means that members of the team will not be punished, embarrassed or rejected for speaking up due to mutual respect and trust among team members (Kahn, 1990). Psychological safety includes interpersonal trust (Edmondson, 1999) so that employees feel encouraged to be themselves. Psychological safety is especially experienced where employees feel that relationships are open, supportive

and trusting (May et al., 2004). Because of these genuine relationships at work, employees can focus on their work and actualise themselves in their work roles, without having to protect themselves within unsafe work relationships (Edmondson, 2003).

Studies indicate that employees' work engagement is affected by psychological safety. Psychological safety can increase employees' engagement level at work as they can employ themselves without fear of negative consequences, thus fully focussing on their work (Kahn, 1990; May et al., 2004; Rothmann & Rothmann, 2010). Psychological safety promotes self-expressive behaviour (Kahn, 1990), which increases employee engagement. Psychological safety can also encourage group learning behaviour because in the psychological safe environment employees are not afraid of humiliation (Edmondson, 1999) or of being ridiculed when learning new behaviour (Tucker, Nembhard, & Edmondson, 2007). It was also found that psychological safety allows for greater knowledge sharing between co-workers at work (Siemsen, Roth, Balasubramanian, & Anand, 2008) and that in general people share more private information in a virtual community when they feel psychologically safe (Zhang et al., 2010). Kahn (1990) and May et al. (2004) indicate that the determinants of psychological safety are supervisor support and co-worker relations. These determinants of psychological safety will be discussed in chapter 4 as antecedents of engagement.

2.2.5.2 Psychological meaningfulness

Meaningfulness is regarded as a psychological condition that is essential for personal growth (May et al., 2004), work motivation (Pratt & Ashforth, 2003) and work engagement (Kahn, 1990; Nelson & Simmons, 2003). Meaningful work creates eustress (Rothmann et al., 2005), that gives energy to the employee to work harder to achieve work goals. According to Kahn (1990), psychological meaningfulness in the workplace is experienced when the employee feels that the input at work is remunerated with physical, emotional and cognitive energy. Experience of a sense of meaningfulness at the workplace has been recognised as an important prerequisite for being fully engaged in work, otherwise apathy, detachment and disengagement from work is possible (Aktouf, 1992; Rothmann & Rothmann, 2010). Vinarski-Peretz and Carmeli (2011) state that the experience of psychological meaningfulness is essential for personal growth, work motivation and personal engagement. These authors link the experience of psychological meaningfulness to caring co-worker relations and state that caring relationships increase the feeling of meaningfulness for employees. Meaningfulness, according to Kahn (1990), is experienced when the employee can live out the preferred self within the organizational environment. According to Brief and Nord (1990), meaningfulness involves a fit between the work-role and the employee's values, beliefs and behaviours.

Van Zyl, Deacon, and Rothmann (2010) make a distinction between the meaning of work and psychological meaningfulness. The meaning of work refers to the level of significance work has owing to the subjective experience of the work in a person's

life at a certain time (Bellah, Madsen, Sullivan, Swidler, & Tipton, 1985). Psychological meaningfulness refers to the value of a work goal in the person's life judged by that person's own ideals and standards (May et al., 2004). Both the meaning of work and psychological meaningfulness are essential for positive work-related outcomes (Van Zyl et al., 2010). However, in this study, meaning and meaningfulness are used as synonyms.

According to May et al. (2004), three dimensions influence meaningfulness at the workplace, namely work-role fit, job enrichment, and co-worker relations (discussed in chapter 4 as antecedents of engagement). Research indicates that job enrichment can significantly influence people's experience of meaningfulness of their work (May, 2003). Research by May (2003) supports the notion that a high level of work-role fit leads to higher experience of psychological meaningfulness in the workplace. May (2003) indicates that well-established and satisfying co-worker relationships lead to a higher sense of meaningfulness in one's job. Khan (1990) also emphasized that good interpersonal interaction at work fosters a strong sense of belonging, which increases the experience of meaningfulness at work. Chen, Zhang and Vogel (2011) indicate that employees will experience meaningfulness when they feel in control of their work tasks or when their personal growth increases through the work they are doing. Hackman and Oldham (1980) also theorized that the tasks that facilitate personal growth are the antecedents of meaningfulness at work.

According to Spreitzer (1995), meaningfulness is dependent on the nature of the relationship between the value or purpose of work goals and the employee's own

standards and ideals. Meaningfulness would thus entail the fit between what the work-role requires from the employee and the employee's values, beliefs and behaviours. Meaningfulness can also develop when a person is able to express the preferred self in the workplace without fear of feeling humiliated (Pratt & Ashforth, 2003). Frost, Dutton, Worline, and Wilson, (2000) show how meaningfulness can also be stimulated through care. If an employee feels cared-for by co-workers and the supervisor, such a person will feel valued, respected, useful and worthy and not taken for granted. Consequently, a deep sense of meaningfulness develops.

May et al. (2004) indicate that employees find significant meaningfulness in their work when they fit well in their work roles and when they feel their jobs serve as an enriching experience to them. These researchers furthermore found that meaningfulness fully mediates the effect of work-role fit, co-worker relations and job enrichment on engagement.

According to Saks (2011), a more holistic and complete form of engagement can be achieved when a strong connection exists between individuals and their organization that extends beyond the task, job or role one performs. Such a strong connection between employee and organization can be formed if the employee finds deep meaningfulness in the work that is being performed. Saks (2011) discusses the difference between meaningfulness in work and meaningfulness at work. Meaningfulness in work deals with the type of work that is being done, thus highlighting one's work tasks. Meaningfulness at work deals rather with the

membership in an organization, thus whom you surround yourself with at work and the goals, values and beliefs of the organization.

According to Saks (2011), the definition of Kahn (1990) regarding meaningfulness dealt more with meaningfulness in work, as Kahn focussed meaningfulness on task-issues like task characteristics, role characteristics and work interactions. Saks (2011) emphasizes that individuals are limited in their capacity to remain engaged with a certain task. In this regard it is important that individuals not only find meaningfulness in work, but also meaningfulness at work. Meaningfulness at work enhances engagement generalization beyond a certain task.

The meaningful life is identified by Peterson, Park and Seligman (2005) as one of the components that contribute significantly to happiness. The other two components that contribute to happiness are engagement and pleasure. As individuals spend more than a third of their lives at work (Wrzesniewski et al., 1997), identities are often formed around work (Meyers, 2007). Work should thus be highly meaningful to human beings. Olivier and Rothmann (2007) indicate in this regard that the roles people perform at work (work-role fit) contribute significantly towards the experience of meaningfulness at work as work engagement entails the fit between self-concept and work-role. Individuals who experience high levels of work-role fit perceive their jobs to be callings and are willing to work far more than is expected of them (Dik & Duffy, 2008). When work activities are congruent with the individual's values and/or strengths, work will be highly meaningful to such individuals (Peterson & Seligman, 2004).

Frankl (1959) regards the individual's search for meaning as a primary motivation of life. However, the search for meaning can be frustrated and is then called existential frustration. According to Frankl, existential refers to existence, meaning of existence and the striving to find a concrete meaning in personal existence.

2.2.5.3 Psychological availability

Spreitzer (1995) terms psychological availability as competence and self-efficacy and includes with that the belief that the employee holds about his/her capability to perform a job. Spreitzer also sees psychological availability as analogous to agency beliefs, personal mastery or effort-performance expectancy. According to Kahn (1990), psychological availability encompasses the feeling by the individual of ability to engage the self cognitively, emotionally and physically in the work situation because the nature of the work and the connection between the self and the job allows it. May et al. (2004) maintain that when individuals are ready and confident to engage in their work, they are psychologically available. These authors state that psychological availability and resources relate positively to each other. Kahn (1990) also indicates that employees who believe that they have the necessary physical, emotional and cognitive resources to engage the self at work, are psychologically available.

Employee resources (as discussed in chapter 4 as antecedents of engagement) are regarded as factors that influence psychological availability. Any work requires physical output. Even in an administrative office job, sitting the whole day behind a

computer will exert stress on, for example, a person's back. An orthopaedically designed chair might be the physical resource that enables the individual to do the work without backache. If a person cannot, for the one or other reason, deliver physical demands of the job, this will certainly lead to disengagement from work (May et al., 2004). An employee also needs to be emotionally present at work. Emotional presence is, for example, required for good interpersonal relationships such as those with supervisors, co-workers and/or clients (emotional dissonance can lead to high stress levels with educators).

Any work requires at least a certain amount of cognition. Ganster and Schaubroeck (1991) indicate, for example, that sometimes people do not have the capacity to process the masses of information with which they are bombarded in the workplace and then suffer from role overload. Thus, intact cognition in conjunction with available cognitive resources are necessary for employees to cope with high workloads and thus experience a positive sense of psychological availability and engagement. Fredrickson and Branigan (2005) found that engagement is linked to the broaden-and-build perspective. This perspective asserts that when workers are allowed to broaden themselves cognitively and thus being more available, they are more creative, integrated and efficient and thus engaged as opposed to limited and stressed.

2.2.5.4 Autonomy

Spreitzer (1995) uses the term self-determination for autonomy and depicts it as the employee's choice to initiate and regulate actions in the workplace (Deci, Connell, & Ryan, 1989; Spreitzer & Kizilos, 1997). Autonomy is the degree to which people can resist the demands of the environment and do what they think is best in a given situation (Van Horn, Taris, Schaufeli, & Schreurs, 2004). Autonomous employees feel a sense of freedom in initiating and regulating tasks at work (Deci et al., 1989). Examples of autonomy could include making decisions about work methods, pace of work and the amount of effort invested in work-tasks. Autonomy is regarded as beneficial to the competent employee. When people's motivation for autonomous behaviour is frustrated or undermined, it can lead to high costs in terms of performance (Utman, 1997).

Ryan and Deci (2006) do not regard autonomy as isolated behaviour. In other words, from the philosophical work on autonomy of Ricoeur (1966), these authors come to the conclusion that individuals can act autonomously even when they are tasked from outside. Therefore, in order to act autonomously, individuals do not have to reject all externally commissioned tasks. Autonomy is thus not equal to independence (Ryan & Deci, 2006). As long as the person fully agrees with and gives wholehearted consent to externally initiated orders and also willingly complies to being autonomous, then autonomous acts will be possible.

Ryan and Deci (2006) also find that authentic and inauthentic behaviours are related to the concept of autonomy. People act authentically when they take responsibility for their actions and are not half-hearted. Authentic behaviour comes from the core self, with preferences and values that really belong to the person (Ekstrom, 2005).

The experience of autonomy at work leads to advantages for workers. Spreitzer (1995) views autonomy as one of the factors that lead to the empowerment of employees. Zijlstra and Sonnentag (2006) indicate that the level of autonomy which employees experience at work is important, because that gives them control over their work speed. Work speed is linked to stress experience and, therefore, the possible development of ill-health if autonomy levels are low. Thus, increased autonomy contributes towards healthy stress management and good health. Karasek and Theorell (1990) state that a balance between worker input and the level of worker autonomy acts as a buffer against the experience of work stress. According to these authors, workers can handle tremendous work pressure as long as they feel they have enough autonomy to deal with the work. Van der Meer and Wielers (2012) found that employees who report high autonomy in their jobs experience more happiness. In fact, these researchers indicate more positive organizational results arise when employees experience autonomy than when employees are subjected to supervisory authority at the workplace. According to Spreitzer (1995), autonomy leads to better learning, overall interest in organizational activities and resilience when things become difficult. Being autonomously motivated, in contrast to controlled regulation, leads to higher well-being and better work performance (Ryan & Deci, 2006). Van den Broeck et al. (2011) indicate how being autonomously

motivated leads to definite overall increased well-being of employees, including greater job satisfaction and work engagement, decreased exhaustion and burnout, less anxiety, fewer physical symptoms, higher organizational commitment, better job performance, more frequent knowledge sharing and lower turnover intention.

Self-determination is closely linked to autonomy. Vansteenkiste et al. (2007) maintain that self-determination means that people have a spontaneous need to experience their behaviour as self-chosen and autonomous. Self-determination theory thus regards autonomy, amongst other factors, as essential to a human being's growth. Self-determination theory is concerned with whether individuals experience their engagement in a task as coming from internal or external sources. If the motivation to engage comes from outside the individual, it is a less productive and qualitative type of motivation, called controlled motivation. The locus of control of this type of motivation is external to the individual (Deci & Ryan, 2000). Examples of external motivation would be financial incentives or job security. With controlled motivation, no or little internalisation takes place and, therefore, this type of motivation might go along with feelings of pressure or conflict and, therefore, with sub-optimal functioning (Van den Broeck et al., 2011). In contrast, autonomous motivation would signify that people work from an internal locus of motivation. Motivation and action emanates from within the individual and, therefore, such individuals will experience psychological freedom when conducting the work. Deci and Ryan (2000) thus depict the autonomous worker as the person who internalised the reason for doing a task, thus enjoying and finding their work interesting. In this way employees might lose track of time whilst they are working as they are totally

immersed in what they are doing (Van den Broeck et al., 2011). Autonomy thus leads to engagement.

Self-determination theory, furthermore, classifies behaviour on a continuum from heteronomy (controlled behaviour regulation) on the one side, to autonomy (true self-regulation) on the other side (Ryan & Deci, 2000; 2006). These authors offer a classification of work behaviour on this continuum ranging between most heteronomous to most autonomous. Koestner and Losier (1996) also distinguished interpersonal differences in people's autonomy functioning and called it causality orientations. According to the causality orientation model, people use different skills to arrive at a certain level of autonomous functioning. Those who have a keen interest in and tend to study their choices and options, behave increasingly autonomously. People who focus more on rewards and punishments before deciding how to behave are rather control-oriented and will experience less autonomy. Individuals who adhere to an impersonal causality orientation find their behaviour regulation to be impaired and they lack a sense of personal causation.

Unlike the idea that autonomy would mean a break-away from relationship, in this case also work relationship, Ryan and Deci (2006) show that self-determination theory has found that people feel most related to those who support their autonomy. Support can only be experienced within relationships. Deci and Ryan (1987) found that an increase in a supportive, non-controlling relationship with a supervisor enhances autonomy with employees. However, contexts that are controlling hold

negative implications for employee health and well-being (Ryan & Deci, 2001). Therefore autonomy is regarded as a job resource (Schaufeli et al., 2009).

From the above discussion on psychological conditions, it is anticipated that psychological conditions contribute positively to work engagement and to positive organizational outcomes and a positive individual (well-being/health) outcome.

2.3 ANTECEDENTS OF WORK ENGAGEMENT AND PSYCHOLOGICAL CONDITIONS

The fostering of work engagement amongst employees is deemed crucial as engaged employees are central to numerous organizational advantages such as commitment to the work, organizational success and better financial performance (Olivier & Rothmann, 2007; Saks, 2006). Certain organizational factors and dispositional factors can be regarded as antecedents of employee engagement and will be discussed next.

2.3.1 ORGANIZATIONAL FACTORS AS ANTECEDENTS OF WORK ENGAGEMENT

Organizational factors that can serve to enhance employee work engagement levels will be discussed next.

2.3.1.1 Work-role fit

Work-role fit is the match that an employee experiences between his/her own self-concept and the work-role (May et al., 2004; Olivier & Rothmann, 2007; Schreuder & Theron, 2004). Such a match gives the individual a sense of meaningfulness since that the employee can express his/her values and beliefs through work (Shamir, 1991; Van Zyl et al., 2010). Work-role fit thus seeks for a linkage of person and work-role through the glue of shared meaningfulness and matching values and beliefs. Iplíc, Kilic, and Yalcin (2011) regard work-role fit as the fit between the characteristics of the person and the characteristics of the work-role and work-role tasks. The person with a good fit to the work-role can, therefore, also be regarded as the engaged person, as personal disengagement is described as the uncoupling of the person from work roles (Rothmann & Jordaan, 2006).

Hecht and Allen (2005) make mention of two types of work-role fit namely abilities-demand fit and needs-supplies fit (Leiter & Bakker, 2012). Abilities-demand fit constitutes whether the employee has the specific work abilities to satisfy the demands of the tasks of the job. For example, does the educator have the academic qualifications to teach a certain subject on a certain academic level? Needs-supplies fit converse that the needs of the employee are adequately addressed by the supplies (rewards and recognition) of the work-place. For example, can the school as a work environment offer the educator the challenges that contribute towards need fulfilment of the educator? If both of these types of work-role fit are achieved, employees function on a higher work-level, thus being more engaged in their work, have a better

chance of a good relationship with their supervisor and show lower levels of turnover intention (Iplic et al., 2011). The educator that experiences work-role fit have a good chance to experience positive psychological conditions and will be more likely to show work engagement and positive organizational outcomes (Van Zyl et al., 2010).

Iplic et al. (2011) also differentiate between subjective and objective work-role fit. Subjective work-role fit is the employee's perception of the fit between work-role and self where-as objective work-role fit is the match of characteristics between work-role and individual. Work-role misfit means the non-fit between the job characteristics, preferences and values of the employee and those of the employing organization, which increases the likelihood of educators becoming disengaged which again leads to negative organizational outcomes (Ford, 2012). Work-role misfit in secondary schools could be the result of educators being forced to teach subjects that they are not fond of or being bombarded with an overload of administrative duties.

Iplic et al. (2011) assert that person-organization fit and person-job fit (which includes work-role fit) are sub-components of person-environment fit. These authors argue that people can fit well to the organization and not so well to the work-role or vice versa. This also leads to the logic that the employee who subjectively fits equally well to the organization and the work-role will experience greater internal harmony and organizational commitment. As education is regarded as a profession, it might be the case that the educator is highly committed to the act of educating, but not to the organization (school, Ministry of Education). Thus, the profession

(education) contains the work-role (teaching a certain subject) whereas the organization contains the profession. Therefore, according to Iplic et al. (2011), work-role fit does not always contribute to organizational commitment.

The stimuli that people experience at work can be appraised as threatening, benign or challenging. Work stimuli that are seen as challenging are regarded as positive for the organization as it will probably foster energy and motivation with the employee. Whether people experience the stimulus at work as threatening or challenging, they still need to respond. Ford (2012) regards the person-environment fit theory as a means of understanding how people appraise stimuli and their reactions towards these stimuli. According to the person-environment fit theory, job stress and job dissatisfaction will be the result of a mismatch between the employee and the organization or the misfit between the work-role of the person and the organization (Ford, 2012). Especially if the preferences and/or the values of a person do not fit with the attributes of the organization and the specific work-role, dissatisfaction and strain might be the result for the employee (Edwards & Rothbard, 1999). The work stimulus is thus experienced as a threat and will possibly result in the experience of poor work-role fit.

An occupation is a collection of work roles with similar goals that are reached through the application of certain work activities and specialized skills (Dierdorff, Rubin, & Morgeson, 2009). Ford (2012) asserts that the same occupation has different work roles in different contexts. For example, educators are trained to educate. However, the activity of educating can be done in different ways at different

schools. In addition, different educators can be used in different positions, be it headmaster, head of department, counsellor, educator or confidant. It might thus be that the educator's training and their actual work-role(s) are far apart from each other, which could cause strain with the educator because work-role expectations are not met or only partially met. Ford (2012) identifies three more reasons why mismatch between person and work-role can result. The first reason is that the work-role characteristics do not match with occupational characteristics. If the work-role does not fit the occupation, this is likely to lead to person-environment misfit (second reason). Thirdly, workers use occupational norms as reference points in their decision whether they will take a job in the face of certain adverse circumstances. If the work-role is significantly different from the occupational norms, the worker might be unpleasantly surprised and will experience considerable strain and work-role misfit.

Niessen et al. (2010) mention that current work environments are constantly changing because of fast technological and organizational development. Teaching in Namibian schools, for example, changed from educator centred to learner centred since the independence of Namibia in 1990, which comprises a whole different style of teaching. If major change is instilled in the workplace, it will also have a changing impact on the nature of work-roles. Niessen et al. (2010) mention that changed work-roles might prompt people to leave their current job and find another that matches their preferences and values better. In such a case, failure of full disengagement from the previous work-role can lead to a negative influence or even mismatch between a person and the new work-role.

Niessen et al. (2010) highlight the failure to cut emotional ties with the previous work-role as a possible reason for the difficulties to fully bind with the new work-role. Such a psychological attachment to the previous work-role might cause a person to continuously compare the new work-role with the previous work-role, thereby allowing a genuine fit with the new work-role. Turnover caused by a change in work-roles can thus cause educators not to be able to be productive again as they still belong emotionally to the previous work-role. However, according to Control Theory (Caldwell, 2011), people will spontaneously seek equilibrium after change in the work environment in order to adapt to organizational changes such as restructuring. Employees whose work-role has been changed in the organization owing to organizational matters, will not just leave the organization as there are multiple factors that bind an employee to the organization (Caldwell, 2011). The employee can thus make adjustments to fit in.

Studies indicate positive results between work-role fit and a number of outcomes like job satisfaction, organizational commitment, low intention to resign (Niessen et al., 2010), employee behaviour, employee attitude (Schneider, 1987), work ability, quality of life and employee health (Merecz & Andysz, 2012). Merecz and Andysz indicate that poor fit between worker and work-role or worker and organization can lead to health problems like anxiety, depression and burnout. According to Cable and Edwards (2004), there are two types of relationships that the individual can have with the organization: a complementary and a supplementary relationship. A complementary fit between person and organization would indicate the extent to which the worker complies with the demands of the organization and in how far the

organization fulfils the expectations of the worker. A supplementary relationship is the degree to which organization and worker share the same characteristics, goals and values.

Hecht and Allen (2005) popularised the concept of polychronicity in conjunction with work-role fit. According to these authors certain employees can be involved in work-roles where they concentrate on one task at a time whereas other employees can be involved in work-roles that include simultaneous multiple tasks at the same time. Better work-role fit will thus also depend on task requirements. For example, the person who seeks a work-role with multiple task involvement at once will fit better if these subjective requirements are met in the work-role.

Caldwell (2011) challenges the notion that employees should ascribe to optimal fit in the organization, environment and work-role. According to Caldwell, good fit might lead to inflexibility with the employee. The modern organization expects people to be flexible and able to adapt to change quickly. In this sense work-role fit might hamper the development of flexibility of employees.

From the above discussion on work-role fit, it is anticipated that good work-role fit contributes positively to the psychological conditions and work engagement levels of educators and leads to positive organizational and positive well-being/health outcomes.

Besides good work-role fit, it is anticipated that Namibian secondary school educators should experience job enrichment at work if they want to be successful educators.

2.3.1.2 Job enrichment

Jobs that are characterized by tasks that are repetitive and allow little or no autonomy lead to employee boredom, lack of flexibility and employee dissatisfaction (Hackman & Oldham, 1980). Job enrichment entails a redesign of such jobs, so that they become challenging. According to Hackman, Oldham, Janson, and Purdy (1995), developments in job enrichment have been regarded as the solution to many organizational problems, like boredom. Significant evidence exists about the positive impact of job enrichment (challenge and increased positive complexities in the work) on worker performance, motivation and job satisfaction in the workplace (Oldham, Hackman, & Pearce, 1976). Job enrichment introduces, amongst others, challenge to the workplace. It seems that employees experience the positive organizational experience of flow, especially after completing challenging tasks successfully (see 2.2.4.1).

The industrial revolution initiated new situations at the workplace where control and efficiency became essential. One of these workplace new situations was the onset of mass employment, as in factories and industry. These large numbers of employees had to be kept under control to ensure efficient work output and maximum profits. Large numbers of employees were assigned with extremely routine tasks such as

cutting equal pieces of wire for needles the whole day. The result of circumstances in the workplace such as control (low autonomy), pressure for efficiency and routine work was that people became bored, lost job satisfaction, motivation and productivity (Oldham & Hackman, 2010). Job enrichment was introduced in order to address these kinds of workplace problems.

Job enrichment theory emphasizes the importance of meaningfulness, responsibility and feedback on employee behaviour as significant contributors towards job satisfaction, quality of work and motivation (Hackman & Oldham, 1980). Meaningfulness, responsibility and feedback are regarded as psychological work states. Meaningfulness of work entails that the employee knows that the work he/she is doing, feels worthwhile and important. With regard to responsibility, the employee should feel a certain sense of accountability with regard to the work he/she does. The employee should also be able to identify on a regular basis whether the work done is satisfactory, thus seeking feedback or results (Hackman & Oldman, 1980). Hackman et al. (1995) propose that an employee will feel good if the above-mentioned psychological work states are met during work, which will again lead to enhancement of internal motivation. However, if one of the states (meaningfulness, responsibility, feedback) is not met, internal worker motivation will drop significantly (Whittington & Galpin, 2010).

Hackman et al. (1995) distinguished five job characteristics that ensure the positive presence of these three psychological work states. These characteristics make it possible to diagnose the cause for low internal motivation, job dissatisfaction and/or

low quality of work of employees. *Skill variety* enriches the job in the sense that it poses challenges to the abilities of the employee. With increased skill variety boredom and monotony are reduced. For a job to be enriching the employee needs to be able to identify with a work task from its beginning to its end. Such *task identity* gives the employee the opportunity to go through the whole process of the work activity so that the end product is also visible. A job is thus regarded to be richer when the employee is involved from start to end, than when only one component of the work needs to be done. With *task significance* the employee should feel that the work that is being done has a substantial and perceivable impact on other people. If an employee experiences high levels of skill variety, task identity and task significance, such an employee will certainly experience a high level of meaning at work. *Responsibility* in the workplace creates accountability, which again increases autonomy of the employee. The worker who is accountable will look more eagerly and independently for solutions if things go wrong, which is the spontaneous acquisition of increased autonomous behaviour. In this sense responsibility leads to an enriching experience at work. *Feedback* also serves to enrich work experience. If the employee can see the result of the work that has been done, such feedback can either provide pleasure owing to the positive results or can lead to improved actions if the feedback entails positive criticism. The unblocking of feedback channels can also have an enriching experience for employees. It is rather found more productive for an employee to have immediate and private feedback as the task progresses than having feedback less often and then by a member of management. Feedback thus provides the employee with an appraisal of the quality of the work done.

According to Hackman et al. (1995), not all people who are given these five job characteristics will experience them as job enrichment with the resulting development of high internal motivation (Steers & Spencer, 1977; Stone, Mowday, & Porter, 1977). If the psychological needs and thus the growth need strength of people is high, the presence of the five job characteristics will lead to increased internal motivation (Oldham et al., 1976).

Niehoff, Moorman, Blakely, and Fuller (2001) link job enrichment and empowerment to each other. Empowering employees has proven to contribute positively to the well-being and success of organizations and employees (Fulford & Enz, 1995; Niehoff, Enz, & Grover, 1990; Wu & Short, 1996). Niehoff et al. (2001) indicate that empowerment of the employee leads to the altering of the current job. Thus, one of the ways of empowerment of educators would be to change the content or the context of their work. Hackman and Oldham (1976), in their theory of job enrichment, state that to change work content or context is to enrich work and worker by adding more variety, identity, significance, autonomy and feedback. Spreitzer (1995) theorized that empowerment leads to meaningfulness, autonomy, competence and that work has a broader impact than just within the boundaries of the job. Therefore it can be anticipated that job enrichment contributes to the increased experience of autonomy and meaningfulness of the work of educators.

Oldham et al. (1976) indicated that the need for personal growth as well as contextual factors will influence whether employees are positively affected by job enrichment. Job enrichment will most possibly have a low effect with employees

who show a low growth need and experience poor job factors like low pay and poor supervisor support. Poor job factors might keep employee energy diverted from job tasks, as they have to struggle with these factors.

Hackman et al. (1995) mention that employers often blame employees for work-related problems instead of scrutinizing work structures which could cause the problems. It might thus be that Namibian secondary school educators are blamed by authorities for poor academic output of learners. Hackman et al. (1995), therefore, propose a number of ways in which organizational structures can be changed to increase job enrichment for enhanced quality of work experience and work productivity. The forming of natural work units, called task combination, by which work is distributed in a logical pattern that targets worker satisfaction and motivation leads to task significance and task identification. If a supervisor assigns a certain task to a certain person, the person has a greater chance to be able to identify the scope of the task (identity) and also to see what the impact (significance) of the specific task is on other people after the successful completion of the work. Task combination has as its goal to do away with fragmented work, as is so often the case found on assembly lines. Therefore, if a worker was used to do monotonous mini tasks at work, this might have led to boredom, absenteeism and possibly higher turnover rates. To combine a number of fragmented tasks, so that the person can have an overview over the work and a start and end product, will lead towards task variety (no fragmented work, rather a lot of tasks) as well as task identity (the task has a start and end product) and therefore to job enrichment (Hackman et al., 1995).

Encouraging employees to actively build client relationships can also attain job enrichment. The employee sees what the impact of the product (employee's work) is on the client. Therefore, employee-client relationships provide skill variety (employee has to be updated on interpersonal relationships), feedback (the employee hears the feedback of the client and can act upon it) and responsibility (the employee has to take responsibility for the quality of service rendered which thus increases employee autonomy) (Hackman et al., 1995). Thus, educators can increase job enrichment by maintaining good relationships with learners and parents.

Vertical job loading also increases job enrichment. Work is often broken down in smaller units along a horizontal line by a strict division of planning and controlling work, on the one hand, and doing the work, on the other hand. Vertical loading means that the planning, control and actual execution of the task is done by one person, which was found to significantly increase motivation. In such an event, the employee will win with a feeling of increased responsibility and autonomy (Oldham et al., 1976).

Criticism against the job enrichment theory is that it does not seem to lead to greater work productivity, but only to greater job satisfaction (White & Mitchell, 1979). Be it as it may, the Namibian government regulates the Namibian school system. This might lead to a work environment that is strictly regulated, without significant autonomy for individual educators and thus low job enrichment. Job enrichment could thus be a job factor that plays a significant role in order to improve educator

psychological conditions, work engagement and positive organizational/individual outcomes.

Besides job enrichment, it is anticipated that Namibian secondary school educators should experience good relationships at work if they want to be successful educators.

2.3.1.3 Relationships at work

The workplace is often, besides other things, a combination of relationships. The general idea is held that unity makes strength and, therefore, dysfunctional interpersonal relationships at work could affect the general functioning of any organization negatively. Pratt and Ashforth (2003) speak about family-like dynamics at the workplace. Human beings who fulfil the functions of an organization can be seen as a social community, unit or even “family”.

Meaningful relationships at work create a pro-social environment within which workers are able to experience meaningfulness and safety. If workers feel safe in their work and experience meaningfulness in what they are doing, they will be fully available for the workplace. Therefore, the psychological conditions of meaningfulness, safety and availability, which are amongst others the result of good relationships at work, contribute significantly to worker engagement. Engagement better leads towards innovative organizational behaviour (May et al., 2004). Vinarski-Peretz and Carmeli (2011) regard innovation as the key to enhancing performance in the workplace in a knowledge-based economy. These authors

emphasize the importance of finding out what motivates workers to be fully engaged in their work, thus showing innovation, which will lead to increased work performance. The climate of the workplace seems to play a crucial role in the enhancement of productivity of workers (Baer & Frese, 2003). Vinarski-Peretz and Carmeli (2011) maintain that caring relationships at work will contribute significantly towards a positive work climate, which will increase employee engagement (Baer & Frese, 2003). The experience of being cared-for is an emotional reward that is highly meaningful in terms of relatedness and belonging (Alderfer, 1972). Vinarski-Peretz and Carmeli (2011) also explain that employees who feel cared-for by their co-workers will be better able to fully focus on their work tasks, thus not being distracted and being totally available at their work.

According to Frost et al. (2000), an emotional ecology that encompasses personal connectivity through high caring leads to much meaningfulness in people's lives. Kahn (1990), for example, found that when people do not care for each other a general feeling of disrespect is generated, which impacts negatively on meaningfulness. Alderfer (1972) also argues that the lack of caring relationships will diminish the experience of workplace safety as it becomes threatening to open up, to be your preferred self, since one is afraid of uncared-for negative criticism.

In summary, positive collegial relationships between educators at Namibian secondary schools will lead to a constructive work climate within which educators can experience meaningfulness and safety. Educators who experience meaningfulness and safety at the school will most probably also want to be fully

available for the learners and their colleagues. Educators who work in these workplace conditions will be engaged, innovative and show enhanced performance and productivity. Positive relationships at work thus seem to be a crucial element of productive schools.

For this study, two types of workplace relationships are explored namely co-worker relations and supervisor relations.

2.3.1.3.1 Co-worker relations

Rafaeli and Sutton (1987) regard interpersonal caring as the main ingredient of positive co-worker relationships. When employees experience that co-workers care for them, such employees experience psychological meaningfulness and safety at work (Kahn, 1990; May et al., 2004) and a sense of interpersonal trust develops. Good co-worker relations include the fact that workers can trust each other. Frost et al. (2000) explain that when employees experience that co-workers care for them, they feel worthy, useful, valued and not taken for granted.

Florian and Snowden (1989) found that when individuals experience good co-worker relations, they have group membership at work, which gives them also a sense of social identity. Capozza and Brown (2000) assert that individuals have both a social and an individual identity. Social identity contains the values and the norms of the group to which the individual belongs. In order to strengthen the ties within the social group, the members of the group will contrast themselves to other out-groups.

In this sense ties between in-group members become very close, as all individuals identify with the in-group as contrasted to the out-group. In-group identity, which is crucial to organizational success, can only be well established when good co-worker relations exist.

Social relationships within the workplace can be regarded as network ties. Lincoln and Miller (1979) divide network ties into expressive and instrumental ties. With expressive ties, a close friendship exists that is marked by support in times of need. The bonds between people with expressive ties are marked by increased affect with closeness and a high level of trust. With instrumental ties, an exchange of information about work is evident. Expressive ties are characterized by more spontaneity whereas instrumental ties have less freedom as they are often constrained by work information which is more formal. Both expressive and instrumental ties can be regarded as crucial for the successful organization. A prerequisite for the forming of these ties are good co-worker relations.

According to Kahn (1990), positive co-worker relations are of particular importance in times of stressful circumstances at work, because these safe relationships serve as a secure basis from where employees can address difficult circumstances. According to Cohen and Wills (1985), social support will decrease the experience of stress and strain. These authors differentiate between a main-effect model and a buffering model for social support. The main effect model postulates that social support affects overall well-being positively, regardless of stress level experience. The buffering

model indicates that increased social support will decrease the perceived levels of stress much more.

Beehr and Glazer (2001) distinguish between emotional social support and instrumental social support. Emotional support would entail talking to and showing care towards the other, which will alleviate stress symptoms. With instrumental social support, tangible resources will be made available to the stressed person in order to lower stress levels.

Heaphy and Dutton (2008) show how positive interpersonal relations have immediate and enduring positive effects on the cardiovascular, immune and neuroendocrine systems of employees. Heaphy and Dutton (2008) also mention that numerous studies indicate that many work relationships are associated with physiological outcomes. Duffy, Ganster, and Pagon (2002) found that negative relationships between employees have more potent negative effects than the positive effects that are resulting from positive relationships between people. Therefore, it is essential that co-worker and other relationships in the workplace remain as positive as possible, as negative relationships can cause significant harm.

From the above discussion on co-worker relations, it is anticipated that good co-worker relations contribute positively to the psychological conditions and work-engagement levels of educators and lead to positive organizational and positive well-being/health outcomes.

2.3.1.3.2 Supervisor relations

The relationship between worker and supervisor is crucial for the overall well-being of the organization. For example, when employees are treated with respect, dignity and gratitude for their contributions to the organization, and they are not just expected to complete the job, these employees find a deep sense of meaning in their job and in life in general (Kahn, 1990). Chances are good that under such circumstances employees will deliver back to the organization, as outlined by social exchange theory.

Blau (1964) developed the social exchange theory (SET), which emphasises the rules that regulate social interaction. According to SET, interpersonal relationships evolve over time into loyal, trusting and committed connections, but also with a certain set of conditions (Cropanzano & Mitchell, 2005). One of the important conditions of social exchange is reciprocity. A prerequisite for reciprocity is interdependence (Gouldner, 1960). If an individual is either dependent on or independent of the other, reciprocity cannot develop as two way exchange is essential for reciprocity to take place. The interdependence necessary for reciprocity to prosper should be a mutual commitment towards the other (Molm, 1994). That would mean if the one party does a favour for the other, this should be returned in kind by the other party. A supportive relationship from the supervisor will most probably cause a return of the same type of behaviour from the employee. Therefore, the supervisor cannot play god in the relationship with the employee but has to realize the value of the supplementary relationship rather than the dominating relationship. According to SET one

individual's action follows the behaviour of the other spontaneously so that risk is reduced and cooperation is encouraged (Molm, 1994).

Bargaining cannot be part of social exchange, because bargaining does not allow for spontaneous reciprocity. Besides bargaining, negotiated agreements and reciprocal behaviour could be confused by the uninformed. Therefore, much research has targeted the differentiation between negotiation and reciprocated deeds. Molm (2003) indicates that negotiation and agreement are common forms of conduct in organizations. However, Molm shows it was found that spontaneous and positive reciprocity leads towards better work relationships and leads to more trusting and committed relationships at the workplace than in the case of negotiated agreements and bargaining. Molm also indicates that research found negotiation often involves unproductive power structures, which can lead to unbalanced and less equal outcomes. Therefore, a healthy supervisor employee relationship would rather be in agreement with the criteria of SET, including reciprocity, than with bargaining and negotiation.

Gouldner (1960) looks at reciprocity as a folk belief. In this sense people could hold the notion that one gets what one gives in life. If the individual (supervisor) gives generously to society (employee), society (the employee) will spontaneously react in a similarly generous way. Thus, if the supervisor and employee share a positive reciprocal relationship, both as well as the organization will reap the benefits. Furthermore, Gouldner (1960) is of the belief that reciprocity is also a universal norm of humankind. According to Gouldner (1960), a norm differs from a folk belief

in that a norm contains an element of prescription, where-as a folk belief contains an element of choice. Therefore, if reciprocity in social exchange is regarded as a norm, then it is expected of human beings to reciprocate in positive ways in order to maintain healthy relationships. Healthy interpersonal relationships are thus in a sense dependent on reciprocity. Still, worldwide, individuals differ in the degree that they value and practice reciprocal behaviour (Shore & Coyle-Shapiro, 2003).

Eisenberger et al. (1986) were the first researchers who attempted to investigate the intensity of social exchange relationships. These researchers found that individuals who experienced a high sense of obligation towards the organization if that organization (through the supervisor) treated them well also showed higher incidence of reciprocity, stronger levels of organizational citizenship behaviour as well as higher levels of performance and effort than individuals who held a low exchange ideology. According to Uhl-Bien and Maslyn (2003), individuals who hold a negative exchange orientation are eager to return negative treatment with negative treatment whereas people who hold a positive exchange orientation return positive treatment when they are treated negatively. Therefore it remains important that both the supervisor and the employee retain a positive exchange orientation.

Both supervisor and employee hold their own subjective perceptions regarding the nature of the relationship between them. However, certain realities can complicate the relationship between supervisor and employee. In this regard, Merton (1957) differentiates between the role-set and the status-set. According to the role-set, people occupy different roles within an occupation. For example, an educator will

have differing types of relationships and roles with the principal, the school board member, a parent, a student and the director of education. All of these people will be embedded in their own role-sets and will thus have different expectations and requirements of the educator. Therefore, Merton makes it clear that even what seems to be a simple relationship (i.e., supervisor-employee relationship) is very much complicated through the role-set. The head of department and the subject educator are in a supervisor-employee relationship, but both of them have to maintain numerous other occupational relationships and roles, which can confuse the supervisor employee relationship. Therefore, taking the role-set into consideration the relationship between supervisor and employee can be a minefield in which both supervisor and employee have to tread with great caution. Furthermore, the role-set is a reality across cultures. Merton's role-set is thus also applicable to the Namibian multi-cultural set-up. However, a multi-cultural set-up might complicate relationships because of several factors like different norms, values, uses and political considerations. Therefore, especially in a multi-cultural country like Namibia and specifically with Namibian educators, both the supervisor and the subject educator have to organize themselves in a way to avoid extreme conflict in their role-sets and still work in a way that optimal results are obtained for the learner and the school.

Merton describes the status-set as the different statuses that people hold, for example the educator can also be the father, church elder, town council member and husband. Although the subject educator holds the chair for the church committee, this chair-status should not interfere in the relationship with the supervising head of department

within the school environment. Both the role-set and the status-set render an indication of the vulnerability of the supervisor-employee relationship.

During social exchange, people (supervisor as well as employee) make individual decisions. According to Meeker (1971), people need rules according to which they make these individual decisions so that social exchange is not harmed by individual decisions. Meeker proposed a model with six styles that people may use when they make decisions during social exchange. These are: reciprocity, rationality, altruism, competition, status consistency and group gain. Reciprocity has been extensively discussed above. According to Meeker, individuals generally apply rational thinking in order to make decisions whereas choices that are made altruistically are those by which people choose to benefit the other even if that choice would come at high cost to the decision maker. In direct opposite to altruism, people can use competition as a basis in social exchange decision-making. In this instance the individual might harm the other when making the decision, as long as the competition is not lost. Using status consistency an individual can make a decision based on the status of the self and the other. Status could entail socio-economic class, cultural group or other social group membership. With group gain, all possible decisions are made in order to benefit the group. The health of the interaction between supervisor and employee will thus greatly depend on the type of style that is followed in the social exchange. Should both the subject educator and the supervising colleague adopt the competitive stance, one can expect problems in the relationship as both will focus on winning.

According to Foa and Foa (1980), six types of resources are usually exchanged in a relationship: love, status, information, money, goods and services. Foa and Foa (1980) indicate that within organizations the goods of exchange are either financial or socio-emotional. Economic outcomes are regarded to address financial needs and can be clearly defined. The salary or bonuses paid by the school board for exceptional after-hour services can be regarded as economic outcomes for the educator. Socio-emotional outcomes address social and esteem needs and are often symbolic. The socio-emotional outcomes motivate employees much more than financial rewards (Foa & Foa, 1980). The supervisor in particular has a great challenge to continuously deliver social-emotional rewards so that the employee remains positive and motivated.

With regard to supervisor relations one should keep in mind that schools, as organizations, are different from other organizational set-ups owing to the isolation in which educators often work. Especially in smaller schools in rural areas, one will find a single educator that teaches a certain subject to the whole school. Such an educator has little subject support within the immediate school environment. Lortie (1976) mentions that the organizational set-up for educators can be compared to egg crates where you find a number of isolated compartments under one roof. This practical set-up within which educators under one roof are functioning on their own islands complicates co-worker and supervisor-employee relationships. For this reason, supervisor and employee have to work much harder to find common ground within the organization, especially in school environments.

The quality of supervisor employee relationships is greatly dependent on supervisor support and supervisor trust.

2.3.1.3.2.1 Supervisor support

A supportive, non-controlling supervisor, will make an employee feel safe (May et al., 2004). Eisenberger et al. (1986) define supervisor support as the degree of care about employee health as well as the way that the employees experience that supervisors appreciate employee contributions (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002). Stoner, Gallagher, and Stoner (2011) mention that the employee perceives instrumental supervisor support as soon as the supervisor stands up for the employee when the employee feels wronged. In the same sense, employees will perceive supervisor loyalty according to the degree of protection they feel the supervisor can offer them. Deci and Ryan (1987) assert that the supportive supervisor will show concern for the needs and feelings of employees, encourage employees to voice their concerns, assist employees to develop new skills, help employees to solve work-related problems and provide positive feedback to the employee. This kind of support will encourage the employee to be interested in his/her work and enhance employee autonomy. Such employees will feel safe to try new, creative ways of doing their work, discuss mistakes and be more open when they are in such a supportive environment. One can infer that supportive leadership and guidance from a supervisor (rather than the dominant authoritarian style) will play a crucial role in employee motivation and commitment towards the organization.

With regard to the quality of leadership and guidance, Settoon, Bennett, and Liden (1996) conceptualised leader-member exchange (LMX) as the exchange relationship between supervisor and employee. Settoon et al. (1996) found that the quality of LMX played a crucial role in the regulation of job performance and organizational citizenship behaviour. If the LMX is of such quality that the employee perceives organizational support (POS), such an employee will most probably show higher levels of job performance and organizational citizenship behaviour. The findings of Settoon et al. (1996) are an indication of how important it is for employees that they perceive a supportive relationship with their supervisor. Furthermore, as the supervisor acts as an agent for the organization, healthy supervisor support might spontaneously lead to perceived organizational support for the employee. In this way it is more important that the employee perceives supervisor support than organizational support. One should also keep in mind that organizational support is a more general and vague type of support, whereas support from a direct supervisor is immediate and tangible. To demonstrate the power of supervisor support, Stoner et al. (2011) found in a study that when employees experience a psychological breach from the side of the organization, their turnover intention will remain low if they perceive at the same time strong supervisor support.

On the other hand, Masterson, Lewis, Goldman, and Taylor (2000) suggest that supervisor support as an exchange variable (supervisor supports employee; employee supports supervisor) is very much dependent on whether the employee perceives support from the organization. Eisenberger et al. (1986) found that supervisor support is a component of the broader concept of perceived organizational support.

One can thus conclude that the ideal situation for optimal organizational performance would be that the employee perceives both organizational and supervisor support.

From the above discussion on supervisor support, it is anticipated that good supervisor support contributes positively to the psychological conditions and work-engagement levels of educators and leads to positive organizational and positive well-being/health outcomes.

Holmes (1981) mentions that trust is the result of favourable social exchange. The supportive supervisor is also the supervisor that is deemed to be trusted.

2.3.1.3.2.2 Supervisor trust

Trust studies began to increase during the late 1950s when suspicions escalated during the cold war (Tschannen-Moran & Hoy, 1998). Zand (1971) defined trust as behaviour that consists of actions that increase a person's vulnerability to another person. If the other person abuses this vulnerability, the penalties would be higher than the benefits gained if the vulnerability were not abused. According to Zand, trust is not an emotion like warmth or affection. It rather is a conscious regulation of one's dependence on another person. Trust involves placing something of value into the care of another person with a certain degree of confidence that the other person will not cause harm but protect it (Baier, 1986). Hoy and Kupersmith (1985) defined trust within the school setting as the educator's expectancy that the words, actions and promises of colleagues, superiors and the organization can be relied on. The

educator's trust in the principal (or head of department or subject head) is vested in the educator's confidence that the principal will keep his/her word and always act in the best interests of the educator (Tschannen-Moran & Hoy, 1998). Hoy and Tschannen-Moran (1999) found trust to be a crucial element in school effectiveness. According to these authors, trust assists in keeping educators at a certain school in an integrated and cohesive community.

In organizational terms, trust is defined as a social relationship aspect and a prerequisite for organizational success. Kahn (1990) stipulates that employees find tasks at work easier if they know they can trust their supervisors, because if the task is not completed accurately the supervisor will deliver constructive criticism instead of emotionally harming the employee. In this sense trust increases the experience of psychological safety. Trust becomes very important in contexts where risks exist. The workplace is a risky environment where worker-interrelationships can lead to financial profits or deficits. Or as the case is at schools, young lives are in the hands of educators and should be guided towards optimal functioning instead of steered into dysfunction. Mayer, Davis, and Schoorman (1995) found the presence of trust to reduce risk. Mayer et al. also found that when a trusting relationship exists at work, employees collaborate more easily and work effectively together. Trust has different components.

McAllistar (1995) asserts that trust between people has a cognitive and an emotional component. The cognitive component of trust includes whether supervisor and employee can rely and depend on each other. The emotional component of trust

refers to the affective relationship between supervisor and employee and includes the expression of concern for each other's welfare, the willingness to make future emotional investments in the relationship and belief in the intrinsic virtue of such work relationships. Hoy and Tschannen-Moran (1999) also differentiate between faces of trust, being willingness to risk, benevolence, reliability, confidence, honesty and openness. With willingness to risk, Hoy and Tschannen-Moran (1999) refer to the vulnerability employees subject themselves to when they trust people. Benevolence is about the confidence one has that one's well-being or something one cares about will be protected by the trusted person, like the supervisor. Reliability refers to the extent to which one counts on the trusted person to come through with what is needed. Competence refers to the fact that trust can only grow in the face of skill. The educator can only trust the subject head if the subject head knows the subject much better than the educator. Honesty involves character, integrity, authenticity and the fact that one can rely on the word of the trusted person. Openness has to do with the extent to which relevant information is not withheld. Openness also has to do with the process by which individuals make themselves vulnerable by sharing information with the trusted person. Besides the different components, trust also has different levels.

Lewicki and Bunker (1996) describe three levels of trust. *Deterrence trust* rests on the assumption that both supervisor and employee are committed to keep the relationship, but a breach of expectations will lead to a break-up of the relationship. This is also called provisional trust. *Knowledge-based trust* is where the parties learn to know each other increasingly better so that each starts to feel comfortable to

accurately predict the future behaviour of the other. With *identity-based trust*, the committed parties feel complete empathy with the other party's desires and intentions. From these descriptions it is clear that identity-based trust functions on a much deeper level than deterrence trust. It is also clear that trust cannot just exist, but that trust involves a developmental process.

Ridings, Grefen, and Arinze (2008) found that in the absence of a formalized legal arrangement at work, trust becomes the subjective substitute. This means, if trust is firmly constituted, employees do not have to be afraid that co-workers and supervisors will behave wrongly towards them. Within a trusting context people will feel that their behaviour has meaning as others will genuinely collaborate and contribute and share towards their behaviour in the organization (Staples & Webster, 2008). People thus do not have to be constantly afraid that their behaviour is inappropriate or that they work counter productively.

According to Britt (1999), trust between supervisor and employee increases if supervisory supportiveness of an employee's autonomy is present and when congruent perceptions exist between employee and supervisor. Whitener, Brodt, Korsgaard, and Werner (1998) identified five categories that employees observe in order to see if they can trust their supervisors: the accuracy with which the supervisor generally acts, explanation and openness of communication of the supervisor, behavioural consistency of the supervisor, demonstration of concern from the supervisor, overall behavioural integrity and sharing and delegation of control. Hoy and Tschannen-Moran (1999) found in their study on trust between educators in

elementary schools that as soon as educators trust learners, they spontaneously also trust the parents.

From the above discussion on supervisor trust, it is anticipated that supervisor trust contributes positively to the psychological conditions and work-engagement levels of educators and leads to positive organizational and positive health outcomes.

Besides good relationships, it is anticipated that Namibian secondary school educators should have adequate resources at work if they want to be successful educators.

2.3.1.4 Personal resources

The ways employees experience their work psychologically exert a substantial impact on their attitude and behaviour at work. Numerous factors determine psychological experience at work such as individual, interpersonal, group, inter-group and organizational factors (Rothmann & Jordaan, 2006). The psychological experience of the work will also be an important contributing factor to the level of work engagement the individual experiences. Pleasant psychological work experiences will probably lead to a higher level of employee work engagement and a lower level of burnout.

Any occupation has a specific combination of work characteristics that impact on people's experience of work. These work characteristics can be divided in two main categories, namely job demands and job resources (Hakanen et al., 2006; Rothmann

& Jordaan, 2006). The Job Demands-Resources (JD-R) Model (Bakker et al., 2003a; Demerouti et al., 2001b) integrates the conceptualization that job demands and job resources are the constituents of work characteristics. Job demands are those physical, psychological, social and/or organizational aspects of the work (i.e., cognitive, emotional, physical) that require sustained physical and psychological effort from the employee. Therefore, the employee experiences sustained physical and psychological costs and thus a continuous process of depletion of physical and psychological resources on a cognitive, physical and/or emotional level. If employees have to continuously work hard in order to maintain performance levels, the psychological experience of work becomes stressful, which can lead to negative results such as employee burnout (a depletion of personal resources). Studies indicate that educators experience several of these stressors such as disruptive learner behaviour (Evers et al., 2004), work overload (Burke & Greenglass, 1995) and poor physical work environment (Bakker et al., 2005).

Job resources are those physical, psychological, social and organizational aspects of the work and the employee that might assist the employee in achieving work goals, stimulate personal growth and development as well as reducing job demands and the accompanying physical and psychological costs (Hakanen et al., 2006; Salanova et al., 2005). Job resources are found on different levels such as the organization (salary, promotion, job security), interpersonal and social relations (supervisor and co-worker support), the organization of the work (role clarity, participation in decision-making) and the level of the task (performance feedback, skill variety, task significance, task identity, autonomy). Job resources are crucial for intrinsic reasons

(motivation, growth, learning, self-development) and extrinsic reasons (being instrumental in achieving work goals). It can thus be deduced that job resources are not just crucial for dealing effectively with job demands and achieving work goals, but also in personal development. Thus, the presence of resources (physical, emotional, cognitive) will lead to greater employee availability and work engagement. Employees that receive ample resources from their organization will feel obliged to repay the organization with greater levels of engagement (Saks, 2006). Thus, job resources lead to educator well-being and increased levels of work engagement, where-as the lack of resources can lead to burnout, lower levels of engagement or even disengagement as people have to withdraw from work in order to replenish their energy levels (Ganster & Schaubroeck, 1991; Hakanen et al., 2006).

Van Vegchel, De Jonge, and Landsbergis (2005) regard the JD-R model as a balance model that explains the requirements of emotional, psychological and physical resources to bring balance between job demands and resources, in order to ensure health. Employees who are engaged in their work depend on their physical, cognitive and emotional resources to complete work tasks and reach work goals (May et al., 2004). Different occupations challenge different resources. A person in the education profession will work constantly with other human beings and thus experience a challenge towards emotional resources (Sutton, 1991). Lacking these resources might lead to disengagement and/or ill health (Rothmann & Rothmann, 2010). There is evidence that a lack of resources leads to illness. For example, burnout was found to be the result of a dramatic loss of resources, available resources that are overpowered

by job demands, a perceived threat of unusual loss of resources or the vigorous investment of resources with little or no return (Wright & Hobfoll, 2004).

Van den Tooren and De Jonge (2008) found studies that favour a matching hypothesis for demands and resources. According to the matching hypothesis a job demand of a certain dimension can only be moderated through a job resource of the same dimension. For example, an educator who has to move heavy sport equipment will not show physical symptoms of backache if appropriate equipment is available to help with the physical work. Jobs in the service sector, like schools, have high emotional demands and require great emotional resources from employees (Sutton, 1991). Morris and Feldman (1996) indicate that emotional dissonance, high frequency of emotional display, duration and intensity of emotional display and the variety of the expressed emotions deplete emotional resources. Job positions also differ in terms of cognitive demands. Ganster and Schaubroeck (1991) indicate that if people are overwhelmed by the amount of information they have to work with (cognitive demands), they might suffer from role overload. Having sufficient cognitive resources might neutralize the cognitive demands well.

Van den Tooren and De Jonge (2008) note that because of homeostatic self-regulation, employees will probably attempt to address demands of a certain dimension with the same resources. However, if matching resources are not available, employees will utilize what they regard as the next best resource(s) with a sufficient buffering effect (De Jonge & Dormann, 2006; Hobfoll, 1989; Vohs, Baumeister, & Ciarocco, 2005). For example, Zapf (2002) indicates that with an

emotionally demanding job, employees can utilize cognitive resources well, as cognition can counteract disturbing emotions with increased rationality. On the other hand, with cognitively demanding jobs, employees benefit from emotional resources, as emotions that can sabotage cognitive tasks are brought under control. For example, an educator that becomes grumpy after a long brainstorming meeting, who gets excellent emotional support, will be able to control the grumpiness well. Van den Tooren and De Jonge (2008) found in a study with nursing staff that high physical demands have a strong impact on both physical and emotional resources and can lead to a depletion of those resources if nurses do not have adequate reservoirs of especially physical resources. A nurse who works through a busy night shift and has to run up and down corridors between patients for the whole night might be physically depleted and tearful the next morning.

With regard to self-regulation, De Jonge and Dormann (2006) mention that in medical science, the homeostatic regulation process maintains that internal resources are spontaneously activated when particular physical stressors occur. For example, in order to survive, the human body has to regulate vital functions such as temperature regulation, fluid regulation and energy regulation. The body's ability to maintain critical balances for survival is called homeostatic regulation. Homeostatic regulation could also be transferred to coping regulation in the organizational setting (De Jonge et al., 2008). Thus, when stressors at work increase, self-regulatory processes (functional, corresponding job-related resources) become spontaneously activated to cope with states of psychological imbalance and strain (De Jonge & Dormann, 2006). Therefore, when cognitive job demands ensue, a relatively spontaneous

human reaction will ensure the search for cognitive resources, according to the self-regulation theory.

Hobfoll (1989) found that human beings do not always utilize available resources. According to the conservation of resources (COR) theory, Hobfoll (1989) states that people can be afraid to utilize available resources, as they are afraid the resources will become depleted. Resource conservation then takes place. The theory argues that people will spontaneously obtain resources and then attempt to retain and protect the resources, thus not using them. In this way, depersonalisation is an attempt on the side of the employee to minimize emotional resource loss when attempting to deal with intense client problems (Wright and Hobfoll, 2004). COR theory also proposes that once a process of resource loss starts, it can easily just escalate. Hobfoll (1989) further found that people who do not have access to strong resource pools might remain in a cycle of a lack of resources (loss cycle). However, people who managed to build a strong resource pool will continue to try to maintain a strong resource pool and even strengthen it (gain cycle). Llorens, Bakker, Salanova, and Schaufeli (2007) indeed found in a study that task resources (time control and method control) increased engagement, which again increased task resources. Also, according to Fredrickson's (2001) broaden-and-build theory positive emotions, which might be the result of the gain cycle, broaden people's immediate thoughts and keep the thoughts positive, thereby increasing (build) enduring personal resources. Both the above-mentioned increased task resources theory and broaden-and-build theory are proof for the gain cycle of resources. However, in both the loss cycle and the gain

cycle people might hold onto resources and not use them because they either are afraid to lose the little they have or that they weaken a strong resource pool.

Job demands can lead to burnout where-as job resources encourage engagement. Burnout and engagement are in relationship with each other. According to Maslach and Leiter (1997), burnout is the erosion of engagement during which energy changes into exhaustion, involvement becomes cynicism and effectiveness becomes ineffectiveness. Leiter and Bakker (2012) regard burnout as the opposite of engagement (Maslach et al., 2001; Schaufeli & Bakker, 2004). Engagement, on the one end of the spectrum, is characterized by concepts like energetic and effective connectedness, challenge, involvement and efficacy. Burnout, on the other end of the spectrum, is marked by concepts like distress, overly high job demands, exhaustion and ineffectiveness. Burnout is a negative psychological state, mainly caused by self-perceived high and chronic work stress (Halbesleben & Demerouti, 2005), but includes components like mental weariness (Schaufeli & Bakker, 2004), emotional exhaustion, depersonalisation and a consequent reaction of reduced personal accomplishment (Maslach & Jackson, 1984, 1986). Maslach and Leiter (1997) regard cynicism, exhaustion and ineffectiveness as components of burnout. Leiter and Bakker (2012) identify burnout with a feeling of a void and emptiness. Schaufeli and Taris (2005) regard exhaustion and cynicism as the two main symptoms of burnout. Work-related burnout is linked to symptoms like emotional exhaustion, depression, irritability and boredom (Drakopoulos, Economou, & Grimani, 2012). An employee struggling with these symptoms will find it hard to be positively engaged at work.

Schaufeli and Bakker (2004) differ from Maslach and Leiter (1997) with regard to the relationship between burnout and engagement in that they state that, although burnout can be regarded as linked to engagement, it does not mean that low levels of burnout will predict higher levels of engagement or vice versa. Therefore, engagement and burnout should be measured independently. Barkhuizen and Rothmann (2006), however, state that although engagement can be distinguished from burnout, they cannot be divorced from each other in terms of structure and operationalization. According to Maslach (1982), burnout is particularly prevalent among teaching professionals.

According to Demerouti et al. (2001a), two psychological processes play a role in burnout namely an effort-driven process in which excessive job demands lead to exhaustion and a motivation-driven process where a lack of resources leads to disengagement. Job characteristics such as variety, opportunities for learning and personal growth, autonomy, opportunities for participation, role clarity, effective communication, opportunities for promotion, remuneration and good relationships with co-workers and supervisors can all enhance employee safety and meaning as well as work engagement (Jackson et al., 2006; May et al., 2004).

According to the JD-R model, job demands and job resources may lead to two related processes namely an energetic process and a motivational process (Hakanen et al., 2006; Jackson et al., 2006; Schaufeli & Bakker, 2004). The energetic process entails that the individual faces high job demands, which exhaust mental and physical resources. Hockey's (1997, 2000) compensatory regulatory-control model

explains how individuals continuously attempt to maintain performance levels. When job demands increase, employees have to try harder (compensatory effort) in order to maintain (regulate) performance levels. The compensatory effort is usually associated with physiological and psychological costs like fatigue and irritability. If the demands remain high and the compensatory effort has to remain mobilized, burnout, ill health and absenteeism from work can be the result (Frankenhaeuser & Johansson, 1986).

The motivational process means that job resources foster engagement and, therefore, also positive organizational outcomes like organizational commitment (Schaufeli & Bakker, 2004). Job resources can play an intrinsic motivational role (fostering personal growth and learning) or an extrinsic motivational role (being instrumental in achieving work goals). Regarding the intrinsic motivational role of resources, job resources can satisfy basic employee needs of autonomy, competence and relatedness (Ryan & Deci, 2001). Employees can grow more competent and feel increasingly autonomous if they receive organizational support and growth opportunities. Social support from the supervisor and co-workers will render the experience of relatedness to the employee. Regarding the extrinsic motivational role of resources, the availability of resources such as organizational support, growth opportunities, social support and advancement will oblige employees to dedicate their efforts to the work task, which will lead to goal attainment and thus engagement (Bakker et al., 2003b). A work environment that provides relevant resources to employees will help in fostering engaged and committed workers (Bakker et al., 2003b; Houkes et al., 2001). Mauno, Kinnunen, and Ruokolainen (2007) conducted a longitudinal study on

job resources and job demands and found that job resources predicted level of engagement effectively. Hakanen, Schaufeli, and Ahola (2008) also conducted a longitudinal study in which these researchers found that job resources predicted future worker engagement. In a study conducted in the Netherlands with the JD-R, Schaufeli and Bakker (2004) found that job demands were associated with exhaustion whilst job resources lead to employee engagement. These authors also found that burnout led to health problems and higher turnover intentions whilst work engagement mediated the relationship between job resources and turnover intentions. From the above discussion on resources, it is anticipated that the adequate availability of resources contributes positively to the psychological conditions and work-engagement levels of educators and leads to positive organizational and positive well-being/health outcomes.

Besides adequate resources, it is anticipated that Namibian secondary school educators should experience rewards and recognition at work if they want to be successful educators.

2.3.1.5 Rewards and recognition

Numerous advantages are attached to the organization that values and invests into a well-defined rewards and recognition system. In fact, Bau and Dowling (2007) define the organization as a system of incentives and rewards. These authors found that if an organization is managed well, every aspect of it can be a reward to someone in the organization. An organization and its effective rewards and

recognition system are thus married and cannot be separated without the organization facing disaster.

Engagement, organizational commitment and empowerment are amongst the products of an effective rewards and recognition system of an organization. The willingness of employees to become deeply engaged in their organization will depend to a great extent on the reward system of the organization (De Villiers-Scheepers, 2011). A properly designed reward system can lead to organizational commitment, which again will dictate organizational success. Saunderson (2004) indicates that employee recognition correlates positively with loyalty, commitment, good morale and satisfaction in the workplace. According to Spreitzer (1995), a critical variable that influences employees' experience of empowerment is rewards. Saunderson (2004) asserts that employee recognition has its own advantages. It improves morale, improves a sense of belonging, increases organizational commitment, increases job satisfaction and improves retention.

The reward and recognition system of an organization is imbued with morals and can be applied as a tool for positive organizational change. It is regarded as a reflection of the type of exchange that happens between organization and employee, and thus a reflection of the relationship between these two (Kerr & Slocum, 1987). As the organization hires the employee the organization to a great degree defines the nature of the relationship between organization and employee through, amongst others, the reward and recognition system. In this sense the reward and recognition system of the organization contains the organization's values and norms, as it is a reflection of

how the organization chooses to handle its employees (De Villiers-Scheepers, 2011). Therefore, an analysis of an organization's rewards and recognition system will also reveal the existing organizational culture. In this sense management can analyse the existing reward system and change it in order to develop the organization into the desired direction. The reward system thus becomes a tool for positive organizational change.

It might take a while for an organization to find the most effective rewards and recognition system and whether rewards and recognition should be direct or indirect. According to Spreitzer (1995), for rewards to be empowering, the individual should feel that he/she was personally rewarded. In this sense personal competencies should be recognized and reinforced. Lawler (1986), in agreement with Spreitzer, mentions that employees often work hard without understanding how their work contributes to the general success of the organization. Individual performance-based rewards should, therefore, recognize and reinforce personal competencies and explain to individuals, through incentives, how they influenced the decision-making process and workings of the organization. Saunderson (2004) suggests that the effective rewards and recognition programme should cover three areas of recognition, namely, everyday recognition, informal recognition and formal recognition. With regard to the nature of recognition, Saunderson indicates that most companies do have a formal recognition strategy with awards and prizes, but that everyday recognition is neglected. Everyday recognition is an indication to employees that their organizational inputs are appreciated.

The successful organization is the one that delivers service excellence and happy customers. One of the ways in which to enhance client service is by recognizing and rewarding employees appropriately. Effective reward and recognition programmes have shown to improve employee attitudes and to bring along positive organizational change (Kopelman, Gardberg, & Brandwein, 2011). Although technology and machines seem to overshadow human resources in the organizational set-up of the 21st century, human resources are still regarded as the major source of sustainable, competitive advantage in the organizational world. The challenge remains to find ways in which to manage human resources in order to attain world-class service delivery (Luthans & Stajkovic, 1999). It became clear that rewards and recognition could be used to motivate employees towards service excellence. De Villiers-Scheepers (2011) endorses the definition of motivation whereby the employee experiences internal and/or external triggers that keep behaviour in place until a certain goal is reached. These triggers can be needs that the employee attempts to satisfy through the rewards and recognition that is received when organizational goals are reached. De Villiers-Scheepers (2011), however, demonstrates that not all types of rewards and recognition will motivate employees towards positive organizational behaviour. It is, therefore, a major task of management to carefully select which rewards and recognition will have the desired effect on employees.

Bau and Dowling (2007) also link the rewards and recognition system of an organization to employee motivation saying that rewards and recognition is partially responsible for the individual's decision to join the organization, staying with the organization and being an asset to the organization. Expectancy theory builds on

reinforcement and explains employee's sustained motivation to engage in positive organizational behaviour (Lawler, 1978). Expectancy theory holds that motivation is sustained by effort-reward probability as well as the perceived value of the reward that is on offer (Lawler, 1978). With the effort-reward probability the employee expects a certain reward for a certain type of effort. Goal achievement will lead to the gaining of the reward. Then again, effort-reward imbalance occurs when employees have a high effort output with minimal rewards. The social exchange relationship is then disturbed (Siegrist, 1996). Siegrist (1996) developed the effort-reward imbalance model. According to this author, people can become unwell when they show high effort at work with inadequate rewards.

Bau and Dowling (2007) identified components of reward systems, which are direct and indirect financial incentives, social incentives, incentives inherent in work and incentives brought about by organizational culture. Direct financial incentives will be money that is paid, for example, in the form of bonuses. Indirect financial incentives will be, for example, the free access to internet or recreational facilities at work. Eisenberger et al. (1990) found that employees distinguished between two types of performance reward expectancies, namely those relating to pay and promotion and those relating to approval, recognition and influence. De Villiers-Scheepers (2011) mentions that no conclusive evidence indicates that direct financial rewards keep employees motivated over the long term. If one turns to job satisfaction which is also a component of indirect financial incentives it can be noted that the U.S. National Center for Educational Statistics (NCES, 1997) found that educators' degree of job satisfaction is poorly related to salary. Rather, the factors that play a significant role

in educator job satisfaction are parental support, student behaviour, principal interaction, staff recognition, educator participation in school decision making, influence over school policy and sense of control in the classroom. It seems that recognition that contributes towards self-esteem, as well as opportunities for self-actualisation lead to long term motivation of employees (Hofstede, 1980). Social incentives include positive communication between employers and employees. This type of communication would include recognition, gratitude, praise, encouragement and appreciation (Bau & Dowling, 2007). Stajkovic and Luthans (2001) regard social recognition as personal attention and found that social incentives are better long term motivators for employees than financial rewards. One of the greatest needs of employees is acceptance. Although it seems that managers, in general, know about the strong acceptance and social incentive requirements of employees, very few organizations really attend to those needs or fail to take them seriously (De Villiers-Scheepers, 2011).

According to the motivation-hygiene theory of Herzberg (1966), rewards and recognition can either be motivating or preventing dissatisfaction. Rewards and recognition that is aimed at motivating employees target intrinsic matters like giving responsibility (autonomy), recognizing, emphasizing advancement and achievement and setting the focus on work itself. Rewards and recognition that is aimed at preventing dissatisfaction target extrinsic matters like adhering to organizational policy, being subordinate to supervision, focussing on salary, highlighting interpersonal relations and working conditions. Frase (2001) found that educators valued intrinsic rewards (reaching and enriching learners) more than extrinsic

rewards (salary). With this finding, Frase finds that school boards and governments that determine salary structures of educators cannot buy their motivation with money. According to Frase, financial rewards remain positive to educators, however school boards and governments should rather offer educators a menu of rewards if long term educator motivation is aimed at. In another study Furnham, Forde, and Ferrari (1999) found that extroverted educators valued types of rewards and recognition that motivated them where-as introverted educators valued rewards and recognition that helped them to avoid making mistakes at work.

Stajkovic and Luthans (2001) reason that social rewards are expensive in terms of the manager's energy in the form of time, effort and interpersonal skills. Desired outcomes like a promotion or salary raise usually is preceded by positive behaviour and social recognition. Employees are thus conditioned that after social recognition, rewards could follow and, therefore, employees show organizational behaviour that will bring about social recognition. Stajkovic and Luthans (2001) thus warn that social recognition is not productive in quantity, but in quality. The frequent and empty praise "good job" (as uttered by the supervisor) is therefore not social recognition. In addition, other forms of rewards or positive outcomes should follow social recognition in order to really give weight to social recognition.

Self-determination theory regards rewards as a factor that works greatly against autonomy (Ryan & Deci, 2006). For intrinsic motivation to be fostered, the individual needs to experience autonomy. However, extrinsic motivation, like rewards, has shown to diminish intrinsic motivation and autonomy (Deci, Koestner,

& Ryan, 1999). When substantial rewards are offered, people can often lose sight of important values, social concerns and needs. People that prioritise extrinsic rewards report less autonomy, happiness and quality of relationships (Kasser, 2002). Luthans and Stajkovic (1999) indicate that enough research findings exist that indicate how rewards and financial incentives rather demotivate employees than motivate them. These authors also indicate that mixed findings on this topic exist but after a review of numerous studies they found from the literature that negative effects after rewards do occur but under very specific circumstances. These circumstances can be avoided in order to rather capture the positive effects of rewards and recognitions. These authors (Luthans & Stajkovic, 1999) found that mechanisms of classical and instrumental conditioning can be used to explain why rewards sometimes end in negative rather than positive effects. Furthermore, it seems that positive effects can be gained from rewards and recognition by simultaneously applying behavioural techniques (Luthans & Stajkovic, 1999). According to Luthans and Stajkovic (1999), Pavlov's conditioning experiments contributed to the perception that behaviour is formed through consequences that follow the behaviour. Reinforcement can be utilized as a form of consequence on behaviour in order to encourage repetition of such behaviour. In this way, a reinforcer is always a reward but a reward is not always a reinforcer because rewards are important to the giver, but not always important to the receiver (Luthans & Stajkovic, 1999).

Stajkovic and Luthans (2001) also regard performance feedback a reward. It will, however, depend on the content of the feedback whether it is regarded as a reward. Performance feedback gives direction to positive organizational employee behaviour

in order for these employees to reach other desirable organizational outcomes. However, performance feedback should adhere to the standards of being positive, immediate and specific (Stajkovic & Luthans, 1997).

From the above discussion on rewards and recognition, it is anticipated that rewards and recognition contribute positively to the psychological conditions and work-engagement levels of educators and lead to positive organizational and positive well-being/health outcomes.

Besides rewards and recognition, it is anticipated that Namibian secondary school educators should experience organizational support at work if they want to be successful educators.

2.3.1.6 Organizational support

Eisenberger et al. (1986) conceptualise organizational support as the exchange relationship between the employee and the organization. Organizational support centres on how grateful the employer is about the employee's contribution and how much the employer cares for the well-being of the employee. Organizational support is very much about the commitment of the organization towards the employee (Shore & Tetrick, 1991). The perception that the organization cares for the employee encourages the employee to incorporate work-role status and membership to the organization into his/her self-identity (Eisenberger et al., 1990). In this way

organizational support commits the employee in an indirect way towards the organization.

Wayne et al. (2002) draw on social exchange theory when they postulate that organizational support contains an element of reciprocity in terms of which fair treatment obligates the employee to return the favourable treatment in the one or other way. In this regard, equity theory stipulates that people attempt to find a balance between what they invest in a relationship (time, effort) and what they gain out of it (status, salary, organizational support) (Taris et al., 2004). A disturbance in this balance leads to negative organizational outcomes like low organizational commitment, low organizational citizenship behaviour, poor health and high turnover intention. Thus, fair treatment of an employee causes the employee to feel indebted to the employer, which will probably result in the employee repaying the employer in terms of commitment towards the organization or behaviours and attitudes that will be beneficial to the employer and/or organization. Therefore, as expected, Wayne et al. (2002) and Wayne, Shore, and Liden (1997) found in studies that perceived organizational support shows a positive correlation with organizational commitment and organizational citizenship behaviour. Also, Eisenberger et al. (1986) regarded perceived organizational support as an antecedent of organizational commitment.

Gouldner (1960) indicates in his work on reciprocity that two assumptions are important namely, that the helper should be helped and that the helper should not be injured. Thus, the organization that requires commitment from the employee should be prepared to support and protect the employee. Gouldner furthermore showed that

reciprocity would have as a by-product that an established social relationship is stable, because of the obligation and indebtedness that is involved. Therefore, beyond the quality of the organization employee relationship, owing to reciprocity, these two entities will remain committed towards each other. The recipient remains indebted to the giver until he/she has returned the debt. An obligation is created when one does well to the other in a fashion that is beyond the requirements of a normal social relationship. In that way organizational support indirectly commits the educator to deliver excellent services at the workplace/school.

Social exchange theory proposes two streams, namely perceived organizational support and leader-member exchange. Wayne et al. (1997) found that employees tend to make a distinction in the type of exchange between employee and leader and employee and organization. Wayne et al. (1997) indicate that with regard to organizational support, the employee cannot return the favour to a specific person as the obligation is towards the whole organization. When employees receive discretionary rewards from their organization owing to, for example, excellent work, the evaluation of the employee as well as the hand-over of the reward usually happens through the immediate supervisor. The employee might perceive the rewards as organizational support. However, since the token of appreciation from the organization in the form of the reward is handed down to the employee by the supervisor, the employee associates organizational support with leader support (Wayne et al., 1997).

There are many ways in which the organization can signal support towards employees. Employees will, for example, look at the history of support that the organization has given to the employees over the years as a means of evaluating organizational support. According to Shore and Shore (1995) the history of corporate decisions and the subsequent employees' interpretation of organizational caring gives to employees a feeling of how much the organization supports them and thus influences employee behaviour. It is not only the support that the organization gives in the present, but also rules regarding organizational support that were created by previous leaders and supervisors that still might benefit (or disadvantage) the employee. Employees can also perceive organizational support within the history of rewards they received from the organization over a certain time span (Wayne et al., 1997). Furthermore, according to signal theory, the type of job assignments and promotions that employees receive, signals to them to which degree the organization values them. In this way an employee forms an automatic association between human resource decisions and organizational support that benefits the employee, for example, the number of promotions the employee receives during a certain period of time (Sheridan, Slocum, Buda, & Thompson, 1990). Wayne et al. (1997) found that the number of promotions within a five year period indicates to the employee a certain level of organizational support. In the same way, these authors theorize that developmental experience in the organization in the form of number of trainings also indicates organizational support to the employees. According to feedback theory, if information that is passed on by human resources to the employee connects well with the career goals of an employee, the employee will experience organizational support (Ashforth & Cummings, 1983). According to Shore and Shore (1995), two human

resource practices in particular lead to perceived organizational support by employees, namely if the organization invests in the employee for example by allowing time off for further education or if the organization gives certain benefits to the individual like significant salary increases on a regular basis. However, regulated practices of organizations towards employees such as a yearly inflation-related increment in salary will not be regarded as organizational support. According to Shore, Tetrick, Lynch, and Barksdale (2006), main contributors towards the perception of organizational support are trusting and supportive managers, supervisors and co-workers as well as careful human resource practices and organizational recognition.

Numerous studies indicate correlations between organizational support and organizational outcomes. Eisenberger et al. (1990) found that when employees perceive organizational support, they are more prone to be conscientious with their work responsibilities, committed and innovative. According to Wayne et al. (1997), perceived organizational support is negatively related to turnover intention. Perceived fairness and justice in the organization will probably be regarded as organizational support, which will probably increase citizenship behaviours (Moorman et al., 1998). Eisenberger et al. (1990) found a high positive correlation between perceived organizational support, employee attendance and job performance. In this study, low organization support employees reported twice as many absent days as high organization support employees. Perceived organizational support also related positively to employee innovation, affective attachment and greater performance-reward expectancies. Shore and Barksdale (1998) found that

when employees perceived high mutual obligations between employees and organization, turnover intention was lowest whereas a strong positive sense of career future and high affective commitment was found with employees. With high employer commitment and low employee obligations, it was found that employees struggled with high turnover intention and low future career prospects and low affective commitment. Tsui, Pearce, Porter, and Tripoli (1997) found that when employees' expectations about organizational commitment were met with high inducements from the organization, high performance and positive employee attitudes could be expected. Shore et al. (2006) found that employer commitment is an antecedent of affective employee commitment, but not of employee continuance commitment. Continuance commitment becomes rather stronger when the costs of leaving the organization increase. Shore et al. (2006) furthermore found that perceived organizational support is positively related to social exchange and affective employee commitment.

From the above discussion on organizational support, it is anticipated that good organizational support contributes positively to the psychological conditions and work-engagement levels of educators and leads to positive organizational and positive well-being/health outcomes.

Besides good organizational support, it is anticipated that Namibian secondary school educators should experience sense of coherence if they want to be successful educators.

2.3.2 DISPOSITIONAL RESOURCES AND WELL-BEING: SENSE OF COHERENCE

Sense of coherence is about the ability to concentrate on positive aspects in the face of adverse stressors (Söderfeldt et al., 2000). Even when the individual struggles with stressors, if he/she has a significant sense of coherence, he/she could ask: what is good? It is crucial that educators are able to deal with their stressors in effective ways so that stress does not influence their style of interaction with learners. A high sense of coherence is, therefore, just as essential with educators than with employees of other organizations.

Sense of coherence is constituted by three factors namely comprehensibility, manageability and meaningfulness (Antonovsky, 1987; Pallant & Lae, 2002). These three factors constitute the individual's understanding of the world. If an individual thus has a significant sense of coherence, such an individual will regard the world as comprehensible, manageable and meaningful. Comprehensibility encompasses how the individual perceives internal stimuli and external stimuli from the environment and orders these in a clear and concise way. In this way stimuli are ordered to become explicable so that the world becomes predictable. Manageability refers to the expectation of the individual about the availability of appropriate resources with which life demands can be overcome. Meaningfulness deals with the individual's motivation to invest energy and activity into problems and challenges as well as the overall investment in life. Meaningfulness also deals with the expectation of the individual about how much sense life makes in emotional terms. Comprehensibility

and manageability can be regarded as cognitive concepts (Antonovsky, 1987). Meaningfulness is a rather emotional and motivational concept. Antonovsky (1987) regards meaningfulness as a crucial part of the sense of coherence as it contains a motivational aspect for human beings.

The core of a person's sense of coherence is formed between birth and the age of about 30 years. Thereafter, sense of coherence stays relatively stable. If changes occur, they usually are gradual and prolonged over time (Antonovsky, 1987; Strümpfer, Gouws, & Viviers, 1998). Feldt (1997) regards the first employment years as years of great transition of a person's sense of coherence.

Although there is evidence that sense of coherence remains relatively stable after the age of 30 years (Strümpfer, 2005), it seems to be changeable because of socialization processes (Feldt, Kinnunen, & Mauno, 2000). Snekkevik, Anke, Stanghelle, and Fugl-Meyer (2003) found that sense of coherence could become unstable after multiple traumas were experienced. Høgh and Mikkelsen (2005) found that the quality and availability of personal and organizational resources play a crucial role in how people deal with violence at work. If their resources are inadequate, they will probably experience the trauma of the violence as severe, which might reduce their sense of coherence. Kivimäki, Feldt, Vahtera, and Nurmi (2000) found in a study with men that violence and financial difficulties tended to lower their sense of coherence. Snekkevik et al. (2003) mention that under stable circumstances, sense of coherence might remain stable, but with severely traumatic conditions and a lack of resources, sense of coherence might change permanently. In their study on the

relationship between coping with bullying and a sense of coherence, Nielsen et al. (2008) found that a sense of coherence protects the individual from the negative emotional effects of bullying, as long as the bullying is mild. As soon as the bullying becomes severe, the sense of coherence does not have the protective effect anymore.

A high sense of coherence and positive affectivity seem to complement each other. Positive affectivity encompasses pleasurable feelings such as cheerfulness, joy, excitement, delight and enthusiasm, high energy, determination, ambition and adventurousness with mental alertness and interest that is experienced throughout different situations. Some descriptions of positive affectivity also include social dominance and gregariousness (Clark, Watson, & Mineka, 1994; Strümpfer et al., 1998). The way people view their life and the world around them has an influence on their physical and mental health and, therefore, also on a person's sense of coherence (Eriksson & Lindström, 2005). Negative affectivity is the opposite of positive affectivity and thus negatively related to sense of coherence. Negative affectivity is seen as a personality trait that reflects the different ways in which people experience negative emotional states (Watson & Clark, 1984). Höge and Büssing (2004) report that people with negative affectivity tend to subjectively experience higher levels of stress and negative emotions independently of the rational presence of such stressors (Watson, Pennebaker, & Folger, 1987). Individuals with a negative affectivity will most probably struggle with a low sense of coherence.

According to Antonovsky (1987), a sense of coherence is a crucial factor in stress prevention and health maintenance. People with a strong sense of coherence are

better able to deal with the stressors of life in a healthy way and, therefore, are less frequently ill than people with a lower sense of coherence. Stressors could come from either general life circumstances like bereavement or poverty or it can be the result of work-related stress. Therefore, a person's level of sense of coherence is applicable both in private- and work life. With a high sense of coherence, the individual will regard problem-situations, at home or at work as challenges rather than as threats (Feldt, 1997).

As research on the relationship between social conditions, work, health and disease progressed, the salutogenic paradigm emerged as a product (Söderfeldt et al., 2000). According to the salutogenic paradigm, health is different from the absence of disease. The traditional pathogenic paradigm rather looked at what was causing illness and contrasted illness with health in the "either-or" sense. Sense of coherence breaks away from all the illness-oriented concepts and, therefore, relates well to the salutogenic paradigm. Antonovsky (1987) introduced sense of coherence as a leading part of the salutogenic paradigm and referred to it as a basic resource that explains health rather than disease. The consequence is that the whole population becomes of interest and not only those that struggle with ill health. Furthermore, with a concept like sense of coherence, the salutogenic paradigm can focus on the productive aspects of stressors. Stressors thus become redefined, not only as deviant and illness provoking but also as challenge and opportunity for human growth. For example, the question will become: how can I live well with my stressors? Strümpfer et al. (1998) agree that people with a strong sense of coherence will cope with the stressful event and can possibly be transformed in a positive way by it.

Karasek (1979) and Karasek and Theorell (1990) developed the job demands-resources model (JDR) and the job demands-control model (JDC). These models stressed the idea that employees of organizations who experience high demands and low resources and/or low job control might experience high levels of distress and low levels of well-being or even severe forms of illness like cardiovascular disease (Karasek, Baker, Marxer, Ahlbom, & Theorell, 1981). Söderfeldt et al. (2000) indicate that sense of coherence plays a crucial role in the alleviation or management of stress-symptoms as proposed by the job demand-control model in that people that experience a high sense of coherence are likely to cope well with stressors and experience fewer symptoms of illness (Antonovsky, 1987). Sense of coherence is postulated to be a global cognitive style that is utilized in the face of handling stressors (Antonovsky, 1987). Therefore it is relevant to also use sense of coherence in a job-stress context. Sense of coherence has a protective effect on people who experience stress.

Antonovsky (1987) regarded sense of coherence as a personality characteristic that is crucial when it comes to stress prevention and maintenance of good health. At the same time sense of coherence is also regarded as a health source rather than a particular coping style (Feldt, 1997). Pallant and Lae (2000) also agree that sense of coherence is not in itself a coping strategy but that a healthy sense of coherence gives to people the energy to be more creative in their seeking, forming and application of coping skills. Basinska et al. (2011) mention that sense of coherence plays a crucial role in professional life as it affects the ability to mobilise resources positively.

According to Feldt (1997), a strong sense of coherence was found to be leading to higher levels of general well-being, competence, life satisfaction, functional status and psychological and physical health. A strong sense of coherence also leads to lower levels of depression, anxiety, perceived work stress, psychological distress and physical symptoms (Feldt, 1997). Individuals experience stress when a situation appears to be threatening and they feel that they do not need to have skills to deal with the situation (Lazarus & Folkman, 1991). Hogh and Mikkelsen (2005) mention that human beings have characteristics that will cause them to evaluate if situations are stressful and whether they have the appropriate coping skills. In this sense Hogh and Mikkelsen postulate that sense of coherence can be such a characteristic which helps people to either not so easily perceive a stressor or to have adequate coping strategies at hand for a particular stressful situation. Hogh and Mikkelsen (2005) proposed that a weak sense of coherence will cause people to be more exposed to violent situations at work, where-as a strong sense of coherence will help people who experienced violence at work to feel less vulnerable and to cope better with possible future assaults and experience less stress. Antonovsky (1987) indicated that sense of coherence is meaningful across cultures, gender and social class. Basinska et al. (2011) found that a sense of coherence has a protective function on people who are unemployed. These authors also found that a strong relationship exists between high sense of coherence and healthy work behaviour where-as a weak sense of coherence exhibits a strong relationship with higher levels of work burnout.

Krantz and Östergren (2000) found with a group of middle-aged women who experienced violence at home or work that they did present with serious health

symptoms if their sense of coherence and support network was weak. Hogh and Mikkelson (2005) postulate that, due to the fact that people with a strong sense of coherence have a meaningful worldview, they will be less affected by violent situations at work and show fewer symptoms of stress afterwards.

From the above discussion on sense of coherence, it is anticipated that sense of coherence contributes positively to the psychological conditions and work-engagement levels of educators and leads to positive organizational and positive well-being/health outcomes.

2.4 OUTCOMES OF WORK ENGAGEMENT AND PSYCHOLOGICAL CONDITIONS

Employee engagement has positive and crucial consequences for organizations as well as for individuals (Macey & Schneider, 2008; Ram & Prabhakar, 2011). It has been proved that there is a link between employee engagement and positive organizational results (Harter et al., 2002). Kahn (1992) indicated that engagement leads to positive individual as well as organizational outcomes. In this part, general health is discussed as an individual outcome of engagement, whilst organizational commitment, organizational citizenship behaviour and turnover intention are discussed as organizational outcomes of employee engagement.

2.4.1 INDIVIDUAL OUTCOME OF WORK ENGAGEMENT

2.4.1.1 General health

Health in the workplace encompasses physical health and psychological health (May & Schwoerer, 1994). Physical health is concerned with physical (somatic) symptoms like physical pain in different parts of the body. Psychological health is concerned with mental ill-health symptoms such as depression, anxiety and/or psychological dysfunction (Millar, 1992; Viljoen & Rothmann, 2009). Workplace ill-health symptoms are often associated with work stress. Thus work stress can manifest in physical (somatic symptoms) and psychological (depression, anxiety, social dysfunction) symptoms in employees (Barlow & Durand, 2011; Kaplan & Sadock, 2007; Luborsky, Docherty, & Penick, 1972; Oldmanns, Melley, & Turkheimer, 2002).

The world of work has changed significantly during the past decades for reasons such as increased global competition (Houkes, Janssen, De Jonge, & Bakker, 2003) and the fast development of technology. Jamison, Wallace, and Jamison (2004) regard organizational mergers, layoffs, company buyouts, retrenchments and downsizing as significant contributors to the changed world of work. Layoffs and retrenchments cause a higher workload on remaining employees, which increases the risk of mental and physical exhaustion (Wise, 2001). Increased global competition and the competitive job market lead to pressure on employees to deliver excellent services (Brunt, 2000; Rothmann et al., 2005). Therefore, employees are increasingly

exposed to mentally demanding work, which often leads to high stress levels (Houkes et al., 2003). If employees do not have the internal and external resources to cope with increased stress, the stress will most likely lead to mental and psychosomatic ailments. Jones and Hodgson (1998) found that workers in the United Kingdom who suffered from health problems in 1995 indicated that work stress was the second most reported cause of the health problems. Koukoulaki (2002) found that European workers often cite occupational stress and burnout to be their main work-related health problem. Van der Linde, Van der Westhuizen, and Wissing (1999) found in a study in South Africa that 29% of female educators reported that they were suffering from emotional exhaustion. Occupational stress is becoming the main reason for occupational disease (Cartwright & Cooper, 2002; Leigh & Schnall, 2000). As educators are tasked to prepare young people for the competitive job market, one can assume the same stressful circumstances for educators. Dysfunctional mental and physical health (depression, poor self-esteem, hypertension, alcoholism, drug consumption) can be very costly to organisations in terms of negative consequences, both personal and financial (Buys & Rothmann, 2010). Therefore, it is crucial that, despite harsh organizational demands and stress, employee health enjoys first priority.

The Spielberger State-Trait (STP) model of occupational stress (Spielberger, Vagg, & Wasala, 2003) defines occupational stress as physical and mental arousal caused by job demands. The model views stress to be a complex phenomenon consisting of three components: firstly the stressor that occurs at the workplace, secondly the subjective perception and appraisal of the stressor, and lastly the emotional reaction

of the employee if the stressor is appraised as threatening. If this happens, anxiety and/or anger will activate the autonomic nervous system, which might result in physical and mental strain and adverse behavioural consequences.

Namibia is a developing country. Kortum, Leka, and Cox (2010) mention that 30 – 50% of workers in developing countries report work overload, which results in negative stress reactions. The growth of industry in developing countries adds to the increase of stress-related diseases (Wegman, 2006). Kortum et al. (2010) found numerous negative health outcomes because of exposure to psycho-social hazards and work-related stress in developing countries such as physical health (heart and circulatory, gastro-intestinal, musculo-skeletal disorders, headaches/migraines, dermatological and respiratory symptoms, disability and injuries, diabetes, ulcers and certain cancers), mental health (depression, anxiety, emotional problems, suicidal behaviours, other general mental disorders, fatigue and sleep problems) and adverse health behaviours (substance abuse, smoking, obesity).

Occupational stress is caused by different factors such as job demands, time pressure, pace of work, repetitive tasks and personality. Wallace (2008) found that workplace characteristics such as job security, rewards (remuneration), autonomy, social support or how interesting the work is, predictability and outlets for frustration can have an impact on employee health (Jamison et al., 2004). Karasek (1979) developed a job-strain model where he argues that high job demands and low worker autonomy will increase the likelihood of ill health (Sandquist, Ostergren, Sandquist, & Johansson, 2003). Job demands like cognitive, physical and emotional demands as

well as a lack of social support are the strongest predictors of adverse health outcomes like burnout (Demerouti et al., 2001b; Janssen, Peeters, De Jonge, Houkes, & Tummers, 2004).

Job stress is experienced as general discomfort and uneasiness, which is usually paired with increased anxiety and can lead to symptoms like insomnia, gastrointestinal problems and depression (Yoshio, Shigemi, Tsuda, Nobufumi, & Bebbington, 1998). Emotional exhaustion, immune deficiency disorders, cardiovascular disease (Sapolsky, 2003), social dysfunction (Goldberg & Hillier, 1979), self-reported headaches, colds, increased incidence of viral infections as well as other medical conditions such as migraines, hypertension and coronary heart disease (Siu, 2002) are also attributed to not coping with job stress.

Warr (1990) defines mental health as having five components: affective well-being, competence, autonomy, aspiration and integrated functioning. Warr also divides mental health into context-free and context-specific mental health. Context-free mental health is depicted as being mental health or emotional problems in general, like depression and anxiety while context-specific mental health deals with mental health in specific contexts like the workplace (e.g., burnout). In the realm of context-free mental health, Cartwright and Cooper (2002) caution that poor health cannot always be ascribed to workplace circumstances. Often people are ill owing to lifestyle inadequacies or stressful circumstances elsewhere. With regard to context-specific mental health, Kortum et al. (2010) confirm that it is well documented that psychosocial hazards at the workplace can cause significant mental (anxiety,

depression, burnout), physical (somatic symptoms) and social symptoms (social dysfunction) for the workers (Drakopoulos et al., 2012; Houkes et al., 2001). This study uses the General Health Questionnaire (GHQ-28) to measure general mental ill-health. A four-dimensional scale of this questionnaire measures somatic symptoms, anxiety and insomnia, severe depression and social dysfunction (Werneke, Goldberg, Yalcin, & Üstün, 2000). The GHQ focuses on two main categories of phenomena, namely those that prevent the execution of normal healthy functions and those that appear suddenly as new distressing symptoms (Goldberg et al., 1997).

Westover (2008) indicates that human beings often spend half of their day or more in the workplace. It has been found that long working hours correlate negatively with health. Buell and Breslow (1960) found an increase of the incidence of heart disease in men who worked more than 48 hours per week. Long working hours can lead to mental and physical exhaustion, which could have a negative impact on the individual's immune system and thus affect health negatively. Long working hours often lead to poor health but also to an unhealthy lifestyle, which could include smoking, poor diet and lack of exercise, which again impacts negatively on health (Maruyama, Kohno, & Morimoto, 1995). Tsutsumi, (2005) in a study on the correlation between high job pressure and health behaviour found that high psychological demands at work could lead to the increase of smoking and alcohol consumption. In fact, Moriana and Herruzo (2006) found in one of their studies in Spain that educators who had to take psychiatric sick leave are often teachers who

smoke and consume alcohol. The same author also found that low job control was associated with lower vegetable intake in the diet.

According to Jamison et al. (2004), the natural instinct of human beings is to flee from perceived danger. The modern employee, however, cannot flee from work for existential reasons, which keeps the person trapped in ongoing stressful job circumstances. Employees in middle age and older, in particular, will not easily leave a stressful job as they are afraid that their age makes them unemployable. Siegrist (2007) indicates that in the middle-aged working population, working conditions and work are central in determining general well-being and mental health. If working conditions are employee unfriendly, high stress hormone levels are maintained in the body, which leads to the increase of infectious disease, chronic disease and aging disorders. Employees who remain in stressful work situations harbour negative emotional states, which are associated with negative patterns of physiological functioning (Cohen & Rodriguez, 1995). Kendall and Muenchberger (2009) introduce the concept of presenteeism, which concerns employees who are physically present at work, but who cannot be optimally productive because of psychological symptoms and negative emotional states. Negative emotions and low motivation of employees are positively correlated with impairments in individual health and increased costs for the organization (Brief & Weiss, 2002; Salanova et al., 2005).

Kopp et al. (2007) mention that level of education is related to the severity of work-related depressive symptoms as well as self-rated health. Bogart, Vranceanu, and Walt (2004) found that females with low status occupations and high stress at work

are disproportionately more at risk of cardiovascular illness. Sapolsky (1998) found that the lower the employee's ranking is at work, the higher the possibility becomes that such an employee will be subjected to increased physical and psychological stress with the likelihood of an increase in ill health.

It seems that job satisfaction plays a major role in the prevention of stress-related disease in the workplace. Platsidou and Agaliotis (2008) found a negative correlation between job satisfaction and job-burnout with teachers in Greece. Koustelios (2001), in addition, found that, among a small sample of Greek educators, autonomy, job prospects and working conditions are strong determinants of job satisfaction whereas autonomy and positive working conditions are regarded as enhancing job satisfaction. Labiris, Gitona, Drosou, and Niakas (2008) found that interpersonal relationships, working conditions, salary and organizational structure affect job satisfaction of employees in the mental health field. Caplan, Cobb, French, Van Harrison, and Pinneau (1975) found significant correlations between job satisfaction and four psychiatric conditions, namely depression, anxiety, somatic complaints and irritation.

Coetzee and Rothmann (2005) found a negative relationship between ill health (physical and mental) and organizational commitment from both organization and individual with a study conducted at a higher education institution in South Africa. These authors found that organizational stress can lead to ill health, but that organizational commitment can minimize the effect of stress on employees.

A lack of peer support and organizational support proved to be associated with increased job stress and musculoskeletal disorders (Denton, Zeytinoglu, Davies, & Lian, 2002). MacDermid et al. (2008) found that low social support from supervisors and/or co-workers affected employee health negatively. These authors also found that participants in their study in Canada indicated that social, cultural and mental aspects of work had a more detrimental effect on their health and quality of work life than the physical and safety hazards of the work.

A sense of coherence is a feeling of confidence that one can predict one's internal and external environment, which causes things to work out as one expects (as discussed under 4.2). Rothmann (2003) confirmed that a person's level of sense of coherence is an important predictor of health and well-being. Feldt (1997) also indicates that a sense of coherence is linked to general well-being and emotional stability. In this sense people with high levels of burnout will probably show lower levels of sense of coherence.

2.4.2 ORGANIZATIONAL OUTCOMES OF WORK ENGAGEMENT

2.4.2.1 Organisational commitment

Organizational commitment is an indication of a person's identification with and involvement in a certain organization (Gallie & White, 1993; Mowday et al., 1979). In general, organizational commitment can be seen as the binding force between the employee and the organization. Much of the literature in this field is in agreement

about the incorporation of identification with the organization, personal involvement and internalization of the organization's values as part of the conceptualization of organizational commitment (Jaros, Jermier, Koehler, & Sincich, 1993; Kell & Motowidlo, 2012; Meyer & Herscovitch, 2001; Reichers, 1985). From this definition of organizational commitment it can be derived that if an employee identifies strongly with the organization and has an innate need to be deeply involved in it, such an employee accepts the organization's goals, is willing to work hard for the organization and wants to stay with the organization for a considerable time (Siu, 2002). Day (2008) lists six different dimensions of commitment, namely commitment as a passion, as investment of extra time, as a focus on the well-being and achievement of the learner, as a responsibility to maintain professional knowledge, as transmitting knowledge and/or values and as engagement with the school community.

Sollinger, Van Olffen, and Roe (2008) found that organizational commitment should solely be regarded as a job attitude and should, therefore, have affective, cognitive and behavioural components (Ajzen, 2001). Largely in agreement with this view, Cohen (2003) depicts organizational commitment is a multidimensional construct with affective, continuance and normative commitment as its dimensions. Affective commitment encompasses the employee's identification with, involvement in and attachment to the organization (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002), which also refers to the engaged employee. Continuance commitment includes the employee's perceived cost of leaving the organization (Meyer & Allen, 1984). The normative aspect of organizational commitment shows on the individual's attitude

(towards work tasks) as well as the organization's contribution (quality of supervision) towards the development of organizational commitment and the employee's perceived commitment to stay with the organization (Allen & Meyer, 1990). From these definitions it seems natural that if the individual has a high affective commitment, continuance and normative commitment will also be high. Kell and Motowidlo (2012) propose that continuance and normative commitment are attitudes that are directed towards employee behaviour (the behaviour of staying or leaving the organization) whereas affective commitment is the direct identification of the employee with the organization. Therefore Kell and Motowidlo propose that only affective commitment should be regarded as organizational commitment. Buys and Rothmann (2010) agree that the affective component of organizational commitment is the most explanatory variable of the three commitment variables and also the most reliable in measurement.

As a part of organizational commitment, attitudinal commitment of the employee includes the emotional commitment of the employee as well as the employee's acceptance of the organizations values and goals (Brett, Cron, & Slocum, 1995). Employees who are high on attitudinal commitment will remain with the organization because they wish to do so. These employees also commit themselves to be part of the organization's psychological and social community.

Organizational commitment buffers the employee against negative effects of work stress and work-related ill health. Siu (2002) explains that if employees are committed towards their organization, they will have a sense of healthy direction in

reaching work goals and see meaning in their work, which will diminish the negative experience of stress in the workplace. Buys and Rothmann (2010) also indicate that organizational commitment has important moderating effects on workers who experience stressful work situations in that committed employees are positively tuned towards their work, which prevents them from experiencing unhealthy work stress levels (Begley & Cazjka, 1993). It can thus be derived that the employee who experiences high levels of organizational commitment will most probably not suffer from extensive work stress and related ailments. Siu (2002) found that organisational commitment was positively related to mental and physical well-being in Hong Kong white-collar workers and China blue-collar workers. Siu continues to suggest that if managers would ensure that employees are committed towards their work and organization, they will be physically healthier which will lead to lower absenteeism from work and increase work productivity whilst decreasing turnover rate.

The experience of organizational commitment exerts a significant influence within organizations. Sommer, Bae, and Luthans (1996) state that a lack of organizational commitment has been linked to employee withdrawal behaviour like absenteeism, lateness and employee tardiness (Mathieu & Zajac, 1990). Chow (1990) indicates that committed employees were found to be more productive, creative, showing initiative and more willing to take responsibility at the workplace. In addition, Katz and Kahn (1978) indicate that committed employees engage in extra-role behaviour, thus spontaneously doing more than is expected of them. Organizational commitment is also regarded as an indicator for motivation (Brown, 1996b) as the committed employee will also be the motivated employee.

It is difficult to define organizational commitment in terms of education. Educators differentiate between different organizations they work for namely the Ministry of Education, the Regional Education Office, the specific school they are employed at, the committees of private schools that employ educators or the learners they are educating. Collie, Shapka, and Perry (2011) identified two forms of educator commitment, namely professional commitment and organizational commitment. Professional commitment depicts the commitment an educator feels for the profession of teaching whereas organizational commitment would encompass the level of identification with, involvement with and commitment an educator feels for the organization (school, ministry of education). Therefore, organizational commitment in this study was taken to include educator commitment towards the profession of education as a whole, including commitment to the above-mentioned employing agencies.

Within the field of education, committed educators are crucial as educator commitment has a direct influence on the quality of teaching, learning, school success and the subsequent educator/learner well-being (Day, 2008). The educator/learner who is not well will struggle to educate/learn well. Day mentions that the educator who is committed towards his/her school and education in general will play a crucial role in the cognitive, social, behavioural and affective behaviour and development of scholars. Nias (1981) identified educator commitment to be a critical factor in education success (Fink, 1992; Park, 2005). Educator job performance and overall quality of education offered are dependent on educator commitment (Tsui & Cheng, 1999). Day (2008) asserts that organizational

commitment can be used to predict performance, burnout and attrition rates of educators. Elliott and Crosswell (2001) found that commitment is often regarded as an integral part of an educator's professional identity. Day (2008) indicates that educator commitment can be influenced by factors such as collegial and management support (see 2.3.1.3, relationships at work), student behaviour, parental demands and government education policies.

Organizational commitment should work on both sides: employees should be committed towards their organization whilst the organization should show commitment towards its employees. Coetzee and Rothmann (2005) found that staff members at a higher educational institution in South Africa did not feel that their organization was committed to them, which could, over the long term, erode employee commitment towards the organization. Settoon et al. (1996) found that perceived organizational support played an important role in employee organizational commitment. Organizational commitment is seen as a relational construct. Eisenberger et al. (1986) found that employees will show organizational commitment when they perceive organizational support. Organizational commitment influences organizational citizenship behaviour (Cropanzano & Mitchell, 2005) in that a positive relationship exists between these two (Somech & Bogler, 2002).

Rai (2012) conducted a study on the organizational commitment of long-term care staff and found that several workplace characteristics can exert an influence on organizational commitment of employees. For example, Rai found that a heavy workload correlates negatively with organizational commitment where-as reasonable

work demands lead to higher levels of organizational commitment (De Cuyper & De Witte, 2006). Rai (2012) also found that job satisfaction had the greatest positive impact on organizational commitment, whereas the larger the organization becomes, the lower organizational commitment is because of an increasingly impersonal work climate (Greve & Fujiwara-Greve, 2003). Rai found in addition that social support correlates positively with organizational commitment (Fuller, Hester, Barnett, Frey, & Relyea, 2006). Also, demographic variables such as age, gender, marital status, ethnicity, education level and length of service were found to influence organizational commitment (Rai, 2012). Work demands, employee support and work climate could thus be avenues from the organization's side that could indicate the organization's commitment towards the employee.

Fuller et al. (2006) found in a study that perceived organizational support and perceived external prestige are positively related to each other but also positively related to organizational attachment behaviour and negatively related to withdrawal cognitions. Therefore, as these researchers indicate, organizational commitment is also influenced by organizational support and the image that the organization has in society generally. The educator who works at a school that is well-known nationally for excellent education might thus most probably be more committed than educators who work at ordinary schools.

Mathieu and Zajac (1990) reported that employees who are highly committed to their organization make themselves eligible for intrinsic as well as extrinsic rewards. An example of an intrinsic reward could be a feeling of job satisfaction whilst an

extrinsic reward might be an increase in wages of the employee by the management of the organization in an attempt to show gratitude towards the employee's commitment towards the organization. In addition, these researchers found that older workers, female employees (Collie et al., 2011; Park, 2005) and married employees experience higher levels of organizational commitment than younger workers, male employees or unmarried staff.

Mathieu and Zajac (1990) regard organizational commitment as either an antecedent or a consequence of other work-related variables. In this study organizational commitment is regarded as an organizational outcome of job contextual variables.

2.4.2.2 Organizational citizenship behaviour

Brief and Motowildo (1986) indicate that during the 1960s and 1970s, considerable attention was devoted to pro-social behaviours like helping, sharing, volunteering, donating and cooperating. Fairly recently, the positive effect of these pro-social behaviours in organizations became evident (Organ, 1990) and was termed organizational citizenship behaviour or extra-role behaviour (Podsakoff & MacKenzie, 1994). According to Organ (1990), the employee who shows citizenship behaviour *chooses* to engage in extra-role tasks without consideration of formal incentives. Organ, Podsakoff, and MacKenzie (2006) define organizational citizenship behaviour as discretionary behaviour that is not recognized by the formal reward system of the organization, but that promotes efficiency and effective functioning of the organization (Podsakoff, MacKenzie, Paine, & Bachrach, 2000).

Morrison (1994) regards work tasks that exceed job requirements to be what researchers mean by organizational citizenship behaviour.

Morrison (1994) emphasizes that if there is no clear boundary between in-role and extra-role behaviour, it would be difficult to define organizational citizenship behaviour on a global scale. Therefore, organizational citizenship behaviour cannot be generalized to be the same thing for different organizations. Therefore, Morrison (1994) comes to two conclusions with regard to the nature and definition of organizational citizenship behaviour: firstly, what the supervisor regards as organizational citizenship will depend on the breadth of the definition of in-role behaviour (Morrison cautions that both supervisor and employee should together decide on this definition). Secondly, employees are more eager to perform in-role tasks than extra-role tasks because it was proven that in-role tasks are more often extrinsically rewarded than extra-role behaviours (Organ, 1988). If extra-role tasks are defined as in-role tasks by supervisors, employees are keener to perform them (Morrison, 1994). Educators often show organizational citizenship behaviour by, for example, accompanying learners to sport events over weekends. However, it depends on the school and the management whether educator supervision at learner sport events is defined as in-role or extra-role behaviour. Especially within and between schools, it becomes complicated to define extra-role behaviour. For the purpose of this study the extent of organizational citizenship behaviour was left to the subjective interpretation of the individual educator.

Katz (1964) identified three requirements of workers for organizations to be functional, namely to remain at the organization for an extended time after joining, to deliver performance that meets standards and requirements of the organization and to behave beyond role requirements like promoting the organization's name to the outside, cooperating with co-workers and protecting the company from danger. This last requirement of Katz, namely to behave beyond role requirements, is a reference to organizational citizenship behaviour. Although all these three requirements contribute towards the effective functioning of organizations, the practical significance of organizational citizenship behaviour is highlighted as the active improvement of organizational efficiency, its contribution to resource transformation, innovativeness and adaptability (Katz, 1964; Williams & Anderson, 1991). According to Podsakoff, Ahearne, and MacKenzie (1997) organizational citizenship behaviours can also increase organizational effectiveness because they prevent scarce resources being used for purely maintenance functions, free the resources for more productive purposes, enhance the productivity of workers and managers, effectively distributes work-loads across the staff contingent and make it possible for the organization to attract the best workers by making the organization a more attractive place in which to work.

According to Roethlisberger and Dickson (1964), citizenship behaviours have an organizational and individual component (Lee & Allen, 2002; McNeely & Meglino, 1994; Organ, 1997; Podsakoff, Whiting, Podsakoff, & Blume, 2009; Williams & Anderson, 1991). Brief and Motowidlo (1986) also show that citizenship behaviour can be either targeted towards the organization or the individual. According to these

authors organizational citizenship behaviour concerns the target of the pro-social act(s). In many instances, the pro-social acts are targeted at co-workers individually (OCBI), or maybe the individual supervisor (OCBS) during the execution of work tasks but with the intention of benefiting the individual at whom the acts are targeted. Employees that perform OCBI behaviours help their co-workers, offer preventive advice regarding work problems, assist with interpersonal conflict situations that co-workers experience at work and encourage work achievements (Ozer, 2011). Staw (1983), however, indicated that pro-social behaviour can also be directed at the organization (OCBO) as a whole, like extra voluntary service. In this sense the individual will donate time, energy and other personal resources to the organization, complies with company norms, help with the good functioning of the organization and tolerate less than ideal work circumstances (Ozer, 2011). Whilst Brief and Motowidlo (1986) indicate that pro-social acts towards individuals could be to the detriment of the organization (like giving employees days off work which is good for the individual but bad for the organization in terms of productivity and costs), Staw (1983) indicates that pro-social acts towards the organization almost always benefits the organization, also in terms of enhancing trusting, supportive and positive co-worker relationships (Ozer, 2011). Masterson et al. (2000) also divided organizational citizenship behaviour into two components: organizational citizenship behaviour organization (OCBO, citizenship beneficial to the organization) and organizational citizenship behaviour supervisor (OCBS, citizenship beneficial to the supervisor). Williams and Anderson (1991) also differentiate between OCBO behaviours that benefit the organization as a whole and OCBI behaviour that benefits specific individuals in the organization and, therefore, benefits the organization

indirectly. OCBI would in effect include OCBS, as the supervisor is also an individual. Examples of OCBO behaviour could include employees giving advance notice of their absenteeism from work or sticking to unwritten rules that benefit the organization. Examples of OCBI behaviour include helping other individual employees who struggle with tasks or have been absent from work, or taking a personal interest in another employee. An example of OCBS behaviour might be to assist and support the supervisor beyond job requirements. Masterson et al. (2000) found that perceived organizational support was a good indicator for OCBO, turnover intention and organizational commitment. They also found that perceived supervisor support was a good predictor of OCBS, job performance and job satisfaction.

To effect organizational citizenship behaviour in educators should be the aim of every school in Namibia, as it has been indicated by research that it is useful to society if educators develop goodwill and loyalty towards the school at which they are working (Elstad et al., 2011). Organizational citizenship behaviour should thus be seen as a core influence of general school improvement (Kuvaas & Dysvik, 2009). According to Elstad et al. (2011) it is crucial that educators are able to identify with the school, and involve and engage themselves on behalf of that school if they want to observe quality learner and organizational/school development.

Elstad et al. (2011) assert that the employee-organization relationship and social exchange relationship remain prerequisites for organizational citizenship behaviour. However, economic exchange does not influence organizational citizenship

behaviour of educators (Elstad et al., 2011). It can thus be derived that whilst economic exchange is not so prominent in relation to organizational citizenship behaviour, organizational citizenship behaviour lubricates the social machinery of the organization (Smith, Organ, & Near, 1983).

Organ (1990) identified different dimensions of citizenship behaviour, namely cheerleading, sportsmanship, altruism, courtesy, peacekeeping, civic virtue and conscientiousness. Podsakoff and MacKenzie (1994) indicate that managers often struggle to differentiate between these distinctive dimensions of citizenship behaviour and, therefore, group altruism, courtesy, cheerleading, and peacekeeping fall into a helping dimension. These helping behaviours together with sportsmanship and civic virtue are positively related to organizational effectiveness (Podsakoff & MacKenzie, 1994) as they enhance the social functioning of the organization, decrease interpersonal friction and increase overall organizational efficiency (Smith et al., 1983). George and Bettenhausen (1990) find that helping behaviours also lead to more effectiveness in the workplace because if the less experienced employees is assisted and guided by the more experienced, outputs of the less experienced will increase to the benefit of all. Furthermore, if employees help each other, managers do not have to lose productive time to help employees and can thus attend to more high-functioning tasks. High levels of helping behaviour also increases group cohesiveness, make the organization an attractive work environment, reduce turnover rates and thus increase the overall productivity of the company (Podsakoff et al., 1997).

According to Organ (1990), sportsmanship would entail that the employee tolerates difficult circumstances at work, without complaining. Podsakoff et al. (1997) indicate that sportsmanship will contribute towards a more effective work environment in that employees will expect difficult circumstances at work and probably will attempt to struggle through the difficult circumstances with perseverance. In this sense, managers don't lose valuable time in trying to persuade workers to remain positive and can thus concentrate on the organization and its problems. Organ (1990) defines civic virtue as the ability of the employee to remain committed to the organization and to fully participate in and be concerned about the organization. Podsakoff et al. (1997) indicate that civic virtue also leads towards a more effective organization as productive suggestions are delivered about how to make the work group more effective and productive. Civic virtue also allows for active participation of workers in the mechanics of the organization, thus encouraging employees to take ownership of the organization.

Podsakoff et al. (2000), much in agreement with the findings of Organ (1990), found that at least 30 forms of citizenship behaviour have been identified, which have been organized in seven themes: helping behaviour, sportsmanship, organizational loyalty, organizational compliance, individual initiative, civic virtue and self-development. A great deal of overlap is evident with these different forms of citizenship behaviour. Helping behaviour includes voluntary actions to help other to overcome problems or to prevent problems. It includes the dimensions of altruism, peace-making and cheerleading of Organ (1990). Organizational loyalty includes the promotion of the organization to outsiders as well as defending it against outside threats. To stay loyal

to the organization would also mean to give it full support, even in harsh and difficult circumstances (Podsakoff et al., 2000). Organizational compliance is the internalisation of company rules and regulations and the slavish adherence to these, even if not monitored (Podsakoff et al., 2000). Individual initiative will entail creative acts by employees to promote the organization and to lighten one's own job. An employee who shows individual initiative will do anything to get the job done and will then take on extra responsibilities. Such a person might even encourage co-workers to do the same and will go above and beyond the call of duty (Podsakoff et al., 2000). Organ's construct of conscientiousness agrees well with the theme of individual initiative. Self-development includes those voluntary behaviours that employees engage in to enhance their work-related knowledge, skills and abilities, which will benefit the organization (George & Brief, 1992).

Organ (1990) found that fairness perceptions of employees play an important role in their organizational citizenship behaviour. If the employee is of the impression that fairness at the workplace is a priority of management, such an employee might be much more eager to do more than is expected at the workplace. Settoon et al. (1996) also found that both perceived organizational support as well as supervisor support affects employee organizational commitment and thus also organizational citizenship behaviour. These researchers found that employees show higher levels of organizational citizenship behaviour when they feel they have support from their organization as well as from their supervisor.

2.4.2.3 Turnover intention

Turnover can be voluntary or involuntary. Voluntary turnover is the employee's decision to leave the organization. Involuntary turnover is a reflection of the employer's decision to end the employment relationship (Dess & Shaw, 2001). Organizations usually attempt to retain employees as employee turnover can affect the organization negatively. Leaving the job inflicts a great deal of costs on the organization. The costs are created owing to the loss of human capital with the departure of the employee, need for temporary staffing and the recruitment, selection and training of a new worker (Holtom, Mitchell, Lee, & Eberly, 2008). Dess and Shaw (2001) also indicate that when an employee leaves an organization, it could affect the performance of the company negatively because of the loss of human capital, organizational wisdom and expertise (Glebbeck & Bax, 2004). It should also be taken into consideration that more negative effects can follow for the company if the employee joins a competing firm (Chow, Ng, & Gong, 2012). High turnover will also affect schools negatively. For example, an ever-changing educator component will create a feeling of instability for learners. Holtom et al. (2008) mention that individuals are also negatively affected when they intend to resign. Significant output of energy is used to find a new job. There-after the individual has to adapt to the new work situation. Then, the individual also has to give up old routines and known interpersonal connections, all of which are stressful.

Chow et al. (2012) found that several reasons could play a role in why people decide to leave an organization. Attitudinal factors like job satisfaction and organizational

commitment, as well as workplace characteristics, such as stress, burnout and remuneration, could lead to higher turnover rates. Griffeth, Hom, and Gaertner (2000) found that popular indicators for intention to resign are the level of job satisfaction, comparison of alternatives, leaving intentions, organizational commitment, job search and withdrawal cognitions. These researchers also indicated that determinants of intention to resign can be found in the characteristics of the work environment such as quality of leadership, chances for promotion, co-worker cohesion, job content, stress levels, autonomy and distributive justice. It is also indicated that lucrative job alternatives can play a significant role in people's decision to leave an organization (Chow et al., 2012; Griffeth et al., 2000). When an educator receives an offer of appointment at a prestigious school, such an educator might be very tempted to quit. Social ties could play a role in people's decision to leave or stay at their organization. Social contact could provide the educator/employee with information about other more lucrative job positions (Granovetter, 1985). On the other hand, Chow et al. (2012) found in a study that if people hold valuable internal ties within the organization, the intention to leave is lower (Moynihan & Pandey, 2008).

Allen et al. (2005) indicate that leaving a job goes hand in hand with risk and uncertainty, thus possibly raising anxiety levels. The uncomfortable feeling that the risk of quitting brings to the person might be the reason why a person does not quit. However, such a situation where an individual intends to resign, but does not because of uncertainty, might keep the person imprisoned with low job motivation, lack of loyalty towards the organization with low engagement and low commitment. In such

an event, feeling trapped in a workplace, might also contribute towards the negative health of employees.

Mobley (1977) developed the intermediate linkages model that highlights certain withdrawal cognitions and job seeking behaviours that links job dissatisfaction to actual turnover behaviour. Withdrawal cognitions include thoughts of quitting whereas job-search behaviours include the actual looking for a job and the evaluation of alternatives. Mobley was also the first to identify moderating effects on the turnover decision. For example, this researcher hypothesized that centrality of non-work values and the need for immediate gratification are moderating effects between job satisfaction and turnover intention in the same way as impulsiveness moderates between turnover intention and actual turnover. According to Maertz and Campion (2004), the decision to resign depends on a complex interplay between different turnover motive forces and turnover decision types. The turnover motive forces are affective, calculative, constituent, moral, contractual, behavioural, alternative and normative whereas the turnover decision types can range between impulsive, comparative, pre-planned and conditional.

Lee and Mitchell (1994) proposed a model for turnover behaviour. The major components of the model are shocks, scripts, image violations, job satisfaction and job search. A shock would be an extraordinary incident the impact of which on the employee is so strong that thoughts about quitting are activated. A script is an unfolding plan of how to leave the organization. An image violation occurs when the individual's strategies and values for goal attainment are significantly different from

those of the organization. There is thus little or no fit between what the individual wants and what the organization wants. An individual's job satisfaction seems to decrease when the cognitive, emotional and financial benefits don't match those that the individual desires. Job search indicates that the individual looks for alternatives whilst evaluating those alternative job positions and comparing them to the current job. Lee and Mitchell propose five possible routes in the development of intention to leave a job. As a first possibility, the individual experiences shock, which triggers and emphasizes the script upon which the person leaves. In a second route, a person experiences shock which leads to image violations and the person resigns. In a third route the person experiences shock, image violations occur and the person starts with job search, thus comparing alternatives and leaves the organization. As a fourth alternative, the trigger is low job satisfaction, which prompts the person to leave whilst in a fifth possibility the individual experiences low job satisfaction, searches for alternatives and leaves then.

In a review of the literature it was found that individual differences could play a role in turnover intention by either decreasing or increasing the incidence. Barrick and Zimmerman (2005) found that self-confidence, decisiveness together with data about the time at their previous work and the quality of the ties to the organization might prevent employees from quitting easily. Higher conscientiousness also seems to relate to lower turnover intention (Barrick & Mount, 1996). Griffeth et al. (2000) found that high performers are less prone to resign. Usually, if they perform very well for and in the organization, they get a great deal of internal and external rewards and benefits. Quitting would mean losing these benefits. Challenge stressors, like

time stressors and pressure to complete tasks, do not increase turnover intentions (Podsakoff, LePine, & LePine, 2007). Holtom et al. (2008) summarize how change acceptance is positively related to job satisfaction and negatively related to turnover intention. Gerhart (1990) found that longer time at work of an individual might be a sign of organizational commitment, a good match between the employee and the job with possible non-work attachments to a geographical area. In such cases, even in the face of lucrative alternatives, the employee will stay at the current job. According to the Job Characteristics Theory of Hackman and Oldham (1980) every job has a certain motivation potential. This motivational potential depends on the presence of five job characteristics, namely: skill variety, autonomy, task significance, task identity and feedback. These job characteristics are linked with positive job outcomes of which low absenteeism and low turnover are two such outcomes.

Negative affectivity leads to higher turnover intention (Barrick & Mount, 1996). Allen et al. (2005) again found that people with a low risk aversion and low self-monitors indicate a higher level of turnover. Intention to resign also becomes higher when an employee is psychologically vulnerable whilst organizational changes happen often (Holtom et al., 2008). It was further found that hindrance stressors like organizational politics, hassles, situational constraints, role conflicts and role overload, lead to higher motivations to quit (Podsakoff et al., 2007). Proost, Van Ruyseveldt, and Van Dijke (2011) indicate that unmet expectations at the workplace lead to numerous negative outcomes including emotional exhaustion, lower organizational commitment as well as increased turnover intention. These authors propose that it will help substantially to keep employees positive with a low intention

to leave if expectations are made clear to them when they enter the new job. Resources, especially emotional resources, are the basic ingredients of work engagement. If an employee becomes emotionally exhausted, it is one of the major indicators of burnout and can lead to increased intention to quit (Huang, Chuang, & Lin, 2003).

Allen et al. (2005) conducted a study to link personality to quitting behaviour. These authors wanted to find an explanation why certain people intend only to quit but remain in their position whereas other individuals follow through on their intention to quit and eventually leave their job. According to Allen et al. (2005), people with a low self-monitoring attitude are more prone to quitting their job when they intend to do so in comparison with those people with a higher self-monitoring attitude. In addition, people with a low risk aversion also show a higher tendency to quit when intentions to do so are high than people with a high risk aversion. Although Crant (2000) found that people with a proactive personality are not very keen to remain in unfavourable job conditions, Allen et al. (2005) did not find that proactive people follow more vigorously through with quitting than less proactive people. Ghiselli (1974) brings up the concept of the hobo syndrome, referring to people who have an internal desire to move from their current circumstances, including their job, on a periodic basis. Such people have been proven to leave their jobs more easily.

Stoner et al. (2011) link psychological contract breach, family support and supervisor loyalty to turnover intention. According to these authors psychological contracts entail that the individual believes that his/her inputs into the organization need to be

reciprocated by the organization. Breach of such a psychological contract is experienced when the employee perceives that the organization is not giving back to the employee as expected. Perceived psychological contract breach might increase turnover intentions. Stoner et al. (2011) hypothesized that turnover intention will be lower in the face of psychological contract breach if supervisor support and family support are high. They found in their study that perceived supervisor support is essential to keep turnover intention low during psychological contract breach. These researchers also found that in the absence of supervisor support, turnover intention escalated when psychological contract breach was perceived whilst family support was high. This might be the case because family, in their support of the employee, might encourage the individual to leave the organization.

2.5 CHAPTER SUMMARY

This chapter dealt with a variety of trends in education in Namibia. The changes in the education system in Namibia over the years and the current structure of the education system were discussed. The relationship between education and important national developmental milestones like ETSIP and Vision 2030 was highlighted, whilst the current condition of education in Namibia was elaborated. Certain challenges faced by the education system in Namibia like the high turnover rate of educators, increasing class size, educator and learner absenteeism, lack of resources, lack of higher qualifications of educators, high dropout rates of learners, constraints of the education budget, low level of salaries, amongst other aspects, were discussed. This chapter also reviewed the general working conditions of educators.

Furthermore, this chapter focused on work engagement and psychological conditions of work engagement. Work engagement has been defined extensively, after which the prerequisites of work environments that foster engagement were discussed. An overview of disengagement at the workplace and the factors that lead to work disengagement have been provided. The psychological conditions of safety, meaningfulness, availability and autonomy have been discussed.

In addition, this chapter covered a discussion of the antecedents of work engagement in terms of organizational factors and individual factors. Organizational factors such as work-role fit, job enrichment, relationships at work, job resources, rewards and recognition and organizational support have been discussed. Sense of coherence has been discussed as a personal resource that contributes towards work engagement.

In this chapter, the organizational and individual outcomes of work engagement were discussed. General health was regarded as an individual outcome. Organizational commitment, organizational citizenship behaviour and turnover intention were discussed as organizational outcomes of work engagement.

Chapter 3 focuses on the methodology of the research study.

CHAPTER 3

METHODOLOGY

The empirical study will be discussed in this chapter. The general research approach of this study will firstly be elucidated, after which more detailed information will be offered about those who participated in the study. A broader discussion of the measuring instruments used in the study will also be presented. The data analysis and a listing of hypotheses that guided the research will follow this discussion.

3.1 RESEARCH DESIGN

The approach of this study is quantitative, descriptive and cross-sectional, whilst a survey has been used to collect data about the general well-being of secondary school educators in Namibia, as well as data about their self-perceived levels of job contextual factors, psychological conditions, level of engagement and position with regard to certain organizational outcomes.

A postpositivist, quantitative approach had been followed. Postpositivism holds a deterministic philosophy where-in causes determine certain hypothesized outcomes. Postpositivism is also reductionist in nature as the ideas that underlie the study are broken down into smaller parts that can be tested such as the variables that form part of the hypotheses and research question (Creswell, 2009). The postpositivist paradigm steers research to move from certain theories that govern realities to collect

data on confirming and refining these theories, so that the world can be better understood (Creswell, 2009). Quantitative studies often follow the postpositive paradigm which is more formalized, more explicitly controlled with an exactly defined range (Huysamen, 2001; Mouton & Marais, 1996) and which allows for studying the relationship between variables. Quantitative research in the social sciences is based on the idea that social phenomena can be quantified, measured and expressed as a numerical value (Neuman, 2009). The applicable social phenomena, in this case the general well-being of secondary school educators in Namibia, their intention to resign from their jobs and factors that increase/decrease general well-being, that are expressed in a numerical value can be further analysed with statistical methods. As quantitative research allows for quantification of social phenomena, it is regarded as an objective approach (Van der Stoep & Johnson, 2009). This approach also allows for comparison of social phenomena between groups. General well-being and other job-related factors of secondary school educators between schools, educational regions as well as between private schools and government schools can thus be compared. Statistical analysis of work-related factors of educators, which is possible with quantitative research, allows for the detection of correlations, dependencies, causing factors and mediations in order to establish which factors influence each other in which way (Gravetter & Wallnau, 2007). In this manner the quantitative approach allows the researcher to establish whether an increase in engagement of educators, for example, will lead to a decrease of turnover intention. Furthermore, the quantitative approach allowed the researcher to collect a large amount of data by distributing the questionnaire in six educational regions, thus reaching many educators in a relatively short time. However, the researcher had to be

careful not to fall into the trap of simplifying abstract and complex phenomena with the quantitative method. Furthermore, the researcher had to have extensive knowledge about the research topic in order to ask appropriate questions and not to distort the research by inappropriate questions. For this purpose, the researcher had to work extensively on the research topic before the project started, which was time-consuming (Gravetter & Forzano, 2006).

For the purpose of being able to collect larger amounts of data as well as to be able to provide a detailed description of the participants, a field survey design was selected for this research study. A specific population (secondary school educators) was required for this study. Therefore a specific field (secondary schools) was identified for the survey. A survey is a fact-finding enterprise where the researcher collects data directly from a particular population in different ways at a particular time (Creswell, 2002). Internal validity is increased by the survey design in the natural setting (the secondary school) as no experiment that can influence participants has been conducted.

Internal validity was furthermore increased, as the measuring instruments used in this study were existing instruments that are proven to be valid by previous research. These instruments were selected to relate directly to this research (Gay, 1996). Questionnaires had been distributed by courier, thus no contact ensued between the researcher and participants prior to the completion of the questionnaire, which is expected to increase external validity (Creswell, 2002). This survey was conducted with structured questionnaires as the primary data collection tool (Davis, 2005;

Fouché & De Vos, 2002). Structured questionnaires contain pre-coded questions only, with the advantages that they are easy to administer, fewer discrepancies are experienced, consistency in answering is found and data is easily managed. The demographic part of the questionnaire contained restricted questions. With these restricted questions, participants had either to choose an answer from a given number of options (e.g., home language) or had to fill a certain number into an open space (e.g., age in years). Although the restricted way of putting questions is intended for easier data management, the researcher found that educators sometimes struggled with the options available as answers. For example, some educators did not have one home language, or they could not decide about their ethnicity. Still, the restricted questions assisted the researcher to be objective and unbiased with the data gathered. Furthermore, the data could be easily summarized and analysed and supplied valuable quantitative information. The health questionnaire within the larger survey consisted of questions or statements with a semantic differential scale, e.g., “Have you recently felt that you are ill?” (giving a choice between ‘not at all’, ‘no more than usual’, ‘rather more than usual’ and ‘much more than usual’) whilst most of the questionnaire consisted of questions and statements with a seven-point Likert scale, e.g., “I frequently think of quitting my job” (giving a choice from strongly disagree ‘1’ to strongly agree ‘2’; very little ‘1’ to very much ‘2’; never or almost never ‘1’ to almost always or always ‘2’). The Likert rating scale is regarded as a sophisticated scale, containing equal distances between choices (in this case one point difference), which are referred to as interval measurements. In this way each response could be related to a category on an interval scale that represented the extent of the experience of a certain phenomenon. The semantic differential scale and Likert scale answering

types allow the researcher to establish measurements of social phenomena in order to find differences, commonalities and causes between phenomena. Usually participants understand the scales easily. However, these types of scales do not allow the researcher to come up with absolute answers as the scales allow participants to rate themselves anywhere from the left to the right of the scale. Thus the researcher can only compare answers across groups and across time. In addition, with a Likert-type scale respondents are often tempted to answer all questions/statements in the same way, which is called a response set (Creswell, 2002).

This study consists of a cross-sectional descriptive research strategy thus measuring variables, as they exist naturally (Gravetter & Forzano, 2006). The main goal of a descriptive research design is to describe (and thus understand) the data that has been gathered as well as the characteristics of what has been studied. In addition, the cross-sectional design renders the researcher the opportunity to do the same research with many different groups at the same time. In this way time is saved and interesting comparisons can be drawn from the analysed data (Gravetter & Forzano, 2006).

3.2 PARTICIPANTS

Secondary school educators of all the government and private schools of the Khomas, Otjozondjupa, Omaheke, Erongo, Hardap and Karas educational regions in Namibia were invited to participate on a voluntary basis in this research study and was thus the target population. Some 2332 secondary school educators are employed

in these regions. At the time that the research commenced, 969 educators were employed at the schools that agreed to participate in the study. Of these educators, 502 participated in a convenience sample and participants were selected on the basis of availability and willingness to participate (Gravetter & Forzano, 2006). The sample included ordinary educators as well as members of school management like heads of departments and principals. The sample was regarded as representative of the target population as Jacobs (2012) mentions that, as a rule of thumb, if a population size is around 1500, at least 20% should be sampled. If a population size is around 500, at least 50% should be sampled. In the case of the current research study, the sample consisted of 52% of the target population, which can thus be regarded as a representative sample.

These educational regions are easily accessible and arranged around the Khomas region from where the research was conducted. Financial considerations pressurized the researcher to include the nearest and most convenient regions into the target population. Other considerations like summer flooding, which could delay the transport of questionnaires was another reason for excluding the northern regions of Namibia.

Table 11 indicates the secondary schools that participated in the study with the number of educators employed at the school and the number of educators who actually participated.

Table 11

Participating Schools and Statistics

Educational Region	Secondary School Name	Private/ Government School	School Code	Educator Booklet Codes	Participants	Educators Employed
Khomas	Academia	Government	ACA	ACA1-ACA21	21	34
	Augustineum	Government	ASS	ASS1- ASS28	28	39
	Centaurus	Government	CSS	CSS1-CSS19	19	31
	Combretum	Private	CTS	CTS1-CTS3	3	8
	Concordia	Government	CCG	CCG1-CCG16	16	34
	Cosmos	Government	CHS	CHS1-CHS26	26	32
	David Bezuidenhout	Government	DBS	DBS1-DBS22	22	42
	Delta	Government	DSW	DSW1-DSW22	22	34
	Jakob Marengo	Government	JMS	JMS1-JMS16	16	21
	Jan Jonker Afrikaner	Government	JJA	JJA1-JJA25	25	31
	St. George's*	Private	GCW	GCW1-GCW7	7	43
	St. Paul's*	Private	PCW	PCW1-PCW13	13	43
	Welwitschia*	Private	WSW	WSW1-WSW5	5	15
	Windhoek Afrikaans*	Private	WAP	WAP1-WAP19	19	32
	Windhoek High	Government	WHS	WHS1-WHS38	38	48
	Windhoek	Private	WIS	WIS1-WIS6	6	36
	International*					
				TOTAL	286	523
Omaheke	Gobabis Gymnasium*	Private	GGG	GGG1-GGG4	4	11
	Johannes Dohren	Government	JDH	JDH1-JDH9	9	17
				TOTAL	13	28
Erongo	Colin Foundation	Government	CFS	CFS1-CFS11	11	19
	Karibib	Private	KPV	KPV1-KPV11	11	20
	Kuisebmond	Government	KSS	KSS1-KSS15	15	27
	Swakopmund	Government	SSS	SSS1-SSS15	15	29
	Walvisbaai	Private	WVS	WVS1-WVS11	11	18
				TOTAL	63	113
Otjozondjupa	Grootfontein	Government	GSS	GSS1-GSS10	10	28
	Otjiwarongo	Government	OSS	OSS1-OSS14	14	26

	Paresis	Government	PSS	PSS1-PSS5	5	29
				TOTAL	29	83
Hardap	C//Oaseb	Government	CSS	CSS1-CSS10	10	15
	Dr. Lemmer	Government	DLH	DLH1-DLH10	10	31
	Empelheim	Government	ESS	ESS1-ESS19	19	18
	Mariental	Government	MHS	MHS1-MHS10	10	21
	Rehoboth	Government	RHS	RHS1-RHS6	6	31
					TOTAL	55
Karas	Lüderitz	Government	LSS	LSS1-LSS17	17	34
	P.K De Villiers	Government	PKD	PKD1-PKD8	8	26
	Keetmans Private	Private	KSP	KSP1-KSP13	13	15
	Suiderlig	Government	SCS	SCS1-SCS18	18	31
				TOTAL	56	106
Total	35 secondary schools	10 P; 25G			502	969 Educators
					Participants	

* Combined primary and secondary schools – only secondary phase educators participated

Table 11 indicates that educators from 35 secondary schools in six educational regions participated in this research study. About 57% of the participants were from the Khomas region. Ten private schools and 25 government schools participated. Nearly 52% of all the educators of the participating schools volunteered to participate in this study. Many of the non-participating educators mentioned that they do not want to participate because of a heavy workload.

Table 12 indicates the characteristics of the participants in this study as found in the demographic data of the questionnaire.

Table 12

Characteristics of the Participants (n = 502)

Item	Category	Frequency	Percentage
Gender	Male	177	35.50
	Female	325	64.70
Age	20-24	22	4.40
	25-29	86	17.10
	30-34	75	14.90
	35-39	60	12.00
	40-44	66	13.10
	45-49	78	15.50
	50-54	65	12.90
	55-59	32	6.40
	60 +	18	3.60
Marital Status	Single	167	33.30
	Divorced	31	6.20
	Widowed	13	2.60
	Married	280	55.80
	Living with partner	11	2.20
Qualifications	Grade 12	11	2.20
	Diploma	166	33.10
	Postgraduate Diploma	146	29.10
	Degree	94	18.70
	Honours Degree	64	12.70
	Master's Degree	20	4.00
Job Tenure	Doctoral Degree	1	.20
	Up to 1 year	59	11.80
	Up to 2 years	50	10.00
	Up to 3 years	47	9.40
	Up to 4 years	40	8.00
	5 to 6 years	56	11.20
	7 to 8 years	41	8.20
	9 to 10 years	36	7.20
	11 to 15 years	49	9.80
	16 to 20 years	55	11.00
Job Position	21 + years	69	13.70
	Student Teacher (in full-time training)	8	1.60
	Junior Teacher (two years or less in full-time teaching)	50	10.00
	Senior Teacher (more than two years in full-time teaching)	364	72.50
	Head of Department	62	12.40
Type of School	Principal	18	3.60
	Government	380	71.43
	Private	101	28.57

Item	Category	Frequency	Percentage
Years at the School	Up to 2 years	96	19.10
	2 to 4 years	172	34.30
	5 to 9 years	107	21.30
	10 to 15 years	53	10.60
	16 + years	74	14.70
Years in Teaching	Up to 2 years	41	8.20
	3 to 5 years	85	16.90
	6 to 10 years	92	18.30
	11 to 20 years	133	26.50
	21 + years	151	30.10
Nationality	Namibian	472	94.00
	Non-Namibian	30	6.00
Ethnicity	African	223	44.40
	European	190	37.80
	Asian	1	.20
	Colored	88	17.50
Home Language	Afrikaans	244	48.60
	English	34	6.80
	Oshiwambo	73	14.50
	Herero	33	6.60
	Damara	31	6.20
	Nama	17	3.40
	Tswana	2	.40
	German	34	6.80
	Others	34	6.80
Educational Region	Khomas	297	56.98
	Otjozondjupa	29	5.78
	Omaheke	13	2.58
	Erongo	63	12.55
	Hardap	55	10.95
	Karas	45	11.16

Information from Table 12 indicates that significantly more female educators (64%) participated in the study. This was expected as figures indicate that only 38% of educators in Namibia are males (see Table 4). Of all the different age groups, the age category of 25-29 had the highest number of participants. Married participants were the single largest group of participants of the marital status category. About 33% of

the participants indicated that they were in possession of a teaching diploma as their highest professional qualification. Of all the participants, about 98% had an academic qualification higher than grade 12, which is an indication that Namibian secondary school educators in the represented regions are adequately qualified.

About 25% of the educators who participated in the study had been in the teaching profession for five years or less, where-as about 92% of the educators have been teaching for more than two years. It was further indicated that about 47% of the educators were working for more than five years at their specific school, whilst about 53% of the educators had been working for up to four years at their current school. Furthermore, participants indicated that about 34% of them have teaching experience of 11 or more years.

The participating educators indicated that 94% were Namibians whereas 6% were non-Namibians. With regard to ethnicity, about 44% of the participants indicated that they were African, 38% were European and 18% were Colored. One educator of Asian descent participated in the study. With regard to home language 49% of participants indicated that they were Afrikaans-speaking whilst 15% of educators were Oshiwambo-speaking. The other language groups were smaller with Tswana-speaking educators being the lowest number represented. Most participants came from the Khomas region.

3.3 MEASURING INSTRUMENTS

The following measurement instruments or subscales there-of were used in a survey battery in the current study: Work Engagement Scale (WES), Psychological Conditions Scale (SCS), Psychological Empowerment Questionnaire (PEQ), Work-role Fit Scale (WRFS), Job Diagnostic Survey (JDS), Antecedent Scale (AS), Maslach Burnout Inventory – Educators Survey (MBI-ES), Rewards and Recognitions Scale (RRS), Survey of Perceived Organizational Support (SPOS), Orientation to Life Questionnaire (OLQ), Affective Commitment Scale (ACS), Organizational Citizenship Behaviour Scale (ACBS), Turnover Intention Scale (TIS), and the General Health Questionnaire – 28 (GHQ) as well as a demographic questionnaire consisting of a number of probes with regard to characteristics of the Namibian secondary school educators who were the participants in the study.

3.3.1 The Work Engagement Scale (WES)

3.3.1.1 Rationale and description

The *Work Engagement Scale* (WES) as developed by May et al. (2004) has been utilized in this study to collect data about Namibian secondary school educators' emotional, physical and cognitive engagement in their work. As educators completed the scale themselves, results are regarded as a subjective reflection of educators' total engagement in their job at the time of measurement.

The literature differs on the number of items included in the WES. Schaufeli and Bakker (2012), however, state that the WES consists of 13 items that are used in total to measure psychological engagement. These 13 items show a resemblance with the items of the Utrecht Engagement Scale's absorption, dedication and vigour scales (Schaufeli & Bakker, 2012). The 13-item version of the WES was also used in this study. Five items are indicators of cognitive engagement whereas four items are indicators of emotional and physical engagement each.

The items were generated to measure each of Kahn's (1990) three components of engagement namely cognitive (e.g., "I am very absorbed in my work"), emotional (e.g., "I am passionate about my job") and physical engagement (e.g., "I feel physically strong at work"). The items used a 7-point never-always scale varying from 1 (*never or almost never*) to 7 (*almost always or always*).

3.3.1.2 Administration, scoring and interpretation

The WES was administered as part of a survey battery. Participants thus did not find an additional WES questionnaire. The 13 items of the WES were numbered from item 88 to item 100. Items 88 – 92 represented statements with regard to cognitive engagement. Items 93 – 96 represented statements with regard to emotional engagement. Items 97 to 100 dealt with educators' physical engagement. Scoring and interpretation of the results obtained by the participants on the WES were statistically conducted with the SPSS 19.0 (SPSS, 2011) statistical programme.

The WES provides the researcher with a subjective overall assessment of how the educators perceived their total engagement in education. It is a short scale and easy to administer.

3.3.1.3 Reliability and validity

According to Bakker and Schaufeli (2012), instead of three factors of the WES, only one emerged from factor analysis although the total scale is internally consistent ($\alpha = .77$). The factorial model of work engagement was tested in this study with structural equation modelling with the Amos 17.0 statistical programme (Arbuckle, 2008). Results indicate that a three-factor (cognitive, emotional, physical) model of engagement ($\chi^2 = 154.94, p < 0.01, df = 32, CFI = .96, TLI = .95, RMSEA = .09$ and the SRMR = .05) was superior to a one-factor model. The three-factor model included ten items that represented all three components of work engagement as operationalized by May et al. (2004). Three items each were used for both cognitive and physical engagement each, whilst four items were used for emotional engagement. Rothmann and Rothmann (2010) report construct validity for the WES in a study about factors that are associated with employee engagement in South Africa. Participants for the study were selected from three different organizations. Cronbach alpha coefficients for the three scales of the WES were found to be .80 for physical engagement, .82 for emotional engagement and .78 for cognitive engagement (Rothmann & Rothmann, 2010). Cronbach alpha coefficients for the three scales of the WES in this particular study on educator well-being were found to be .91 for physical engagement, .89 for emotional engagement and .78 for cognitive

engagement (Rothmann, 2010). The three scales of the WES were thus found to be reliable and valid for this study.

3.3.1.4 Motivation for inclusion

The WES is a short scale, which can be easily administered in order to extract valuable information about the engagement of educators in Namibian secondary schools. Many of the participating educators complain that they have a high workload, therefore they welcome a short scale. The scale can be used as a global measure of cognitive, emotional and physical engagement (May et al., 2004).

3.3.2 Psychological Conditions Scale (PCS) and Psychological Empowerment Questionnaire (PEQ)

3.3.2.1 Rationale and description

The *Psychological Conditions Scale* (PCS) was used to measure psychological meaningfulness, psychological safety and psychological availability. Six items were also extracted from the *Psychological Empowerment Questionnaire* (PEQ) to measure a further psychological condition, namely autonomy. The PCS and a subscale of the PEQ represent global measures of people's psychological conditions of meaning, safety, availability and autonomy at the workplace – in this case educators at secondary schools in Namibia. This measure of educators' psychological conditions is based on a self-experienced evaluation, and is therefore subjective and

not influenced by the researcher. The PCS was developed by May et al. (2004) based on the theory of Kahn (1990), whilst the PEQ is the result of the work of Spreitzer (1995) on self-determination (autonomy).

Twenty-one of the items of the PCS were used in this study in order to measure psychological meaning (six items) (e.g., “The work I do is very important to me”), psychological safety (seven items) (e.g., “It is safe to take a risk in my section”) and psychological availability (eight items) (e.g., “I am confident about my ability to do my job”). Another six items from the PEQ were used to determine educators’ self-perceived autonomy levels (e.g., “I have significant autonomy in determining how I do my job”).

The items that measured psychological meaning were used to quantify the degree of meaning that educators found in their work-related activities. The items that measured psychological safety focused especially on whether educators felt free to express themselves and be themselves at work without any anticipated threats. The items that measured psychological availability focused on whether educators were cognitively, emotionally and physically available to conduct their work at school. The items that measured psychological autonomy focused on the degree that educators felt they were allowed to function independently and keep to their decisions even when colleagues differed from their viewpoints.

3.3.2.2 Administration, scoring and interpretation

Scales of the PCS and the PEQ were included in a survey battery that was distributed to educators. The 21 items of the PCS and the six items of the PEQ were numbered from item 61 to item 87. Items 61 – 66 represented statements regarding psychological meaningfulness. Items 67 – 74 represented statements with regard to psychological availability. Items 75 – 81 represented statements regarding psychological safety, whilst items 82 – 87 dealt with statements regarding psychological autonomy. Scoring and interpretation of the results obtained by the participants on the PCS and PEQ were statistically conducted with the SPSS 19.0 (SPSS, 2011) programme.

3.3.2.3 Reliability and validity

A factorial model of psychological conditions was tested with structural equation modelling in this study. Results indicated that a three-factor model of psychological conditions ($\chi^2 = 534.87$, $p < 0.01$, $df = 163$, CFI = .94, TLI = .93, RMSEA = .07 and SRMR = .05.) was the superior model. May et al. (2004) found Cronbach alpha coefficients of .71 for psychological safety, .90 for psychological meaning and .85 for psychological availability. Cronbach alpha coefficients in this study on educator well-being were found to be .60 for psychological safety appreciation, .58 for psychological safety rejection, .93 for psychological meaning and .92 for psychological availability. After structural equation modelling was conducted, six

items each represented psychological safety and meaning, eight represented psychological availability and three items represented autonomy.

The reliability of the autonomy scale of the PEQ has been determined by Spreitzer (1995) on a sample of middle level employees of an insurance firm. A Cronbach alpha of .72 was found with this sample ($n = 393$). Furthermore, a second-order confirmatory factor analysis was used to determine convergent and discriminant validity on the same population. An excellent fit of the data to the hypothesized model was found (AFGFI = .93, RMSR = .04, NCFI = .97) (Spreitzer, 1995). Other studies also confirmed convergent validity, discriminant validity and internal consistency reliability (Hochwaller & Brucefors, 2005; Kraimer, Seibert, & Liden, 1999). Siegall and Gardner (2000) found a Cronbach alpha coefficient of .72 for autonomy and confirmed construct validity in a study where they surveyed 203 employees in a manufacturing firm. In this study on educator well-being, the Cronbach alpha coefficient for autonomy was found to be .88. The scales for psychological conditions were thus found to be reliable and valid.

3.3.2.4 Motivation for inclusion

As this study hypothesizes that psychological conditions of safety, meaning, availability and autonomy contribute towards educator engagement, it was essential to find appropriate scales for valid and reliable measurement of these psychological conditions. The work of May et al. (2004) and Spreitzer (1995) was deemed appropriate to use within this context. Both the PCS and the PEQ were also found to

be reliable and valid. Both scales represent global measures of the psychological conditions (May et al., 2004; Spreitzer, 1995).

3.3.3 Work-role Fit Scale (WRFS)

3.3.3.1 Rationale and description

The *Work-role Fit Scale* (WRFS), as developed by May et al. (2004), has been used in this study to collect data about Namibian secondary school educators' subjective experience of the fit between their self-concept and their different work-roles.

Work-role fit was measured by three items. These items (e.g., "My job 'fits' how I see myself") used a 7-point agreement-disagreement scale varying from 1 (*strongly disagree*) to 7 (*strongly agree*). A higher score meant a higher indication of self-experienced fit between self and work-role.

3.3.3.2 Administration, scoring and interpretation

The WRFS was administered as part of a survey battery. The three items of the WRFS were numbered from item one to item three. Scoring and interpretation of the results obtained by the participants of the WRFS were statistically conducted with the SPSS 19.0 (SPSS, 2011) statistical programme.

The WRFS is a short scale, easy to administer which provides the researcher with a subjective overall assessment of how educators perceived their fit to their work-role(s) in education.

3.3.3.3 Reliability and validity

The reliability of the WRFS was confirmed by Olivier and Rotmann (2007) in a study in a multi-national oil company ($\alpha = .90$). May et al. (2004) found internal consistency with the WRFS when conducting research in a large insurance company ($\alpha = .92$). In this study on educator well-being, a Cronbach alpha coefficient of .90 has been found for the WRFS. The WRFS was thus found to be reliable and valid for this study.

3.3.3.4 Motivation for inclusion

The WRFS is a short scale, which can be easily administered. The WRFS was applied in this study as it was essential to find secondary school educators' subjective experience of their work-role fit within their profession.

3.3.4 Job Diagnostic Survey (JDS)

3.3.4.1 Rationale and description

The *Job Diagnostic Survey* (JDS) as developed by Hackman and Oldham (1975) has been used in this study to collect data about Namibian secondary school educators' subjective experience of the degree of personal enrichment they experience because of their work (Fried & Ferris, 1987).

Job enrichment was measured by six items. These items (e.g., "To what extent do managers and co-workers let you know how well you are doing on your job?") used a 7-point little – much scale varying from 1 (*very little*) to 7 (*very much*). A higher score meant a higher indication of self-experienced job enrichment.

3.3.4.2 Administration, scoring and interpretation

The JDS was administered as part of a survey battery. The six items of the JDS were numbered from item four to item nine. Scoring and interpretation of the results obtained by the participants of the JDS were statistically conducted with the SPSS 19.0 (SPSS, 2011) statistical programme.

The JDS is a short scale, easy to administer, which provides the researcher with a subjective overall assessment of educators' experience of how much their work enriches them and allows for personal growth.

3.3.4.3 Reliability and validity

Hackman and Oldham (1975) conducted studies with the JDS with 658 employees working in 62 different jobs at seven different organizations. They found that the results of this study showed that the JDS has internal consistency reliability as well as discriminant validity. Internal consistency reliability ranged from a high of .88 to a low of .56. A Cronbach alpha coefficient of .74 has been found for the JDS in this study on educator well-being. The JDS was thus found to be reliable and valid for this study.

3.3.4.4 Motivation for inclusion

The JDS is a short scale, which can be easily administered. The JDS was applied in this study as it was essential to find secondary school educators' subjective experience of how much their work enriches them.

3.3.5 Antecedent Scales (AS)

3.3.5.1 Rationale and description

The *Antecedents Scale* (AS; May et al., 2004) had been utilized in order to collect data about participants' perceptions of their co-workers and supervisors. All items followed a 7-point agreement – disagreement scale varying from 1 (*strongly disagree*) to 7 (*strongly agree*). Co-worker relations were measured with ten items

(e.g., “My co-workers value my input”). Supervisor relations items were divided into two groups namely five items for supervisor support (e.g., “My supervisor helps me solve work-related problems”) and five items for supervisor trust (e.g., “I trust my supervisor”).

3.3.5.2 Administration, scoring and interpretation

The AS was administered as part of a survey battery. The 20 items of the AS were numbered from item 10 to item 29. Two subscales of the AS were utilized. Ten items represented supervisor relations (items 10 – 19) whilst another ten items represented co-worker relations (items 20 – 29). The items concerning supervisor relations were again divided into items representing supervisor support (items 10 – 14) and those representing supervisor trust (items 15 – 19). Scoring and interpretation of the results obtained by the participants of the AS were statistically conducted with the SPSS 10.0 (SPSS, 2011) statistical programme. All the statements that had to be rated in the AS used an agree/disagree style on a Likert scale of 1 (*strongly disagree*) to 7 (*strongly agree*).

The AS is a short scale, easy to administer, which provides the researcher with a subjective overall assessment of educators’ experience of how much their work enriches them and allows for personal growth.

3.3.5.3 Reliability and validity

May et al. (2004) confirmed Cronbach alpha coefficients of .93 for co-worker relations and .95 for supervisor relations in their study on the determining factors and mediating effects of three psychological conditions in an insurance firm in the USA. Cronbach alpha coefficients of .95 for co-worker relations items, .91 for supervisor support items and .92 for supervisor trust items were found in this study on educator well-being for the AS. The antecedent scales for co-worker relations and supervisor relations were thus found to be reliable and valid for this study.

3.3.5.4 Motivation for inclusion

The AS is a short scale, which can be easily administered. The AS covers two antecedents of engagement, namely co-worker relations and supervisor relations, although it is concise. The scale can be used as a global measure of educators' subjective opinion about the quality of the relationships between them and co-workers and supervisors.

3.3.6 The Resources Survey (RS)

3.3.6.1 Rationale and description

The Resources Survey (RS; May et al., 2004) consists of eight items. These items were used to gather data about educators' emotional exhaustion levels but also their

subjective perception of the availability of cognitive, emotional and physical resources/energy within themselves.

The availability of cognitive (e.g., “I can’t think straight by the end of the workday”), emotional (e.g., “I feel emotionally drained from my work”) and physical resources (e.g., “I feel physically used up at the end of the workday”) could be assumed when educators indicated no symptoms of burnout. The items that indicated burnout were tapped by a 7-point agreement – disagreement scale varying from 1 (*strongly disagree*) to 7 (*strongly agree*). A low score on these burnout items indicated a high availability of resources.

3.3.6.2 Administration, scoring and interpretation

The RS was administered as part of a survey battery. Eight items (items 30 – 37) of the RS were extracted for use in this study. These items were also utilized to indicate the availability of cognitive, emotional and physical resources within educators. Items 30 – 32 represented statements regarding the availability of cognitive resources. Items 33 – 35 represented statements regarding the availability of emotional resources. Items 36 and 37 represented statements regarding the availability of physical resources. Scoring and interpretation of the results obtained by the participants on the RS were statistically conducted with the SPSS 19.0 (SPSS, 2011) statistical programme.

The RS provided the researcher with a subjective overall assessment of how adequate the educators that participated in this study felt their cognitive, emotional and physical resources were.

3.3.6.3 Reliability and validity

Taris et al. (2004) found a Cronbach alpha of .92 for this 8-item RS scale in their study that examines the relations between inequity, psychological well-being and organizational commitment with 920 Dutch educators. For this study on educator well-being a Cronbach alpha coefficient of .87 was found for the items measuring physical and emotional resources and .77 for cognitive resources. The scales of the RS were thus found to be reliable and valid for this study.

3.3.6.4 Motivation for inclusion

The RS is a short scale, which can be easily administered. The RS is designed to measure possible burnout levels of educators. However, an indication of burnout will also be an indication of a lack of resources. The eight items that were utilized indicate either a lack or the availability of cognitive, emotional and physical resources within educators. Thus besides a burnout indication, the same survey can also serve as an indication of availability of resources. The scale can be used as a global measure of educators' subjective opinion about the availability of job resources or burnout.

3.3.7 Rewards and Recognition Scale (RRS)

3.3.7.1 Rationale and description

The *Rewards and Recognitions Scale* (RRS) as developed by Saks (2006) has been utilized in this study in order to capture data on Namibian secondary school educators' subjective experience of the rewards and recognition they receive from their respective institutions. The scale consists of 10 items (e.g., "Indicate the extent to which you receive the following outcomes for performing your job well: 'more freedom and opportunities' ").

3.3.7.2 Administration, scoring and interpretation

The RRS was administered as part of a survey battery. The 10 items of the RRS were numbered from item 38 to item 47. Participants had to indicate the extent to which they received certain outcomes for performing their job well. Participants had to respond on a 7-point little – much scale varying from 1 (*very little*) to 7 (*very much*). Scoring and interpretation of the results obtained by the participants of the RRS were statistically conducted with the SPSS 19.0 (SPSS, 2011) statistical programme.

3.3.7.3 Reliability and validity

Saks (2006) found the rewards and recognitions scale to be valid and reliable in a study on the antecedents and consequences of employee engagement conducted on

102 employees from different occupational fields ($\alpha = .80$). A Cronbach alpha coefficient of .86 has been found in this study on the well-being of secondary school educators in Namibia. The scale of the RRS was thus found to be reliable and valid for this study.

3.3.7.4 Motivation for inclusion

Owing to the subjective rating of the 10 items by the educators themselves, the researcher could not influence the results. The RRS is a short scale, which could be easily administered. The results of the scale can be used as a global measure of educators' experience of received rewards and recognitions.

3.3.8 Survey of Perceived Organizational Support (SPOS)

3.3.8.1 Rational and description

The *Survey of Perceived Organizational Support (SPOS)*, as developed by Eisenberger et al., (1986, 1990), has been used to measure educators' subjective experience of how much their organization supports them. The SPOS is a survey that educators had to complete themselves, thus the results are subjective which increased researcher objectivity. Two shorter versions with 17 and 8 items are available (Eisenberger et al., 1986). A version with 10 items of the SPOS was used in this study. The original SPOS consists of 36 items.

3.3.8.2 Administration, scoring and interpretation

The SPOS was administered as part of a survey battery. The 10 items of the SPOS were numbered from item 48 to item 57. Ten little – much items (e.g., “My organization cares about my opinions”) are scaled from 1 (*very little*) to 7 (*very much*). A low score on this scale indicates a low experience of organizational support. Scoring and interpretation of the results obtained by the participants of the SPOS were statistically analysed and interpreted with the SOSS 19.0 (SPSS, 2011) statistical programme.

3.3.8.3 Reliability and validity

Exploratory and confirmatory factor analyses with a number of employees across occupations and organizations provided substantial evidence for high internal reliability and validity of the SPOS (Armeli, Eisenberger, Fasolo, & Lynch, 1998). Eisenberger et al. (1990) indicate a Cronbach alpha coefficient of .93 for the SPOS in two studies concerning perceived organizational support and employee diligence, commitment and innovation with employees of six different occupations (study 1) and manufacturing employees and managers (study 2) in the USA. The mean reliability coefficient for 58 studies that reported internal consistency was .88 (Hellman, Fuqua, & Worley, 2006). The Cronbach alpha for the SPOS in this study on educator well-being in Namibia was .86. The scale of the SPOS was thus found to be reliable and valid for this study.

3.3.8.4 Motivation for inclusion

The shorter version of the SPOS as used in this study is easily administered whilst extracting valuable information from educators about the degree of organizational support they perceive that they receive. As it is a subjective rating (educators fill the survey in for themselves), researcher objectivity is increased.

3.3.9 Orientation to Life Questionnaire (OLQ)

3.3.9.1 Rationale and description

The *Orientation to Life Questionnaire* (OLQ; Antonovsky, 1987) was utilized to measure sense of coherence (educator's way of experiencing the world and his/her life in it) with educators in this study.

The original OLQ consists of 29 items (Antonovsky, 1987). The shortest version available is a three-item scale as indicated by Lundberg and Nyström Peck (1994) and Schumann, Hapke, Meyer, Rumpf, and John (2003) and termed the Brief Assessment of Sense of Coherence (BASOC). The OLQ is a popular instrument and is, therefore, available in 30 countries and 33 languages. Fifteen versions of the OLQ are available (Eriksson & Lindström, 2005; Lundberg & Nyström Peck, 1994). Five well-known versions are the original 29-item version (Antonovsky, 1987), a 13-item version derived from the original OLQ, the 23-item version (Randall, 2006) and two

different three-item versions, one by Lundberg and Nyström Peck (1994) and the other one by Schumann et al. (2003).

A 13-item version of the OLQ was used in this study. The 13 items measured the three components of Antonovsky's (1987) conceptualisation of sense of coherence namely comprehensibility (five items) (e.g., "Do you have very mixed-up feelings and ideas?"), manageability (four items) (e.g., "Has it happened that people whom you counted on disappointed you?"), and meaningfulness (four items) (e.g., "Do you have the feeling that you don't really care about what goes on around you?").

3.3.9.2 Administration, scoring and interpretation

The OLQ was administered as part of a survey battery. The 13 items of the OLQ were numbered from item 143 to item 155. Items 143, 146, 149 and 154 were intended to measure the meaningfulness educators derived from their lives. Items 144, 148, 150, 151 and 153 measured educators' sense of comprehensibility whilst items 145, 147, 152 and 155 measured educators' sense of manageability of life. Participants had to answer on a 7-point Likert scale version where extreme answers are formulated for each item (e.g., 1 = *very often* and 7 = *very seldom or never*).

Scoring and interpretation of the results obtained by the participants on the OLQ were statistically analysed and interpreted with the SPSS 19.0 (SPSS, 2011) statistical programme.

3.3.9.3 Reliability and validity

Van Schalkwyk and Rothmann (2008) found construct equivalence of the OLQ by using AMOS (Arbuckle, 2008). These authors found poor fit statistics with the 29-item version of the OLQ. Better fit statistics were found with the 13-item version of the OLQ (Van Schalkwyk & Rothmann, 2008) ($\alpha = .75$). Furthermore, Antonovsky (1993) recommended that the three components of sense of coherence (manageability, comprehensibility and meaningfulness) not be used as sub-scales of the OLQ since the items were first constructed with a facet-analysis design in order to vary the content systematically along a number of dimensions. Antonovsky (1993) also proposed that factor analysis of the 29-item version of the OLQ is likely to produce a single-factor solution that would not reflect the three dimensions of sense of coherence. Antonovsky found Cronbach alpha's of between .85 and .91 for the 29-item version of the OLQ. The Cronbach alpha coefficient for the OLQ in this study on secondary school educator well-being in Namibia was found to be .71. The scales of the OLQ were thus found to be reliable and valid for this study. The factorial model of sense of coherence was tested with structural equation modelling in this study. Results indicate that a one-factor model of orientation to life/sense of coherence ($\chi^2 = 17.74$, $p < 0.01$), $df = 8$, CFI = .98, TLI = .97, RMSEA = .05 and SRMR = .03) is the superior model.

3.3.9.4 Motivation for inclusion

The shorter version of the OLQ is more suitable for large population surveys and for already compounded survey batteries (Schumann et al. 2003). The OLQ-13 is a short scale, which could be easily administered.

3.3.10 Affective Commitment Scale (ACS)

3.3.10.1 Rationale and description

The *Affective Commitment Scale* (ACS) has been used to measure the degree of how committed their institution is towards employees (Meyer & Allen, 1997). Although Meyer and Allen have conceptualised organizational commitment to be a multidimensional construct (affective, normative and continuance), Mowday et al. (1979) assert that the employee has an affective bond with the organization. The original Organizational Commitment Questionnaire (OCQ) had 15 items (Mowday et al., 1979). Allen and Meyer (1990) further refined the OCQ into three scales of affective commitment (eight items), continuance commitment (eight items) and normative commitment (eight items). For the purpose of this study, the affective commitment scale with five items, as used by Rhoades et al. (2001), was utilized (Meyer & Allen, 1997; Meyer et al., 1993).

The items (e.g., I feel personally attached to my work organization) use a 7-point agreement–disagreement scale varying from 1 (*strongly disagree*) to 7 (*strongly*

agree). A higher score obtained means a higher indication of organizational commitment.

3.3.10.2 Administration, scoring and interpretation

The ACS was administered as part of a survey battery. The five items of the ACS were numbered from item 101 to item 105. These items represented statements with regard to the degree of organizational commitment that educators experienced from the side of their employing educational institutions. The scoring and interpretation of the results obtained by the participants on the ACS were statistically conducted with the SPSS 19.0 (SPSS, 2011) statistical programme.

3.3.10.3 Reliability and validity

Allen and Meyer (1990) found that reliability and validity scores for the ACS were acceptable ($\alpha = .90$). Noor and Noor (2006) also found convergent and discriminant validity with the ACS in their study in which they evaluated the psychometric properties of Allen and Meyer's Organizational Commitment Scale. For their study, Noor and Noor (2006) used Malaysian academic librarians. Ample research also confirmed that the three scales of organizational commitment (affective, normative and continuance) are distinguishable from one another (Allen & Meyer, 1990; McGee & Ford, 1987; Reilly & Orsak, 1991). The Cronbach alpha coefficient for the ACS in this study concerning the well-being of secondary school educators in

Namibia has been found to be .85. The scale of the ACS was thus found to be reliable and valid for this study.

The factorial model of organizational commitment for this study was tested with structural equation modelling. Results indicate that a one-factor model of organizational commitment ($\chi^2 = 17.33$, $p < 0.01$, $df = 2$, CFI .99, TLI .95, RMSEA .12, and SRMR .03) is the superior model.

3.3.10.4 Motivation for inclusion

The ACS is a short scale, which can be easily administered, whilst valuable data is extracted from participants about the degree of subjective organizational commitment that they experience at their employing institutions. As the literature supports the notion that organizational commitment has a strong affective colour (Mowday et al., 1979), it was decided to use the ACS in this study.

3.3.11 Organizational Citizenship Behaviour Scale (OCBS)

3.3.11.1 Rationale and description

The *Organizational Citizenship Behaviour Scale* (OCBS; Rothmann, 2010) as adapted by Lee and Allen (2002) was utilized in this study to measure organizational citizenship behaviour levels of educators. As it was found that organizational citizenship behaviour could be directed towards the individual or the organization,

OCB that was directed towards the individual (OCBI) was measured with three items (e.g., “Assist others with their duties”). OCB that was directed towards the organization (OCBO) was measured with the remaining three items (e.g., “Offer ideas to improve the functioning of the organization”). Participants responded by using a 7-point never – always scale that varies between 1 (*never or almost never*) and 7 (*almost always or always*).

3.3.11.2 Administration, scoring and interpretation

The OCBS was administered as part of a survey battery. The six items of the OCBS were numbered in the battery from item 109 to item 114. Three items numbered 109 – 111 measured educators’ OCB towards individuals (OCBI), whereas the remaining three items numbered 112 – 114 measured educators’ OCB towards the organization (OCBO). Scoring and interpretation of the results obtained by the participants on the OCBS were statistically conducted with the SPSS 19.0 (SPSS, 2011) statistical programme.

3.3.11.3 Reliability and validity

Tayyab (2005) conducted a study on the invariance of organizational citizenship behaviour properties with employees in India and attempted to validate the factorial structure of the OCBS. In this study, Tayyab (2005) found the OCBS to be reliable and valid. Lee and Allen (2002) found reliabilities for OCBI to be .83 and for OCBO to be .88 in their study on the role of affect and cognitions on organizational

citizenship behaviour of employees. Saks (2006) found Cronbach alphas of .75 for OCBI and .73 for OCBO. For this study on the well-being of secondary school educators in Namibia, Cronbach alpha coefficients were found to be .75 for the OCBI and .82 for the OCBO. The scales of the OCB were thus found to be reliable and valid for this study. The factorial model of OCB was tested with structural equation modelling for this study. Results indicate that a two-factor (OCBI and OCBO) model of OCB ($\chi^2 = 35.18$, $p < 0.01$, $df = 8$, CFI .98, TLI .96, RMSEA .08, and SRMR .03) is the superior model.

3.3.11.4 Motivation for inclusion

Although the six-item OCBI-OCBO version of the OCBS differs from the three-component scale as developed by Podsakoff et al. (1997), the version used in this study has been adopted by many researchers (e.g., Dunlop & Lee, 2004; McNeely & Meglino, 1994; Rothmann, 2010; Williams & Anderson, 1991). Furthermore, the OCBS scales are brief and easy to administer. Valuable information regarding educators' OCBI and OCBO could be extracted with this short survey.

3.3.12 Turnover Intention Scale (TIS)

3.3.12.1 Rationale and description

The Turnover Intention Scale (TIS) as developed by Colarelli (1984) has been utilized in this study to collect data about Namibian educators' intention to leave

their work. As the educators completed the scales themselves, results are regarded as a subjective reflection of educators' intention to leave their job.

3.3.12.2 Administration, scoring and interpretation

The TIS was administered as part of a survey battery. The three items of the TIS were numbered from item 106 to item 108. Scoring and interpretation of the results obtained by the participants of the TIS were statistically conducted with the SPSS 19.0 (SPSS, 2011) statistical programme. The items (e.g., "I am planning to search for a new job during the next 12 months") are anchored from *strongly disagree* (1) to *strongly agree* (7)

The TIS provided the researcher with valuable information regarding educators' intention to leave their job.

3.3.12.3 Reliability and validity

Colarelli (1984) found a Cronbach alpha coefficient of .82 with the three item TIS. Saks (2006) reported an internal consistency of .82 for the TIS. Using Cronbach's alpha coefficient, the internal consistency of the TIS was .91 in a study conducted by Weaver & Yancey (2010) in their study on the impact of ineffective leadership on organizational commitment and turnover of employees. The Cronbach alpha coefficient for the TIS in this study on educator well-being has been found to be .75. The scale of the TIS was thus found to be reliable and valid for this study.

3.3.12.4 Motivation for inclusion

The TIS is a short scale with three items and thus brief to administer. Valuable information with regard to educator turnover intention is still extracted from the participants even when the scale is short.

3.3.13 General Health Questionnaire (GHQ)

3.3.13.1 Rationale and description

The *General Health Questionnaire-28* (GHQ) as developed by Goldberg (Goldberg & Hillier, 1979) has been utilized in this study in order to determine the general health condition of educators in secondary schools in Namibia. The GHQ is available in different versions of 12, 28, 30 or 60 items (Jackson, 2007). The content of the items refers to psychosocial distress and dysfunction. The GHQ score of an individual is an indication of the severity of psychological distress at the time of the completion of the questionnaire. The 28-item version of the GHQ used in this study consists of four subscales with seven items each. The four subscales are somatic symptoms (e.g., “Have you recently felt that you are ill?”), anxiety and insomnia (e.g., “Have you recently felt constantly under strain?”), social dysfunction (e.g., “Have you recently felt you are playing a useful part in things?”), and severe depression (e.g., “Have you recently felt that life isn’t worth living?”). The items are developed in such a way that educators had to compare their health states of the past few weeks with their general health conditions. The discrepancy found between these

states is quantified to make statistical meaning about any changes in health condition (Rijsdijk et al., 2003). The items had been measured on a 4-point Likert scale, ranging from 1 (*not at all*) to 4 (*much more than usual*).

3.3.13.2 Administration, scoring and interpretation

The GHQ-28 was administered as part of a survey battery. The 28 items of the GHQ were numbered from item 115 to item 142. Items 115 – 121 are intended to measure somatic symptoms and items 122 – 128 are intended to measure educators' anxiety levels. Items 129 – 135 are intended to measure social dysfunction whilst items 136 – 142 are intended to measure educators' depression levels. Scoring and interpretation of the results obtained by the participants on the GHQ-28 were statistically conducted with the SPSS 19.0 (SPSS, 2011) statistical programme.

3.3.13.3 Reliability and validity

The GHQ has been found generally to be valid and reliable (Buys & Rothmann, 2010; Goldberg et al., 1997). Jackson (2007) reports that reliability coefficients of the GHQ-28 have ranged from 0.78 to 0.95 in various studies. Cronbach alpha coefficients found for the scales of the GHQ-28 in this study on educator well-being were .84 for somatic symptoms, .92 for anxiety and insomnia, .84 for social dysfunction, and .90 for severe depression. The scales of the GHQ-28 were thus found to be reliable and valid for this study.

The factorial model of the GHQ-28 was tested with structural equation modelling for this study. Results indicate that a four-factor (somatic symptoms, anxiety/insomnia, social dysfunction, severe depression) model of GHQ-28 ($\chi^2 = 843.13$, $p < 0.01$, $df = 266$, CFI = .93, TLI = .92, RMSEA = .07 and SRMR = .06.) is the superior model.

3.3.13.4 Motivation for inclusion

The 28-item version of the GHQ is the most widely used version and screening instrument for detecting ill health not only because of time considerations but also because the GHQ - 28 has been used most widely in other working populations, allowing for more valid comparisons (Jackson, 2007; Rijdsdijk et al., 2003). The GHQ is simple to administer, easy to complete and score. It is widely used in many studies of well-being, which allows for simple comparisons with results obtained in other studies. The GHQ rarely fails to provide reliable and effective measures of well-being and these measure usually correlate very highly with other measures of employees in working environments (Jackson, 2007).

3.4 PROCEDURE

Questionnaires were designed by selecting appropriate subscales of different measuring instruments, which were put together. Reliability and validity of the measuring instrument was ensured by conducting confirmatory factor analysis with the items of the constructs of the measuring instruments. A cover letter explaining

the purpose of the research, stating the voluntary nature of participation and outlining ethical standards like confidentiality and the addresses of both the researcher and the supervisor was attached as a cover page to each of the questionnaires. Official printers at the North West University in South Africa edited, printed and binded the questionnaires in booklet form. Permission for the intended research in secondary schools in Namibia was requested in writing from The Ministry of Education of Namibia via the Permanent Secretary and the Regional Directors of the six applicable educational regions. As soon as permission for the research was granted in writing by these authorities, principals were contacted telephonically by the researcher, according to a list of secondary schools and their current principals as obtained by the Ministry of Education. After principals and educators agreed to participate in the research study, secretaries of schools were encouraged to become administrators in the process and contact the researcher with figures of booklets that were required. Booklets were then couriered to the schools, addressed to the secretary of the specific school. Secretaries of schools handled the receiving, distribution, taking in and couriering back (to the researcher) of the booklets. Principals of schools were briefed telephonically about the procedures for the completion of questionnaires. The completion of questionnaires was voluntary, thus principals were requested not to enforce the completion of questionnaires. Participants were free to contact the researcher with questions regarding the completion of the questionnaire if deemed necessary.

It was a huge challenge to motivate educators to participate in the study. Many educators did not see their way open to complete the survey battery owing to a large

workload. Some educators were afraid that principals and heads of departments might identify their completed questionnaires and victimize them because of their answers. Some of the principals immediately agreed to receive the questionnaire booklets, whereas other principals first wanted to ask permission from their staff members. Some principals declined participation in the study without having first consulted with the staff members. One principal first consulted with his staff, whereafter he informed the researcher that the educators are not willing to participate in the study.

At first, 800 questionnaires were printed for distribution. As many schools at first agreed to participate, many questionnaires were sent by courier to these schools. However, as completed questionnaires were received it became evident that few educators completed the questionnaires. Schools had thus to be asked again to participate and, therefore, another 600 questionnaires had to be printed and distributed.

On a few occasions, the principals had long discussions with the researcher about general conditions in schools. All these principals were of the opinion that the research will prove to be valuable for education in Namibia. The researcher could sense a need that principals wanted to talk about the hardships they experience at schools. Educators also e-mailed and phoned the researcher. Some educators made comments on the survey battery. Two educators made strange pencil marks in the booklet and then wrote that they fell asleep whilst busy with the completion of the questionnaires. This might be a possible sign of educator exhaustion.

Feedback will be given to participating schools after the findings were officially approved of.

3.5 DATA ANALYSIS

Completed, received booklets were coded, after which the data was captured in a data matrix. Each observation unit was recorded in a row whilst each variable was recorded in a column. The data was then converted to a SPSS dataset.

The statistical analysis was carried out with the SPSS 19.0 programme (SPSS, 2011) and the Analysis of Movement Structures (AMOS) programme (Arbuckle, 2008) to test a structural model of psychological well-being of educators in secondary schools in Namibia. The reliability and the validity of the questionnaire were assessed by means of Cronbach alpha coefficients and confirmatory factor analysis (Everitt & Hay, 1992). Cronbach's alpha can be explained to be an indication of internal consistency of the items of the measuring instrument (Streiner & Norman, 1989). An adequate scale would have at least a Cronbach alpha of .70, with .80 indicating a good scale. The closer the Cronbach alpha is to 1.00, the greater the internal consistency of the selected items of the measuring instrument (Nunnally & Bernstein, 1994). Confirmatory factor analysis attempts to establish whether indicator variables load on factors according to pre-established theory (Stevens, 1996). Confirmatory factor analysis was used, as already developed measuring instruments were applied. Descriptive statistics (means and standard deviations) were also computed to describe the data.

Furthermore, structural equation modelling (SEM), as implemented in AMOS (Arbuckle, 2008), was used to test factorial models of the questionnaire used in this study, by using the maximum likelihood analyses. One-, two-, three-, four- and sometimes five-factor models (like with general health, engagement, psychological conditions) were used to find the best fitting model for the identified constructs. SEM is typically used to find relationships between factors (latent variables) (Byrne, 2010). Different measuring models were used to find the best fitting model for the identified constructs. Thus, hypothesized relationships were tested empirically for goodness of fit with the sample data. The χ^2 statistic (chi-square) was applied in order to find the degree of correspondence between the implied and the observed covariance matrices. Byrne (2010) indicates that it is not adequate to use the χ^2 statistic (the test of absolute fit of the model) as the only indicator of model fit in the behavioural sciences. Therefore, besides the χ^2 , the following AMOS-produced indices (Hair, Black, Babin, & Anderson, 2010) were considered in this study: the Comparative Fit Index (CFI) (the CFI uses a similar approach as the NFI with a non-central chi-square and a .9 or higher indicates a good fit), the Tucker-Lewis Index (TLI) (the TLI can be used to compare alternative models against a null model with 0 a no fit and 1 a perfect fit) and the Root-Means-Square Error of Approximation (RMSEA) (the RMSEA estimates lack of fit compared to the saturated model where 0.08 or less indicates acceptable fit). The standardized root mean residual (SRMR) is also a good absolute fit of model indicator. A good model should have an SRMR smaller than 0.05.

Multiple regression analyses were conducted in order to determine the percentage of the variance in the dependent variables (engagement, general health, psychological conditions, sense of coherence, organisational commitment, organizational citizenship behaviour and turnover intention) that is predicted by the independent variables (work-role fit, job enrichment, supervisor relations, co-worker relations, cognitive, physical and emotional resources, rewards and recognition, organizational support, self-consciousness) (Klem, 2005). Mediating effects, correlations of the measuring instruments and MANOVA statistics were conducted.

Mediation analyses were used to simultaneously assess the mediating effects of multiple aspects of psychological need satisfaction on the relations between task characteristics, supervisor relations, personal resources, as well as remuneration and job satisfaction, work engagement and flourishing. The product of coefficients was used to quantify the size of the indirect effects (Preacher & Hayes, 2009). The *MEDIATE* procedure, developed by Hayes and Preacher (in press), was used to estimate the indirect effects of independent variables on outcomes variables through a proposed set of mediator variables. The procedure provides an omnibus effect for all the independent variables per mediator. Bootstrap procedures suggested by Preacher and Hayes (2009) were used to make inferences for indirect effects. Bootstrap percentile confidence intervals, which were used to assess whether indirect effects were different from zero, were set at 0.95 with 10000 resamples.

3.6 HYPOTHESES

The following research hypotheses (based on the literature review) were set:

Hypothesis 1: Emotional engagement is positively related to positive organizational outcomes (organizational commitment, organizational citizenship behaviour, low turnover intention) and a positive individual outcome (general well-being/health).

Hypothesis 2: Physical engagement is positively related to positive organizational outcomes (organizational commitment, organizational citizenship behaviour, low turnover intention) and a positive individual outcome (general well-being/health).

Hypothesis 3: Cognitive engagement is positively related to positive organizational outcomes (organizational commitment, organizational citizenship behaviour, low turnover intention) and a positive individual outcome (general well-being/health).

Hypothesis 4: Psychological safety relates positively to work engagement of educators (cognitive, emotional and physical).

Hypothesis 5: Psychological safety relates positively to organizational outcomes (organizational commitment, organizational citizenship behaviour, low turnover intention) and a positive individual outcome (general well-being/health).

Hypothesis 6: Psychological meaning relates positively to work engagement of educators (cognitive, emotional and physical).

Hypothesis 7: Psychological meaning relates positively to organizational outcomes (organizational commitment, organizational citizenship behaviour, low turnover intention) and a positive individual outcome (general well-being/health).

Hypothesis 8: Psychological availability relates positively to work engagement of educators (cognitive, emotional and physical).

Hypothesis 9: Psychological availability relates positively to organizational outcomes (organizational commitment, organizational citizenship behaviour, low turnover intention) and a positive individual outcome (general well-being/health).

Hypothesis 10: Autonomy relates positively to work engagement of educators (cognitive, emotional and physical).

Hypothesis 11: Autonomy relates positively to organizational outcomes (organizational commitment, organizational citizenship behaviour, low turnover intention) and a positive individual outcome (general well-being/health).

Hypothesis 12: Psychological conditions mediate the relationship between job factors and sense of coherence on the one hand and work engagement on the other hand.

Hypothesis 13: Psychological conditions mediate the relationship between job factors and sense of coherence on the one hand and positive organizational factors on the other hand.

Hypothesis 14: Psychological conditions mediate the relationship between job factors and sense of coherence on the one hand and educator general well-being on the other hand.

Hypothesis 15: Work-role fit is positively related to educator psychological condition meaningfulness.

Hypothesis 16: Work-role fit is positively related to educator work engagement (cognitive, emotional and physical).

Hypothesis 17: Work-role fit is positively related to positive organizational outcomes (organizational commitment, organizational citizenship behaviour, low turnover intention) and a positive individual outcome (general well-being/health).

Hypothesis 18: Job enrichment is positively related to the educator psychological condition of meaning.

Hypothesis 19: Job enrichment is positively related to educator work engagement (cognitive, emotional and physical).

Hypothesis 20: Job enrichment is positively related to positive organizational outcomes (organizational commitment, organizational citizenship behaviour, low turnover intention) and a positive individual outcome (general well-being/health).

Hypothesis 21: Co-worker relations is positively related to educator psychological conditions (meaning, safety, availability and autonomy).

Hypothesis 22: Co-worker relations is positively related to educator work engagement (cognitive, emotional and physical).

Hypothesis 23: Co-worker relations is positively related to positive organizational outcomes (organizational commitment, organizational citizenship behaviour, low turnover intention) and a positive individual outcome (general well-being/health).

Hypothesis 24: Supervisor support is positively related to educator psychological conditions (meaning, safety, availability and autonomy).

Hypothesis 25: Supervisor support is positively related to educator work engagement (cognitive, emotional and physical).

Hypothesis 26: Supervisor support is positively related to positive organizational outcomes (organizational commitment, organizational citizenship behaviour, low turnover intention) and a positive individual outcome (general well-being/health).

Hypothesis 27: Supervisor trust is positively related to educator psychological conditions (meaning, safety, availability and autonomy).

Hypothesis 28: Supervisor trust is positively related to educator work engagement (cognitive, emotional and physical).

Hypothesis 29: Supervisor trust is positively related to positive organizational outcomes (organizational commitment, organizational citizenship behaviour, low turnover intention) and a positive individual outcome (general well-being/health).

Hypothesis 30: Physical and emotional resources are positively related to the educator psychological condition of availability.

Hypothesis 31: Physical and emotional resources are positively related to educator work engagement (cognitive, emotional and physical).

Hypothesis 32: Physical and emotional resources are positively related to positive organizational outcomes (organizational commitment, organizational citizenship behaviour, low turnover intention) and a positive individual outcome (general well-being/health).

Hypothesis 33: Cognitive resources are positively related to the educator psychological condition of availability.

Hypothesis 34: Cognitive resources are positively related to educator work engagement (cognitive, emotional and physical).

Hypothesis 35: Cognitive resources are positively related to positive organizational outcomes (organizational commitment, organizational citizenship behaviour, low turnover intention) and a positive individual outcome (general well-being/health).

Hypothesis 36: Rewards and recognition are positively related to educator psychological conditions (meaning, safety, availability and autonomy).

Hypothesis 37: Rewards and recognition are positively related to educator work engagement (cognitive, emotional and physical).

Hypothesis 38: Rewards and recognition are positively related to positive organizational outcomes (organizational commitment, organizational citizenship behaviour, low turnover intention) and a positive individual outcome (general well-being/health).

Hypothesis 39: Organizational support is positively related to the educator psychological conditions of meaning and safety.

Hypothesis 40: Organizational support is positively related to educator work engagement (cognitive, emotional and physical).

Hypothesis 41: Organizational support is positively related to positive organizational outcomes and a positive individual outcome (general well-being/health).

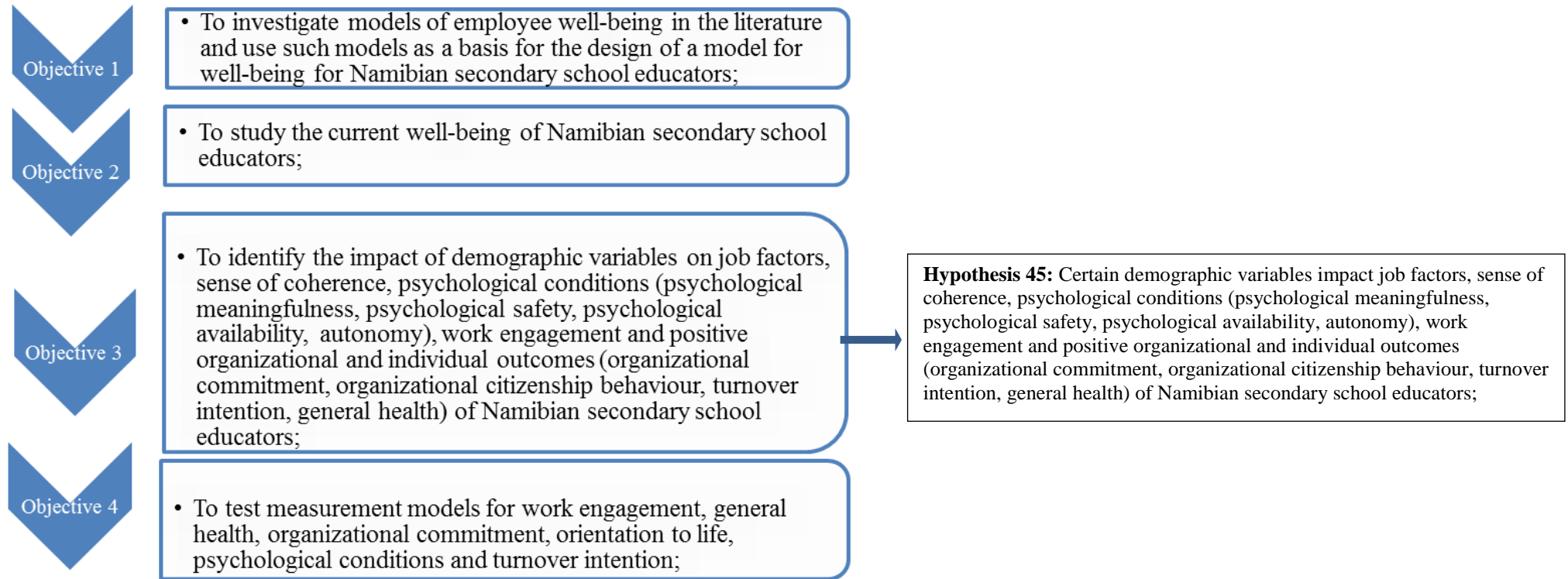
Hypothesis 42: Sense of coherence is positively related to educator psychological conditions (meaning, safety, availability and autonomy).

Hypothesis 43: Sense of coherence is positively related to educator work engagement (cognitive, emotional and physical).

Hypothesis 44: Sense of coherence is positively related to positive organizational outcomes and a positive individual outcome (general well-being/health).

Hypothesis 45: Demographic variables impact job factors, sense of coherence, psychological conditions, work engagement and positive organizational and individual outcomes of Namibian secondary school educators.

Figure 3 depicts the relationship between the objectives and the hypotheses of the study.



Objective 5

- To study the impact of job factors on the work engagement of Namibian secondary school educators, including the psychological conditions of that engagement and also the contribution of job factors on positive organizational/individual outcomes of the educators;

Hypothesis 15: Work-role fit is positively related to psychological condition meaningfulness. **Hypothesis 16:** Work-role fit is positively related to work engagement. **Hypothesis 17:** Work-role fit is positively related to positive organizational outcomes and general well-being/health. **Hypothesis 18:** Job enrichment is positively related to psychological condition meaningfulness. **Hypothesis 19:** Job enrichment is positively related to work engagement. **Hypothesis 20:** Job enrichment is positively related to positive organizational and general well-being/health. **Hypothesis 21:** Co-worker relations is positively related to psychological conditions. **Hypothesis 22:** Co-worker relations is positively related to work engagement. **Hypothesis 23:** Co-worker relations is positively related to positive organizational outcomes and general well-being/health. **Hypothesis 24:** Supervisor support is positively related to psychological conditions. **Hypothesis 25:** Supervisor support is positively related to work engagement. **Hypothesis 26:** Supervisor support is positively related to positive organizational outcomes and general well-being/health. **Hypothesis 27:** Supervisor trust is positively related to psychological conditions. **Hypothesis 28:** Supervisor trust is positively related to work engagement. **Hypothesis 29:** Supervisor trust is positively related to positive organizational outcomes and general well-being/health. **Hypothesis 30:** Physical and emotional resources are positively related to psychological condition availability. **Hypothesis 31:** Physical and emotional resources are positively related to educator work engagement. **Hypothesis 32:** Physical and emotional resources are positively related to positive organizational outcomes and general well-being/health. **Hypothesis 33:** Cognitive resources are positively related to psychological condition availability. **Hypothesis 34:** Cognitive resources are positively related to work engagement. **Hypothesis 35:** Cognitive resources are positively related to positive organizational outcomes and general well-being/health. **Hypothesis 36:** Rewards and recognition are positively related to psychological conditions. **Hypothesis 37:** Rewards and recognition are positively related to work engagement. **Hypothesis 38:** Rewards and recognition are positively related to positive organizational outcomes and general well-being/health. **Hypothesis 39:** Organizational support is positively related to psychological conditions meaning and safety. **Hypothesis 40:** Organizational support is positively related to work engagement. **Hypothesis 41:** Organizational support is positively related to positive organizational outcomes and general well-being/health. **Hypothesis 42:** Sense of coherence is positively related to psychological conditions. **Hypothesis 43:** Sense of coherence is positively related to work engagement. **Hypothesis 44:** Sense of coherence is positively related to positive organizational outcomes and general well-being/health.

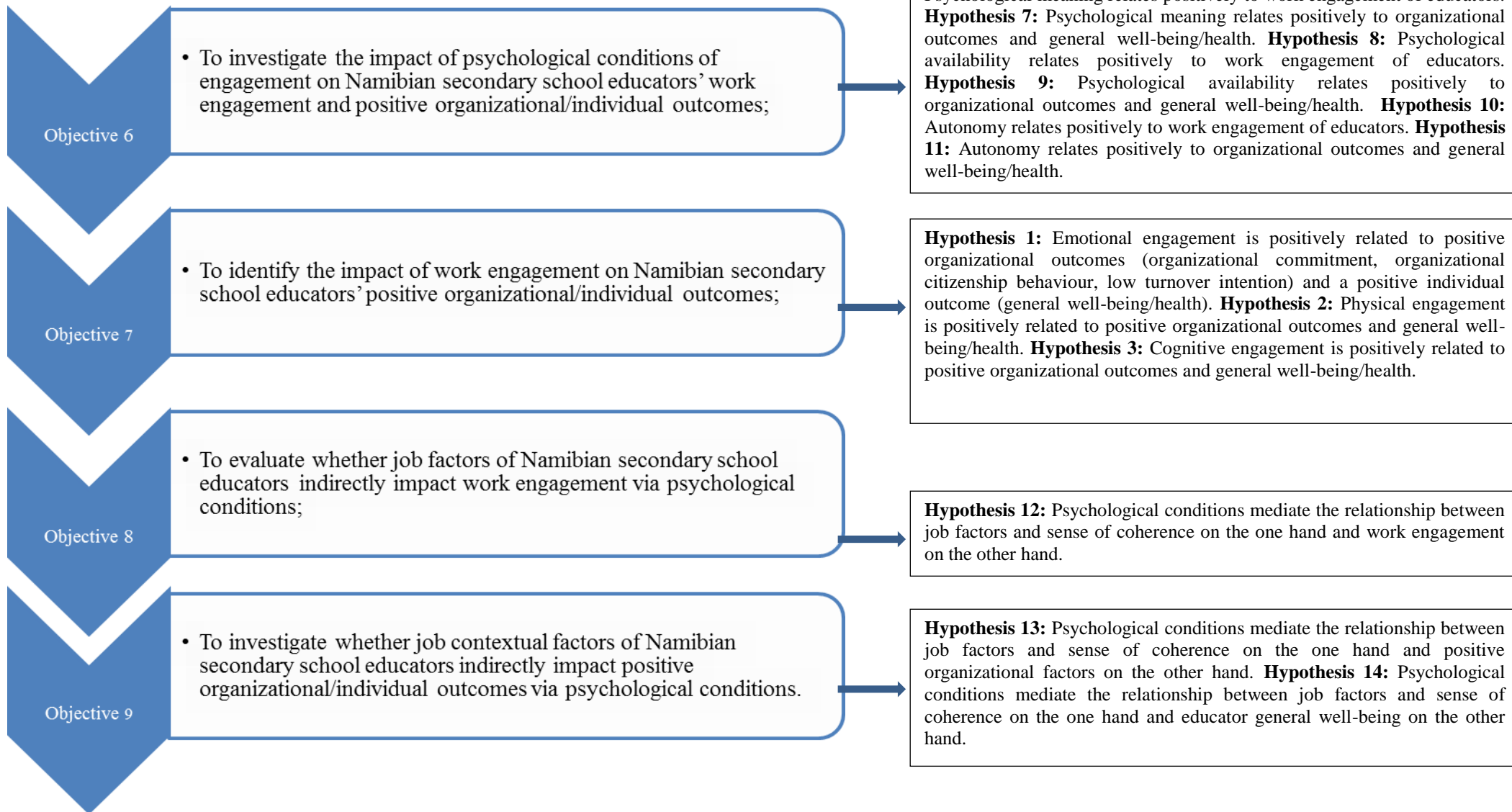


Figure 3. Linking of objectives and hypotheses of the research study.

3.7 CHAPTER SUMMARY

In this chapter, the methodology of the study was discussed in terms of the research design, data collection, data analysis, the characteristics of the participants, the measuring instruments, the procedure to be followed and the intended data analysis. An overview of the hypotheses that guided the research has also been provided and linked to the objectives at the end of this chapter.

The results of the empirical study are reported in Chapter 4.

CHAPTER 4

RESULTS

In this chapter results regarding validity and reliability of the measuring instruments as well as results of the well-being of educators of selected secondary schools in Namibia are reported. Empirical results gained from this study are reported in different steps. First, measurement models of the constructs in this study are shown. Second, the descriptive statistics, internal consistencies of measures and correlations are reported. Third, the results of multivariate analysis of variance are given. Lastly, the results of hierarchical regression analyses, which were used to investigate direct and indirect effects of variables are reported.

4.1 CONSTRUCT VALIDITY OF THE MEASURING INSTRUMENTS

In order to determine construct validity of the measuring instruments both confirmatory and exploratory factor analyses were used. This strategy was followed because some measures has been subjected to factor analyses in previous studies (in which case confirmatory factor analyses were employed to test the hypothesized factor structures), while in other cases information was not available regarding the factor structures of measures (in which case exploratory factor analysis was used). Construct validity is the demonstration that a certain test measures the construct it claims to measure (Brown, 1996a). Different measurement models were tested for all the constructs to find the best fitting models. After initial testing of measurement

models, best fitting models were developed (using AMOS; Arbuckle, 2011) if necessary by just focusing on model fit indices, creation of factors to describe constructs better, forming of correlations between factors and/or deletion of items (observed variables) that were regarded as ambiguous or poor-fitting. “Items” are observed variables that are anticipated to measure factors. The reliability of the observed variables (items) are indicated in the different models to be influenced by random measurement error and as such indicated by an error term (e.g., e1, e2). Models were tested for the following constructs: work engagement (three factors), general health (four factors), psychological conditions (four factors), organizational commitment (one factor), organizational citizenship behaviour (two factors), turnover intention (one factor), and sense of coherence/orientation to life (one factor). Construct validity of job factors (work-role fit, co-worker relations, job enrichment, supervisor relations, job resources, organizational support, rewards/recognition) was investigated using exploratory factor analysis.

4.1.1 Measurement model of work engagement

Five measurement models of work engagement were tested (Kahn, 1990). Model 1 is a one-factor model consisting of one main construct (work engagement) and 12 items (observed variables) that measure engagement. The 12 items (EN88-EN100) consist of cognitive, emotional, and physical components. Item EN92 was removed owing to its ambivalent nature (“I feel I am able to contribute new ideas”). After statistical analysis was conducted on the model, the results revealed a relatively poor overall fit. In order to find areas of misfit, model fit indices were examined. The chi-square

for Model 1 (1041.37, $p < .01$) is large and statistically significant, indicating a poor fit between the data and the measurement model of work engagement. The degrees of freedom are also high ($df = 54$). All other models of fit indices for Model 1 showed poor fit with CFI $< .90$ (.75). TLI (.70) should be nearer to a value of 1 for a perfect fit. RMSEA (.19) and SRMR (.13) are larger than the required .08 (or smaller) and thus indicate poor fit of the model as well. The Bayes Information Criterion (BIC) is used in the comparison of two or more models, with smaller values representing a better fit of the model (Raftery & Zheng, 2003). The BIC for model 1 of work engagement is large (1190.61). Model 1 was thus rejected.

Model 2 of work engagement is a two-factor model. In Model 2, two factors were derived, i.e., cognitive engagement and emotional/physical engagement. Four items defined cognitive engagement (EN88-EN91) and eight items predicted emotional/physical engagement (EN93-EN100). In this model, a correlation was allowed between the two latent variables. No items were removed from this model. The results showed that although the chi-square is statistically significant (514.25, $p < .01$), the model has a poor fit, $df = 53$, CFI = .88, TLI = .86, RMSEA = .13, SRMR = .07 and the BIC = 669.72.

Model 3 is a three-factor model of work engagement. For Model 3, emotional/physical engagement, as in Model 2, was divided into two separate factors, emotional engagement and physical engagement. Cognitive engagement remained as a factor with four items (EN88-EN91). Four items were related to both emotional engagement (EN93-EN96) and physical engagement (EN97-EN100).

Correlations were allowed between all the factors. Model 3 showed improved fit, $\chi^2 = (296.38, p < .01)$, $df = 51$, CFI = .94, TLI = .92, RMSEA = .10, SRMR = .06 and the BIC = 464.28. As best fit for a model should be ensured, statistical data on the items in the measurement tool that load on engagement were analysed. In this regard item 89 (“I am rarely distracted when performing my job”) (Table 13) showed a squared multiple correlation of .17, which is significantly lower than the required .50.

Table 13

Squared Multiple Correlations of Work Engagement

EN88	EN89	EN90	EN91	EN93	EN94	EN95	EN96	EN97	EN98	EN99	EN100
.61	.17	.31	.80	.65	.79	.83	.45	.62	.84	.84	.62

Item 89 also shows a significant statistical standardized residual covariance (SRC) with item 94 (“I feel energised when I work”) that is >2.58 (-2.782). Therefore, for Model 4, item 89 has been removed.

Model 4 is a re-specified three-factor model of work engagement. In Model 4, three observed variables load on factor cognitive engagement (EN88, EN90, EN91). Four variables load on two latent variables, namely emotional engagement (EN93-EN96) and physical engagement (EN97-EN100). Correlations were allowed between all three factors. The model did not show an acceptable fit, $\chi^2 = (275.05, p < .01)$, $df = 41$, CFI = .94, TLI = .92, RMSEA = .11, SRMR = .06 and the BIC = 430.51. A fifth model for work engagement (Figure 4) was tested.

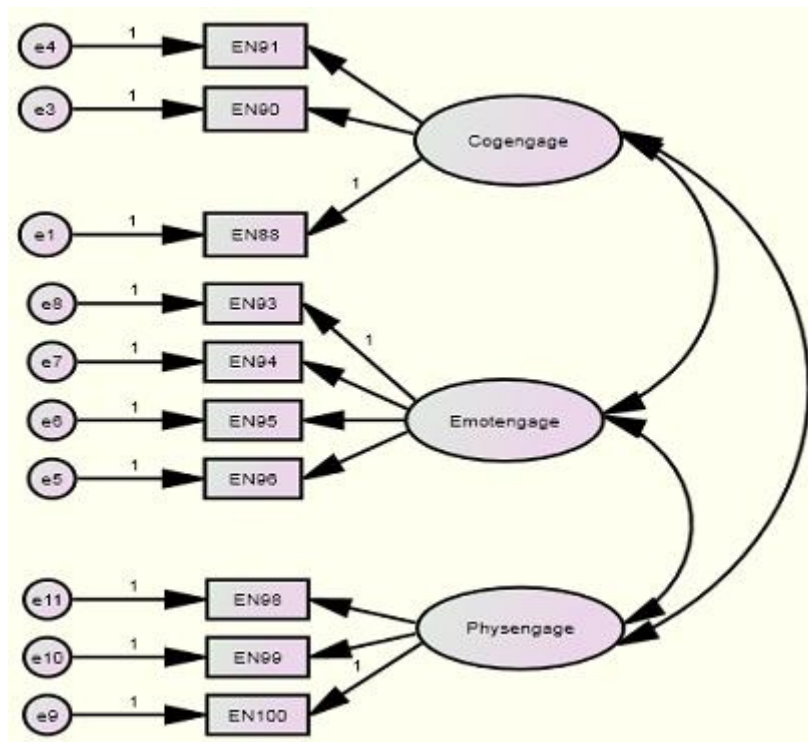


Figure 4. Measurement model of work engagement

Model 5 (Figure 4) is a three-factor model. For Model 5 of work engagement, item 97 (“I feel a lot of energy when I am performing my job”) was removed because the standardized residual covariance between items 97 and 96 (“I get excited when I perform well on my job”) is 3.27 ($SRC > 2.58$). Three observed variables load on each of the factors cognitive engagement (EN88, EN90, EN91) and physical engagement (EN98-EN100). Four observed variables load on emotional engagement (EN93-EN96). Correlations were allowed between all three factors. Model 5 shows acceptable fit, $\chi^2 = (154.94, p < .01)$, $df = 32$, CFI = .96, TLI = .95, RMSEA = .08, SRMR = .05 and the BIC = 297.97.

The results indicate that Model 5 indeed fits the data better than the other four models (both in terms of parsimony and complexity). Model 5 hypothesizes that engagement consists of three factors, namely cognitive engagement (three items), emotional engagement (four items), and physical engagement (three items). The model was over-identified: it had 55 distinct sample moments, 23 distinct parameters to be estimated and 32 degrees of freedom.

Table 14 illustrates how the model for engagement was re-specified until Model 5 was reached that represents the better model fit.

Table 14

Fit Statistics of Competing Measurement Models of Work Engagement

Model	χ^2	<i>df</i>	TLI	CFI	RMSEA	SRMR	BIC
Model 1	1041.37	54	.70	.75	.19	.13	1190.61
Model 2	514.25	53	.86	.88	.13	.07	669.72
Model 3	296.38	51	.92	.94	.10	.06	464.28
Model 4	275.05	41	.92	.94	.12	.06	430.51
Model 5	154.94	32	.95	.96	.08	.05	297.97

χ^2 = Chi-Square; *df* = degrees of freedom; TLI = Tucker-Lewis Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardised Root Mean Square Residual; BIC = Bayes Information Criterion

According to the model with the best fit, work engagement can be measured best with cognitive engagement, emotional engagement and physical engagement. *Work engagement* refers to the level of energy, dedication and absorption with which

individuals are doing their work. *Cognitive engagement* refers to the mental alertness with which the individual is present at work. *Emotional engagement* refers to the positive feelings and emotions that employees experience at work, which is often dependent in the interpersonal relations at work. *Physical engagement* refers to the physical presence and physical involvement people show at work.

4.1.2 Measurement model of general health

Seven measurement models of general health were tested (Goldberg & Hillier, 1979), for which the first model for general health is a one-factor model. The model consists of 28 items (GH143-GH155) measuring general health. All model fit indices indicate poor fit for the model, $\chi^2 = (4226.92, p < .01)$ with $df = 350$, CFI = .54, TLI = .51, RMSEA = .15, and the BIC = 4575.16.

Model 2 is a four-factor model. The four factors of the model are somatic symptoms, anxiety, social dysfunction, and depression. Seven items predict each factor somatic symptoms (GH115-GH121), anxiety (GH122-GH128), social dysfunction (GH129-GH135) and depression (GH136- GH142). Correlations were allowed between all the factors. Poor fit of the data was found for Model 2, $\chi^2 = (1843.66, p < .01)$, $df = 344$, TLI = .80, RMSEA = .09, SRMR = .11 and the BIC = 2229.21.

Model 3 is also a four-factor model. The four factors of the model are somatic symptoms, anxiety, social dysfunction and depression. Seven items predict each factor. One observed variable (“Have you been taking longer over the things you

do?") had a low R^2 (.01). Therefore six items predict social dysfunction. All factors were correlated. The model shows poor fit, $\chi^2 = (1572.47, p < .01)$, $df = 318$, CFI = .85, TLI = .83, RMSEA = .09, SRMR = .08 and the BIC = 1945.58.

Model 4 is a four-factor model. The four factors of the model are somatic symptoms, anxiety, social dysfunction and depression. Seven items predict each factor, namely somatic symptoms, anxiety and depression. One observed variable ("Have you been managing to keep yourself busy and occupied?") had a low R^2 (.03). Five items load on factor social dysfunction. Correlations were allowed between all three factors. The fit statistics were as follows, $\chi^2 = (1433.21, p < .01)$, $df = 293$, CFI = .86, TLI = .84, RMSEA = .88, SRMR = .07 and the BIC = 1793.89.

Model 5 is a four-factor model. The four factors of the model are somatic symptoms, anxiety, social dysfunction and depression. Seven items predict each factor somatic symptoms, anxiety and depression. Five items load on factor social dysfunction. Owing to a high error covariance (MI = 134.03) the error variances of two items E13 ("Found yourself wishing you were dead and away from it all?") and E14 ("Found that the idea of taking your own life kept coming into mind?") were correlated to improve model fit. Additionally, GH115 ("Have you recently been feeling perfectly well and in good health?") loaded weak on factor somatic symptoms (.14) and was therefore removed from further analyses. Correlations were allowed between the factors. The fit statistics for Model 5, $\chi^2 = (1096.13, p < .01)$, $df = 268$, CFI = .90, TLI = .88, RMSEA = .08, SRMR = .06 and the BIC = 1450.59.

Model 6 of general health is a four-factor model. Seven items predict each factor anxiety (GH122-GH128) and depression (GH136-GH142). Six items load on factor somatic symptoms (GH115-GH121). Five items load on factor social dysfunction (GH131-GH135). Owing to a high error covariance (MI = 125.04) the error variances of two items E1 (“Lost much sleep over worry?”) and E2 (“Had difficulty in staying asleep once you are off?”) were correlated to improve the fit of the model. Correlations were drawn between all three factors. Model fit statistics of Model 6 indicate the following, $\chi^2 = (957.54, p < .01)$, $df = 267$, CFI = .91, TLI = .90, RMSEA = .07, SRMR = .06 and the BIC = 1318.22. A 7th model (Figure 5) was tested for possible improved fit.

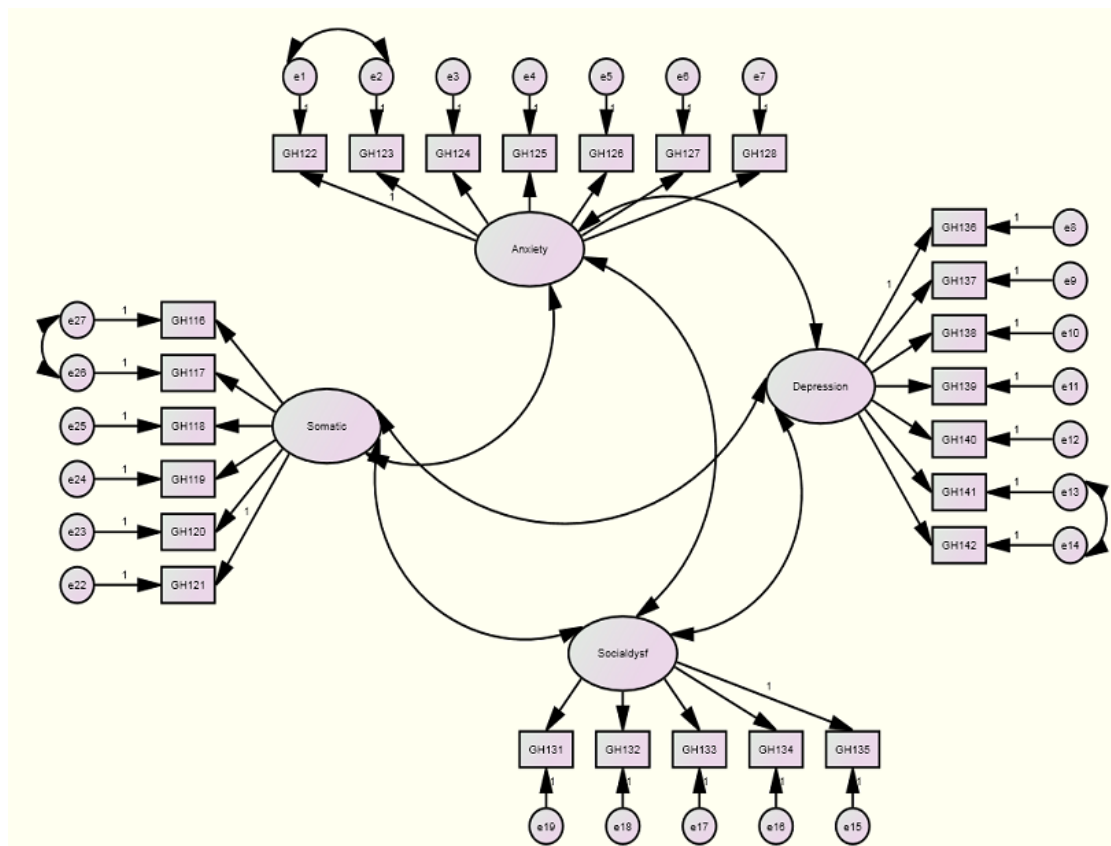


Figure 5. Measurement model of general health

Model 7 (see Figure 5) is a four-factor model. Seven items predict each factor anxiety (GH122-GH128) and depression (GH136-GH142). Six items load on factor somatic symptoms (GH115-GH121). Five items load on factor social dysfunction (GH131-GH135). Owing to a high error covariance (MI = 97.07) the error variances of two items E26 (“Been feeling run down and out of sorts?”) and E27 (“Felt that you are ill?”) were correlated to improve the fit of the model. Correlations were allowed between all three factors. Comparison of the fit indices for the different general health models indicates that Model 7 fitted the data the best, $\chi^2 = (843.13, p < .01)$, $df = 266$, CFI = .93, TLI = .92, RMSEA = .07, SRMR = .06 and the BIC = 1215.03.

These results indicate that Model 7 indeed fits the data statistically significantly better than the other six models. Model 7 hypothesizes that general health consists of four first-order factors, namely depression (seven items), anxiety (seven items), social dysfunction (five items) and somatic symptoms (six items). Two errors of each somatic symptoms, anxiety and depression were correlated. The model was over-identified: it had 325 distinct sample moments, 59 distinct parameters to be estimated and 266 degrees of freedom.

Table 15 illustrates how the model for general health was re-specified until Model 7 was reached that represents the better model fit.

Table 15

Fit Statistics of Competing Measurement Models of General Health

Model	χ^2	<i>df</i>	TLI	CFI	RMSEA	SRMR	BIC
Model 1	4226.98	350	.51	.54	.15	.13	4575.16
Model 2	1843.66	344	.81	.82	.09	.11	2229.21
Model 3	1572.47	318	.83	.85	.09	.08	1945.58
Model 4	1433.21	293	.84	.86	.88	.07	1793.89
Model 5	1096.13	268	.88	.90	.08	.06	1450.59
Model 6	957.54	267	.90	.91	.07	.06	1318.22
Model 7	848.13	266	.92	.93	.07	.06	1215.03

χ^2 = Chi-Square; *df* = degrees of freedom; TLI = Tucker-Lewis Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardised Root Mean Square Residual; BIC = Bayes Information Criterion

According to the model with the best fit, general health can be measured best with social dysfunction, anxiety, depression and somatic symptoms. *General health* deals with the self-perceived health status of employees at work. *Social dysfunction* is regarded as significant impaired social and occupational functioning, which includes unstable and intense interpersonal relationships. In these interpersonal relationships co-workers are idealized at one time or devalued at another. Social dysfunction also includes consistent irresponsible work behaviour like failure to sustain healthy work behaviour or failure to honour financial commitments. *Anxiety* is a mood state which is characterized by bodily symptoms of tension, significant negative affect and apprehension about the future. *Depression* is manifested by a combination of symptoms like a sad, blue mood that exceeds normal sadness and grief, negative

thoughts/moods/behaviours and changes in bodily functions like eating, sleeping and sexual activity. These depressive symptoms interfere with the ability to work and enjoy once pleasurable activities. *Somatic symptoms* are physically ill manifestations of the physical body and are often the result of stressful experiences or other emotional disturbances. Such somatic symptoms could include headaches, stomach dysfunction, colds, backache, fever and nasal dysfunction.

4.1.3 Measurement model of psychological conditions

Five measurement models of psychological conditions were tested (May et al., 2004). Model 1 of psychological conditions is a three-factor model. The three factors of the model are psychological safety with seven items (PS75-PS81), psychological meaningfulness with six items (PM61-PM66), and psychological availability with eight items (PA67-PA74). Correlations were allowed between all the factors. Fit statistics of Model 1 indicate poor overall fit of the model with the data, $\chi^2 = (1005.03, p < .01)$, $df = 186$, CFI = .86, TLI = .85, RMSEA = .09, SRMR = .07 and the BIC = 1284.87.

Statistics for Model 1 of psychological conditions indicate that certain items of psychological safety load negative on this factor, like PS76 (“Individuals in my section are able to bring up problems and tough issues”), (-.13), PS78 (“It is safe to take a risk in my section”), (-.32), PS80 (“No one in my section would deliberately act in a way that undermines my efforts”) (-.52) and PS81 (“Working with colleagues in my section, my unique skills and talents are valued and utilised”) (-

.84). The other three items of psychological safety loaded low on this factor (PS75: .30, PS77: .23, PS79: .23). Most of the psychological safety items also have lower communality values than the required 0.5. For this reason two second-order factors were derived for psychological safety, namely appreciation (PS78, PS80, PS81) and rejection (PS75, PS77, PS79).

Model 2 is a three-factor model with psychological safety, psychological meaningfulness and psychological availability as first order factors. Two second-order factors (appreciation, rejection) were specified for psychological safety. Three items load on psychological safety appreciation and psychological safety rejection. Six items load on psychological meaningfulness and eight items load on psychological availability. Correlations were allowed between the first order factors. Because of a low squared multiple correlation value, item PS76 (“Individuals in my section are able to bring up problems and tough issues”) was eliminated. Fit statistics of Model 2 indicates a poor fit, $\chi^2 = (807.13, p < .01)$, $df = 165$, CFI = .89, TLI = .88, RMSEA = .09, SRMR = .06 and the BIC = 1086.96.

Model 3 of psychological conditions is a three-factor model. Owing to a high error covariance (MI = 152.87) the error variances of two items E7 (“I am self-assured about my capabilities to perform my work activities.”) and E8 (“I have mastered the skills necessary for my job.”) were correlated to improve the fit of the model. Three items load on each psychological safety appreciation and psychological safety rejection. Six items load on psychological meaningfulness and eight items load on psychological availability. Correlations were allowed between the primary factors.

The fit statistics of Model 3 indicates an unacceptable fit, $\chi^2 = (632.63, p < .01)$, $df = 164$, CFI = .92, TLI = .91, RMSEA = .09, SRMR = .05 and the BIC = 918.69.

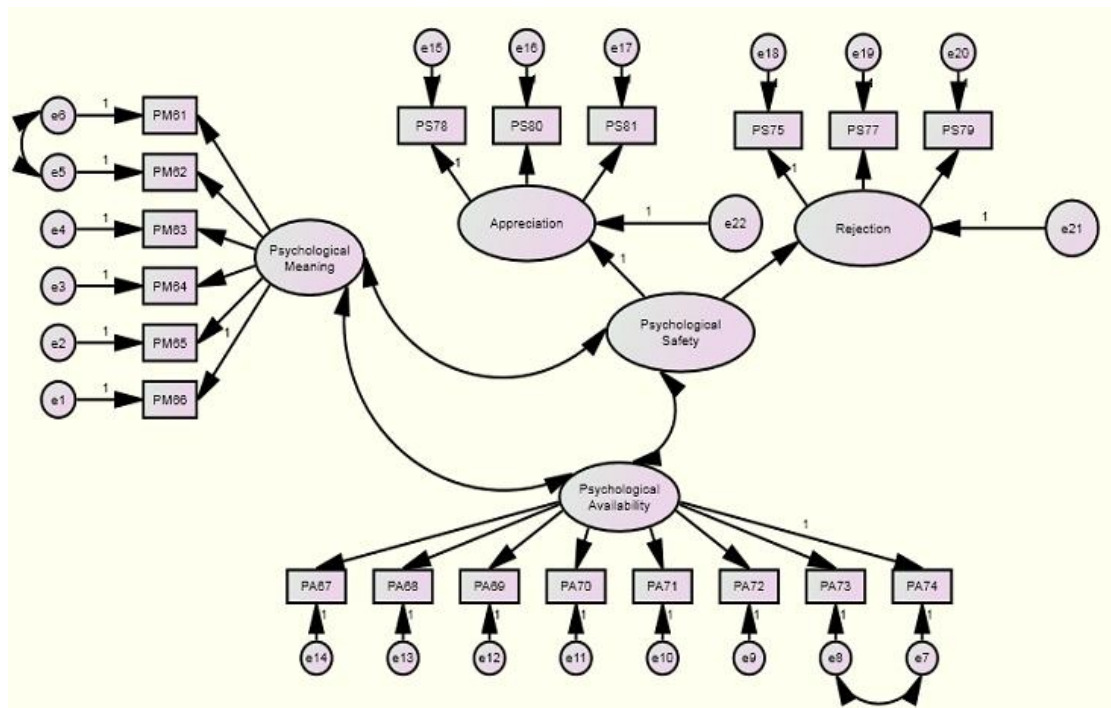


Figure 6. Measurement model of psychological conditions

Model 4 (see Figure 6) of psychological conditions is a three-factor model. Owing to a high error covariance (MI = 64.02) the error variances of two items E5 (“The work I do is very important to me.”) and E6 (“The work I do is meaningful to me.”) were correlated to improve the fit of the model. Three items load on each psychological safety appreciation (PS78, PS80, PS81) and psychological safety rejection (PS75, PS77, PS79). Six items load on psychological meaningfulness (PM61-PM66) and eight items load on psychological availability (PA67-PA74). Correlations were allowed between the primary factors. The following model fit statistics resulted from

Model 4, $\chi^2 = (534.87, p < .01)$, $df = 163$, CFI = .94, TLI = .93, RMSEA = .07, SRMR = .05 and the BIC = 827.15. Model 4 shows good fit of the data.

Model 4 hypothesizes that psychological conditions consists of 3 first-order factors, namely psychological meaningfulness (six items), psychological availability (eight items) and psychological safety (six items). Psychological safety is subdivided into two second-order factors, namely rejection (three items) and appreciation (three items). Two errors of each psychological meaningfulness and psychological availability were correlated. The model was over-identified: it had 210 distinct sample moments, 47 distinct parameters to be estimated and 163 degrees of freedom.

Table 16 presents the goodness of fit statistics of the four psychological condition models. Model 4 (meaningfulness, availability, safety) shows good fit statistics.

Table 16

Fit Statistics of Competing Measurement Models of Psychological Conditions

Model	χ^2	df	TLI	CFI	RMSEA	SRMR	BIC
Model 1	1005.03	186	.85	.86	.09	.07	1284.87
Model 2	807.13	165	.88	.89	.09	.06	1086.96
Model 3	632.63	164	.91	.92	.09	.05	918.69
Model 4	534.87	163	.93	.94	.07	.05	827.15

χ^2 = Chi-Square; df = degrees of freedom; TLI = Tucker-Lewis Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardised Root Mean Square Residual; BIC = Bayes Information Criterion

According to the model with the best fit, psychological conditions can be measured best with meaningfulness, safety and availability. *Psychological conditions* are psychological states of employees that contribute towards their experience of work engagement. *Psychological meaningfulness* is an important psychological state at work and is defined as the value of a work goal in relation to the ideals of the employee. Frankl (1992) argued that individuals have a primary motive to seek meaning in the work they do. *Psychological safety* can be defined as being able to show and employ one's self without having to fear negative consequence on one's self-image, status or career. *Psychological availability* is the readiness or confidence of a person to engage in one's work despite being also engaged in many other life activities. To be psychologically available at work, a person needs to believe that he/she has the adequate cognitive, emotional and physical resources to engage the self at work.

4.1.4 Measurement model of organizational commitment

Two measurement models of organizational commitment were tested (Meyer & Allen, 1997). The first model is a one-factor model with five items (OC101–OC105) that load on the first order factor organizational commitment. The fit statistics indicate poor fit of the model with the data, $\chi^2 = (171.42, p < .01)$, $df = 5$, CFI = .89, TLI = .78, RMSEA = .26, SRMR = .06 and the BIC = 233.60.

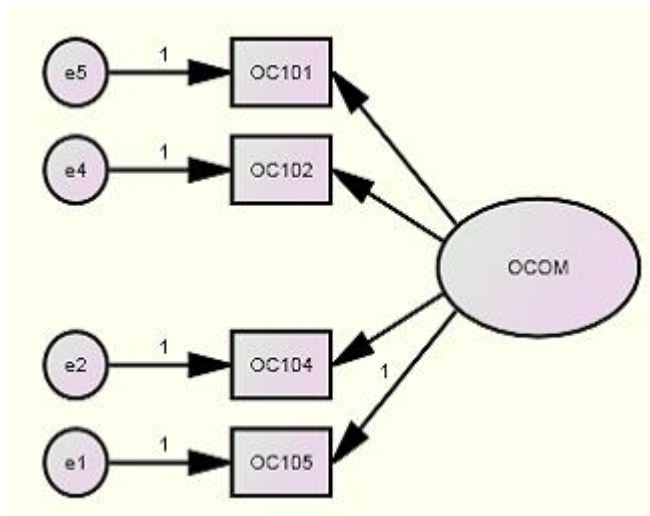


Figure 7. Measurement model of organizational commitment

Model 2 (see Figure 7) of organizational commitment is a one-factor model. Statistics of Model 1 for organizational commitment indicate that item OC103 interacts with all the other items (covariance), influencing the overall fit statistics negatively. It was, therefore, decided to remove OC103 (“I feel personally attached to my work organization.”) for Model 2. Model fit statistics for Model 2 of organizational commitment indicate good fit of the data, $\chi^2 = (17.33, p < .01), df = 2,$ CFI = .99, TLI = .95, RMSEA = .12, SRMR = .03 and the BIC = 67.08.

The results indicate that Model 2 indeed fits the data statistically significantly better than the other model. Model 2 hypothesizes that organisational commitment consists of one first-order factor, namely organisational commitment (four items). The model was over-identified: it had 10 distinct sample moments, eight distinct parameters to be estimated and two degrees of freedom.

Table 17

Fit Statistics of Competing Measurement Models of Organisational Commitment

Model	χ^2	<i>df</i>	TLI	CFI	RMSEA	SRMR	BIC
Model 1	171.42	5	.78	.89	.26	.06	233.60
Model 2	17.33	2	.95	.99	.12	.03	67.08

χ^2 = Chi-Square; *df* = degrees of freedom; TLI = Tucker-Lewis Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardised Root Mean Square Residual; BIC = Bayes Information Criterion

Organizational commitment can be defined as the process whereby the goals of the employee and those of the organization become increasingly integrated and congruent. With increased organizational commitment one could thus see a growing interlinking between employee identity and organizational identity.

4.1.5 Measurement model of organizational citizenship behaviour

Two measurement models of organizational citizenship behaviour were tested (Rothmann, 2010). Model 1 is a one-factor model, which consists of six items (OCB109-OCB 114) loading on the first order factor organizational citizenship behaviour. Model fit statistics for Model 1 of organizational citizenship behaviour indicates poor fit of the data, $\chi^2 = (218.92, p < .01)$, *df* = 9, CFI = .82, TLI = .70, RMSEA = .22, SRMR = .09 and BIC = 293.55.

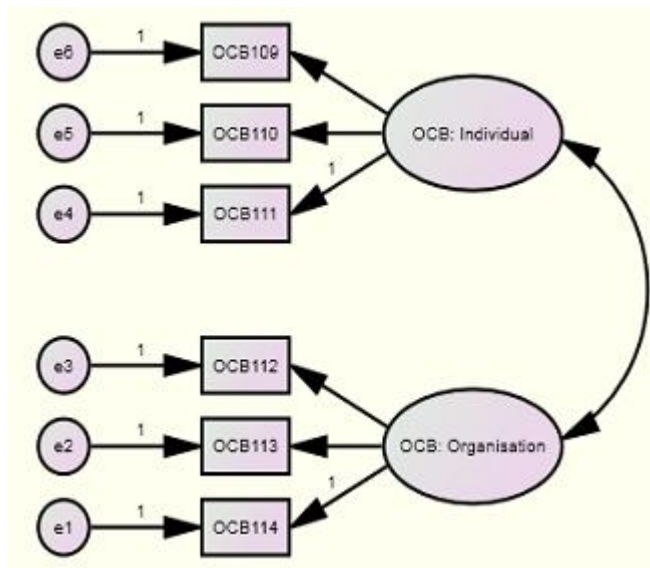


Figure 8. Measurement model of organizational citizenship behaviour

Model 2 (see Figure 8) of organisational citizenship behaviour is a two-factor model. Two first order factors (organizational citizenship behaviour individual and organizational citizenship behaviour organization) were derived for Model 2. Three items (OCB109-OCB111) load on the first order factor organizational citizenship behaviour individual. Three items (OCB112-OCB114) load on the first order factor organizational citizenship behaviour organization. Organizational citizenship behaviour individual and organizational citizenship behaviour organization were correlated in Model 2. Model fit indices for the second model of organizational citizenship behaviour show good fit, $\chi^2 = (35.18, p < .01), df = 8, CFI = .98, TLI = .96, RMSEA = .08, SRMR = .03$ and the BIC = 116.02.

The results indicate that Model 2 indeed fits the data statistically significantly better than the other model. Model 2 hypothesizes that organizational citizenship behaviour consists of 2 first-order factors, namely organizational citizenship behaviour

individual (three items) and organizational citizenship behaviour organization (three items). The model was over-identified: it had 21 distinct sample moments, 13 distinct parameters to be estimated and eight degrees of freedom. The Cronbach alpha for the three items that load on organizational citizenship behaviour individual is .75, and for the three items that load on organizational citizenship behaviour organization .82. Table 18 is a comparison of the model fit indices of the two hypothesized models for organizational citizenship behaviour.

Table 18

Fit Statistics of Competing Measurement Models of Organisational Citizenship

Behaviour

Model	χ^2	<i>df</i>	TLI	CFI	RMSEA	SRMR	BIC
Model 1	218.92	9	.70	.82	.22	.09	293.55
Model 2	35.18	8	.96	.98	.08	.03	116.02

χ^2 = Chi-Square; *df* = degrees of freedom; TLI = Tucker-Lewis Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardised Root Mean Square Residual; BIC = Bayes Information Criterion

According to the model with the best fit, organizational citizenship behaviour (OCB) can be measured best with organizational citizenship behaviour individual (OCBI) and organizational citizenship behaviour organization (OCBO). *Organizational citizenship behaviour* can be regarded as pro-social behaviour that employees exhibit in order to benefit the organization. With *organizational citizenship behaviour individual*, the employee behaves in a pro-social way towards individuals in the organization (e.g., gives advice) and thus indirectly benefits the organization. With

organizational citizenship behaviour organization, the employee behaves in a pro-social way towards the organization (e.g., working overtime without being compensated) and thus benefits the organization directly.

4.1.6 Measurement model of turnover intention

Three items of the questionnaire battery used in this study load on the factor turnover intention (TI106, TI107, TI108) (Colarelli, 1984). Factor analysis indicates that item TI108 (If I have my own way, I will be working for this organisation one year from now) has a low communality (.014) and a negative loading (-.12) on turnover intention. It was thus decided to delete this item. The two remaining items (TI106, TI107) show an acceptable Cronbach Alpha (.75).

Turnover intention is the employee's intention to leave the organization, thus resigning from the organization/school.

4.1.7 Measurement model of orientation to life (sense of coherence)

Two measurement models of orientation to life (sense of coherence) were tested (Antonovsky, 1987). The first model of orientation to life is a one-factor model. Six items are expected to load on orientation to life (OLQ1-OLQ6). Model fit indices indicate a relatively poor fit of the data to the hypothesized model, $\chi^2 = (74.56, p < .01)$, $df = 9$, CFI = .88, TLI = .79, RMSEA = .12, SRMR = .06 and the BIC = 149.18.

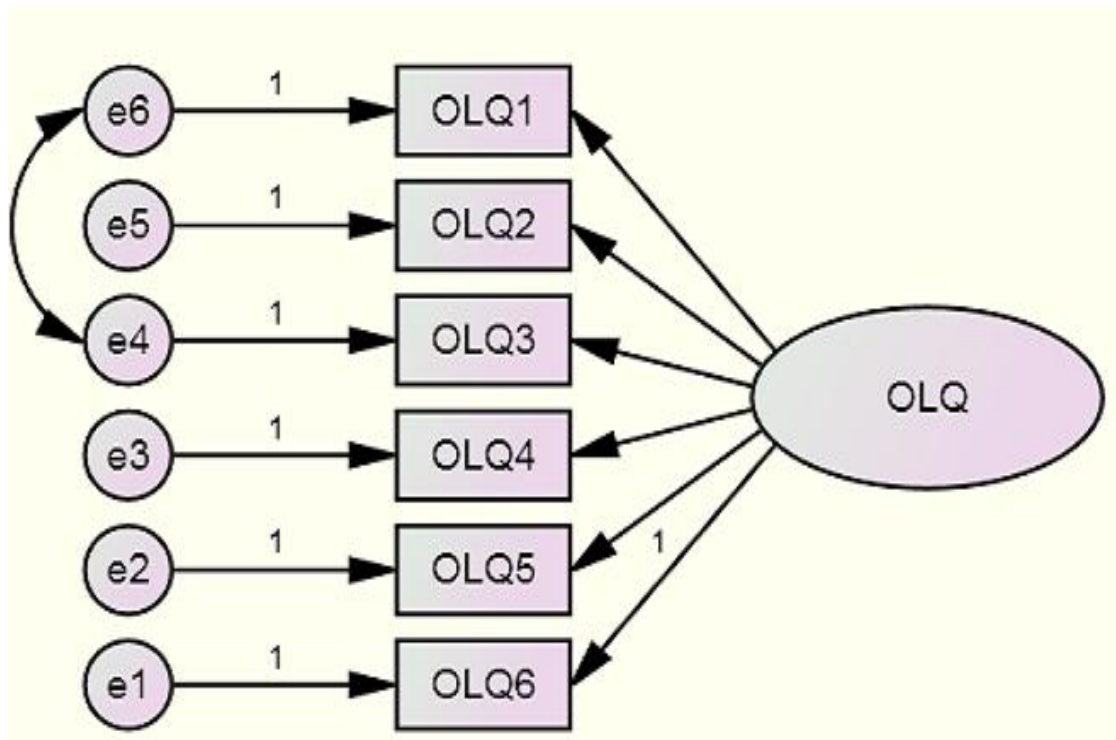


Figure 9. Measurement model of sense of coherence

Model 2 (Figure 9) is a one-factor model consisting of six items (OLQ1-OLQ6). Because of a high error covariance (MI = 53.16), the error variances of two items E4 (“Doing the things that you do everyday is a source of deep pleasure/boredom.”) and E6 (“Do you have the feeling that you don’t really care about what goes on around you?”) were correlated to improve the fit of the model. The fit statistics for Model 2 indicate good fit of the data, $\chi^2 = (17.74, p < .01)$, $df = 8$, CFI = .98, TLI = .97, RMSEA = .05, SRMR = .03 and the BIC = 98.58.

These results indicate that Model 2 indeed fits the data better than the other model. Model 2 hypothesizes that orientation to life consists of one first-order factor, namely orientation to life (5 items). Two errors of orientation to life (E4, E6) were

correlated. The model was over-identified: it had 21 distinct sample moments, 13 distinct parameters to be estimated and eight degrees of freedom. Table 19 is a summary of the data fit statistics of the two models for orientation to life.

Table 19

Fit Statistics of Competing Measurement Models of Orientation to Life

Model	χ^2	<i>df</i>	TLI	CFI	RMSEA	SRMR	BIC
Model 1	74.56	9	.79	.88	.12	.06	149.18
Model 2	17.74	8	.97	.98	.13	.03	98.58

χ^2 = Chi-Square; *df* = degrees of freedom; TLI = Tucker-Lewis Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardised Root Mean Square Residual; BIC = Bayes Information Criterion

Orientation to life, in this study called *sense of coherence*, can be defined as the ability of the employee to remain positive and creative in the face of difficult and stressful circumstances.

4.1.8 Measurement model of perceptions of work contextual factors with factor analysis

Exploratory factor analysis was used to determine the factor structure loadings of items of all the work contextual factors. All correlation coefficients are smaller than .9 and all the coefficients correlate fairly acceptably with each other. Tabachnick and Fidell (2001) indicated that when an item loads with a value higher than .32 on

another item, multicollinearity exists and factors cross-load. Multicollinearity is thus not a problem for these data.

The Kaiser-Meyer-Olkin (KMO) measure can vary between zero and one (Field, 2005), with values near to one indicating relatively compact patterns of correlations. In addition, the diagonals of the anti-image correlation matrix were also all over .5 with the communalities all greater than .3 and therefore factor analysis could be conducted. Field (2005) indicates that KMO values greater than .9 indicate superb factorability of the data. In this case, the KMO value is .93, which delineates the factorability of the data is superb. The Bartlett's test value is smaller than 0.001 (.000), which is another indication of the appropriateness of factor analysis.

Principal component analysis was used to assess the number of components in the data. Factor extraction on work contextual factors indicates 48 linear components within the data set. Ten of the factors indicate eigenvalues greater than one (as indicated in Table 20). Subsequently, a principal factor analysis with a direct oblimin rotation was conducted. Table 20 reports factor loadings of job factors.

Table 20

Pattern Matrix of Job Factors

	Eigenvalue	% Variance	F1	F2	F3	F4	F5	F6	F7	F8	F9
SR19 I trust my supervisor.	14.58	29.75	.81	-.02	.04	.04	.01	.01	.00	-.04	-.04
SR16 Employees are treated fairly by my supervisor			.80	.00	.06	-.00	.05	.03	-.06	.02	-.02
SR17 My supervisor is committed to protecting my interests.			.70	-.06	.12	.00	.05	.06	.02	.06	-.11
SR18 My supervisor does what he/she says he/she will do.			.67	.02	.02	.05	-.01	.05	-.01	-.13	-.13
SR15 My supervisor encourages employees to speak up when they disagree with a decision.			.60	.00	.10	.03	.03	-.05	-.05	.08	-.24
PR37 I feel physically used up at the end of the workday.	4.68	9.55	-.03	.80	.06	-.05	-.03	-.04	-.04	.07	.00
ER35 I feel emotionally drained from my work.			.01	.79	-.06	.03	-.02	-.03	.02	.04	.03
PR36 I feel tired before my workday is over.			-.05	.78	-.02	-.01	-.05	-.03	.00	.07	-.08
ER34 I feel like I'm at the end of my rope emotionally.			.06	.60	-.06	.07	-.03	-.01	.12	.14	.07
CWR25 I sense a real connection with my co-workers.	3.19	6.51	-.08	-.02	.94	.01	-.02	-.01	-.04	.05	-.02
CWR24 I believe that my co-workers appreciate who I am.			-.05	-.01	.87	.00	.01	.03	-.01	.02	-.06
CWR27 I feel a real "kinship" with my co-workers.			.06	-.06	.85	.03	.04	.01	.03	.09	.10
CWR28 I feel worthwhile when I am around my co-workers.			.08	-.02	.80	-.04	.07	.03	-.03	-.02	.09
CWR23 My co-workers really know who I am.			-.13	-.02	.79	.07	.10	-.07	-.06	.12	-.146
CWR26 My co-workers and I have mutual respect for one another.			.15	.03	.77	-.03	-.04	.05	.02	-.08	.11
CWR21 My co-workers value my input.			.02	.02	.73	.02	-.01	.06	-.00	-.08	-.10
CWR29 I trust my co-workers.			.06	-.06	.69	-.01	.01	.06	.04	-.01	.01
CWR20 My interactions with my co-workers are rewarding.			.15	.07	.68	.04	-.03	.03	.01	-.12	-.03
CWR22 My co-workers listen to what I have to say.			.02	.03	.67	.04	.04	.04	-.01	-.14	-.09
RR40 Reward and recognition: promotion	2.78	5.68	.08	-.08	.00	.82	-.06	-.06	.03	.05	.07
RR38 Reward and recognition: pay raise			.01	-.04	.05	.74	-.11	-.06	.01	.07	.08
RR46 Reward and recognition: Public recognition			-.06	.04	.05	.70	.00	-.05	.01	.04	-.03
RR44 Reward and recognition: Training and development opportunities			-.03	.05	-.05	.64	.13	.10	.02	-.08	-.13

	Eigenvalue	% Variance	F1	F2	F3	F4	F5	F6	F7	F8	F9
RR41 Reward and recognition: More freedom and opportunities			.15	-.09	-.04	.64	.11	.13	-.10	.10	.01
RR47 Reward and recognition: A reward or token of appreciation			-.08	.03	.07	.62	-.03	.08	.04	-.02	-.11
RR45 Reward and recognition: More challenging work assignments			.01	.11	-.05	.53	.18	.03	-.00	-.11	-.19
RR39 Reward and recognition: Job security			.11	.05	.05	.47	.06	.16	.00	-.06	.14
WRF2 The work I do on this job helps me satisfy who I am.	2.44	4.98	.01	-.03	.06	.03	.88	-.08	-.02	.02	-.01
WRF1 My job "fits" how I see myself			.02	-.07	.01	.02	.89	-.11	-.02	.05	-.01
WRF3 My job "fits" how I see myself in the future			-.01	-.13	.04	-.00	.79	-.07	.06	.06	-.01
JE6 How much variety is there in your job? That is, to what extent does the job require you to do many different things at work, using a variety of your skills and talents?	1.76	3.59	-.04	.10	.04	-.04	.49	.14	-.03	-.05	-.07
JE4 How much autonomy is there in your job? That is, to what extent does your job permit you to decide on your own how to go about doing the work?			.16	-.10	-.06	.01	.41	.14	-.03	.00	-.01
JE5 To what extent does your job involve doing a "whole" and identifiable piece of work? That is, is the job a complete piece of work that has an obvious beginning and end? Or is it only a small part of the overall piece of work, which is finished by other people or by automatic machines?			.02	.09	.08	.02	.35	.07	.04	-.19	.05
OS54 My organisation is willing to help me if I need a special favour.	1.57	3.20	.01	-.01	-.05	.00	-.05	.86	.03	-.00	-.01
OS55 Help is available from my organisation when I have a problem.			-.04	-.03	.09	.00	.02	.82	-.05	-.00	-.01
OS56 My organisation would forgive an honest mistake on my part.			.10	.04	.10	-.02	.05	.66	-.02	-.01	.07
OS53 My organisation cares about my opinions.			.02	-.11	.10	.08	-.02	.59	-.04	.15	-.14
OS51 My organisation strongly considers my goals and values.			-.01	-.12	.05	.24	-.01	.44	.03	.00	-.23
SC59 I am afraid my failings will be noticed by others.	1.27	2.59	.00	.04	.00	-.01	-.04	.01	.80	-.10	-.06
SC60 I worry about being judged by others at work.			-.03	-.03	.05	-.02	.01	-.06	.73	.06	-.03
SC58 I worry about how others perceive me at work.			.00	-.02	-.06	.04	.04	.03	.69	.08	.06
CR31 I can't think straight by the end of my workday.	1.15	2.35	.00	.20	-.02	.04	.03	.07	.12	.66	.02
CR30 I find it difficult to focus my attention while at work.			-.06	.10	-.01	.07	-.02	-.02	.02	.61	-.00
CR32 I have problems remembering all the things I need to do at work.			.06	.25	-.06	-.05	-.02	.07	.11	.53	.01
SR11 My supervisor encourages me to develop new skills.	1.01	2.05	.11	.03	.12	.05	.05	.09	.04	-.04	-.64
SR12 My supervisor keeps informed about how employees think and feel about things.			.20	-.05	.03	.02	.07	.09	.03	.11	-.63
SR14 My supervisor praises good work.			.21	-.04	.05	.03	.01	.07	-.00	-.11	-.60
SR13 My supervisor encourages employees to participate in important decisions.			.30	-.05	.04	.03	.07	.04	-.04	.08	-.59
SR10 My supervisor helps me solve work-related problems			.21	.04	.13	.01	.04	.08	.04	-.10	-.50

Because of appropriate theoretical background, it was anticipated that the factors should be related to each other and therefore an oblique rotation (direct oblimin) has been used, as oblique methods allow the factors to correlate (Costello & Osborne, 2005). Ten factors were extracted as job factors namely supervisor relations trust (the good, trusting relationship between supervisor/principal and employee/educator), emotional resources (e.g., support educators get from learners, parents and co-workers/co-educators, positive attitude of the educator), physical resources (physical strength, vitality, physical health), co-worker relations (the good relationships between co-workers/educators at work), rewards and recognition (salary, positive confirmation from superiors like the principal), work-role fit (the degree of fit between the employee and the specific work-role – in school terms this would refer to the degree to which the educator feels he/she fits to the work they do such as the subjects he/she teaches), job enrichment (whether the job is of such a nature that the employee/educator experiences personal growth by doing the work, thus exciting, non-routine work in which the employer ensures that the employee grows), organizational support (based on social exchange theory, organizational support theorizes that if the employee feels the organization supports him/her well, the employee will work hard to return the good intention of the organization), self-consciousness, cognitive resources (e.g., theoretical knowledge, wisdom) and supervisor relations support (the good, supportive relationship between supervisor/principal and employee/educator).

As the sample size in this study exceeds 250 (502) participants and the average communality is greater than .6 (.61), Kaiser's rule is valid in this case. Factor

loadings in the pattern matrix (Table 20), after extraction through the principal factor analysis and oblimin rotation indicate that all items load above .3 on the factors. No cross-loadings are evident. In this regard, Costello and Osborne (2005, p. 03) write: “After rotation...the one (table) with the ‘cleanest’ factor structure – item loadings above .30, no or few item cross-loadings, no factors with fewer than three items – has the best fit to the data.” Table 20 shows that this is the case for the correlation of job contextual factors.

Communalities are the sum of the squared factor loadings for all factors of a given variable (Bryant & Yarnold, 2005). The communalities for job contextual factors were all above .3, indicating that each item shared some common variance with other items. One item of job enrichment (“To what extent does your job involve doing a ‘whole’ and identifiable piece of work? That is, is the job a complete piece of work that has an obvious beginning and end? Or is it only a small part of the overall piece of work, which is finished by other people or by automatic machines?”) has a low communality (.35) but is still acceptable. Data regarding the correlation of the factors contained in the correlation matrix indicate no values greater than .05 (Field, 2005), which is statistically significant. All correlation coefficients are smaller than .9 and all the coefficients correlate fairly acceptable with each other. Multicollinearity is thus not a problem for these data. All the questions related to job contextual factors correlate fairly well, thus there is no need to consider elimination of items/questions.

4.2 DESCRIPTIVE STATISTICS, CRONBACH ALPHA'S AND PEARSON CORRELATIONS

4.2.1 Descriptive statistics and Cronbach alpha's of the measuring instruments

Table 21 reports the descriptive statistics and Cronbach alpha coefficients of the measuring instruments used in this study.

Table 21

Descriptive Statistics and Cronbach Alpha Coefficients of the Measuring Instruments

Items	Scale	Mean	SD	Skewness	Kurtosis	A
Work-role fit	7-point scale	5.01	1.53	-.47	-.63	.90
Job enrichment	7-point scale	5.08	.99	-.47	-.09	.74
Co-worker relations	7-point scale	4.96	1.24	-.69	.29	.95
Supervisor support	7-point scale	4.69	1.44	-.58	-.11	.91
Supervisor trust	7-point scale	4.93	1.48	-.79	.12	.92
Physical and emotional resources*	7-point scale	3.51	1.57	.16	-.82	.87
Cognitive resources*	7-point scale	2.87	1.46	.51	-.60	.77
Rewards and recognition	7-point scale	3.31	1.44	.49	-.36	.86
Organizational support	7-point scale	4.25	1.30	-.28	-.36	.86
Sense of coherence	7-point scale	4.61	1.10	-.23	-.07	.71
Psychological safety: rejection*	7-point scale	3.62	1.44	.12	-.53	.58
Psychological safety: appreciation	7-point scale	4.92	1.39	-.57	-.15	.60
Psychological meaningfulness	7-point scale	5.93	1.02	-1.03	.83	.93
Psychological availability	7-point scale	6.10	.79	-1.06	1.49	.92
Autonomy	7-point scale	5.32	1.29	-.91	.91	.88
Cognitive engagement	7-point scale	4.42	1.17	-.28	.04	.78
Emotional engagement	7-point scale	5.58	1.10	-.80	.50	.89
Physical engagement	7-point scale	5.31	1.12	-.38	-.26	.91
Somatic symptoms*	4-point scale	2.03	.69	.53	-.35	.84
Anxiety*	4-point scale	1.96	.78	.70	-.29	.92
Social dysfunction	4-point scale	2.73	.64	.09	-.47	.84
Depression*	4-point scale	1.95	.84	1.92	3.3	.90
Organizational commitment	7-point scale	5.37	1.21	-.77	.31	.85
Organizational citizenship behaviour: individual	7-point scale	4.71	1.21	-.37	-.16	.75
Organizational citizenship behaviour :organization	7-point scale	5.13	1.16	-.49	.14	.82
Turnover intention*	7-point scale	3.37	1.91	.34	-1.03	.75

* High score indicates a negative manifestation

Table 21 indicates the descriptive statistics and Cronbach alpha coefficients of the constructs. Acceptable alpha coefficients were obtained for all the scales except

psychological safety – rejection (.58) and psychological safety – appreciation (.60), which obtained lower alpha coefficients. According to Nunnally and Bernstein (1994), the recommended lower limit of a Cronbach alpha is .70. However, a cut-off point of .55 is acceptable for the purposes of basic research. Acceptable levels of internal consistency were obtained in the current study.

Table 21 indicates furthermore that nearly all the scores on the subscales are normally distributed except for psychological meaningfulness (negatively skewed), psychological availability (negatively skewed) and general health depression (negatively skewed). Table 22 summarizes mean sizes of job factors used in this study. Mean values were evaluated according to the following criteria: > 4.5 high (7-point scale), > 3 high (4-point scale); < 3.5 low (7-point scale), < 2 (4-point scale); all the other mean values were regarded as average.

Table 22

Distribution of Mean Scores of Job Factors and Constructs

Mean size	Job factors and constructs
High mean values	Work-role fit, job enrichment, co-worker relations, supervisor support, supervisor trust, sense of coherence, psychological safety appreciation, psychological meaningfulness, psychological availability, autonomy, emotional engagement, physical engagement, organizational commitment, organizational citizenship behaviour individual, organizational citizenship behaviour organization, cognitive resources
Average mean values	Physical/emotional resources*, organizational support, psychological safety rejection*, cognitive engagement, somatic symptoms*, social dysfunction
Low mean values	Cognitive resources*, turnover intention*, anxiety*, depression*, rewards and recognition

* High score indicates a negative manifestation

4.2.2 Pearson correlations

Next, Pearson correlations were computed to assess the relationships between the constructs. The results are reported in Table 23.

Table 23

Pearson Correlations of the Scales

	1	2	3	4	5	6	7	8	9	10	11	12	13
1.WRF	-	-	-	-	-	-	-	-	-	-	-	-	-
2.JE	.53***††	-	-	-	-	-	-	-	-	-	-	-	-
3.CWR	.36**†	.45**†	-	-	-	-	-	-	-	-	-	-	-
4.SS	.35**†	.55***††	.52***††	-	-	-	-	-	-	-	-	-	-
5.ST	.32**†	.48**†	.56***††	.74***††	-	-	-	-	-	-	-	-	-
6.P/ER	-.24**	-.20	-.21	-.14	-.18	-	-	-	-	-	-	-	-
7.CR	-.18**	-.18	-.20	-.10	-.13	.53***††	-	-	-	-	-	-	-
8.REW	.22**	.29**	.32**†	.36**†	.33**†	-.03	.09*	-	-	-	-	-	-
9.OS	.28**	.48**†	.52***††	.58***††	.55***††	-.16**	-.09*	.53***††	-	-	-	-	-
10.SOC	.37**†	.37**†	.38**†	.25**	.29**	-.39***†	-.32**†	.10*	.24**	-	-	-	-
11.PSR	-.06	-.18	-.37	-.23	-.25	.22**	.26**	-.09*	-.32***†	.34***†	-	-	-
12.PSA	.26**	.30**†	.46***†	.33***†	.33***†	-.40	-.10*	.23**	.34***†	.22**	-.20**	-	-
13.PM	.59***††	.48**†	.33***†	.34***†	.28**	-.28**	-.30***†	.18**	.32**†	.37**†	-.15**	.21**	-
14.PA	.35**†	.35**†	.25**	.18**	.21**	-.23**	-.34***†	.02	.15**	.27**	-.06	.24**	.53***††
15.AUT	.32**†	.48**†	.30***†	.32**†	.40**†	-.20**	-.12**	.25**	.37**†	.20**	-.17**	.33**†	.38**†
16.CE	.18**	.18**	.14**	.12**	.12**	.10*	.07	.09	.16**	.04	.04	.11*	.16**
17.EE	.59***††	.48**†	.28**	.30***†	.30***†	-.32***†	-.28**	.14**	.30**†	.37**†	-.13**	.19**	.62***††
18.PE	.44***†	.37**†	.31***†	.26**	.27**	-.38***†	-.33***†	.11*	.24**	.36***†	-.13**	.18**	.52***††
19.GHS	-.12	-.11	-.24	-.14	-.15	.44***†	.34***†	-.10*	-.18**	.39***†	.29**	-.18**	-.17**
20.GHA	-.16	-.14	-.27	-.18	-.21	.48***†	.34***†	-.05	-.18**	.43***†	.28**	-.12**	-.20**
21.GHSF	.24**	.14**	.25**	.24**	.19**	-.24**	-.09*	.12**	.20**	.24**	-.10*	.10*	.22**
22.GHD	-.19	-.22	-.20	-.16	-.16	.30***†	.25**	-.06	-.17**	.42***†	.26**	-.18**	-.28**
23.OC	.54***††	.49**†	.47**†	.46***†	.43**†	-.21**	-.19**	.22**	.43***†	.40***†	-.23**	.34***†	.57***††
24.OCBI	.15**	.17**	.12**	.13**	.10**	-.02	.09*††	.06	.13**	.06	.03	.05	.19**
25.OCBO	.34**†	.33**†	.30***†	.32**†	.29**	-.10*	-.07	.13**	.30***†	.20**	-.10*	.21**	.34**†
26.TI	-.40	-.33	-.30	-.26	-.26	.36***†	.30***†	-.16**	-.31***†	.40***†	.24**	-.14**	-.36***†

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

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

† $r > 0.30$ (Practically significant effect: medium effect)†† $r > 0.50$ (Practically significant effect: large effect)

Table 23

Pearson Correlations of the Scales

	14	15	16	17	18	19	20	21	22	23	24	25
1.WRF	-	-	-	-	-	-	-	-	-	-	-	-
2.JE	-	-	-	-	-	-	-	-	-	-	-	-
3.CWR	-	-	-	-	-	-	-	-	-	-	-	-
4.SS	-	-	-	-	-	-	-	-	-	-	-	-
5.ST	-	-	-	-	-	-	-	-	-	-	-	-
6.P/ER	-	-	-	-	-	-	-	-	-	-	-	-
7.CR	-	-	-	-	-	-	-	-	-	-	-	-
8.REW	-	-	-	-	-	-	-	-	-	-	-	-
9.OS	-	-	-	-	-	-	-	-	-	-	-	-
10.SOC	-	-	-	-	-	-	-	-	-	-	-	-
11.PSR	-	-	-	-	-	-	-	-	-	-	-	-
12.PSA	-	-	-	-	-	-	-	-	-	-	-	-
13.PM	-	-	-	-	-	-	-	-	-	-	-	-
14.PA	-	-	-	-	-	-	-	-	-	-	-	-
15.AUT	.35**†	-	-	-	-	-	-	-	-	-	-	-
16.CE	.07	.09*	-	-	-	-	-	-	-	-	-	-
17.EE	.42**†	.41**†	.20**	-	-	-	-	-	-	-	-	-
18.PE	.43**†	.34**†	.14**	.73**††	-	-	-	-	-	-	-	-
19.GHS	-.14**	.12**	.08	-.21**	-.30**†	-	-	-	-	-	-	-
20.GHA	-.24**	-.18**	.06	-.28**	-.36**†	.72**††	-	-	-	-	-	-
21.GHSF	.26**	.21**	.02	.35**†	.39**†	-.18**	-.26**	-	-	-	-	-
22.GHD	-.24**	-.13**	-.06	-.23**	-.21**	.47**†	.50**††	-.08	-	-	-	-
23.OC	.30**†	.40**†	.24**	.65**††	.62**††	-.20**	-.22**	.29**	-.22**	-	-	-
24.OCBI	.20**	.14**	.18**	.21**	.23**	0.5	.06	.16**	.01	.19**	-	-
25.OCBO	.33**†	.29**	.19**	.40**†	.41**†	-.01	-.06	.32**†	-.04	.49**†	.50**††	-
26.TI	-.14**	-.20**	-.03	-.37**†	-.30**†	.33**†	.34**†	-.19**	.35**†	-.39**†	.01	-.12**

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

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

† $r > 0.30$ (Practically significant effect: medium effect)†† $r > 0.50$ (Practically significant effect: large effect)

Key to the Pearson Correlation Scales (Table 23)

1. WRF	Work-role fit	14. PA	Psychological availability
2. JE	Job enrichment	15. AUT	Autonomy
3. CWR	Co-worker relations	16. CE	Cognitive engagement
4. SS	Supervisor support	17. EE	Emotional engagement
5. ST	Supervisor trust	18. PE	Physical engagement
6. P/ER	Physical and emotional resources	19. GHS	Somatic symptoms
7. CR	Cognitive resources	20. GHA	Anxiety
8. REW	Rewards and recognition	21. GHSF	Social dysfunction
9. OS	Organizational support	22. GHD	Depression
10. SOC	Sense of coherence	23. OC	Organizational commitment
11. PSR	Psychological safety rejection	24. OCBI	Organizational citizenship behaviour individual
12. PSA	Psychological safety appreciation	25. OCBO	Organizational citizenship behaviour organisation
13. PM	Psychological meaningfulness	26. TI	Turnover intention

Concerning correlations, Table 23 shows that work-role fit is practically significantly positively related to the following psychological conditions: psychological meaningfulness ($r = .59, p < .01$, large effect), psychological availability ($r = .35, p < .01$, medium effect) and autonomy ($r = .32, p < .01$, medium effect). Furthermore, work-role fit is practically significantly positively related to emotional engagement ($r = .59, p < .01$, large effect) and physical engagement ($r = .44, p < .01$, medium effect). Work-role fit is practically significantly positively related to the following organizational outcomes: organizational commitment ($r = .54, p < .01$, large effect), and organizational citizenship behaviour organization ($r = .34, p < .01$, medium effect).

Job enrichment is practically significantly positively related to the following psychological conditions: psychological safety appreciation ($r = .30, p < .01$, medium effect), psychological meaningfulness ($r = .48, p < .01$, medium effect), psychological availability ($r = .35, p < .01$, medium effect) and autonomy ($r = .48, p < .01$, medium effect). Furthermore, job enrichment is practically significantly positively related to emotional engagement ($r = .48, p < .01$, medium effect) and physical engagement ($r = .37, p < .01$, medium effect) as well as to organizational commitment ($r = .49, p < .01$, medium effect) and organizational citizenship behaviour organization ($r = .33, p < .01$, medium effect).

Co-worker relations are practically significantly positively related to psychological safety appreciation ($r = .46, p < .01$, medium effect), psychological meaningfulness ($r = .33, p < .01$, medium effect), and autonomy ($r = .30, p < .01$, medium effect). Furthermore, co-worker relations are practically significantly positively related to physical engagement ($r = .31, p < .01$, medium effect) organizational commitment ($r = .47, p < .01$, medium effect), and organizational citizenship behaviour organization ($r = .30, p < .01$, medium effect).

Supervisor support is practically significantly positively related to psychological safety appreciation ($r = .33, p < .01$, medium effect), psychological meaningfulness ($r = .34, p < .01$, medium effect), and autonomy ($r = .32, p < .01$, medium effect). Furthermore, supervisor support is practically significantly positively related to emotional engagement ($r = .30, p < .01$, medium effect), organizational commitment

($r = .46$, $p < .01$, medium effect), and organizational citizenship behaviour organization ($r = .32$, $p < .01$, medium effect).

Supervisor trust is practically significantly positively related to psychological safety appreciation ($r = .33$, $p < .01$, medium effect), and autonomy ($r = .40$, $p < .01$, medium effect). Furthermore, supervisor trust is practically significantly positively related to emotional engagement ($r = .30$, $p < .01$, medium effect), and organizational commitment ($r = .43$, $p < .01$, medium effect).

Physical/emotional resources are practically significantly positively (measures in opposite direction) related to emotional engagement ($r = -.32$, $p < .01$, medium effect) and physical engagement ($r = -.38$, $p < .01$, medium effect). Physical/emotional resources are also practically significantly and negatively related to somatic symptoms ($r = .44$, $p < .01$, medium effect), anxiety ($r = .48$, $p < .01$, medium effect), depression ($r = .30$, $p < .01$, medium effect) and turnover intention ($r = .36$, $p < .01$, medium effect).

Cognitive resources are practically significantly positively (measures in opposite direction) related to psychological meaningfulness ($r = -.30$, $p < .01$, medium effect), psychological availability ($r = -.34$, $p < .01$, medium effect) and physical engagement ($r = -.33$, $p < .01$, medium effect). Cognitive resources are practically significantly negatively (measures in opposite direction) related to somatic symptoms ($r = .34$, $p < .01$, medium effect) anxiety ($r = .34$, $p < .01$, medium effect), and turnover intention ($r = .30$, $p < .01$, medium effect).

Organizational support is practically significantly negatively related to psychological safety rejection ($r = -.32, p < .01$, medium effect) and practically significantly positively related to psychological safety appreciation ($r = .34, p < .01$, medium effect), psychological meaningfulness ($r = .32, p < .01$, medium effect), and autonomy ($r = .37, p < .01$, medium effect). Furthermore, organizational support is practically significantly positively related to emotional engagement ($r = .30, p < .01$, medium effect), organizational commitment ($r = .43, p < .01$, medium effect), organizational citizenship behaviour organization ($r = .30, p < .01$, medium effect) and practically significantly negatively related to turnover intention ($r = -.31, p < .01$, medium effect).

Sense of coherence is practically significantly negatively (measures in opposite direction) related to psychological safety rejection ($r = .34, p < .01$, medium effect), and significantly positively related to psychological safety appreciation ($r = .22, p < .01$), and psychological meaningfulness ($r = .37, p < .01$, medium effect). Furthermore, sense of coherence is practically significantly positively related to emotional engagement ($r = .37, p < .01$, medium effect), and physical engagement ($r = .36, p < .01$, medium effect) and practically significantly negatively (measures in opposite direction) related to somatic symptoms ($r = .39, p < .01$, medium effect), anxiety ($r = .43, p < .01$, medium effect), and depression ($r = .42, p < .01$, medium effect). Sense of coherence is practically significantly positively related to organizational commitment ($r = .40, p < .01$, medium effect), and practically significantly negatively (measures in opposite direction) related to turnover intention ($r = .40, p < .01$, medium effect).

Psychological safety appreciation is practically significantly positively related to autonomy ($r = .33, p < .01$, medium effect) and organizational commitment ($r = .34, p < .01$, medium effect).

Psychological meaningfulness is practically significantly positively related to psychological availability ($r = .53, p < .01$, large effect), autonomy ($r = .38, p < .01$, medium effect), emotional engagement ($r = .62, p < .01$, large effect) and physical engagement ($r = .52, p < .01$, large effect). Psychological meaningfulness is practically significantly positively related to organizational commitment ($r = .57, p < .01$, large effect), and organizational citizenship behaviour organization ($r = .34, p < .01$, medium effect), but practically significantly negatively related to turnover intention ($r = -.36, p < .01$, medium effect).

Psychological availability is practically significantly positively related to autonomy ($r = .35, p < .01$, medium effect), emotional engagement ($r = .42, p < .01$, medium effect), physical engagement ($r = .43, p < .01$, medium effect), organizational commitment ($r = .30, p < .01$, medium effect), and organizational citizenship behaviour organization ($r = .33, p < .01$, medium effect).

Autonomy is practically significantly positively related to emotional engagement ($r = .41, p < .01$, medium effect), physical engagement ($r = .34, p < .01$, medium effect), and organizational commitment ($r = .40, p < .01$, medium effect).

Emotional engagement is practically significantly positively related to social dysfunction ($r = .35, p < .01$, medium effect), organizational commitment ($r = .65, p < .01$, large effect), organizational citizenship behaviour organization ($r = .40, p < .01$, medium effect), and practically significantly positively (measures in opposite direction) related to turnover intention ($r = -.37, p < .01$, medium effect).

Physical engagement is practically significantly positively (measures in opposite direction) related to somatic symptoms ($r = -.30, p < .01$, medium effect), anxiety ($r = -.36, p < .01$, medium effect) and practically significantly positively (measures in opposite direction) related to turnover intention ($r = -.30, p < .01$, medium effect).

Physical engagement is practically significantly negatively related to social dysfunction ($r = .39, p < .01$, medium effect) and positively related to organizational commitment ($r = .62, p < .01$, large effect), and organizational citizenship behaviour organization ($r = .41, p < .01$, medium effect).

Somatic symptoms is practically significantly positively related with turnover intention ($r = .33, p < .01$, medium effect). Anxiety is practically significantly positively related with turnover intention ($r = .34, p < .01$, medium effect). Social dysfunction is practically significantly negatively (measures in opposite direction) related with organizational citizenship behaviour organization ($r = .32, p < .01$, medium effect). Depression is practically significantly positively related to turnover intention ($r = .35, p < .01$, medium effect).

Organizational commitment is practically significantly positively related to organizational citizenship behaviour organization ($r = .49, p < .01$, medium effect).

4.3 MULTIVARIATE ANALYSIS OF VARIANCE

Multivariate analysis of variance (MANOVA) was used in an attempt to determine the significance of differences between organizational outcomes of demographic groups. When an effect was significant in MANOVA, ANOVA was used to discover which dependent variables were affected. Because multiple ANOVAs were used, a Bonferroni-type adjustment was made for inflated Type 1 error.

4.3.1 Gender and general health

Table 24 reports the MANOVA for general health with gender as the independent variable and somatic symptoms, anxiety, social dysfunction and depression as the dependent variables.

Table 24

MANOVA for General Health and Gender

Variable (dependent)	Variable (independent)	Value	<i>F</i>	<i>df</i>	Error <i>df</i>	<i>p</i>	η^2
General health	Gender	.92	10.79	4.00	497.00	.00*	.08

* $p < .01$

The analysis indicates a significant effect of gender on the combined dependent variable general health, $F(4, 50) = 10.79$; $p < .01$; $\eta^2 = .08$. Analysis of each dependent sub-variable (somatic symptoms, anxiety, social dysfunction, depression), using a Bonferroni adjusted alpha level of .005, showed that gender has a statistically significant influence on social functioning ($p < .000$; $\eta^2 = .04$) and depression ($p < .000$; $\eta^2 = .03$). Males (compared with females) reported higher levels of depression and lower levels of social dysfunction.

4.3.2 Language and general health

Table 25 reports the MANOVA for general health with home language as the independent variable and somatic symptoms, anxiety, social functioning and depression as the dependent variables. (Note that Setswana speaking participants were not included in the analysis given the small sample of such participants.)

Table 25

MANOVA for General Health and Home Language

Variable (dependent)	Variable (independent)	Value	F	df	Error df	p	η^2
General health	Home language	.83	3.43	28.00	1764.54	.00*	.05

* $p < .01$

The analysis indicates a significant effect of home language on the combined dependent variable general health, $F(28, 1764.54) = 3.43$; $p < .01$; $\eta^2 = .05$. Analysis

of each dependent sub-variable (somatic symptoms, anxiety, social dysfunction, depression) using a Bonferroni adjusted alpha level of .001, showed that home language had a statistically significant influence on anxiety ($p < .000$; $\eta^2 = .07$) and social functioning ($p < .001$; $\eta^2 = .07$). Afrikaans and Nama-speaking teachers showed statistically significant higher anxiety scores than teachers in the category “Other languages”. Oshiwambo speaking participants (compared to Afrikaans, English and German participants) showed lower levels of social dysfunction.

4.3.3. Ethnicity and general health

Table 26 reports the MANOVA for general health with ethnicity as the independent variable and somatic symptoms, anxiety, social functioning and depression as the dependent variables. (Note that Asian participants were not included in the analysis given the small sample of Asians.)

Table 26

MANOVA for General Health and Ethnicity

Variable (dependent)	Variable (independent)	Value	F	df	Error df	p	η^2
General health	Ethnicity	.85	10.75	8.00	990.00	.00*	.08

* $p < .01$

The analysis indicates a significant effect of ethnicity on the combined dependent variable general health, $F(8, 990) = 10.75$; $p < .01$; $\eta^2 = .08$. Analysis of each

dependent sub-variable (somatic symptoms, anxiety, social dysfunction, depression), using a Bonferroni adjusted alpha level of .003, showed that ethnicity had a statistically significant influence on social functioning ($p < .000$; $\eta^2 = .08$) and depression ($p < .002$; $\eta^2 = .03$). Africans (compared to Europeans and Coloureds) indicated a statistically significantly lower level of social dysfunction and a higher level of depression.

4.3.4 Position and organizational outcomes

Table 27 reports the MANOVA for organizational outcomes with position as the independent variable and organizational commitment, organizational citizenship behaviour individual, organizational citizenship behaviour organization and turnover intention as the dependent variables.

Table 27

MANOVA for Organizational Outcomes and Position

Variable (dependent)	Variable (independent)	Value	<i>F</i>	<i>df</i>	Error <i>df</i>	<i>p</i>	η^2
Organizational outcomes	Position	.92	2.58	16.00	1509.83	.00*	.02

* $p < .01$

Although job position of educators does not, in general, exert a statistically significant influence on organizational outcomes, job position has a statistically significant influence on organizational citizenship behaviour (organizational) ($p <$

.01; $\eta^2 = .06$). Analysis of each dependent sub-variable using a Bonferroni adjusted alpha level of .002 indicated that principals of secondary schools in Namibia have the highest levels of orientation towards citizenship behavior regarding their organization (school). Heads of departments and senior educators also attained higher scores for organizational citizenship behaviour (organizational) than junior educators and education students.

4.3.5 Age category and antecedents

Table 28 reports the MANOVA for antecedents with age category as the independent variable and antecedents work-role fit and job enrichment as the dependent variables.

Table 28

MANOVA for the Antecedents Work-Role Fit, Job Enrichment and Age Category

Variable (dependent)	Variable (independent)	Value	<i>F</i>	<i>df</i>	Error <i>df</i>	<i>p</i>	η^2
Antecedents	Age category	.91	2.85	16.00	984.00	.00*	.04

* $p < .01$

The analysis indicates a significant effect of age category on the combined dependent variables of work-role fit and job enrichment $F(16, 984.00) = 2.85$; $p < .01$; $\eta^2 = .08$. Analysis of each dependent sub-variable using a Bonferroni adjusted alpha level of .002 showed that age category had a statistically significant influence on work-role fit ($p < .001$, $\eta^2 = .08$). It seems that especially those educators who are 55 years and

older (10% of the participants) reported the highest levels of work-role fit. Educators between the ages 20 and 34 (36% of the participants) showed the lowest levels of work-role fit.

4.3.6 Years in teaching and antecedents

Table 29 reports the MANOVA for antecedents with years in teaching as the independent variable and work-role fit and job enrichment as the dependent variables.

Table 29

MANOVA for Antecedents Work-Role Fit, Job Enrichment and Years in Teaching

Variable (dependent)	Variable (independent)	Value	<i>F</i>	<i>df</i>	Error <i>df</i>	<i>p</i>	η^2
Antecedents	Years in teaching	.95	3.35	8.00	992.00	.00*	.03

* $p < .01$

From Table 29 it transpires that years in teaching do not statistically significantly influence work-role fit and job enrichment in general. Analysis of each dependent sub-variable using a Bonferroni adjusted alpha level of .002 showed that years in teaching had a statistically significant effect on work-role fit ($p < .000$; $\eta^2 = .05$). Especially educators who have been in the teaching profession for 10 years and longer seem to indicate better work-role fit than educators who are in the profession for a shorter period.

4.3.7 Age category and antecedents

Table 30 reports the MANOVA for antecedents with age category as the independent variable and co-worker relations, supervisor support and supervisor trust as the dependent variables.

Table 30

MANOVA for Antecedents Co-Worker Relations, Supervisor Support, Supervisor Trust and Age Category

Variable (dependent)	Variable (independent)	Value	<i>F</i>	<i>df</i>	Error <i>df</i>	<i>p</i>	η^2
Antecedents	Age category	.91	2.05	24.00	1424.65	.00*	.03

* $p < .01$

Age category does not influence the combination of co-worker relations, supervisor support and supervisor trust in a statistically significant way ($p = .00$). Analysis of each dependent sub-variable using a Bonferroni adjusted alpha level of .001 showed that age category had a statistically significant influence on co-worker relations ($p < .000$; $\eta^2 = .06$). Educators aged 55 years and older indicate high levels of positive co-worker relations.

4.3.8 Years in teaching and antecedents

Table 31 reports the MANOVA for antecedents with years in teaching as the independent variable and co-worker relations, supervisor support and supervisor trust as the dependent variables.

Table 31

MANOVA for Antecedents Co-Worker Relations, Supervisor Support, Supervisor Trust and Years in Teaching

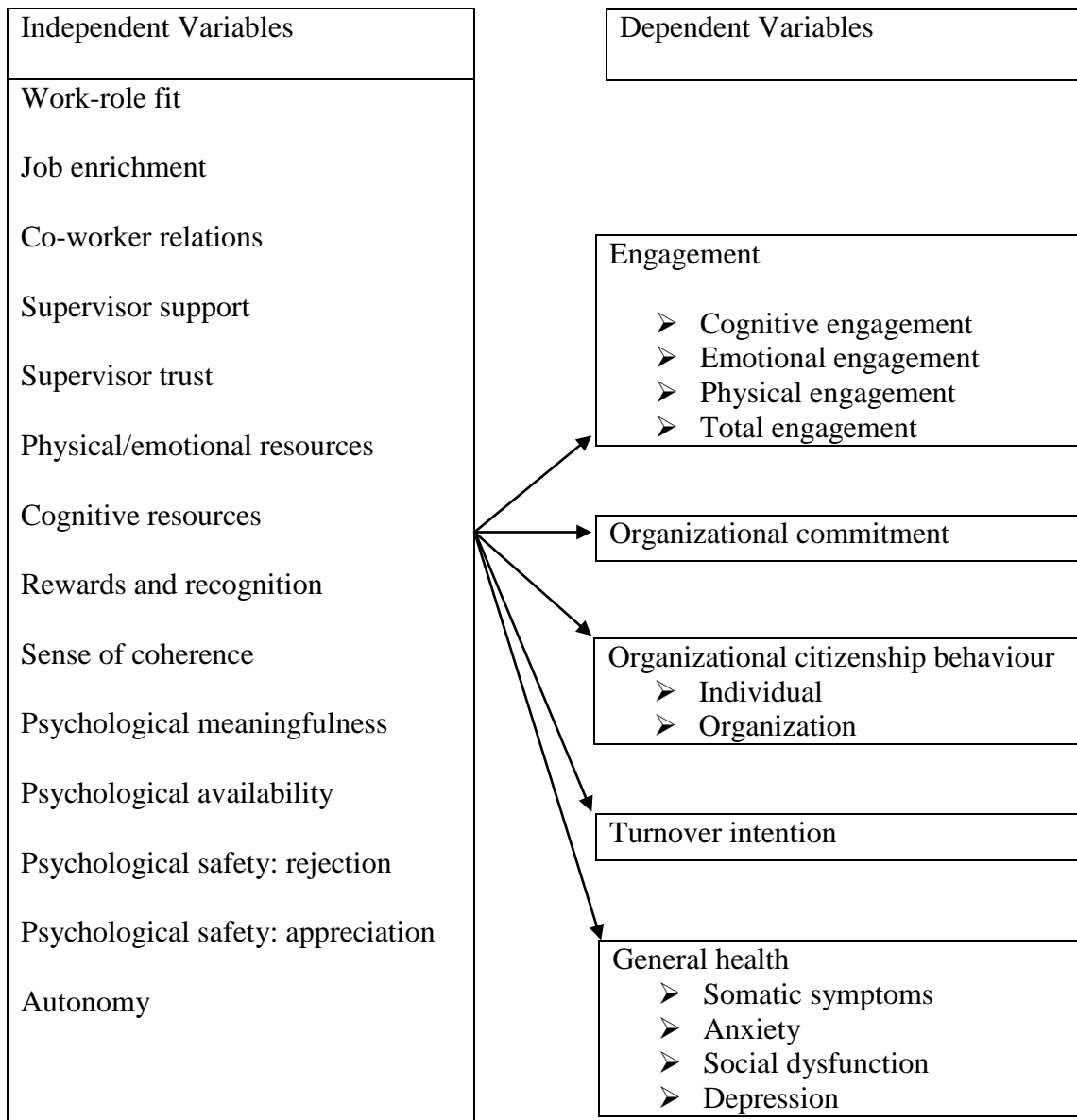
Variable (dependent)	Variable (independent)	Value	<i>F</i>	<i>df</i>	Error <i>df</i>	<i>p</i>	η^2
Antecedents	Years in teaching	.93	2.84	12.00	1309.94	.00*	.02

* $p < .01$

The above table indicates that years in teaching do not statistically influence co-worker relations, supervisor support and supervisor trust significantly in general. Analysis of each dependent sub-variable using a Bonferroni adjusted alpha level of .002 indicated that years in teaching show a statistically significant effect on co-worker relations ($p < .001$; $\eta^2 = .05$). Educators who have been in the education profession for 16 years and longer seem to indicate better co-worker relations than educators that are in the profession for a shorter time. Educators who teach for less than two years are also statistically indicated to experience good co-worker relations.

4.4 HIERARCHICAL REGRESSION ANALYSIS AND INDIRECT EFFECTS

Hierarchical regression analysis evaluates the effect of independent variables on one dependant variable whilst controlling for the impact of a different set of independent variables on the dependant variable (Aiken & West, 1991; Baron & Kenny, 1986). Hierarchical regression analysis includes both direct and indirect effects of independent variables on outcome variables. The direct effect and the indirect effect together form the total effect on the outcome variables (Baron & Kenny, 1986). In this study, two processes were followed for the hierarchical regression analysis. As a first step, the direct effect of a number of indirect variables on a number of dependent variables was analysed. In a second step, the indirect effect of a number of indirect variables on a number of dependent variables was analysed, whilst at the same time controlling for an intervening or process variable. These two steps are outlined in Figure 10 below.

Step 1

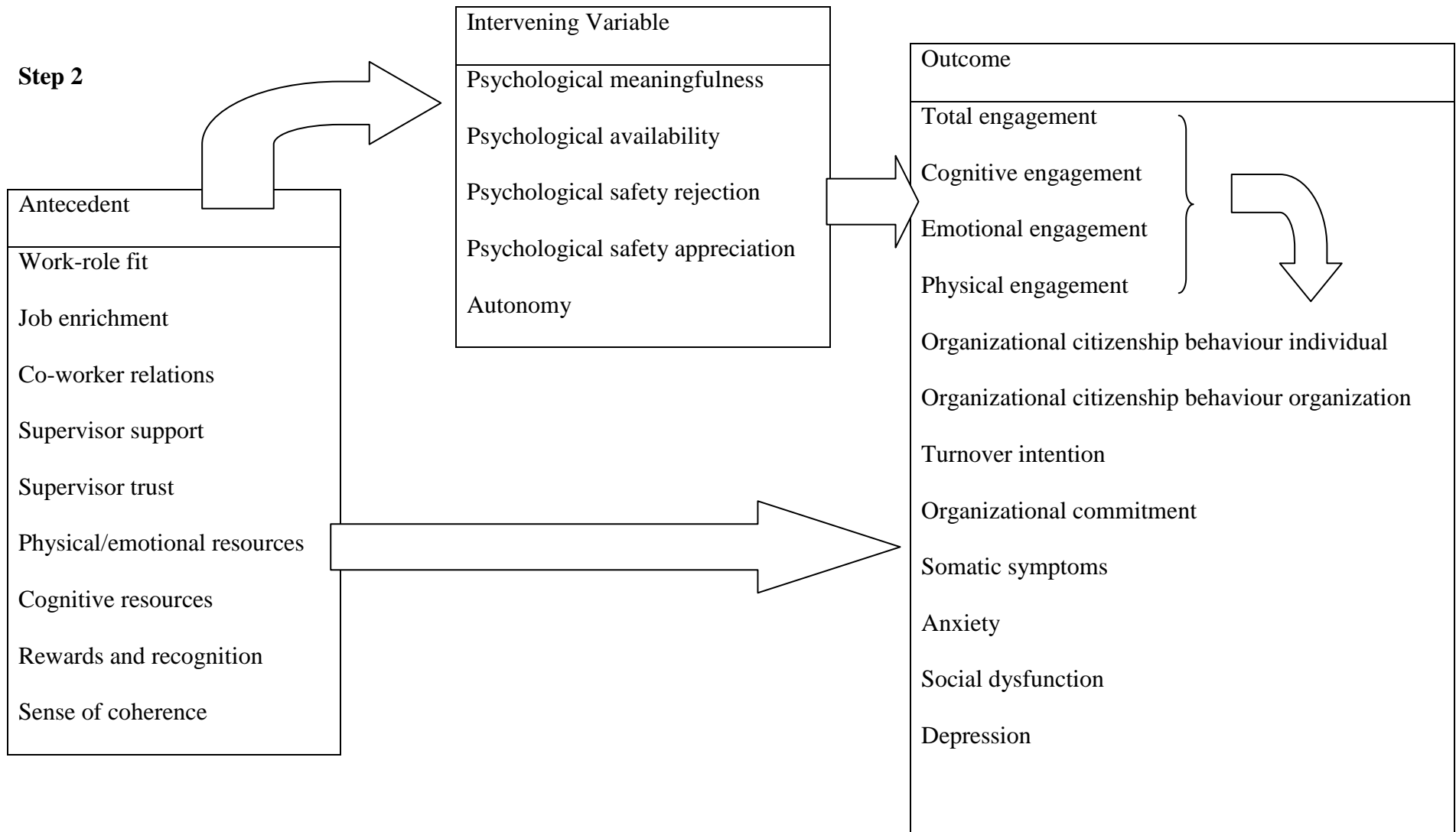


Figure 10. Two processes in hierarchical regression analysis

4.4.1 Direct effects of independent variables on dependent variables

4.4.1.1 Direct effects of independent variables on the dependent variables

cognitive, emotional and physical engagement

Three steps were used (in a three-step hierarchical multiple regression procedure) to test the effect of specific independent variables on the dependent variables. In the first step, independent variables, namely work-role fit, job enrichment, co-worker relations, supervisor support, supervisor trust, physical/emotional resources, cognitive resources and rewards were used to establish a significant effect on the dependent variables (cognitive- emotional- and physical engagement). In the second step, the same independent variables were used together with sense of coherence. In the third step all of the above variables were used together with psychological meaningfulness, psychological availability, psychological safety (rejection), psychological safety (appreciation) and autonomy. The results are reported in Table 32.

Table 32

Regression Analysis with Antecedents as the Independent Variables and Cognitive Engagement, Emotional Engagement and Physical Engagement as the Dependent Variables

Variable	Cognitive Engagement			Emotional Engagement			Physical Engagement		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Constant	2.36**	2.36**	1.77**	3.39**	3.03**	1.27**	4.04**	3.72**	1.62**
Work-role fit	.14*	.14*	.08	.44**	.42**	.28**	.28**	.26**	.13*
Job enrichment	.11	.11	.10	.20**	.20**	.10*	.10*	.10*	.01
Co-worker relations	.07	.07	.08	-.03	-.05	-.05	.08	.06	.07
Supervisor support	-.03	-.03	-.04	-.02	-.01	-.02	.00	.01	.01
Supervisor trust	.05	.05	.06	.06	.05	.03	.03	.03	.00
Physical/emotional resources	.14*	.14*	.14*	-.13**	-.10*	-.08	-.20**	-.18**	-.16**
Cognitive resources	.06	.06	.06	-.09*	-.08*	-.03	-.13**	-.13*	-.07
Rewards and recognition	-.00	-.00	-.01	-.02	-.02	-.03	-.01	-.01	-.01
Sense of coherence		.00	.01	-	.10*	.08	-	.09*	.07
Psychological meaningfulness	-	-	.12	-	-	.30**	-	-	.22**
Psychological availability	-	-	-.03	-	-	.06	-	-	.13**
Psychological safety: rejection	-	-	.07	-	-	.01	-	-	.04
Psychological safety: appreciation	-	-	.03	-	-	-.02	-	-	-.02
Autonomy	-	-	-.02	-		.13**	-	-	.09
R^2	.08	.08	.09	.42	.43	.51	.31	.32	.39
F	4.98**	4.42**	3.28**	45.13**	41.25**	36.75**	28.23**	25.71**	22.39**
df	8/493	9/492	14/487	8/493	9/492	14/487	8/493	9/492	14/487
ΔR^2	.08	.00	.01	.42	.01	.08	.31	.01	.07
ΔF	4.98**	.00	1.21	45.13**	6.28*	16.77**	28.23**	4.12*	11.48**
df	-	1/492	5/487	-	1/492	5/487	-	1/492	5/487

* $p < .05$

** $p < .01$

To investigate the direct effect of independent variables on educators' cognitive engagement, three steps were followed. In the first step, work-role fit, job enrichment, co-worker relations, supervisor support, supervisor trust, physical and emotional resources, cognitive resources and rewards explain 8% ($R^2=.08$) of the

variance in the cognitive engagement of secondary educators in Namibia ($F=4.98$, $p < .01$). Standardised beta values indicate that, amongst these predictors, work-role fit ($\beta = .14$, $p < .05$) and physical/emotional resources ($\beta = .14$, $p < .05$) contribute significantly towards educators' experience of cognitive engagement. In the second step, sense of coherence was added to the predictors of cognitive engagement, which did not result in a statistically significant increase in predicting the variance in cognitive engagement ($\Delta F = .00$, $p > .01$, $\Delta R^2 = .00$). No change was found in the explained variance of cognitive engagement ($\Delta R^2 = .00$), which means that sense of coherence does not play a statistically significant role in its effect of educators' experience of cognitive engagement. Standardised beta values indicate that, amongst these predictors in step two, work-role fit ($\beta = 0.14$, $p < .05$) and physical/emotional resources ($\beta = .14$, $p < .05$) remained unchanged and still contribute significantly towards educators' experience of cognitive engagement. In the third step, psychological meaningfulness, psychological availability, psychological safety rejection, psychological safety appreciation and autonomy were added as independent variables. Entering these independent variables did not result in a statistical significant increase in the percentage of variance in cognitive engagement ($\Delta F = 1.21$, $p > .01$, $\Delta R^2 = .01$) and explain another 1% in the variance of cognitive engagement that secondary school educators experience. Standardised beta values indicate that, amongst these predictors in model three, physical/emotional resources ($\beta = .14$, $p < .05$) contribute significantly towards educators' experience of cognitive engagement. Work role fit and physical/emotional resources account for 9% of the variance experienced by Namibian secondary school educators in their experience of cognitive engagement. Thus, in order to be cognitively engaged, educators should

feel that they fit into their work role and that they have adequate physical and emotional resources available to do their job.

To investigate the direct effect of independent variables on educators' emotional engagement, three steps were followed (Table 32). In the first step, work-role fit, job enrichment, co-worker relations, supervisor support, supervisor trust, physical and emotional resources, cognitive resources and rewards and recognition explain 42% ($R^2 = .42$) of the variance in the experience of emotional engagement of secondary school educators in Namibia ($F = 45.13, p < .01$). Standardised beta values indicate that, amongst these predictors, work role fit ($\beta = .44, p < .01$), job enrichment ($\beta = .20, p < .01$), physical/emotional resources ($\beta = -.13, p < .01$) and cognitive resources ($\beta = -.09, p < .05$) contribute significantly towards educators' emotional engagement. In the second step, sense of coherence was added to the predictors of emotional engagement. A change of 1% ($\Delta R^2 = .01$), was found in the variance of the experience of emotional engagement, which means that sense of coherence plays a statistical significant role in its effect on educators' experience of emotional engagement ($\Delta F = 6.28, p < .05$). Standardised beta values indicate that, amongst these predictors, work role fit ($\beta = .42, p < .01$), job enrichment ($\beta = .20, p < .01$), physical/emotional resources ($\beta = -.10, p < .05$), cognitive resources ($\beta = -.08, p < .05$) and sense of coherence ($\beta = .10, p < .05$) contribute towards educators' emotional engagement. In the third step, psychological meaningfulness, psychological availability, psychological safety rejection, psychological safety appreciation and autonomy were added as independent variables. These independent variables explain another 8% ($\Delta R^2 = .08$) in the variance of emotional engagement of

secondary school educators ($\Delta F = 16.77, p < .01$). Standardised beta values indicate that, amongst these predictors, work role fit ($\beta = .28, p < .01$), job enrichment ($\beta = .10, p < .05$), psychological meaningfulness ($\beta = .30, p < .01$), and autonomy ($\beta = .13, p < .01$), contribute significantly towards educators' experience of emotional engagement. The independent variables account for 51% of the variance in the emotional engagement of Namibian secondary school educators. Thus, in order to be emotionally engaged educators should feel that they fit into their work role, experience their job as enriching, perceive that they have sufficient physical, emotional and cognitive resources, have a strong sense of coherence, find meaningfulness in their work and experience autonomy.

To investigate the direct effect of independent variables on educators' physical engagement, three steps were followed (see Table 32). In the first step, work-role fit, job enrichment, co-worker relations, supervisor support, supervisor trust, physical and emotional resources, cognitive resources and rewards explain 31% ($R^2 = .31$) of the variance in the physical engagement of secondary school educators in Namibia ($F = 28.23, p < .01$). Standardised beta values indicate that, amongst these predictors, work-role fit ($\beta = .28, p < .01$), job enrichment ($\beta = .10, p < .05$), physical/emotional resources ($\beta = -.20, p < .01$) and cognitive resources ($\beta = -.13, p < .01$) contribute significantly towards educators' physical engagement. In a second step, sense of coherence was added to the predictors of physical engagement. A statistically significant increase was found in the variance of the experience of physical engagement ($\Delta F = 4.12, p < .05$), which means that sense of coherence plays a statistically significant role in its effect on educators' experience of physical

engagement. Standardised beta values indicate that, amongst these predictors, work-role fit ($\beta = .26, p < .01$), job enrichment ($\beta = .10, p < .05$), physical/emotional resources ($\beta = -.18, p < .01$), cognitive resources ($\beta = -.13, p < .05$) and sense of coherence ($\beta = .09, p < .05$) contribute towards educators' physical engagement.

In the third step, psychological meaningfulness, psychological availability, psychological safety and autonomy were added as independent variables. These independent variables explain another 7% in the variance of physical engagement of secondary school educators ($\Delta F = 11.48, p < .01$). Standardised beta values indicate that, amongst these predictors, work-role fit ($\beta = .13, p < .05$), physical/emotional resources ($\beta = -.16, p < .01$), psychological meaningfulness ($\beta = .22, p < .01$) and psychological availability ($\beta = .13, p < .01$) contribute significantly towards educators' physical engagement. The results show that work-role fit, job enrichment, physical/emotional resources, cognitive resources, sense of coherence, psychological meaningfulness and psychological availability account for 39% in the physical engagement of Namibian secondary school educators. Thus, in order to be physically engaged in their job, educators should perceive that they fit in their role, feel that their job is enriching, have enough physical, emotional and cognitive resources to support them in their job, experience a sense of coherence, should feel that their job is psychologically meaningful and feel psychologically available for their job.

4.4.1.2 Direct effects of independent variables on the dependent variable total engagement

Three steps were followed to test the effect of independent variables on total work engagement. In the first step, work-role fit, job enrichment, co-worker relations, supervisor support, supervisor trust, physical/emotional resources, cognitive resources and rewards were used to establish a significant effect on the dependent variables. In a second step, the same independent variables were used together with sense of coherence. In a third step all of the above independent variables were used together with psychological meaningfulness, psychological availability, psychological safety (rejection), psychological safety (appreciation) and autonomy. The results are reported in Table 33.

Table 33

*Regression Analysis with Antecedents as the Independent Variables and Total**Engagement as the Dependent Variable*

Variable	Total Engagement		
	Step 1	Step 2	Step 3
Constant	3.26**	3.04**	1.55**
Work-role fit	.38**	.36**	.22**
Job enrichment	.18**	.18**	.09
Co-worker relations	.05	.04	.05
Supervisor support	-.02	-.02	-.02
Supervisor trust	.06	.06	.04
Physical/emotional resources	-.08	-.06	-.04
Cognitive resources	-.07	-.07	-.02
Rewards and recognition	-.02	-.01	-.02
Sense of coherence		.08	.07
Psychological meaningfulness	-	-	.28**
Psychological availability	-	-	.07
Psychological safety: rejection	-	-	.05
Psychological safety: appreciation	-	-	-.01
Autonomy	-	-	.09
R^2	.35	.35	.43
F	32.66**	29.60**	25.70**
Df	8/493	9/492	14/487
ΔR^2	.35	.01	.07
ΔF	32.66**	3.67*	12.47**
Df	-	1/492	5/487

* $p < .05$ ** $p < .01$

In the first step, work-role fit, job enrichment, co-worker relations, supervisor support, supervisor trust, physical and emotional resources, cognitive resources and rewards explain 35% ($R^2 = .35$) of the variance in total engagement of secondary educators in Namibia ($F = 23.66$, $p < .01$). Standardised beta values indicate that, amongst these predictors, work role fit ($\beta = .38$, $p < .01$) and job enrichment ($\beta = .18$, $p < .01$) contribute significantly towards educators' experience of total engagement. In the second step, sense of coherence was added to the predictors of total

engagement. Change was found in the variance of the experience of total engagement ($\Delta R^2 = .01$), which means that sense of coherence plays a statistically significant role in its effect of educators' experience of total engagement ($\Delta F = 3.67, p < .05$). Standardised beta values indicate that, amongst these predictors in model two, work role fit ($\beta = .36, p < .01$) and job enrichment ($\beta = .18, p < .01$) contribute significantly towards educators' experience of total engagement. In a third model, psychological meaningfulness, psychological availability, psychological safety rejection, psychological safety appreciation and autonomy were added as independent variables. These independent variables explain another 7% of the variance of total engagement of secondary school educators. These independent variables thus play a significant role in educators' experience of total engagement ($\Delta F = 12.47, p < .01$). Standardised beta values indicate that, amongst these predictors in model three, work role fit ($\beta = .22, p < .01$) and psychological meaningfulness ($\beta = .28, p < .01$) contribute significantly towards educators' experience of total engagement. Work role fit, job enrichment and psychological meaningfulness account for 43% of the variance in total work engagement of Namibian secondary school educators. Thus, in order to be engaged in total, educators should feel that they fit into their work-role, that their job is enriching them and that they find psychological meaningfulness in their job.

4.4.1.3 Direct effects of independent variables on the dependent variable

organizational commitment

Three steps were followed to test the effects of independent variables on organizational commitment. In the first step, independent variables work-role fit, job enrichment, co-worker relations, supervisor support, supervisor trust, physical/emotional resources, cognitive resources and rewards and recognition were entered into the regression equation. In the second step, the same independent variables were entered together with sense of coherence. In the third step psychological meaningfulness, psychological availability, psychological safety rejection, psychological safety appreciation and autonomy were added as predictors to the regression equation. The results are reported in Table 34.

Table 34

Regression Analysis with Antecedents as the Independent Variables and Organisational Commitment as the Dependent Variable

Variable	Organisational Commitment		
	Step 1	Step 2	Step 3
Constant	1.85**	1.31**	.53
Work-role fit	.34**	.31**	.20**
Job enrichment	.12*	.11*	.05
Co-worker relations	.18**	.15**	.12*
Supervisor support	.13*	.14*	.12*
Supervisor trust	.07	.06	.04
Physical/emotional resources	-.02	.02	.03
Cognitive resources	-.05	-.03	.00
Rewards and recognition	-.02	-.01	-.04
Sense of coherence	-	.14**	.11*
Psychological meaningfulness	-	-	.29**
Psychological availability	-	-	-.08
Psychological safety: rejection	-	-	-.03
Psychological safety: appreciation	-	-	.07
Autonomy	-	-	.10*
R^2	.42	.44	.50
F	45.29**	42.48**	34.51**
Df	8/493	9/492	14/487
ΔR^2	.42	.01	.06
ΔF	45.29**	11.93**	11.78**
Df	-	1/492	5/487

* $p < .05$

** $p < .01$

In the first step, work-role fit, job enrichment, co-worker relations, supervisor support, supervisor trust, physical and emotional resources, cognitive resources and rewards explain 42% ($R^2 = .42$) of the variance in the organizational commitment of secondary educators in Namibia ($F = 45.29$, $p < .01$). Standardised beta values indicate that work role fit ($\beta = .34$, $p < .01$), job enrichment ($\beta = .12$, $p < .01$), co-worker relations ($\beta = .18$, $p < .01$) and supervisor support ($\beta = .13$, $p < .01$) contribute significantly towards educators' experience of organisational commitment. In a second step, sense of coherence was added to the predictors of organisational

commitment. A statistically significant change was found in the variance of the experience of organizational commitment ($\Delta F = 11.93, p < .01$), which means that sense of coherence plays a significant role in its effect on educators' experience of organizational commitment. Standardised beta values indicate that, amongst these predictors, work role fit ($\beta = .31, p < .01$), job enrichment ($\beta = .11, p < .05$), co-worker relations ($\beta = .15, p < .01$), supervisor support ($\beta = .14, p < .05$) and sense of coherence ($\beta = .14, p < .01$) contribute towards educators' experience of organizational commitment. In the third step, psychological meaningfulness, psychological availability, psychological safety rejection, psychological safety appreciation and autonomy were added as independent variables. These independent variables explain another 6% of the variance in organizational commitment of secondary school educators ($\Delta F = 11.78, p < .01$). Standardised beta values indicate that work-role fit ($\beta = .20, p < .01$), co-worker relations ($\beta = .12, p < .05$), supervisor support ($\beta = .12, p < .05$), sense of coherence ($\beta = .11, p < .05$), psychological meaningfulness ($\beta = .29, p < .01$) and autonomy ($\beta = .10, p < .05$) contribute significantly towards educators' experience of organizational commitment. These results indicate that work-role fit, job enrichment, co-worker relations, supervisor support, sense of coherence, psychological meaningfulness and autonomy account for a significant 49% of the variance in organizational commitment of Namibian secondary school educators. Thus, in order to be committed to the school where they work, educators should feel that they fit in their role as educators, feel that their job is enriching, have good co-worker relationships, feel that the supervisor supports them, experience a sense of coherence, and feel a sense of autonomy in the workplace.

4.4.1.4 Direct effects of independent variables on the dependent variable organizational citizenship behaviour

Three steps were followed to test the effects of independent variables on organizational citizenship behaviour. In the first step, work-role fit, job enrichment, co-worker relations, supervisor support, supervisor trust, physical/emotional resources, cognitive resources and rewards were entered as predictors. In a second step, the same independent variables were used together with a sense of coherence. In a third step all of the above independent variables were used together with psychological meaningfulness, psychological availability, psychological safety rejection, psychological safety appreciation and autonomy. The results are reported in Table 35.

Table 35

Regression Analysis with Antecedents as the Independent Variables and Organisational Citizenship Behaviour as the Dependent Variable

Variable	Organizational Citizenship Behaviour: Individual			Organizational Citizenship Behaviour: Organization		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Constant	3.07**	3.06**	1.18	2.67**	2.57**	.81
Work-role fit	.09	.09	.02	.20**	.20**	.13*
Job enrichment	.12	.12	.06	.11	.10	.03
Co-worker relations	.07	.07	.09	.11*	.10	.08
Supervisor support	.04	.04	.05	.12	.12	.13*
Supervisor trust	-.02	-.02	-.03	.05	.04	.02
Physical/emotional resources	-.05	-.04	-.03	-.01	.00	.01
Cognitive resources	.17**	.17**	.21**	.03	.04	.09
Rewards and recognition	-.04	-.04	-.03	-.04	-.04	-.03
Sense of coherence	-	.00	-.00	-	.03	.01
Psychological meaningfulness	-	-	.08	-	-	.07
Psychological availability	-	-	.18**	-	-	.19**
Psychological safety: rejection	-	-	.04	-	-	-.01
Psychological safety: appreciation	-	-	-.06	-	-	.01
Autonomy	-	-	.04	-	-	.08
R^2	.06	.06	.10	.18	.18	.23
F	3.81**	3.38**	3.80**	13.46**	11.99**	10.18**
df	8/493	9/492	14/487	8/493	9/492	14/487
ΔR^2	.06	.00	.04	.18	.00	.05
ΔF	3.81**	.00	4.35**	13.46**	.33	5.86**
df	-	1/492	5/487	-	1/492	5/487

* $p < .05$

** $p < .01$

In the first step, work-role fit, job enrichment, co-worker relations, supervisor support, supervisor trust, physical and emotional resources, cognitive resources and rewards/recognition explain 6% ($R^2 = .06$) of the variance in organizational citizenship behaviour - individual of secondary school educators in Namibia ($F =$

3.81, $p < .01$). Standardised beta values indicate that, amongst these predictors, a lack of cognitive resources ($\beta = .17$, $p < .01$) contribute significantly towards educators' experience of organizational citizenship behaviour individual. It thus seems as if educators that experience a lack of cognitive resources are especially the persons that reach out and help other individual educators. In the second step, sense of coherence was added to the predictors of organizational citizenship behaviour individual. No change was found in the variance of the experience of organizational citizenship behaviour individual ($\Delta R^2 = .00$), which means that sense of coherence does not statistically significantly contribute to educators' experience of organizational citizenship behaviour - individual ($\Delta F = .00$, $p > .01$). In the third step, psychological meaningfulness, psychological availability, psychological safety rejection, psychological safety appreciation and autonomy were added as independent variables. These independent variables explain another 4% in the variance of secondary school educators' experience of organizational citizenship behaviour - individual ($\Delta F = 4.35$, $p > .01$). Standardised beta values indicate that, amongst these predictors, a lack of cognitive resources ($\beta = .21$, $p < .01$) and psychological availability ($\beta = .18$, $p < .01$) contribute significantly towards educators' experience of organizational citizenship behaviour individual. A lack of cognitive resources and high psychological availability account for 10% of the variance in organizational citizenship behaviour - individual of Namibian secondary school educators. Thus, as found with regression analysis, currently, Namibian secondary school educators who experience a lack of cognitive resources are the most willing to assist co-educators individually (OCBI). It thus seems that educators who are cognitively exhausted are willing to invest most into individuals at their schools. Over the long term, this can

have a negative effect, such as burnout, on these educators. This phenomenon might be explained by educators who experience a calling for their profession as well as a higher sense of personal autonomy.

To investigate the direct effect of independent variables on educators' organizational citizenship behaviour - organization, three steps were followed (Table 35). In the first step, work-role fit, job enrichment, co-worker relations, supervisor support, supervisor trust, physical and emotional resources, cognitive resources and rewards explain 18% ($R^2 = .18$) of the variance in organizational citizenship behaviour - organization of secondary school educators in Namibia ($F = 13.46, p < .01$). Standardised beta values indicate that, amongst these predictors, work role fit ($\beta = .20, p < .01$) and co-worker relations ($\beta = .11, p < .05$) contribute statistically significantly towards educators' experience of organizational citizenship behaviour - organization. In the second step, sense of coherence was added to the predictors of organizational citizenship behaviour organization. No statistically significant change was found in the explained variance of organizational citizenship behaviour organization ($\Delta F = .33, p > .01$), which means that sense of coherence did not contribute statistically significantly to educators' organizational citizenship behaviour - organization. Standardised beta values indicate that, amongst these predictors, work-role fit ($\beta = .20, p < .01$) contribute towards educators' experience of organizational citizenship behaviour organization. In the third step, psychological meaningfulness, psychological availability, psychological safety rejection, psychological safety appreciation and autonomy were added as independent variables. These independent variables explain another 5% in the variance of

organizational citizenship behaviour - organization of secondary school educators ($\Delta F = 5.86, p < .01$). Standardised beta values indicate that, amongst these predictors, work-role fit ($\beta = .13, p < .05$), supervisor support ($\beta = .13, p < .05$) and psychological availability ($\beta = .19, p < .01$) contribute significantly towards educators' experience of organizational citizenship behaviour - organization. These results show that work role fit, psychological availability, co-worker relations and supervisor support account for 23% of the variance of organizational citizenship behaviour - organization of Namibian secondary school educators. Thus, in order to be willing to take ownership of the school where they are employed, secondary educators in Namibia should feel that they fit their work role well, receive appropriate supervisor support and feel psychologically available for the school and the learners.

4.4.1.5 Direct effects of independent variables on the dependent variable

turnover intention

Three steps were followed in order to test the effect of certain independent variables on turnover intention. In the first step, independent variables work-role fit, job enrichment, co-worker relations, supervisor support, supervisor trust, physical/emotional resources, cognitive resources and rewards were entered into the regression equation. In the second step, the same independent variables were used together with sense of coherence. In a third step all of the above independent variables were entered into the regression equation together with psychological meaningfulness, psychological availability, psychological safety rejection,

psychological safety appreciation and autonomy. The results are reported in Table 36.

Table 36

Regression Analysis with Antecedents as the Independent Variables and Turnover Intention as the Dependent Variable

Variable	Turnover Intention		
	Step 1	Step 2	Step 3
Constant	5.24**	6.32**	4.71**
Work-role fit	-.25**	-.22**	-.21**
Job enrichment	-.06	-.06	-.07
Co-worker relations	-.07	-.03	-.03
Supervisor support	-.02	-.03	-.01
Supervisor trust	-.02	-.01	-.02
Physical/emotional resources	.20**	.16**	.16**
Cognitive resources	.12*	.11*	.11*
Rewards and recognition	-.05	-.06	-.04
Sense of coherence	-	-.18**	-.16**
Psychological meaningfulness	-	-	-.12*
Psychological availability	-	-	.16**
Psychological safety: rejection	-	-	.07
Psychological safety: appreciation	-	-	.01
Autonomy	-	-	.00
R^2	.27	.29	.32
F	23.01**	22.73**	16.21**
df	8/493	9/492	14/487
ΔR^2	.27	.02	.02
ΔF	23.01**	15.23**	3.45*
df	-	1/492	5/487

* $p < .05$

** $p < .01$

In the first step, work-role fit, job enrichment, co-worker relations, supervisor support, supervisor trust, physical and emotional resources, cognitive resources and rewards explain 27% ($R^2 = .27$) of the variance in the experience of turnover

intention of secondary educators in Namibia ($F = 23.01, p < .01$). Standardised beta values indicate that, amongst these predictors, work role fit ($\beta = -.25, p < .01$), physical/emotional resources ($\beta = .20, p < .01$) and cognitive resources ($\beta = .12, p < .05$) contribute significantly towards educators' experience of turnover intention. In the second step, sense of coherence was added to the predictors of turnover intention. A change of 2% in the explained variance of turnover intention ($\Delta R^2 = .02$), was recorded ($\Delta F = 15.23, p < .01$). Standardised beta values indicate that, amongst the predictors, work role fit ($\beta = -.22, p < .01$), physical/emotional resources ($\beta = .16, p < .01$), cognitive resources ($\beta = .11, p < .05$) and sense of coherence ($\beta = -.18, p < .01$) contribute towards educators' experience of turnover intention. In the third step, psychological meaningfulness, psychological availability, psychological safety rejection, psychological safety appreciation and autonomy were added as independent variables. These independent variables explain another 2% in the variance of turnover intention of secondary school educators', which is statistically significant ($\Delta F = 3.45, p < .05$). Standardised beta values indicate that, amongst these predictors, work role fit ($\beta = -.21, p < .01$), physical/emotional resources ($\beta = .16, p < .01$), cognitive resources ($\beta = .11, p < .05$), sense of coherence ($\beta = -.16, p < .01$), psychological meaningfulness ($\beta = -.12, p < .05$) and psychological availability ($\beta = .16, p < .01$) contribute significantly towards educators' turnover intention. The results indicate that work-role fit, psychological availability, physical/emotional resources, cognitive resources, sense of coherence and psychological meaningfulness account for 32% of the variance in the turnover intention of Namibian secondary school educators. Thus, turnover intention of secondary educators in Namibia escalates when they feel they do not fit their work-role well, experience that they do

not have sufficient physical/emotional and cognitive resources to do their job, don't feel a strong sense of coherence at work, find little or no meaningfulness in their work whilst still feeling significantly psychologically available for their job as an educator.

4.4.1.6 Direct effects of independent variables on the dependent variables

somatic symptoms, anxiety, social dysfunction and depression

Three steps were followed to test the effect of the independent variables on the dependent variables. In the first step, independent variables work-role fit, job enrichment, co-worker relations, supervisor support, supervisor trust, physical/emotional resources, cognitive resources and rewards were used to establish a significant effect on the dependent variables. In the second step, the same independent variables were used together with a sense of coherence. In the third step all of the above independent variables were used together with psychological meaningfulness, psychological availability, psychological safety rejection, psychological safety appreciation and autonomy. The results are reported in Table 37.

Table 37

Regression Analysis with Antecedents as the Independent Variables and Somatic Symptoms, Anxiety, Social Dysfunction and Depression as the Dependent Variables

Variable	Somatic Symptoms			Anxiety			Social Dysfunction			Depression		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Constant	1.52**	2.07**	1.78**	1.52**	2.16**	2.34**	2.34**	2.12**	1.32**	2.25**	3.13**	3.34**
Work-role fit	.03	.08	.07	.00	.05	.03	.16**	.14*	.11*	-.04	.02	.06
Job enrichment	.07	.07	.07	.07	.08	.11*	-.12*	-.12*	-.19**	-.11	-.10	-.09
Co-worker relations	-.15*	-.09	-.03	-.15**	-.10	-.07	.14*	.12*	.14*	-.07	.00	.08
Supervisor support	-.04	-.05	-.04	-.05	-.06	-.08	.19**	.20**	.23**	-.01	-.03	-.01
Supervisor trust	.02	.04	.05	-.04	-.01	.01	-.06	-.07	-.10	-.00	.03	.01
Physical/emotional resources	.35**	.29**	.30**	.40**	.34**	.33**	-.22**	-.20**	-.17**	.19**	.11*	.12*
Cognitive resources	.16**	.13*	.11*	.10*	.07	.04	.07	.08	.11*	.11*	.08	.02
Rewards and recognition	-.08	-.09	-.08	.01	-.00	-.01	.02	.02	.03	.00	-.01	-.01
Sense of coherence	-	-.25**	-.22**	-	-.26**	-.24**	-	.11*	.11*	-	-.33**	-.28**
Psychological meaningfulness	-	-	.00	-	-	.07	-	-	-.04	-	-	-.11
Psychological availability	-	-	.02	-	-	-.12*	-	-	.20**	-	-	-.07
Psychological safety: rejection	-	-	.10*	-	-	.09*	-	-	.01	-	-	.13*
Psychological safety: appreciation	-	-	-.12*	-	-	.02	-	-	-.08	-	-	-.10*
Autonomy	-	-	.01	-	-	-.05	-	-	.12*	-	-	.07
R^2	.24	.28	.30	.27	.32	.34	.14	.15	.19	.13	.21	.24
F	19.60**	21.73**	15.01**	23.12**	25.58**	17.63**	9.79**	9.28**	8.03**	9.31**	14.25**	10.95**
df	8/493	9/492	14/487	8/493	9/492	14/487	8/493	9/492	14/487	8/493	9/492	14/487
ΔR^2	.24	.04	.02	.27	.05	.02	.14	.01	.04	.13	.08	.03
ΔF	19.60**	29.65**	2.36*	23.12**	33.16*	2.58**	9.79**	4.62*	5.08**	9.31**	46.81**	4.18**
df	-	1/492	5/487	-	1/492	5/487	-	1/492	5/487	-	1/492	5/487

* $p < .05$

** $p < .01$

In the first step, work-role fit, job enrichment, co-worker relations, supervisor support, supervisor trust, physical and emotional resources, cognitive resources and rewards explain 24% ($R^2 = .24$) of the variance in the experience of somatic symptoms of secondary school educators in Namibia ($F = 19.60, p < .01$). Standardised beta values indicate that, amongst these predictors, co-worker relations ($\beta = -.15, p < .01$), physical/emotional resources ($\beta = .35, p < .01$) and cognitive resources ($\beta = .16, p < .01$) contribute significantly towards educators' somatic symptoms. In a second step, sense of coherence was added to the predictors of somatic symptoms. A statistically significant change was found in the explained variance of somatic symptoms ($\Delta R^2 = .04$), which means that sense of coherence makes a statistically significant contribution to the explanation of somatic symptoms as reported by secondary school educators ($\Delta F = 29.65, p < .01$). Standardised beta values indicate that, amongst these predictors, physical/emotional resources ($\beta = .29, p < .01$), cognitive resources ($\beta = .13, p < .05$) and sense of coherence ($\beta = -.25, p < .01$) contribute towards educators' somatic symptoms. In a third step, psychological meaningfulness, psychological availability, psychological safety rejection, psychological safety appreciation and autonomy were added as independent variables. These independent variables explain another 2% in the variance of somatic symptoms that secondary school educators' experience, which is statistically significant ($\Delta F = 2.36, p < .05$). Standardised beta values indicate that, amongst these predictors, physical/emotional resources ($\beta = .30, p < .01$), cognitive resources ($\beta = .11, p < .05$), sense of coherence ($\beta = -.22, p < .01$), psychological safety rejection ($\beta = .10, p < .05$), psychological safety appreciation ($\beta = -.12, p < .05$), contribute significantly towards the presence of somatic symptoms in educators.

Statistical values indicate that co-worker relations, physical/emotional resources, cognitive resources, sense of coherence, psychological safety rejection and psychological safety appreciation account for 30% of the variance experienced by Namibian secondary school educators in their experience of somatic symptoms. Thus, somatic symptoms of secondary school educators in Namibia become worse when they feel they experience poor co-worker relations, experience that they don't have enough physical/emotional and cognitive resources to do their job, don't feel a strong sense of coherence at work, feel psychologically rejected and don't feel psychologically appreciated as an educator.

To investigate the direct effect of independent variables on educators' anxiety levels, three steps were followed (Table 37). In the first step, work-role fit, job enrichment, co-worker relations, supervisor support, supervisor trust, physical and emotional resources, cognitive resources and rewards explain a statistically significant 27% ($R^2 = .27$) of the variance in the experience of anxiety of secondary school educators in Namibia ($F = 23.12, p < .01$). Standardised beta values indicate that, amongst these predictors, co-worker relations ($\beta = -.15, p < .01$), physical/emotional resources ($\beta = .40, p < .01$), and cognitive resources ($\beta = .10, p < .05$), contribute significantly towards educators' anxiety. In a second step, sense of coherence was added to the predictors of anxiety. A statistically significant change was found in the explained variance in anxiety ($\Delta R^2 = .05$), which means that sense of coherence contributes to educators' anxiety levels ($\Delta F = 33.16, p < .05$). Standardised beta values indicate that, amongst these predictors, physical/emotional resources ($\beta = .34, p < .01$) and sense of coherence ($\beta = -.26, p < .01$) contribute towards educators' anxiety. In a

third step, psychological meaningfulness, psychological availability, psychological safety rejection, psychological safety appreciation and autonomy were added as independent variables. These independent variables explain another 2% in the variance of anxiety that secondary school educators experience, which is statistically significant ($\Delta F = 2.58, p < .01$). Standardised beta values indicate that, amongst these predictors, job enrichment ($\beta = .11, p < .05$), physical/emotional resources ($\beta = .33, p < .01$), sense of coherence ($\beta = -.24, p < .01$), psychological safety rejection ($\beta = .09, p < .05$) and psychological availability ($\beta = -.12, p < .05$) contribute significantly towards educators' anxiety. The results indicate that co-worker relations, physical/emotional resources, cognitive resources, sense of coherence, psychological safety rejection and psychological availability account for 34% of the variance in anxiety of Namibian secondary school educators. Thus, anxiety of secondary school educators in Namibia becomes worse when they feel they experience poor co-worker relations, experience that they don't have enough physical/emotional and cognitive resources to do their job, have a weak sense of coherence, feel psychologically rejected and do not feel psychologically available as an educator.

To investigate the direct effect of independent variables on educators' social dysfunction, three steps were followed (Table 37). In the first step, work-role fit, job enrichment, co-worker relations, supervisor support, supervisor trust, physical and emotional resources, cognitive resources and rewards explain 14% ($R^2 = .14$) of the variance in the experience of social dysfunction of secondary school educators in Namibia, which is statistically significant ($F = 9.79, p < .01$). The standardised beta

values indicate that, amongst these predictors, work role fit ($\beta = .16, p < .01$), job enrichment ($\beta = -.12, p < .05$), co-worker relations ($\beta = .14, p < .05$), supervisor support ($\beta = .19, p < .01$) and physical/emotional resources ($\beta = -.22, p < .01$) contribute statistically significantly towards educators' social dysfunction. In a second step, sense of coherence was added to the predictors of general health social functioning. A statistically significant change was found in the explained variance in social dysfunction, which means that a weak sense of coherence contributes to educators' social dysfunction ($\Delta F = 4.62, p < .05$). Standardised beta values indicate that, amongst these predictors, work role fit ($\beta = .14, p < .05$), job enrichment ($\beta = -.12, p < .05$), co-worker relations ($\beta = .12, p < .05$), supervisor support ($\beta = .20, p < .01$), physical/emotional resources ($\beta = -.20, p < .01$) and sense of coherence ($\beta = .11, p < .05$), contribute towards educators' experience of social dysfunction. In the third step, psychological meaningfulness, psychological availability, psychological safety rejection, psychological safety appreciation and autonomy were added as independent variables. These independent variables explain another 4% in the variance of social dysfunction that secondary school educators experience, which is statistically significant ($\Delta F = 5.08, p < .01$). Standardised beta values indicate that, amongst these predictors, work role fit ($\beta = .11, p < .05$), job enrichment ($\beta = -.19, p < .01$), co-worker relations ($\beta = .14, p < .05$), supervisor support ($\beta = .23, p < .01$), physical/emotional resources ($\beta = -.17, p < .01$), cognitive resources ($\beta = .11, p < .05$), sense of coherence ($\beta = .11, p < .05$), psychological availability ($\beta = .20, p < .01$) and autonomy ($\beta = .12, p < .05$) contribute significantly towards educators' social dysfunction. Work-role fit, job enrichment, co-worker relations, physical/emotional resources, cognitive resources, sense of coherence, psychological

availability and autonomy account for 19% of the variance in social dysfunction of Namibian secondary school educators. Thus, social dysfunction of secondary school educators in Namibia becomes worse when they feel they experience poor work-role fit, feel that they are not enriched through their job, experience poor co-worker relations, lack supervisor support, experience that they don't have enough physical/emotional and cognitive resources to do their job well, have a poor sense of coherence, do not feel psychologically available for their job and experience a lack of autonomy to do their job.

To investigate the direct effect of independent variables on educators' depression levels (Table 37), three steps were followed. In the first step, work-role fit, job enrichment, co-worker relations, supervisor support, supervisor trust, physical and emotional resources, cognitive resources and rewards explain 13% ($R^2 = .13$) of the variance in the experience of depression of secondary school educators in Namibia, which is statistically significant ($F = 9.31, p < .01$). Standardised beta values indicate that, amongst these predictors, physical/emotional resources ($\beta = .19, p < .01$) and cognitive resources ($\beta = .11, p < .05$) contribute significantly towards educators' depression levels. In the second step, sense of coherence was added to the predictors of depression. Statistically significant change was found in the variance of the experience of depression ($\Delta R^2 = .08$), which means that sense of coherence plays a significant role in its effect on educators' depression levels ($\Delta F = 46.81, p < .01$). Standardised beta values indicate that, amongst these predictors, physical/emotional resources ($\beta = .11, p < .05$) and sense of coherence ($\beta = -.33, p < .01$) contribute towards educators' depression levels. In a third step, psychological meaningfulness,

psychological availability, psychological safety rejection, psychological safety appreciation and autonomy were added as independent variables. These independent variables explain another 3% of the variance of depression that secondary school educators experience, which is statistically significant ($\Delta F = 4.18, p < .01$). Standardised beta values indicate that, amongst these predictors, physical/emotional resources ($\beta = .12, p < .05$), sense of coherence ($\beta = -.28, p < .01$), psychological safety appreciation ($\beta = -.10, p < .05$) and psychological safety rejection ($\beta = .13, p < .05$) contribute significantly towards educators' depression levels. The results indicate that physical/emotional resources, cognitive resources, sense of coherence, psychological safety appreciation and psychological safety rejection account for 24% of the variance experienced by Namibian secondary school educators in their experience of depression. Thus, secondary school educators in Namibia experience higher work-related depression when they feel they don't have adequate physical/emotional and cognitive resources, having a poor sense of coherence, do not feel psychologically safe because of rejection at the workplace and experience a lack of psychological safety owing to a lack of appreciation.

4.4.2 Indirect effects of independent variables on dependent variables

The procedures described by Hayes and Preacher (in press) were used to test for indirect effects. These authors recommended bias-corrected confidence intervals (CIs) as obtained through bootstrapping to measure indirect effects. Two-sided 95% bias corrected confidence intervals (5000 trials), and the statistical significance of indirect effects were computed. The significance of the indirect effects was assessed

in terms of zero versus non-zero coefficients rather than in terms of statistical significance only (Preacher & Hayes, 2008). The lower CI (LCI) and the upper CI (UCI) are reported.

4.4.2.1 Indirect effects of independent variables on total engagement via psychological meaningfulness

Table 38 shows the indirect effects of independent variables on total engagement via psychological meaningfulness.

Table 38

Indirect Effects of Independent Variables on Total Engagement via Psychological Meaningfulness

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.10	.02	.06	.15
Work-role fit	.06	.02	.04	.10
Job enrichment	.04	.02	.01	.07
Co-worker relations	.00	.01	-.02	.03
Supervisor support	.01	.01	-.01	.04
Supervisor trust	-.01	.01	-.03	.01
Physical/emotional resources	-.01	.01	-.02	.01
Cognitive resources	-.02	.01	-.04	-.01
Rewards and recognition	.00	.01	-.01	.02
Sense of coherence	.02	.01	.00	.04

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

Regarding the indirect effects on total engagement, the omnibus effects (and the effects of work-role fit, job enrichment, cognitive resources and sense of coherence

for psychological meaningfulness) did not include zeros. Therefore, psychological meaningfulness mediated the relationship between work-role fit, job enrichment, cognitive resources and sense of coherence on the one hand and total engagement on the other hand. The 95% confidence intervals for co-worker relations, supervisor support, supervisor trust, physical/emotional resources and rewards and recognition for psychological meaningfulness (effect = 0.02, SE = 0.02) included zeros.

4.4.2.2 Indirect effects of independent variables on total engagement via psychological availability

Table 39 shows the indirect effects of independent variables on total engagement via psychological availability.

Table 39

Indirect Effects of Independent Variables on Total Engagement via Psychological Availability

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.02	.01	-.01	.04
Work-role fit	.01	.01	-.00	.02
Job enrichment	.01	.01	-.00	.03
Co-worker relations	.00	.00	-.00	.01
Supervisor support	-.00	.00	-.01	.00
Supervisor trust	.00	.00	-.00	.01
Physical/emotional resources	.00	.00	-.00	.01
Cognitive resources	-.01	.01	-.03	.00
Rewards and recognition	-.00	.00	-.01	.00
Sense of coherence	.00	.00	-.00	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological availability (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological availability did not mediate the relationship between any of the independent variables and total engagement.

4.4.2.3 Indirect effects of independent variables on total engagement via autonomy

Table 40 shows the indirect effects of independent variables on total engagement via autonomy.

Table 40

Indirect Effects of Independent Variables on Total Engagement via Autonomy

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.02	.01	-.00	.04
Work-role fit	.00	.00	-.00	.01
Job enrichment	.03	.02	-.00	.06
Co-worker relations	-.00	.00	-.01	.01
Supervisor support	-.01	.01	-.02	.00
Supervisor trust	.01	.01	-.00	.03
Physical/emotional resources	-.01	.00	-.01	.00
Cognitive resources	.00	.00	-.01	.01
Rewards and recognition	.01	.00	-.00	.01
Sense of coherence	-.00	.00	-.01	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for autonomy (effect = 0.02, SE = 0.02) included zeros.

Therefore, autonomy did not mediate the relationship between any of the independent variables and total engagement.

4.4.2.4 Indirect effects of independent variables on total engagement via psychological safety rejection and psychological safety appreciation

Table 41 shows the indirect effects of independent variables on total engagement via psychological safety rejection and psychological safety appreciation.

Table 41

Indirect Effects of Independent Variables on Total Engagement via Psychological Safety Rejection and Psychological Safety Appreciation

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Psychological Safety Rejection				
Omnibus	.01	.01	-.00	.02
Work-role fit	.01	.01	-.00	.02
Job enrichment	-.00	.00	-.01	.01
Co-worker relations	-.01	.01	-.03	.01
Supervisor support	-.00	.00	-.01	.00
Supervisor trust	-.00	.00	-.01	.01
Physical/emotional resources	.00	.00	-.00	.01
Cognitive resources	.01	.00	-.00	.01
Rewards and recognition	-.00	.00	-.00	.00
Sense of coherence	-.01	.01	-.03	.01
Psychological Safety Appreciation				
Omnibus	-.00	.01	-.02	.01
Work-role fit	-.00	.00	-.01	.00
Job enrichment	-.00	.00	-.01	.01
Co-worker relations	-.00	.01	-.02	.02
Supervisor support	-.00	.00	-.01	.01
Supervisor trust	-.00	.00	-.01	.01
Physical/emotional resources	-.00	.00	-.01	.01
Cognitive resources	.00	.00	-.01	.00
Rewards and recognition	-.00	.00	-.00	.00
Sense of coherence	-.00	.00	-.01	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological safety rejection and psychological safety appreciation (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological safety rejection and psychological safety appreciation do not mediate the relationship between any of the independent variables and total engagement.

4.4.2.5 Indirect effects of independent variables on cognitive engagement via psychological meaningfulness

Table 42 shows the indirect effects of independent variables on cognitive engagement via psychological meaningfulness.

Table 42

Indirect Effects of Independent Variables on Cognitive Engagement via Psychological Meaningfulness

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.06	.03	-.01	.13
Work-role fit	.04	.02	-.00	.09
Job enrichment	.02	.02	-.00	.05
Co-worker relations	.00	.01	-.01	.02
Supervisor support	.01	.01	-.00	.03
Supervisor trust	-.00	.01	-.02	.01
Physical/emotional resources	-.00	.01	-.02	.01
Cognitive resources	-.01	.01	-.03	.00
Rewards and recognition	.00	.00	-.01	.01
Sense of coherence	.01	.01	-.00	.04

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological meaningfulness (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological meaningfulness did not mediate the relationship between any of the independent variables and cognitive engagement.

4.4.2.6 Indirect effects of independent variables on cognitive engagement via psychological availability

Table 43 shows the indirect effects of independent variables on cognitive engagement via psychological availability.

Table 43

Indirect Effects of Independent Variables on Cognitive Engagement via Psychological Availability

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.01	.02	-.05	.03
Work-role fit	-.00	.01	-.02	.01
Job enrichment	-.01	.01	-.04	.02
Co-worker relations	-.00	.00	-.01	.01
Supervisor support	.00	.00	-.01	.01
Supervisor trust	-.00	.00	-.01	.01
Physical/emotional resources	-.00	.00	-.01	.01
Cognitive resources	.01	.01	-.01	.03
Rewards and recognition	.00	.00	-.01	.01
Sense of coherence	-.00	.01	-.01	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological availability (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological availability did not mediate the relationship between any of the independent variables and cognitive engagement.

4.4.2.7 Indirect effects of independent variables on cognitive engagement via autonomy

Table 44 shows the indirect effects of independent variables on cognitive engagement via autonomy.

Table 44

Indirect Effects of Independent Variables on Cognitive Engagement via Autonomy

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	-.00	.02	-.03	.03
Work-role fit	-.00	.00	-.01	.01
Job enrichment	-.01	.02	-.05	.04
Co-worker relations	.00	.00	-.01	.01
Supervisor support	.00	.01	-.01	.02
Supervisor trust	-.00	.01	-.03	.02
Physical/emotional resources	.00	.01	-.01	.01
Cognitive resources	.00	.00	-.01	.01
Rewards and recognition	-.00	.01	-.01	.01
Sense of coherence	.00	.00	-.01	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for autonomy (effect = 0.02, SE = 0.02) included zeros. Therefore, autonomy did not mediate the relationship between any of the independent variables and cognitive engagement.

4.4.2.8 Indirect effects of independent variables on cognitive engagement via psychological safety rejection and psychological safety appreciation

Table 45 shows the indirect effects of independent variables on cognitive engagement via psychological safety rejection and psychological safety appreciation.

Table 45

Indirect Effects of Independent Variables on Cognitive Engagement via Psychological Safety Rejection and Psychological Safety Appreciation

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Psychological Safety Rejection				
Omnibus	.01	.01	-.01	.04
Work-role fit	.01	.01	-.01	.03
Job enrichment	-.00	.01	-.02	.01
Co-worker relations	-.02	.02	-.05	.01
Supervisor support	-.00	.01	-.02	.01
Supervisor trust	-.00	.01	-.01	.01
Physical/emotional resources	.00	.00	-.01	.01
Cognitive resources	.01	.01	-.00	.03
Rewards and recognition	-.00	.00	-.01	.01
Sense of coherence	-.02	.01	-.05	.01
Psychological Safety Appreciation				
Omnibus	.01	.01	-.02	.03
Work-role fit	.00	.00	-.01	.01
Job enrichment	.00	.01	-.01	.01
Co-worker relations	.01	.02	-.03	.05
Supervisor support	.00	.00	-.01	.01
Supervisor trust	.00	.00	-.01	.01
Physical/emotional resources	.00	.01	-.01	.01
Cognitive resources	-.00	.00	-.01	.01
Rewards and recognition	.00	.00	-.01	.01
Sense of coherence	.00	.01	-.01	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological safety rejection and psychological safety appreciation (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological safety rejection and psychological safety appreciation did not mediate the relationship between any of the independent variables and cognitive engagement.

4.4.2.9 Indirect effects of independent variables on emotional engagement via psychological meaningfulness

Table 46 shows the indirect effects of independent variables on emotional engagement via psychological meaningfulness.

Table 46

Indirect Effects of Independent Variables on Emotional Engagement via Psychological Meaningfulness

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.13	.03	.08	.19
Work-role fit	.09	.02	.05	.13
Job enrichment	.05	.02	.01	.10
Co-worker relations	.00	.01	-.02	.03
Supervisor support	.02	.01	-.01	.05
Supervisor trust	-.01	.01	-.03	.02
Physical/emotional resources	-.01	.01	-.03	.01
Cognitive resources	-.03	.01	-.06	-.01
Rewards and recognition	.01	.01	-.01	.02
Sense of coherence	.03	.02	.00	.06

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

As far as the indirect effects on emotional engagement were concerned, the omnibus effects (and the effects of work-role fit, job enrichment, cognitive resources and sense of coherence for psychological meaningfulness) did not include zeros. Therefore, psychological meaningfulness mediated the relationship between work-role fit, job enrichment, cognitive resources and sense of coherence on the one hand and emotional engagement on the other hand. The 95% confidence intervals for co-worker relations, supervisor support, supervisor trust, physical/emotional resources and rewards for psychological meaningfulness (effect = 0.02, SE = 0.02) included zeros.

4.4.2.10 Indirect effects of independent variables on emotional engagement via psychological availability

Table 47 shows the indirect effects of independent variables on emotional engagement via psychological availability.

Table 47

Indirect Effects of Independent Variables on Emotional Engagement via Psychological Availability

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.02	.02	-.01	.05
Work-role fit	.01	.01	-.01	.02
Job enrichment	.01	.01	-.01	.04
Co-worker relations	.00	.01	-.00	.02
Supervisor support	-.00	.00	-.01	.00
Supervisor trust	.00	.00	-.00	.01
Physical/emotional resources	.00	.00	-.01	.01
Cognitive resources	-.01	.01	-.03	.01
Rewards and recognition	-.00	.00	-.01	.00
Sense of coherence	.00	.01	-.00	.02

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological availability (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological availability did not mediate the relationship between any of the independent variables and emotional engagement.

4.4.2.11 Indirect effects of independent variables on emotional engagement via psychological autonomy

Table 48 shows the indirect effects of independent variables on emotional engagement via autonomy.

Table 48

Indirect Effects of Independent Variables on Emotional Engagement via Autonomy

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.03	.01	.01	.06
Work-role fit	.01	.01	-.01	.02
Job enrichment	.05	.02	.02	.09
Co-worker relations	-.00	.01	-.02	.02
Supervisor support	-.01	.01	-.03	.00
Supervisor trust	.03	.01	.01	.05
Physical/emotional resources	-.01	.01	-.02	.00
Cognitive resources	.00	.01	-.01	.01
Rewards and recognition	.01	.01	.00	.02
Sense of coherence	-.00	.01	-.02	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

With regard to the indirect effects on emotional engagement, the omnibus effects (and the effects of job enrichment, supervisor trust and rewards and recognition via autonomy) did not include zeros. Therefore, psychological meaningfulness mediated the relationship between job enrichment, supervisor trust and rewards/recognition on the one hand and emotional engagement on the other hand. The 95% confidence intervals for work-role fit, co-worker relations, supervisor support, physical/emotional resources, cognitive resources and sense of coherence (effect = 0.02, SE = 0.02) included zeros.

4.4.2.12 Indirect effects of independent variables on emotional engagement

via psychological safety rejection and psychological safety appreciation

Table 49 shows the indirect effects of independent variables on emotional engagement via psychological safety rejection and psychological safety appreciation.

Table 49

Indirect Effects of Independent Variables on Emotional Engagement via Psychological Safety Rejection and Psychological Safety Appreciation

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Psychological Safety Rejection				
Omnibus	.00	.01	-.01	.02
Work-role fit	.00	.01	-.01	.01
Job enrichment	-.00	.00	-.01	.01
Co-worker relations	-.00	.01	-.02	.02
Supervisor support	-.00	.00	-.01	.01
Supervisor trust	-.00	.00	-.01	.00
Physical/emotional resources	.00	.00	-.00	.00
Cognitive resources	.00	.01	-.01	.01
Rewards and recognition	.00	.00	-.00	.00
Sense of coherence	-.00	.01	-.02	.02
Psychological Safety Appreciation				
Omnibus	-.00	.01	-.02	.01
Work-role fit	-.00	.00	-.01	.00
Job enrichment	-.00	.00	-.01	.01
Co-worker relations	-.01	.01	-.03	.02
Supervisor support	-.00	.00	-.01	.01
Supervisor trust	-.00	.00	-.01	.00
Physical/emotional resources	-.00	.00	-.01	.01
Cognitive resources	.00	.00	-.00	.01
Rewards and recognition	-.00	.00	-.01	.00
Sense of coherence	-.00	.00	-.01	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological safety rejection and psychological safety appreciation (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological safety rejection and psychological safety appreciation did not mediate the relationship between any of the independent variables and emotional engagement.

4.4.2.13 Indirect effects of independent variables on physical engagement via psychological meaningfulness

Table 50 shows the indirect effects of independent variables on physical engagement via psychological meaningfulness.

Table 50

Indirect Effects of Independent Variables on Physical Engagement via Psychological Meaningfulness

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.10	.03	.05	.17
Work-role fit	.07	.02	.03	.11
Job enrichment	.04	.02	.01	.08
Co-worker relations	.00	.01	-.02	.03
Supervisor support	.01	.01	-.01	.04
Supervisor trust	-.01	.01	-.02	.01
Physical/emotional resources	-.01	.01	-.02	.01
Cognitive resources	-.03	.01	-.05	-.01
Rewards and recognition	.00	.01	-.01	.02
Sense of coherence	.02	.01	.00	.05

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

As far as the indirect effects on physical engagement were concerned, the omnibus effects (and the effects of work-role fit, job enrichment, cognitive resources and sense of coherence for psychological meaningfulness) did not include zeros. Therefore, psychological meaningfulness mediated the relationship between work-role fit, job enrichment, cognitive resources and sense of coherence on the one hand and physical engagement on the other hand. The 95% confidence intervals for co-worker relations, supervisor support, supervisor trust, physical/emotional resources and rewards (effect = 0.02, SE = 0.02) included zeros.

4.4.2.14 Indirect effects of independent variables on physical engagement via psychological availability

Table 51 shows the indirect effects of independent variables on physical engagement via psychological availability.

Table 51

Indirect Effects of Independent Variables on Physical Engagement via Psychological Availability

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.04	.02	.01	.09
Work-role fit	.02	.01	.00	.04
Job enrichment	.03	.01	.01	.06
Co-worker relations	.01	.01	-.01	.03
Supervisor support	-.01	.01	-.02	.01
Supervisor trust	.01	.01	-.01	.02
Physical/emotional resources	.00	.01	-.01	.01
Cognitive resources	-.02	.01	-.05	-.01
Rewards and recognition	-.01	.01	-.02	.00
Sense of coherence	.01	.01	-.00	.02

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

With regard to the indirect effects on physical engagement, the omnibus effects (and the effects of work-role fit, job enrichment and cognitive resources for psychological availability) did not include zeros. Therefore, psychological availability mediated the relationship between work-role fit, job enrichment and cognitive resources on the one hand and physical engagement on the other hand. The 95% confidence intervals for co-worker relations, supervisor support, supervisor trust, physical/emotional resources and sense of coherence (effect = 0.02, SE = 0.02) included zeros.

4.4.2.15 Indirect effects of independent variables on physical engagement

via autonomy

Table 52 shows the indirect effects of independent variables on physical engagement via autonomy.

Table 52

Indirect Effects of Independent Variables on Physical Engagement via Autonomy

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.02	.01	-.00	.05
Work-role fit	.00	.01	-.00	.02
Job enrichment	.04	.02	-.00	.08
Co-worker relations	-.00	.01	-.01	.01
Supervisor support	-.01	.01	-.03	.00
Supervisor trust	.02	.01	-.00	.04
Physical/emotional resources	-.01	.01	-.02	.00
Cognitive resources	.00	.00	-.01	.01
Rewards and recognition	.01	.01	-.00	.02
Sense of coherence	-.00	.01	-.02	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for autonomy (effect = 0.02, SE = 0.02) included zeros.

Therefore, autonomy did not mediate the relationship between any of the independent variables and physical engagement.

4.4.2.16 Indirect effects of independent variables on physical engagement

via psychological safety rejection and psychological safety appreciation

Table 53 shows the indirect effects of independent variables on physical engagement via psychological safety rejection and psychological safety appreciation.

Table 53

Indirect Effects of Independent Variables on Physical Engagement via Psychological Safety Rejection and Psychological Safety Appreciation

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Psychological Safety Rejection				
Omnibus	.01	.01	-.01	.02
Work-role fit	.01	.01	-.01	.02
Job enrichment	-.00	.00	-.01	.01
Co-worker relations	-.01	.01	-.03	.01
Supervisor support	-.00	.00	-.01	.00
Supervisor trust	-.00	.00	-.01	.01
Psychological/emotional resources	.00	.00	-.00	.01
Cognitive resources	.00	.01	-.01	.02
Rewards and recognition	-.00	.00	-.00	.00
Sense of coherence	-.01	.01	-.03	.01
Psychological Safety Appreciation				
Omnibus	-.00	.01	-.02	.02
Work-role fit	-.00	.00	-.01	.01
Job enrichment	-.00	.00	-.01	.01
Co-worker relations	-.01	.01	-.04	.03
Supervisor support	-.00	.00	-.01	.01
Supervisor trust	-.00	.00	-.01	.01
Physical/emotional resources	-.00	.00	-.01	.01
Cognitive resources	.00	.00	-.01	.01
Rewards and recognition	-.00	.00	-.01	.01
Sense of coherence	-.00	.00	-.01	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological safety rejection and psychological safety appreciation (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological safety rejection and psychological safety appreciation did not mediate the relationship between any of the independent variables and physical engagement.

4.4.2.17 Indirect effects of independent variables on organizational citizenship behaviour individual via psychological meaningfulness

Table 54 shows the indirect effects of independent variables on organizational citizenship behaviour individual via psychological meaningfulness.

Table 54

Indirect Effects of Independent Variables on Organizational Citizenship Behaviour Individual via Psychological Meaningfulness

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.04	.03	-.02	.10
Work-role fit	.03	.02	-.02	.07
Job enrichment	.02	.02	-.01	.05
Co-worker relations	.00	.01	-.01	.01
Supervisor support	.01	.01	-.01	.02
Supervisor trust	-.00	.01	-.01	.01
Physical/emotional resources	-.00	.00	-.01	.01
Cognitive resources	-.01	.01	-.03	.01
Rewards and recognition	.00	.00	-.00	.01
Sense of coherence	.01	.01	-.01	.02

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological meaningfulness (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological meaningfulness did not mediate the relationship between any of the independent variables and organizational citizenship behaviour individual.

4.4.2.18 Indirect effects of independent variables on organizational citizenship behaviour individual via psychological availability

Table 55 shows the indirect effects of independent variables on organizational citizenship behaviour individual via psychological availability.

Table 55

Indirect Effects of Independent Variables on Organizational Citizenship Behaviour Individual via Psychological Availability

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.06	.02	.02	.12
Work-role fit	.02	.01	.01	.05
Job enrichment	.05	.02	.01	.09
Co-worker relations	.01	.01	-.01	.04
Supervisor support	-.01	.01	-.03	.01
Supervisor trust	.01	.01	-.01	.03
Physical/emotional resources	.00	.01	-.01	.02
Cognitive resources	-.03	.01	-.06	-.01
Rewards and recognition	-.01	.01	-.03	.00
Sense of coherence	.01	.01	-.01	.03

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

With regard to the indirect effects on organizational citizenship behaviour individual, the omnibus effects (and the effects of work-role fit, job enrichment and cognitive resources for psychological availability) did not include zeros. Therefore, psychological availability mediated the relationship between work-role fit, job enrichment and cognitive resources on the one hand and organizational citizenship behaviour individual on the other hand. The 95% confidence intervals for co-worker relations, supervisor support, supervisor trust, physical/emotional resources and sense of coherence (effect = 0.02, SE = 0.02) included zeros.

4.4.2.19 Indirect effects of independent variables on organizational citizenship behaviour individual via autonomy

Table 56 shows the indirect effects of independent variables on organizational citizenship behaviour individual via autonomy.

Table 56

Indirect Effects of Independent Variables on Organizational Citizenship Behaviour Individual via Autonomy

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.01	.02	-.02	.04
Work-role fit	.00	.00	-.01	.01
Job enrichment	.02	.02	-.03	.06
Co-worker relations	-.00	.00	-.01	.01
Supervisor support	-.00	.01	-.02	.01
Supervisor trust	.01	.01	-.01	.04
Physical/emotional resources	-.00	.01	-.01	.01
Cognitive resources	.00	.00	-.01	.01
Rewards and recognition	.00	.01	-.01	.01
Sense of coherence	-.00	.00	-.01	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for autonomy (effect = 0.02, SE = 0.02) included zeros. Therefore, autonomy did not mediate the relationship between any of the independent variables and organizational citizenship behaviour individual.

4.4.2.20 Indirect effects of independent variables on organizational citizenship behaviour individual via psychological safety rejection and psychological safety appreciation

Table 57 shows the indirect effects of independent variables on organizational citizenship behaviour individual via psychological safety rejection and psychological safety appreciation.

Table 57

Indirect Effects of Independent Variables on Organizational Citizenship Behaviour Individual via Psychological Safety Rejection and Psychological Safety Appreciation

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Psychological Safety Rejection				
Omnibus	.01	.01	-.01	.03
Work-role fit	.01	.01	-.01	.02
Job enrichment	-.00	.00	-.01	.01
Co-worker relations	-.01	.01	-.04	.02
Supervisor support	-.00	.00	-.01	.01
Supervisor trust	-.00	.00	-.01	.01
Physical/emotional resources	.00	.00	-.00	.01
Cognitive resources	.01	.01	-.01	.02
Rewards and recognition	-.00	.00	-.01	.01
Sense of coherence	-.01	.01	-.04	.01
Psychological Safety Appreciation				
Omnibus	-.01	.01	-.04	.01
Work-role fit	-.00	.00	-.01	.00
Job enrichment	-.00	.01	-.02	.01
Co-worker relations	-.02	.02	-.06	.02
Supervisor support	-.00	.01	-.02	.01
Supervisor trust	-.00	.01	-.01	.01
Physical/emotional resources	-.01	.01	-.02	.00
Cognitive resources	.00	.00	-.00	.01
Rewards and recognition	-.00	.00	-.01	.00
Sense of coherence	-.00	.01	-.02	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological safety rejection and psychological safety appreciation (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological safety rejection and psychological safety appreciation did not mediate the relationship between any of the independent variables and organizational citizenship behaviour individual.

4.4.2.21 Indirect effects of independent variables on organizational citizenship behaviour organization via psychological meaningfulness

Table 58 shows the indirect effects of independent variables on organizational citizenship behaviour organization via psychological meaningfulness.

Table 58

Indirect Effects of Independent Variables on Organizational Citizenship Behaviour Organization via Psychological Meaningfulness

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.03	.03	-.03	.10
Work-role fit	.02	.02	-.02	.07
Job enrichment	.01	.01	-.01	.04
Co-worker relations	.00	.01	-.01	.01
Supervisor support	.00	.01	-.00	.02
Supervisor trust	-.00	.00	-.01	.01
Physical/emotional resources	-.00	.00	-.01	.01
Cognitive resources	-.01	.01	-.03	.01
Rewards and recognition	.00	.00	-.01	.01
Sense of coherence	.01	.01	-.01	.02

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological meaningfulness (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological meaningfulness did not mediate the relationship between any of the independent variables and organizational citizenship behaviour organization.

4.4.2.2 Indirect effects of independent variables on organizational citizenship behaviour organization via psychological availability

Table 59 shows the indirect effects of independent variables on organizational citizenship behaviour organization via psychological availability.

Table 59

Indirect Effects of Independent Variables on Organizational Citizenship Behaviour Organization via Psychological Availability

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.06	.02	.03	.11
Work-role fit	.03	.01	.01	.05
Job enrichment	.05	.02	.02	.09
Co-worker relations	.01	.01	-.01	.03
Supervisor support	-.01	.01	-.03	.01
Supervisor trust	.01	.01	-.01	.03
Physical/emotional resources	.00	.01	-.01	.02
Cognitive resources	-.03	.01	-.06	-.01
Rewards and recognition	-.01	.01	-.03	.00
Sense of coherence	.01	.01	-.01	.03

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

As far as the indirect effects on organizational citizenship behaviour organization were concerned, the omnibus effects (and the effects of work-role fit, job enrichment and cognitive resources for psychological availability) did not include zeros. Therefore, psychological availability mediated the relationship between work-role fit, job enrichment and cognitive resources on the one hand and organizational citizenship behaviour organization on the other hand. The 95% confidence intervals

for co-worker relations, supervisor support, supervisor trust, physical/emotional resources and sense of coherence (effect = 0.02, SE = 0.02) included zeros.

4.4.2.23 Indirect effects of independent variables on organizational citizenship behaviour organization via autonomy

Table 60 shows the indirect effects of independent variables on organizational citizenship behaviour organization via autonomy.

Table 60

Indirect Effects of Independent Variables on Organizational Citizenship Behaviour Organization via Autonomy

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.02	.02	-.01	.05
Work-role fit	.00	.01	-.00	.02
Job enrichment	.03	.03	-.01	.08
Co-worker relations	-.00	.01	-.01	.01
Supervisor support	-.01	.01	-.03	.00
Supervisor trust	.02	.01	-.01	.04
Physical/emotional resources	-.01	.01	-.02	.00
Cognitive resources	.00	.00	-.01	.01
Rewards and recognition	.01	.01	-.00	.02
Sense of coherence	-.00	.01	-.02	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for autonomy (effect = 0.02, SE = 0.02) included zeros.

Therefore, autonomy did not mediate the relationship between any of the independent variables and organizational citizenship behaviour organization.

4.4.2.24 Indirect effects of independent variables on organizational citizenship behaviour organization via psychological safety rejection and psychological safety appreciation

Table 61 shows the indirect effects of independent variables on organizational citizenship behaviour organization via psychological safety rejection and psychological safety appreciation.

Table 61

*Indirect Effects of Independent Variables on Organizational Citizenship Behaviour
Organization via Psychological Safety Rejection and Psychological Safety
Appreciation*

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Psychological Safety Rejection				
Omnibus	-.00	.01	-.02	.02
Work-role fit	-.00	.01	-.01	.01
Job enrichment	.00	.00	-.01	.01
Co-worker relations	.00	.01	-.02	.02
Supervisor support	.00	.00	-.01	.01
Supervisor trust	.00	.00	-.01	.01
Physical/emotional resources	-.00	.00	-.00	.00
Cognitive resources	-.00	.01	-.01	.01
Rewards and recognition	.00	.00	-.00	.00
Sense of coherence	.00	.01	-.02	.02
Psychological Safety Appreciation				
Omnibus	.00	.01	-.02	.03
Work-role fit	.00	.00	-.01	.01
Job enrichment	.00	.00	-.01	.01
Co-worker relations	.00	.02	-.03	.04
Supervisor support	.00	.00	-.01	.01
Supervisor trust	.00	.00	-.01	.01
Physical/emotional resources	.00	.01	-.01	.01
Cognitive resources	-.00	.00	-.01	.01
Rewards and recognition	.00	.00	-.01	.01
Sense of coherence	.00	.00	-.01	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological safety rejection and psychological safety appreciation (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological safety rejection and psychological safety appreciation did not mediate the

relationship between any of the independent variables and organizational citizenship behaviour organization.

4.4.2.25 Indirect effects of independent variables on turnover intention via psychological meaningfulness

Table 62 shows the indirect effects of independent variables on turnover intention via psychological meaningfulness.

Table 62

Indirect Effects of Independent Variables on Turnover Intention via Psychological Meaningfulness

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	-.10	.05	-.19	-.01
Work-role fit	-.06	.03	-.12	-.01
Job enrichment	-.04	.02	-.09	-.00
Co-worker relations	-.00	.01	-.03	.02
Supervisor support	-.01	.01	-.04	.01
Supervisor trust	.01	.01	-.01	.03
Physical/emotional resources	.01	.01	-.01	.02
Cognitive resources	.02	.01	.00	.06
Rewards and recognition	-.00	.01	-.02	.01
Sense of coherence	-.02	.01	-.05	.00

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

With regard to the indirect effects on turnover intention, the omnibus effects (and the effects of work-role fit, job enrichment and cognitive resources for psychological meaningfulness) did not include zeros. Therefore, psychological meaningfulness

mediated the relationship between work role fit, job enrichment and cognitive resources on the one hand and turnover intention on the other hand. The 95% confidence intervals for co-worker relations, supervisor support, supervisor trust, physical/emotional resources and sense of coherence (effect = 0.02, SE = 0.02) included zeros.

4.4.2.26 Indirect effects of independent variables on turnover intention via psychological availability

Table 63 shows the indirect effects of independent variables on turnover intention via psychological availability.

Table 63

Indirect Effects of Independent Variables on Turnover Intention via Psychological Availability

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.08	.03	.03	.15
Work-role fit	.03	.01	.01	.07
Job enrichment	.06	.03	.02	.12
Co-worker relations	.01	.01	-.01	.05
Supervisor support	-.01	.01	-.04	.01
Supervisor trust	.01	.01	-.01	.04
Physical/emotional resources	.00	.01	-.02	.02
Cognitive resources	-.05	.02	-.08	-.02
Rewards and recognition	-.02	.01	-.04	.00
Sense of coherence	.02	.01	-.01	.05

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

As far as the indirect effects on turnover intention were concerned, the omnibus effects (and the effects of work-role fit, job enrichment and cognitive resources for psychological availability) did not include zeros. Therefore, psychological availability mediated the relationship between work-role fit, job enrichment and cognitive resources on the one hand and turnover intention on the other hand. The 95% confidence intervals for co-worker relations, supervisor support, supervisor trust, physical/emotional resources and sense of coherence (effect = 0.02, SE = 0.02) included zeros.

4.4.2.27 Indirect effects of independent variables on turnover intention via autonomy

Table 64 shows the indirect effects of independent variables on turnover intention via autonomy.

Table 64

Indirect Effects of Independent Variables on Turnover Intention via Autonomy

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.00	.02	-.05	.05
Work-role fit	.00	.01	-.01	.01
Job enrichment	.00	.04	-.08	.07
Co-worker relations	.00	.01	-.01	.01
Supervisor support	-.00	.01	-.02	.02
Supervisor trust	.00	.02	-.04	.04
Physical/emotional resources	-.00	.01	-.02	.01
Cognitive resources	.00	.00	-.01	.01
Rewards and recognition	.00	.01	-.02	.01
Sense of coherence	-.00	.01	-.01	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for autonomy (effect = 0.02, SE = 0.02) included zeros. Therefore, autonomy did not mediate the relationship between any of the independent variables and turnover intention.

4.4.2.28 Indirect effects of independent variables on turnover intention via psychological safety rejection and psychological safety appreciation

Table 65 shows the indirect effects of independent variables on turnover intention via psychological safety rejection and psychological safety appreciation.

Table 65

Indirect Effects of Independent Variables on Turnover Intention via Psychological Safety Rejection and Psychological Safety Appreciation

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Psychological Safety Rejection				
Omnibus	.02	.02	-.01	.05
Work-role fit	.02	.01	-.00	.04
Job enrichment	-.00	.01	-.02	.02
Co-worker relations	-.03	.02	-.07	.01
Supervisor support	-.01	.01	-.02	.01
Supervisor trust	-.00	.01	-.02	.01
Physical/emotional resources	.00	.01	-.01	.02
Cognitive resources	.01	.01	-.00	.04
Rewards and recognition	-.00	.01	-.01	.01
Sense of coherence	-.03	.02	-.07	.01
Psychological Safety Appreciation				
Omnibus	.00	.02	-.03	.04
Work-role fit	.00	.01	-.01	.01
Job enrichment	.00	.01	-.01	.01
Co-worker relations	.01	.03	-.05	.06
Supervisor support	.00	.01	-.01	.02
Supervisor trust	.00	.01	-.01	.01
Physical/emotional resources	.00	.01	-.01	.02
Cognitive resources	-.00	.01	-.01	.01
Rewards and recognition	.00	.01	-.01	.01
Sense of coherence	.00	.01	-.01	.02

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological safety rejection and psychological safety appreciation (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological safety rejection and psychological safety appreciation did not mediate the relationship between any of the independent variables and turnover intention.

4.4.2.29 Indirect effects of independent variables on organizational commitment via psychological meaningfulness

Table 66 shows the indirect effects of certain independent variables on organizational commitment via psychological meaningfulness.

Table 66

Indirect Effects of Independent Variables on Organizational Commitment via Psychological Meaningfulness

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.15	.03	.09	.22
Work-role fit	.10	.03	.05	.15
Job enrichment	.06	.02	.02	.10
Co-worker relations	.01	.02	-.02	.04
Supervisor support	.02	.02	-.01	.05
Supervisor trust	-.01	.01	-.04	.02
Physical/emotional resources	-.01	.01	-.03	.01
Cognitive resources	-.04	.01	-.06	-.01
Rewards and recognition	.01	.01	-.01	.02
Sense of coherence	.03	.02	.00	.07

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

With regard to the indirect effects on organizational commitment, the omnibus effects (and the effects of work role fit, job enrichment, cognitive resources and sense of coherence for psychological meaningfulness) did not include zeros. Therefore, psychological meaningfulness mediated the relationship between work-role fit, job enrichment, cognitive resources and sense of coherence on the one hand and organizational commitment on the other hand. The 95% confidence intervals for

co-worker relations, supervisor support, supervisor trust and physical/emotional resources (effect = 0.02, SE = 0.02) included zeros.

4.4.2.30 Indirect effects of independent variables on organizational commitment via psychological availability

Table 67 shows the indirect effects of independent variables on organizational commitment via psychological availability.

Table 67

Indirect Effects of Independent Variables on Organizational Commitment via Psychological Availability

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	-.03	.02	-.06	.00
Work-role fit	-.01	.01	-.03	.00
Job enrichment	-.02	.01	-.05	.00
Co-worker relations	-.01	.01	-.02	.00
Supervisor support	.00	.01	-.01	.02
Supervisor trust	-.00	.01	-.01	.01
Physical/emotional resources	-.00	.00	-.01	.01
Cognitive resources	.02	.01	-.00	.04
Rewards and recognition	.01	.00	-.00	.02
Sense of coherence	-.01	.01	-.02	.00

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological availability (effect = 0.02, SE = 0.02)

included zeros. Therefore, psychological availability did not mediate the relationship between any of the independent variables and organizational commitment.

4.4.2.31 Indirect effects of independent variables on organizational commitment via autonomy

Table 68 shows the indirect effects of independent variables on organizational commitment via autonomy.

Table 68

Indirect Effects of Independent Variables on Organisational Commitment via Autonomy

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.03	.01	.00	.06
Work-role fit	.01	.01	-.00	.02
Job enrichment	.04	.02	.00	.09
Co-worker relations	-.00	.01	-.01	.01
Supervisor support	-.01	.01	-.03	.00
Supervisor trust	.02	.01	.00	.05
Physical/emotional resources	-.01	.01	-.02	.00
Cognitive resources	.00	.01	-.01	.01
Rewards and recognition	.01	.01	-.00	.02
Sense of coherence	-.00	.01	-.02	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

As far as the indirect effects on organizational commitment were concerned, the omnibus effects (and the effects of job enrichment and supervisor trust for autonomy) did not include zeros. Therefore, psychological meaningfulness mediated

the relationship between job enrichment and supervisor trust on the one hand and organizational commitment on the other hand. The 95% confidence intervals for work role fit, co-worker relations, supervisor support, physical/emotional resources, cognitive resources and sense of coherence (effect = 0.02, SE = 0.02) included zeros.

4.4.2.32 Indirect effects of independent variables on organizational commitment via psychological safety rejection and psychological safety appreciation

Table 69 shows the indirect effects of independent variables on organizational commitment via psychological safety rejection and psychological safety appreciation.

Table 69

Indirect Effects of Independent Variables on Organizational Commitment via Psychological Safety Rejection and Psychological Safety Appreciation

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Psychological Safety Rejection				
Omnibus	-.01	.01	-.02	.01
Work-role fit	-.00	.01	-.02	.01
Job enrichment	.00	.00	-.01	.01
Co-worker relations	.01	.01	-.01	.03
Supervisor support	.00	.00	-.00	.01
Supervisor trust	.00	.00	-.00	.01
Physical/emotional resources	-.00	.00	-.01	.00
Cognitive resources	-.00	.01	-.01	.01
Rewards and recognition	.00	.00	-.00	.00
Sense of coherence	.01	.01	-.01	.03
Psychological Safety Appreciation				
Omnibus	.02	.01	-.00	.04
Work-role fit	.00	.00	-.00	.01
Job enrichment	.00	.01	-.01	.02
Co-worker relations	.03	.02	-.00	.06
Supervisor support	.00	.01	-.01	.02
Supervisor trust	.00	.01	-.01	.01
Physical/emotional resources	.01	.01	-.00	.02
Cognitive resources	-.00	.00	-.01	.00
Rewards and recognition	.00	.00	-.00	.01
Sense of coherence	.00	.01	-.01	.02

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological safety rejection and psychological safety appreciation (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological safety rejection and psychological safety appreciation did not mediate the

relationship between any of the independent variables and organizational commitment.

4.4.2.33 Indirect effects of independent variables on somatic symptoms via psychological meaningfulness

Table 70 shows the indirect effects of certain independent variables on somatic symptoms via psychological meaningfulness.

Table 70

Indirect Effects of Independent Variables on Somatic Symptoms via Psychological Meaningfulness

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.00	.02	-.04	.03
Work-role fit	.00	.01	-.02	.02
Job enrichment	.00	.01	-.02	.02
Co-worker relations	.00	.00	-.01	.00
Supervisor support	.00	.00	-.01	.01
Supervisor trust	.00	.00	-.01	.00
Physical/emotional resources	.00	.00	-.00	.00
Cognitive resources	-.00	.00	-.01	.01
Rewards and recognition	.00	.00	-.00	.00
Sense of coherence	.00	.00	-.01	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological meaningfulness (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological meaningfulness did not mediate the relationship between any of the independent variables and somatic symptoms.

4.4.2.34 Indirect effects of independent variables on somatic symptoms via psychological availability

Table 71 shows the indirect effects of independent variables on somatic symptoms via psychological availability.

Table 71

Indirect Effects of Independent Variables on Somatic Symptoms via Psychological Availability

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.00	.01	-.02	.03
Work-role fit	.00	.00	-.01	.01
Job enrichment	.00	.01	-.01	.02
Co-worker relations	.00	.00	-.00	.01
Supervisor support	-.00	.00	-.01	.00
Supervisor trust	.00	.00	-.00	.00
Physical/emotional resources	.00	.00	-.00	.00
Cognitive resources	-.00	.01	-.01	.01
Rewards and recognition	-.00	.00	-.01	.00
Sense of coherence	.00	.00	-.00	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological availability (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological availability did not mediate the relationship between any of the independent variables and somatic symptoms.

4.4.2.35 Indirect effects of independent variables on somatic symptoms via autonomy

Table 72 shows the indirect effects of independent variables on somatic symptoms via autonomy.

Table 72

Indirect Effects of Independent Variables on Somatic Symptoms via Autonomy

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.00	.01	-.01	.02
Work role fit	.00	.00	-.00	.00
Job enrichment	.00	.01	-.02	.03
Co-worker relations	.00	.00	-.00	.00
Supervisor support	-.00	.00	-.01	.01
Supervisor trust	.00	.01	-.01	.01
Physical/emotional resources	-.00	.00	-.01	.00
Cognitive resources	.00	.00	-.00	.00
Rewards and recognition	.00	.00	-.01	.01
Sense of coherence	-.00	.00	-.00	.00

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for autonomy (effect = 0.02, SE = 0.02) included zeros. Therefore, autonomy did not mediate the relationship between any of the independent variables and somatic symptoms.

4.4.2.36 Indirect effects of independent variables on somatic symptoms via psychological safety rejection and psychological safety appreciation

Table 73 shows the indirect effects of independent variables on somatic symptoms via psychological safety rejection and psychological safety appreciation.

Table 73

Indirect Effects of Independent Variables on Somatic Symptoms via Psychological Safety Rejection and Psychological Safety Appreciation

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Psychological Safety Rejection				
Omnibus	.01	.01	.00	.02
Work-role fit	.01	.01	.00	.02
Job enrichment	-.00	.00	-.01	.01
Co-worker relations	-.02	.01	-.03	-.00
Supervisor support	-.00	.00	-.01	.00
Supervisor trust	-.00	.00	-.01	.01
Physical/emotional resources	.00	.00	-.00	.01
Cognitive resources	.01	.01	.00	.02
Rewards and recognition	-.00	.00	-.01	.01
Sense of coherence	-.02	.01	-.03	-.00
Psychological Safety Appreciation				
Omnibus	-.01	.01	-.03	-.00
Work-role fit	-.00	.00	-.01	.00
Job enrichment	-.00	.00	-.01	.01
Co-worker relations	-.02	.01	-.04	-.00
Supervisor support	-.00	.00	-.01	.00
Supervisor trust	-.00	.00	-.01	.01
Physical/emotional resources	-.01	.00	-.02	-.00
Cognitive resources	.00	.00	-.00	.01
Rewards and recognition	-.00	.00	-.01	.00
Sense of coherence	-.00	.00	-.01	.00

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

With regard to the indirect effects on somatic symptoms, the omnibus effects (and the effects of work-role fit, co-worker relations, cognitive resources and sense of coherence for psychological safety rejection) did not include zeros. Therefore, psychological safety rejection mediated the relationship between work-role fit, co-worker relations, cognitive resources and sense of coherence on the one hand and somatic symptoms on the other hand. The 95% confidence intervals for job enrichment, supervisor support, supervisor trust, physical/emotional resources and rewards (effect = 0.02, SE = 0.02) included zeros.

As far as the indirect effects on somatic symptoms were concerned, the omnibus effects (and the effects of co-worker relations and physical/emotional resources for psychological safety appreciation) did not include zeros. Therefore, psychological safety appreciation mediated the relationship between co-worker relations and physical/emotional resources on the one hand and somatic symptoms on the other hand. The 95% confidence intervals for work-role fit, job enrichment, supervisor support, supervisor trust, cognitive resources, rewards and sense of coherence (effect = 0.02, SE = 0.02) included zeros.

4.4.2.37 Indirect effects of independent variables on anxiety via psychological meaningfulness

Table 74 shows the indirect effects of independent variables on anxiety via psychological meaningfulness.

Table 74

Indirect Effects of Independent Variables on Anxiety via Psychological Meaningfulness

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.02	.02	-.01	.06
Work-role fit	.02	.01	-.01	.04
Job enrichment	.01	.01	-.01	.02
Co-worker relations	.00	.00	-.01	.01
Supervisor support	.00	.00	-.00	.01
Supervisor trust	-.00	.00	-.01	.00
Physical/emotional resources	-.00	.00	-.01	.00
Cognitive resources	-.01	.01	-.02	.00
Rewards and recognition	.00	.00	-.00	.01
Sense of coherence	.01	.01	-.00	.02

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological meaningfulness (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological meaningfulness did not mediate the relationship between any of the independent variables and anxiety.

4.4.2.38 Indirect effects of independent variables on anxiety via psychological availability

Table 75 shows the indirect effects of independent variables on anxiety via psychological availability.

Table 75

Indirect Effects of Independent Variables on Anxiety via Psychological Availability

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	-.03	.01	-.05	-.00
Work-role fit	-.01	.01	-.02	-.00
Job enrichment	-.02	.01	-.04	-.00
Co-worker relations	-.01	.01	-.02	.00
Supervisor support	.00	.01	-.01	.01
Supervisor trust	-.00	.01	-.01	.00
Physical/emotional resources	-.00	.00	-.01	.01
Cognitive resources	.02	.01	.00	.03
Rewards and recognition	.01	.00	-.00	.02
Sense of coherence	-.01	.01	-.02	.00

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

With regard to the indirect effects on anxiety, the omnibus effects (and the effects of work-role fit, job enrichment and cognitive resources) did not include zeros. Therefore, psychological availability mediated the relationship between work-role fit, job enrichment and cognitive resources on the one hand and anxiety on the other hand. The 95% confidence intervals for co-worker relations, supervisor support, supervisor trust, physical/emotional resources, rewards and sense of coherence (effect = 0.02, SE = 0.02) included zeros.

4.4.2.39 Indirect effects of independent variables on anxiety via autonomy

Table 76 shows the indirect effects of independent variables on anxiety via autonomy.

Table 76

Indirect Effects of Independent Variables on Anxiety via Autonomy

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	-.01	.01	-.03	.01
Work-role fit	-.00	.00	-.01	.00
Job enrichment	-.01	.01	-.04	.02
Co-worker relations	.00	.00	-.01	.01
Supervisor support	.00	.00	-.00	.01
Supervisor trust	-.01	.01	-.02	.01
Physical/emotional resources	.00	.00	-.00	.01
Cognitive resources	-.00	.00	-.00	.00
Rewards and recognition	-.00	.00	-.01	.00
Sense of coherence	.00	.00	-.01	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for autonomy (effect = 0.02, SE = 0.02) included zeros. Therefore, autonomy did not mediate the relationship between any of the independent variables and anxiety.

4.4.2.40 Indirect effects of independent variables on anxiety via psychological safety rejection and psychological safety appreciation

Table 77 shows the indirect effects of independent variables on anxiety via psychological safety rejection and psychological safety appreciation.

Table 77

Indirect Effects of Independent Variables on Anxiety via Psychological Safety Rejection and Psychological Safety Appreciation

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Psychological Safety Rejection				
Omnibus	.01	.01	.00	.02
Work-role fit	.01	.01	.00	.02
Job enrichment	-.00	.00	-.01	.01
Co-worker relations	-.02	.01	-.03	-.00
Supervisor support	-.00	.00	-.01	.00
Supervisor trust	-.00	.00	-.01	.01
Physical/emotional resources	.00	.00	-.00	.01
Cognitive resources	.01	.01	.00	.02
Rewards and recognition	-.00	.00	-.01	.00
Sense of coherence	-.02	.01	-.03	-.00
Psychological Safety Appreciation				
Omnibus	.00	.01	-.01	.02
Work-role fit	.00	.00	-.00	.01
Job enrichment	.00	.00	-.00	.01
Co-worker relations	.00	.01	-.02	.02
Supervisor support	.00	.00	-.00	.01
Supervisor trust	.00	.00	-.01	.01
Physical/emotional resources	.00	.01	-.01	.01
Cognitive resources	-.00	.00	-.01	.00
Rewards and recognition	.00	.00	-.00	.01
Sense of coherence	.00	.00	-.00	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

As far as the indirect effects on anxiety were concerned, the omnibus effects (and the effects of work-role fit, co-worker relations, cognitive resources and sense of coherence for psychological safety rejection) did not include zeros. Therefore, psychological safety rejection mediated the relationship between work-role fit, co-worker relations, cognitive resources and sense of coherence on the one hand and anxiety on the other hand. The 95% confidence intervals for job enrichment, supervisor support, supervisor trust, physical/emotional resources and rewards (effect = 0.02, SE = 0.02) included zeros.

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological safety appreciation (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological safety appreciation did not mediate the relationship between any of the independent variables and anxiety.

4.4.2.41 Indirect effects of independent variables on social dysfunction via psychological meaningfulness

Table 78 shows the indirect effects of independent variables on social dysfunction via psychological meaningfulness.

Table 78

Indirect Effects of Independent Variables on Social Dysfunction via Psychological Meaningfulness

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	-.01	.02	-.04	.02
Work-role fit	-.01	.01	-.03	.01
Job enrichment	-.00	.01	-.02	.01
Co-worker relations	-.00	.00	-.01	.00
Supervisor support	-.00	.00	-.01	.00
Supervisor trust	.00	.00	-.00	.01
Physical/emotional resources	.00	.00	-.00	.00
Cognitive resources	.00	.00	-.01	.01
Rewards and recognition	-.00	.00	-.00	.00
Sense of coherence	-.00	.00	-.01	.00

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological meaningfulness (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological meaningfulness did not mediate the relationship between any of the independent variables and social dysfunction.

4.4.2.42 Indirect effects of independent variables on social dysfunction via psychological availability

Table 79 shows the indirect effects of independent variables on social dysfunction via psychological availability.

Table 79

Indirect Effects of Independent Variables on Social Dysfunction via Psychological Availability

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.04	.01	.02	.07
Work-role fit	.01	.01	.01	.03
Job enrichment	.03	.01	.01	.05
Co-worker relations	.01	.01	-.01	.02
Supervisor support	-.01	.01	-.02	.01
Supervisor trust	.00	.01	-.01	.02
Physical/emotional resources	.00	.00	-.01	.01
Cognitive resources	-.02	.01	-.03	-.01
Rewards and recognition	-.01	.01	-.02	.00
Sense of coherence	.01	.01	-.00	.02

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

With regard to the indirect effects on social dysfunction, the omnibus effects (and the effects of work-role fit, job enrichment and cognitive resources on psychological availability) did not include zeros. Therefore, psychological availability mediated the relationship between work-role fit, job enrichment and cognitive resources on the one hand and social dysfunction on the other hand. The 95% confidence intervals for co-worker relations, supervisor support, supervisor trust, physical/emotional resources, rewards and recognition, as well as sense of coherence (effect = 0.02, SE = 0.02) included zeros.

4.4.2.43 Indirect effects of independent variables on social dysfunction via autonomy

Table 80 shows the indirect effects of independent variables on social dysfunction via autonomy.

Table 80

Indirect Effects of Independent Variables on Social Dysfunction via Autonomy

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.02	.01	.00	.03
Work-role fit	.00	.00	-.00	.01
Job enrichment	.03	.01	.00	.05
Co-worker relations	-.00	.00	-.01	.01
Supervisor support	-.01	.01	-.02	.00
Supervisor trust	.01	.01	.00	.03
Physical/emotional resources	-.00	.00	-.01	.00
Cognitive resources	.00	.00	-.01	.01
Rewards and recognition	.01	.00	-.00	.01
Sense of coherence	.00	.00	-.01	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

As far as the indirect effects on social dysfunction were concerned, the omnibus effects (and the effects of job enrichment and supervisor trust for psychological availability) did not include zeros. Therefore, psychological availability mediated the relationship between job enrichment and supervisor trust on the one hand and social dysfunction on the other hand. The 95% confidence intervals for work-role fit, co-worker relations, cognitive resources, supervisor support, physical/emotional resources, rewards and sense of coherence (effect = 0.02, SE = 0.02) included zeros.

4.4.2.44 Indirect effects of independent variables on social dysfunction via psychological safety rejection and psychological safety appreciation

Table 81 shows the indirect effects of independent variables on social dysfunction via psychological safety rejection and psychological safety appreciation.

Table 81

Indirect Effects of Independent Variables on Social Dysfunction via Psychological Safety Rejection and Psychological Safety Appreciation

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Psychological Safety Rejection				
Omnibus	.00	.01	-.01	.01
Work-role fit	.00	.00	-.01	.01
Job enrichment	-.00	.00	-.00	.00
Co-worker relations	-.00	.01	-.02	.01
Supervisor support	-.00	.00	-.00	.00
Supervisor trust	-.00	.00	-.00	.00
Physical/emotional resources	.00	.00	-.00	.00
Cognitive resources	.00	.00	-.01	.01
Rewards and recognition	.00	.00	-.00	.00
Sense of coherence	-.00	.01	-.01	.01
Psychological Safety Appreciation				
Omnibus	-.01	.01	-.02	.00
Work-role fit	-.00	.00	-.01	.00
Job enrichment	-.00	.00	-.01	.01
Co-worker relations	-.02	.01	-.03	.00
Supervisor support	-.00	.00	-.01	.00
Supervisor trust	-.00	.00	-.01	.00
Physical/emotional resources	-.00	.00	-.01	.00
Cognitive resources	.00	.00	-.00	.01
Rewards and recognition	-.00	.00	-.01	.00
Sense of coherence	-.00	.00	-.01	.00

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological safety rejection and psychological safety appreciation (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological safety rejection and psychological safety appreciation did not mediate the relationship between any of the independent variables and social dysfunction.

4.4.2.45 Indirect effects of independent variables on depression via psychological meaningfulness

Table 82 shows the indirect effects of independent variables on depression via psychological meaningfulness.

Table 82

Indirect Effects of Independent Variables on Depression via Psychological Meaningfulness

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	-.04	.03	-.09	.01
Work-role fit	-.03	.02	-.06	.01
Job enrichment	-.02	.01	-.05	.00
Co-worker relations	-.00	.01	-.01	.01
Supervisor support	-.01	.01	-.02	.00
Supervisor trust	.00	.00	-.01	.01
Physical/emotional resources	.00	.00	-.00	.01
Cognitive resources	.01	.01	-.00	.02
Rewards and recognition	-.00	.00	-.01	.00
Sense of coherence	-.01	.01	-.03	.00

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological meaningfulness (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological meaningfulness did not mediate the relationship between any of the independent variables and depression.

4.4.2.46 Indirect effects of independent variables on depression via psychological availability

Table 83 shows the indirect effects of certain independent variables on depression via psychological availability.

Table 83

Indirect Effects of Independent Variables on Depression via Psychological Availability

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	-.02	.01	-.05	.01
Work-role fit	-.01	.01	-.02	.00
Job enrichment	-.01	.01	-.03	.01
Co-worker relations	-.00	.00	-.01	.00
Supervisor support	.00	.00	-.00	.01
Supervisor trust	-.00	.00	-.01	.00
Physical/emotional resources	-.00	.00	-.01	.00
Cognitive resources	.01	.01	-.01	.03
Rewards and recognition	.00	.00	-.00	.01
Sense of coherence	-.00	.00	-.01	.00

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological availability (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological availability did not mediate the relationship between any of the independent variables and depression.

4.4.2.47 Indirect effects of independent variables on depression via autonomy

Table 84 shows the indirect effects of independent variables on depression via autonomy.

Table 84

Indirect Effects of Independent Variables on Depression via Autonomy

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Omnibus	.01	.01	-.01	.03
Work-role fit	.00	.00	-.00	.01
Job enrichment	.02	.02	-.01	.06
Co-worker relations	-.00	.00	-.01	.01
Supervisor support	-.01	.01	-.02	.00
Supervisor trust	.01	.01	-.00	.03
Physical/emotional resources	-.00	.00	-.01	.00
Cognitive resources	.00	.00	-.01	.01
Rewards and recognition	.00	.00	-.00	.01
Sense of coherence	-.00	.00	-.01	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for autonomy (effect = 0.02, SE = 0.02) included zeros.

Therefore, autonomy did not mediate the relationship between any of the independent variables and depression.

**4.4.2.48 Indirect effects of independent variables on depression via
psychological safety rejection and psychological safety appreciation**

Table 85 shows the indirect effects of independent variables on depression via psychological safety rejection and psychological safety appreciation.

Table 85

Indirect Effects of Independent Variables on Depression via Psychological Safety Rejection and Psychological Safety Appreciation

Variable	Effect	SE	95% BC CI	
			LLCI	ULCI
Psychological Safety Rejection				
Omnibus	.02	.01	.00	.03
Work-role fit	.01	.01	.00	.03
Job enrichment	-.00	.01	-.02	.01
Co-worker relations	-.02	.01	-.05	-.01
Supervisor support	-.00	.01	-.02	.01
Supervisor trust	-.00	.01	-.01	.01
Physical/emotional resources	.00	.00	-.01	.01
Cognitive resources	.01	.01	.00	.03
Rewards and recognition	-.00	.00	-.01	.01
Sense of coherence	-.02	.01	-.04	-.01
Psychological Safety Appreciation				
Omnibus	-.01	.01	-.04	.00
Work-role fit	-.00	.00	-.01	.00
Job enrichment	-.00	.01	-.01	.01
Co-worker relations	-.02	.01	-.05	.00
Supervisor support	-.00	.01	-.02	.01
Supervisor trust	-.00	.01	-.01	.01
Physical/emotional resources	-.01	.00	-.02	.00
Cognitive resources	.00	.00	-.00	.01
Rewards and recognition	-.00	.00	-.01	.00
Sense of coherence	-.00	.01	-.02	.01

Note: SE = standard error; 95% BC CI = 95% bias corrected confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval

With regard to the indirect effects on depression, the omnibus effects (and the effects of work-role fit, co-worker relations, cognitive resources and sense of coherence for psychological safety rejection) did not include zeros. Therefore, psychological safety - rejection mediated the relationship between work-role fit, co-worker relations, cognitive resources and sense of coherence on the one hand and depression on the other hand. The 95% confidence intervals for job enrichment, supervisor support,

supervisor trust, physical/emotional resources and rewards/recognition (effect = 0.02, SE = 0.02) included zeros.

The 95% confidence intervals for the omnibus indirect effects (and all the independent variables) for psychological safety appreciation (effect = 0.02, SE = 0.02) included zeros. Therefore, psychological safety appreciation did not mediate the relationship between any of the independent variables and depression.

4.5 CHAPTER SUMMARY

In this chapter, the empirical findings of the study were recorded. First, the construct validity of the measuring instruments was reported. Then the descriptive statistics, Cronbach alpha coefficients and Pearson correlations of the measuring instruments were given. An outline of multivariate analysis of variance followed next. Finally a hierarchical regression analysis and mediation analysis were reported.

Chapter 5 focuses on a discussion of the empirical findings.

CHAPTER 5

DISCUSSION OF RESULTS

The discussion of the empirical results and the conclusions of this study, based on the research objectives, are reported and elucidated upon in this chapter. The limitations of the study are also recorded. Lastly, recommendations to solve the research problem and recommendations with regard to future research will be made.

5.1 DISCUSSION

The aim of this study was to investigate the well-being of Namibian secondary school educators, as well as the antecedents and outcomes thereof. In line with modern theories of eudaimonia (e.g., Csikszentmihalyi, 1999; Kahn, 1990; May et al., 2004; Ryan & Deci, 2006) well-being was defined in terms of work engagement and specific psychological conditions (i.e., psychological meaningfulness, psychological availability, psychological safety and autonomy). Regarding outcomes of well-being, the study was concerned with the general health, organizational commitment, organizational citizenship behaviour and turnover intention of Namibian secondary school educators. Furthermore, it was argued that educators' well-being was dependent on job factors, personal resources and psychological conditions that fostered work engagement. It was anticipated that the engaged educator would experience positive work outcomes such as organizational commitment, organizational citizenship behaviour, the positive individual outcome

good general health and a low intention to resign. If the educator corps are not healthy and well (cognitively, emotionally and physically), they would probably also struggle with low commitment towards education and their school, as well as low levels of citizenship behaviour. Learners would be negatively affected. Consequently, the overall standard of education in the country would probably be negatively affected and educator turnover would escalate as educators look for greener pastures. These negative indicators are indeed evident in the secondary phase of the current Namibian education system.

As indicated in paragraph 2.1.5.11, turnover rates of educators in Namibia (and all over the world) are alarmingly high. Especially young educators seem to leave the profession early (Parker & Martin, 2009). Between 40% and 50% of Namibia's Grade 10 learners have to repeat the grade annually (EMIS, 2011). Attrition rates of other Grades in the secondary phase are also relatively high. Globally, educators are struggling with high stress in their profession (Bradley & Eachus, 1995), therefore, the question of how Namibian secondary school educators could enjoy a high level of general health, be positive, happy and flourishing, needed to be addressed. As the high levels of stress that educators experience cannot always be limited the focus in this study was on how work environments could be re-structured and employee-resilience rekindled so that Namibian educators could manage work stress in a healthy way. The job demands-resources model highlights that increased job and personal resources can neutralize the harsh effect of job demands and help educators to be engaged in their work (Bakker & Demerouti, 2007; Bakker et al., 2003a; Bakker, Demerouti, & Verbeke, 2004; Bakker & Schaufeli, 2004). With an already

stretched budget, the Ministry of Education in Namibia cannot provide expensive physical resources, therefore, other forms of educator resources should be explored.

The mean scores that participants obtained in this study when they completed the well-being survey battery are a very rough indication of the average of their ratings on the 7-point and 4-point Likert scales that were used in this study. Although mean scores should be interpreted in conjunction with standard deviation scores, mean scores can provide a rough indication of the average ratings of participants on the different scales. Analysis of the mean scores indicates that Namibian secondary school educators are significantly dissatisfied with the way they are rewarded for their work in schools in Namibia. There is thus an indication that Namibian educators feel their work with learners and at their schools is not recognized adequately. It was previously found that rewards and recognition in the form of salaries were regarded as important by educators. In a study by Croasmun, Hampton, and Herrmann (1997) in the U.S.A. 5% of public school educators and 9% of private school educators indicated that low salary was the main cause for leaving the profession.

The educators in the current study also indicated that they struggled with social dysfunction. Social dysfunction is an indicator of challenged general health and well-being (Goldberg & Hillier, 1979). Numerous other studies found that high levels of educator stress led to higher negative health outcomes, including burnout (emotional exhaustion, depersonalization and reduced personal accomplishment), but also increased absenteeism and increased educator turnover rates (Betoret, 2006; Jepson

& Forrest, 2006; Klassen & Chiu, 2010). Namibian educators also indicated frequent experiences of somatic symptoms. These symptoms could be psychosomatic (thus caused by emotional difficulties) in origin due to elevated stress levels. Besides possible other factors, the self-perceived higher levels of social dysfunction and somatic symptoms of Namibian secondary school educators that were found in this study could thus be an indication of high stress levels. Poor educator well-being due to high job demands and distress and a lack of job resources are worldwide concerns (Jackson et al., 2006; Pisanti et al., 2003; Rasku & Kinnunen, 2003).

According to mean scores, the Namibian educators also struggled with a lack of physical (biological health, physical strength) and emotional (support from colleagues and others) resources, poor organizational support (feeling that authorities did not support them), low psychological safety in terms of a general feeling of rejection by supervisors and low cognitive engagement. Many positive factors, as indicated by the mean scores, were selected by Namibian educators. These selected positive factors with the highest mean scores were that educators felt significantly available for, and competent in, their teaching jobs and that their education work was significantly meaningful to them. Mean scores for Namibian educators for all four psychological conditions (meaningfulness, safety - appreciation, availability and autonomy) were positive, which already indicated that educators felt, to a large extent, well-engaged in their work.

The relationships between demographic variables on the one hand and job factors, psychological conditions of engagement, engagement and organizational/individual

outcomes on the other hand were analysed by means of multivariate analysis of variance (MANOVA). Gender differences were found with regard to the general health of educators with male educators struggling more with depression. Females seemed to struggle more with anxiety, insomnia, somatic symptoms and social dysfunction. Far fewer male educators choose education as a career in Namibia, probably because of poor reward packages. In many ways Namibian communities are still regarded as patriarchal with the male figure as the head of the household and thus the breadwinner (Salkeus, 2012). Relatively low reward packages (NANTU, 2012) in the Namibian education sector could be one of the reasons why male educators feel more depressed as they probably struggle to make ends meet and compare financially poorly with counterparts in the private sector. Croasmun et al. (1997) state that educators leave the profession for higher salaries because educator salaries remain low compared to employees with the same qualifications in other professions. Reward packages that compare poorly to the private sector could also be one of the reasons why relatively few males are interested in education as a career in Namibia. In this regard Bloland and Selby (1980) found through a review of the literature concerning rewards and recognition at the workplace that male educators used low salary as an important reason to leave the education profession. The lack of male educators in Namibian schools might also be a factor contributing to disciplinary problems in schools (George et al., 2008, found that Namibian secondary school educators do indeed struggle with learner disciplinary problems). Furthermore, men often tend towards social withdrawal (symptom of depression) when they are unwell (depressed) (Gray, 2012). Females are regarded as more emotional beings (Sigelman & Rider, 2009), which could be the reason for the higher

incidence of anxiety, insomnia, psychosomatic symptoms and social dysfunction amongst female Namibian secondary school educators.

A significant effect was also found between home language of educators and general health. The mean values for all the language groups of Namibian educators indicated elevated levels of social dysfunction. As social dysfunction is an indication of overall poor well-being, there is reason to believe that educators in Namibia are experiencing high stress levels that contribute to low general health. More specifically, Afrikaans, English and German speaking educators indicated higher levels of social dysfunction compared to Oshiwambo speaking participants. A significant effect regarding general health was found between the different ethnic groups of educators. African educators (compared to European and Coloured educators) reported higher levels of depressive symptoms.

With multivariate analysis of variance a strong relationship was found between educators' organizational citizenship behaviour organization (OCBO) and their job position. Principals of secondary schools in Namibia showed a strong tendency towards working more than was formally expected from them. Heads of departments and senior educators (more than two years in full-time education) reported the second highest tendency towards OCBO. Educators with the lowest tendency towards OCBO were junior educators (two years or less in full-time education) and education students. Furthermore, principals and management teams of secondary schools indicated the highest levels of organizational commitment, OCBO, organizational citizenship behaviour directed towards individuals (like educators in

the same school) (OCBI) as well as the lowest levels of turnover intention. Thus, the higher job positions in secondary education in Namibia seem to show the most positive organizational outcomes. The fact that general health for principals and management teams of secondary schools has not been found to be positively affected by job position might be an indication of the escalated stress levels these positions bring with them.

In this study, significant relationships were also found between the ages of the educators and job factors. Namibian secondary school educators who were 55 years and older reported the highest levels of work-role fit. These educators formed 10% of the secondary school educator population that participated in the study. In Namibia, only 84 (primary and secondary phase) of 23 039 educators (0.4% of educators in Namibia) are older than 55 years (EMIS, 2011). In this study, educators 55 years and older also seemed to enjoy the highest quality co-worker relationships. Educators in the age category 20 – 34 years of age reported the lowest levels of work-role fit. In this age category 10 367 educators (primary and secondary school) are employed in Namibia (EMIS, 2011). These educators formed 36% of the secondary school educator population that participated in the study. The average age of educators in Namibia in 2011 was 31.7 years (EMIS, 2011). Work-role fit is an important contributor to the feeling of psychological meaningfulness, which again impacts work engagement (Kahn, 1990; May et al., 2004; Rothmann & Rothmann, 2010). There is thus a strong indication that a large contingent (20 – 34 year old educators) of educators in Namibia might struggle with work engagement. In the same fashion, good co-worker relations are an important contributor towards the feeling of

psychological safety at work, which also impacts work engagement (Kahn, 1990; May et al., 2004). Therefore, there is another strong indication that a large contingent (20 – 34 years old educators) of educators in Namibia might struggle with work engagement. Poor work engagement leads to poor organizational outcomes, which will compromise the quality of education and probably lead to increased turnover intention by educators. This finding correlates with the global finding that younger educators leave the education profession more easily than older educators (as discussed under 2.1.5.11). In the United States of America, for example, it was found that 50% of first-time educators left the education profession before their fifth year in the profession (Ingersoll & Smith, 2003; Latham & Vogt, 2007).

With regard to years in education, educators that were less than two years in education and those 16 years and longer in education reported best co-worker relationships. These educators that were very young in the profession and those that had been in the profession for a long time had the highest quality co-worker relationships.

In the literature review of this study it has been postulated that the engaged (cognitively, emotionally, physically) educator will show positive work outcomes such as being committed to the school and education (organizational commitment), doing more work than is expected from the formal work description which will benefit individuals, the school and education in general (OCBI and OCBO), experiencing high levels of general health (physically and emotionally) and having a low level of turnover intention (see 2.2.4). The literature in this study (see 2.2.4.2)

further postulates that educators become engaged when they experience certain positive job factors (work-role fit, job enrichment, good co-worker relations, good supervisor relations, adequate job resources, organizational support, rewards and recognition), high levels of sense of coherence and positive psychological conditions for engagement (safety, meaning, availability and autonomy) (Kahn, 1990; May et al. 2004; Spreitzer, 1995). The results of extended statistical analysis of the interactions between job factors, sense of coherence, psychological conditions, work engagement and positive organizational and individual outcomes of Namibian secondary school educators will be discussed next.

5.1.1 Effects of job factors and sense of coherence

The impact of job factors and sense of coherence on psychological conditions (safety, meaningfulness, availability, autonomy), engagement (cognitive, emotional, physical), organizational outcomes (organizational commitment, organizational citizenship behaviour, turnover intention) and an individual outcome (general health) on the Namibian secondary school educators was also determined in this study. This contribution has been determined by Pearson correlations and hierarchical regression analysis.

5.1.1.1 Work-role fit

Three hypotheses regarding work-role fit were tested, namely hypothesis 15 (work-role fit is positively related to the educator psychological condition of psychological

meaningfulness), hypothesis 16 (work-role fit is positively related to educator cognitive, emotional and physical work engagement) and hypothesis 17 (work-role fit is positively related to the positive organizational outcomes of organizational commitment, organizational citizenship behaviour, low turnover intention and individual outcome positive general well-being/health).

The results showed that work-role fit was positively related to the psychological condition of meaningfulness and thus fully supports hypothesis 15. Results also indicated that work-role fit was positively related to the psychological conditions of availability and autonomy. Numerous studies (see 2.3.1.1) support the contribution of work-role fit on psychological meaningfulness of work. Shamir (1991) states that work-role assists the human being to transcend his or her personal, limited existence, thus widening the horizon of meaning in his/her life. In the same sense, May et al. (2004) found that work-role and self-concept of the employee were intertwined (work-roles are selected to complement self-concept), which contributed significantly to increased experience of meaning. Rothmann and Rothmann (2010), as well as Van Zyl et al. (2010) found that work-role fit was a strong predictor of psychological meaningfulness (Van Zyl et al., 2010), whereas Strümpfer (2003) emphasized the importance of work as a source of meaningfulness in life. Besides a significant positive correlation between work-role fit and availability and work-role fit and autonomy, this study found that work-role fit contributed to the psychological conditions of availability and autonomy. According to Kahn's (1990) definition, psychological availability is the individual's belief that he/she has the cognitive, physical and emotional resources in order to engage fully in his/her work. It,

therefore, makes sense that, when the educator experiences good work-role fit, he/she will be increasingly psychologically available for the work (Rothmann & Rothmann, 2010). It can be anticipated that the educator that experiences meaningfulness and psychological availability at work is likely to have a great chance of feeling autonomous and self-determined at work. Although this study found no significant impact of work-role fit on educators' feeling of safety at their jobs, a positive correlation was found between work-role fit and educators' sense of psychological safety. Thus, with regard to the influence of work-role fit on psychological conditions, the findings in this study confirm findings of previous studies that work-role fit has the largest impact on psychological meaningfulness (Scroggins, 2008).

Work-role fit contributed to the increased cognitive, emotional and physical engagement of Namibian secondary school educators at work. Thus, work-role fit contributed significantly to the total feeling of work-engagement of educators, which confirms hypothesis 16. Van Zyl et al. (2010) also found that work-role fit predicted work engagement. It makes sense to anticipate that the educator that feels comfortable with his/her teaching post will engage deeply in the job. As stated in the literature review (see 4.1.1), as soon as the educator uncouples from the work-role, disengagement can be expected (Hamid & Yahya, 2011; Kahn, 1990; Rothmann & Jordaan, 2006; Scroggins, 2008). Hamid and Yahya (2011), in their study on engineers in Malaysia, also found a significant positive relationship between work-role fit and work engagement, as did Rothmann and Hamukang'andu (in press) in

their study on calling, work-role fit, meaningfulness and work engagement with educators in Zambia.

Furthermore, as found in this study (see Table 23), work-role fit was positively related to the positive organizational outcomes of organizational commitment and organizational citizenship behaviour organization (OCBO), whilst being negatively related to turnover intention. Thus, the Namibian secondary school educator who experiences work-role fit will feel committed towards his/her school and display forms of citizenship behaviour towards the school. In their study on 131 persons who founded a small business in the United Kingdom, Niessen et al. (2010) also found that work-role fit led to organizational commitment. Scroggins (2008) mentions an indirect impact of work-role fit on organizational citizenship behaviours when stating that fitting into the work-role produces meaning which enhances worker engagement and organizational citizenship behaviours. Iplíc et al. (2011) confirmed in their study on Turkish hotel managers that good work-role fit leads to lower intention to resign. In his study with seven different organizations, Scroggins (2008) found that if the self-concept of the employee was confirmed by the work-role, the person will find so much meaning in the job that turn-over intention will be either very low or not present at all. This study concerning Namibian secondary school educators also found that work-role fit contributed to the individual outcome of general health of educators, as work-role fit and healthy social functioning correlated positively. Educators with a low work-role fit are more likely to suffer from social dysfunction (Merecz & Andysz, 2012). Hypothesis 17 has thus been confirmed in this study. Thus, when Namibian secondary school educators feel they fit well in their work

role, it contributes positively to psychological conditions (meaningfulness, availability), work engagement (cognitive, emotional, physical), positive organizational outcomes (organizational commitment, OCBO, low turnover intention) and positive individual outcome general health (good social functioning).

5.1.1.2 Job enrichment

Three hypotheses regarding job enrichment were tested, namely hypothesis 18 (job enrichment is positively related to the the educator psychological condition of meaningfulness), hypothesis 19 (job enrichment is positively related to educator cognitive, emotional and physical work engagement) and hypothesis 20 (job enrichment is positively related to positive organizational outcomes of organizational commitment, organizational citizenship behaviour, low turnover intention and individual outcome positive general health).

In this study it was found that Namibian secondary school educators, who felt their work enriched them and made them grow as human beings (job enrichment), would be able to find meaningfulness in the work they did. Hypothesis 18 is thus fully supported by the findings of this study. Furthermore, it was found in this study that job enrichment contributed positively to the psychological conditions of safety and availability. Pearson correlations indicated that job enrichment was positively correlated to all the psychological conditions, including autonomy. Findings from previous studies support the notion that job enrichment and psychological meaningfulness correlate positively (Kahn, 1990; May et al., 2004; Renn & Van den

Berg, 1995). Job enrichment can be seen as a tool towards employee empowerment (see 2.3.1.2). In this sense, Spreitzer (1995) found that job enrichment helped employees to experience their jobs as meaningful. Saks (2006), in his study on the antecedents and consequences of work engagement, indicates that job enrichment leads to psychological meaningfulness of work. Hackman and Oldham (1976; 1980) regard meaning as an important product of job-enriched work circumstances. No studies that indicated a significant impact of job enrichment on psychological safety and availability were found. However, it transpires from this study that educators, who feel their job enriches them, feel safe and psychologically available for their teaching work. Ford and Fottler (1995) regard autonomy as a tool to increase employee empowerment, since allowing autonomy is seen as a token of trust. In this sense, autonomy is an ingredient of job enrichment.

This study found that Namibian secondary school educators, who experienced their teaching job as enriching, felt more physically and emotionally engaged in their work. Hypothesis 19 is thus partially supported by this study. Although no significant effect was found between job enrichment and cognitive engagement, a positive correlation is evident from this study. No previous studies that indicated a significant effect of job enrichment on work engagement could be found. However, it makes sense that the educator, who experiences his/her job as enriching, will be engaged in his/her work.

The results showed that educators, who experienced job enrichment, experienced positive organizational outcomes such as being more committed to their school and

doing more work for the good of the organization than was expected from them (organizational citizenship behaviour, OCBO). Wu and Short (1996) confirm the positive relationship between job enrichment and organizational commitment with their finding that job enrichment leaves educators with a sense of empowerment, which is positively related to organizational commitment. Raza and Nawaz (2011), in their study on the impact of job enrichment on job satisfaction, motivation and organizational commitment of 534 government employees in Pakistan, found that job enrichment was a strong predictor of organizational commitment. Furthermore, in the current study, a negative correlation was found between job enrichment and turnover intention. Hackman and Oldham (1976) also found that job enrichment led to lower turnover intention and lower absenteeism from work. It was also indicated in this study that educators who felt enriched by their work, would function socially well. Hypothesis 20 is thus partially supported by the findings of this study as no significant effects were found between job enrichment and other health outcomes such as anxiety, depression and/or somatic symptoms, although negative correlations were found between job enrichment and poor health indicators. This study thus confirms that job enrichment has a positive impact on educator psychological conditions (safety, meaning, availability), work engagement (emotional, physical), positive organizational outcomes (organizational commitment, OCBO) and positive individual outcome general health (good social functioning).

5.1.1.3 Relationships with co-workers

Three hypotheses regarding co-worker relations were tested, namely hypothesis 21 (co-worker relations are positively related to educator psychological conditions of meaningfulness, safety, availability and autonomy), hypothesis 22 (co-worker relations are positively related to educator cognitive, emotional and physical work engagement) and hypothesis 23 (co-worker relations are positively related to positive organizational outcomes organizational commitment, organizational citizenship behaviour, low turnover intention and individual outcome positive general well-being/health).

The results of this study indicated that secondary school educators in Namibia felt high levels of appreciation for good co-worker relationships. Good co-worker relationships caused educators to feel safe, to find meaning in the work they did and made them feel autonomous at work (partial support for hypothesis 21 as psychological availability was not indicated as being significantly affected by co-worker relations. However, a positive correlation was indicated between co-worker relations and psychological availability). The contribution of co-worker relations to psychological safety and meaningfulness was in agreement with the findings of Kahn (1990) and May et al. (2004) who emphasize that when employees feel cared-for by co-workers, they experience psychological meaningfulness and safety at work. In a study on self-determination (autonomy) with 1120 college students in Canada, Guay, Mageau, and Vallerand (2003) also found that co-workers that encouraged relations that were marked by choices, meaningful rationales, recognizing people's feelings

and unique perspectives and that refrained from using pressuring tactics, encouraged autonomy. This agrees with the findings in the current study.

The results in this study also showed that good co-worker relations would increase educators' physical engagement or physical energy at work (partial support of hypothesis 22 as it was not found that co-worker relations contributed significantly to cognitive and emotional engagement). With Pearson correlations a positive correlation was found between co-worker relations and cognitive, emotional and physical engagement. Kahn (1990) also found that the degree of work engagement depended on how supportive co-worker relations were at work. According to Kahn, unsafe co-worker relations will lead to defensive employee behaviour which enhances disengagement from work.

Furthermore, this study found that good co-worker relations caused educators to feel more committed to the school of their employment. Lin and Lin (2011) reached the same conclusions in their study on the impact of co-worker relations on organizational commitment with 1241 employees of international hotels. In their study, Lin and Lin (2011) concluded that one of the main ways in which to increase organizational commitment was to ensure good co-worker relations in organizations. Lumley, Coetzee, Tladinyane, and Ferreira (2011) conducted a study on job satisfaction and organizational commitment on information technology employees in South Africa and also concluded that good co-worker relationships increased employee organizational commitment. Furthermore, it was found in this study that good co-worker relations among Namibian secondary school educators motivated

these educators to do more work for the school and education in Namibia (OCBO) than was formally expected from them. In agreement with this finding, Blau (1964), on the basis of social exchange theory (SET), found that supportive co-worker relationships would encourage the employee to “go the extra mile”. Ozer (2011) conducted a study on the relationship between OCB and job performance on 900 employees and supervisors in Asia and found that good co-worker relationships contributed to OCB’s, but specifically to OCBI (see 2.4.2.2 for OCBI and OCBO). Ozer’s finding thus differs from the finding in this study as good educator relations in Namibia seem rather to OCBO’s than to OCBI’s. A possible reason for this phenomenon might be that Namibian societies are often more collectivistic and not so focused on the individual. Another reason could be that educators are usually part of a multi-member staff and, therefore, more focussed on the whole organization than just an individual. Also, the poor performance of education in general in Namibia is heralded in the media, which might subconsciously drive educators towards bettering the education system in general and not to bettering individuals in the education system.

It is also indicated in the current study that good co-worker relationships protect educator general health, especially preventing the development of illness symptoms such as anxiety, somatic symptoms and social dysfunction. This finding is supported by Cohen and Wills (1985) who found that good co-worker relationships decreased the experience of stress and strain (Heaphy & Dutton, 2008), thus pointing to better educator health. Therefore, good co-worker relationships are essential for general health of Namibian secondary school educators. Diener and Seligman (2002)

conducted a study on happiness with 222 students at the University of Illinois and found that good interpersonal relationships (like co-worker relationships) contributed significantly to happiness and health. In their study on the effects of co-worker relationships on employee well-being with 300 employees in the South Eastern United States Simon, Judge, and Halvorsen-Ganepola (2010) also found that healthy co-worker relationships increased employee health and well-being. Musick and Wilson (2003) also show that social integration and well-being are positively associated. In another study, Loscocco and Spitze (1990) found that male and female factory workers in a factory in the U.S. enjoyed increased well-being when they could maintain good co-worker relationships. With regard to positive organizational and individual outcomes of good co-worker relationships, partial support for hypothesis 23 has been found in the current study as no direct contribution of co-worker relationships on turnover intention was found. However, a negative correlation was found between co-worker relations and turnover intention. Other studies also confirm that good co-worker relations decrease employee turnover intention (Golden, 2007; Lumley et al., 2011). Good co-worker relationships between Namibian secondary school educators thus have a positive impact on psychological conditions (safety, meaning, autonomy), work engagement (physical), positive organizational outcomes (organizational commitment, OCBO) and positive individual outcome general health (good social functioning, less anxiety, less somatic symptoms).

5.1.1.4 Quality of relationships between educators and supervisors

Six hypotheses regarding employee-supervisor relations were tested. Three of the hypotheses dealt with supervisor support whilst the other three hypotheses centred on supervisor trust. These hypotheses are hypothesis 24 (supervisor support is positively related to educator psychological conditions of meaningfulness, safety, availability and autonomy), hypothesis 25 (supervisor support is positively related to educator cognitive, emotional and physical work engagement), hypothesis 26 (supervisor support is positively related to positive organizational outcomes of organizational commitment, organizational citizenship behaviour, low turnover intention with a positive individual outcome general well-being/health), hypothesis 27 (supervisor trust is positively related to educator psychological conditions of meaningfulness, safety, availability and autonomy), hypothesis 28 (supervisor trust is positively related to educator work cognitive, emotional and physical engagement) and hypothesis 29 (supervisor trust is positively related to positive organizational outcomes of organizational commitment, organizational citizenship behaviour, low turnover intention with a positive individual outcome general well-being/health).

The results indicated that good relationships between educators and their supervisors (principals, heads of departments, subject heads, ministerial officials) have advantages. For example, when an educator experiences that a supervisor supports him or her sufficiently, he or she will feel safe, find meaningfulness in the work he/she is doing, and will feel autonomous in the work-role (partial support for hypothesis 24, as supervisor support did not indicate a significantly large effect on

psychological availability, however a positive correlation is evident between psychological availability and supervisor support). These findings are confirmed by a number of studies. For example, May et al. (2004) confirmed in their testing of the engagement model of Kahn (1990) that good relationships between employees and supervisors contributed to a feeling of psychological safety among employees. This finding of the impact of supervisor support on students was also confirmed by Schepers, De Jong, Wetzels, and De Ruyter (2008) in their study with a sample of 361 students at a university in the Netherlands. These researchers found that students felt significantly safer when they perceived their supervisors to be supportive. Nembhard and Edmondson (2006), in their study on health care workers in Massachusetts (U.S.A), found that supervisors played a crucial role in how safe employees felt at work. Kahn (1990) confirms that good relationships between supervisors and employees lead to the increased meaning that employees find in their jobs and their lives in general.

Deci and Ryan (1987) mention that supervisor support will encourage the employee to be more interested in his/her work, which leads to greater autonomy. Griffin, Patterson, and West (2001) conducted a study on the role of supervisor support on job satisfaction and teamwork with 4708 manufacturing workers in the United Kingdom. They found that supervisor support increased the job autonomy of workers. The current study, furthermore, found that support from the supervisor would also increase educator emotional engagement in education work. Thus, when receiving adequate supervisor support, Namibian secondary school educators will involve themselves in their work 'with their hearts'. This finding makes sense as

support is very much an emotional endeavour. Although it was found in the current study that supervisor support did not contribute significantly to physical and cognitive work engagement of employees, a positive correlation was found between supervisor support and physical/cognitive work engagement. Hypothesis 25 of this study is thus partially supported in this study. Saks (2006), however, found that supervisor support contributed to emotional, physical and cognitive work engagement. Bakker, Hakanen, Demerouti, and Xanthopoulou (2007) studied 805 Finnish educators working in elementary, secondary and vocational schools and also found that supervisor support contributed to emotional, physical and cognitive engagement.

It was, furthermore, found in this study that educators who experienced supervisor support would be more committed to their schools, doing more work for the school than was expected (OCBO). This finding is in agreement with Molm (1994) who found that employees would return positive organization behaviour if they received it from superiors. Also, Eisenberger et al. (1986) indicate that supervisor support will lead to organizational citizenship behaviour from employees.

The results of this study showed that supervisor support contribute to healthy social functioning of educators in secondary schools in Namibia and thus contribute to the well-being of educators. Dasborough and Ashkanasy (2002) found in this regard that supervisor support would buffer the well-being of employees in crisis times at their work when stress levels were very high (Bakker et al., 2007). Hall (2007), in her study with 231 nurses in the U.S.A, found that supervisor support led to fewer

somatic complaints and had a positive effect on employee health. Although this study did not find that supervisor support contributed significantly to lower turnover intention with employees (and, therefore, hypothesis 26 can only be partially supported), a negative correlation between supervisor support and turnover intention was indicated. This finding differs from previous research, for example a study of Eisenberger et al. (2002) which found that supervisor support contributed to a lower turnover intention with employees (Hall, 2007). The current study thus found that supervisor support for Namibian secondary school educators contributed to psychological conditions (safety, meaning, autonomy), work engagement (emotional), positive organizational outcomes (organizational commitment, OCBO) and individual outcomes general health (good social functioning).

When the educator can trust the supervisor, a feeling of safety at work will increase and the educator will feel an increase in self-determination and autonomy. This study did not find a significant contribution of supervisor trust on psychological availability and psychological meaningfulness. Therefore, hypothesis 13 is partially supported. Still, a positive correlation was found between supervisor trust and psychological availability/psychological meaningfulness. This finding is in agreement with Kahn (1990) who showed that supervisor trust increased a feeling of safety at work with the employee. In their discussion on the faces of trust, Hoy and Tschannen-Moran (1999) use concepts such as willingness to risk and reliability which refer to a feeling of safety as a prerequisite (see 2.3.1.3.2.2). Concurrently Tschannen-Moran and Hoy (2000) also indicate that when the supervisor trusts the educators, a sense of autonomy is granted to the educators. Furthermore, the current

study found that educators that enjoyed trust in their supervisor would be able to engage emotionally in work (partial support for hypothesis 28 as no significant contribution of supervisor trust was found on cognitive and physical engagement). However, a positive correlation was found to be evident between supervisor trust and cognitive/physical engagement). Chughtai and Buckley (2008) measured the impact of supervisor trust on total work engagement and also confirmed a positive contribution. The current study found that supervisor trust contributed to a high degree of educator commitment to the school (partial support for hypothesis 29 as supervisor trust was not found to contribute significantly to educator health, OCB and lower turnover intention. However, a positive correlation was found between supervisor trust and educator well-being/OCB with a negative correlation between supervisor trust and turnover intention of educators). Chughtai and Buckley (2008) also confirmed a significant impact of supervisor trust on educator organizational commitment and turnover intention, with educators less keen to leave their school when a trusting relationship existed between them and their supervisor. In contrast to the finding in this study, Deluga (1994) found that school principals that clearly trusted their educators, fostered organizational citizenship behaviour. Furthermore, Deluga (1994) suggested, with referring to the equity theory that employees who experience unfairness and distrust with their supervisors will respond to eliminate inequities by reducing contributions to the organization. This suggests that trust between supervisor and educator fosters OCB behaviours. The current study thus found that supervisor trust with Namibian secondary school educators contributed to psychological conditions (safety, autonomy), work engagement (emotional) and a positive organizational outcome (organizational commitment).

5.1.1.5 Availability of resources

Six hypotheses regarding resources were tested, three for physical/emotional resources and three for cognitive resources. These hypotheses are hypothesis 30 (physical and emotional resources are positively related to the educator psychological condition of availability), hypothesis 31 (physical and emotional resources are positively related to educator cognitive, emotional and physical work engagement), hypothesis 32 (physical and emotional resources are positively related to positive organizational outcomes of organizational commitment, organizational citizenship behaviour, low turnover intention and a positive individual outcome general well-being/health), hypothesis 33 (cognitive resources are positively related to the educator psychological condition of availability), hypothesis 34 (cognitive resources are positively related to educator cognitive, emotional and physical work engagement), and hypothesis 35 (cognitive resources are positively related to positive organizational outcomes of organizational commitment, organizational citizenship behaviour, low turnover intention and a positive individual outcome general well-being/health).

In this study it was found that adequate availability of cognitive resources would increase the physical, cognitive and emotional availability that educators feel for their work in education. Hypothesis 33 is thus fully supported by this study. This study also found that the availability of resources increased the meaningfulness that Namibian secondary school educators attached to their work in education. Resources will make it easier for educators to do their jobs as resources are tools to make work

easier. Therefore, one could derive that resources would render the educator more available to do the work. As soon as educators have cognitive resources and they can do their work, they will most probably find meaningfulness in what they are doing. In that sense cognitive resources have the potential to increase meaningfulness. Also, cognitive resources in themselves are meaningful as they deal with cognition. This study did not find any significant contribution of the availability of physical and emotional resources to the psychological condition of educator availability. Hypothesis 30 is thus rejected. This finding is contrary to the finding of May et al. (2004) in their study on the psychological conditions of engagement of insurance company workers in the U.S.A that resources contribute towards psychological availability. In the current study it was more specifically found that cognitive resources contribute towards educator availability in their work.

Furthermore, in this study it was found that educators who had adequate physical resources and emotional resources to do their work would be able to engage cognitively, emotionally and physically in their work (full support for hypothesis 31). Both Saks (2006) and Kahn (1990) indicate that employees tend to engage in varying degrees in their work according to the availability of resources. In their study with Finnish educators Bakker et al. (2007) also confirmed that resources contributed to educator emotional, physical and cognitive work engagement. Crawford, Le Pine, and Rich (2010) show how resources promote work engagement. The current study also found that when Namibian educators felt that they were personally, cognitively resourceful (e.g., thorough knowledge of subject matter) they were emotionally and

physically engaged in their work. Hypothesis 34 is partially supported as resources have not been indicated to contribute significantly to educator cognitive engagement. Namibian secondary school educators that had adequate physical and emotional resources to their disposal rarely complained of ill-health and poor well-being such as somatic symptoms, anxiety and insomnia, social dysfunction and/or depression. Thus it was found in the current study that the availability of physical and emotional resources seemed to relate to greater educator well-being in Namibia. Wright and Hobfoll (2004) confirmed this finding with their study on commitment, psychological well-being and job performance with 50 human service counsellors when they found that a lack of personal resources could increase strain on educators to the extent that burnout could be the result. Personal resources (physical health, emotional health, academic knowledge of subjects) can thus be a buffer against educator strain and help prevent poor well-being (Bakker et al., 2007). Hockey (1997) confirmed in a study that inadequate personal resources could lead to low general well-being with employees. The finding in this study that enough personal physical and emotional resources would prevent ill-health is in agreement with the finding that resources buffer against the ill effects of too high job demands (Hakanen et al., 2007; Karasek, 1979; Salanova et al., 2005). Educators with enough cognitive resources to their disposal have limited or no health complaints specifically with reference to somatic symptoms, anxiety and insomnia and depression. It is indicated that a lack of cognitive resources will have a major negative impact on general educator health (Wright & Hobfoll, 2004). This finding is in agreement with Karasek (1979) who found that a lack of resources might lead to poor well-being due to increased stress. Furthermore, the current study found that adequate personal

physical and emotional resources contributed towards a low turnover intention of educators. Schaufeli and Bakker (2004) also found that adequate job resources might decrease turnover intention. Hypothesis 32 is thus partially supported in this study as no significant impact of available physical and emotional resources on organizational commitment and OCB was found. Hakanen et al. (2006), in their study on engagement and burnout of 2038 Finnish educators, also found that personal resources only contributed through engagement to organizational commitment. Educators that have adequate personal cognitive resources show a low degree of turnover intention. On the contrary, it seems that the lack of personal cognitive resources might be a great contributor to higher educator turnover intention. It was also found in the current study that with adequate personal cognitive resources educators would do more than what was expected from them for individuals (individual co-workers and learners) in their organization/school (OCBI). This might be because cognitive resources (book knowledge, advice) were available to share with colleagues. Hypothesis 35 is thus partially supported in the current study as cognitive resources did not contribute towards organizational commitment of educators.

The availability of cognitive resources thus impacts the educator's psychological conditions (psychological meaningfulness, psychological availability), engagement (emotional, physical), organizational outcomes (turnover intention, OCBI) and individual outcome of educator health. The availability of physical and emotional resources contributes towards the educator's work engagement (emotional, physical, cognitive), a positive organizational outcome (turnover intention) and individual

outcome general health (low anxiety, low depression, fewer somatic complaints, good social functioning).

5.1.1.6 Rewards and recognition

Three hypotheses regarding educator rewards and recognition were tested namely, hypothesis 36 (rewards and recognition are positively related to educator psychological conditions of meaningfulness, safety, availability and autonomy), hypothesis 37 (rewards and recognition are positively related to educator cognitive, emotional and physical work engagement) and hypothesis 38 (rewards and recognition are positively related to positive organizational outcomes of organizational commitment, organizational citizenship behaviour and low turnover intention and a positive individual outcome general well-being/health).

In the current study it was found that rewards and recognition do not contribute significantly to Namibian secondary school educators' psychological conditions, work engagement, positive organizational outcomes and individual outcomes. However, in this study it was indeed found that rewards and recognition correlated positively with psychological conditions of safety, meaningfulness and autonomy (Spreitzer, 1995), emotional engagement and physical engagement as well as positive organizational outcomes organizational commitment (Saunderson, 2004) and OCBO and positive individual outcome general health (especially that rewards and recognition correlate positively with fewer somatic symptoms and good social functioning). A negative correlation was found between rewards and recognition and

educator turnover intention. These correlations are relevant as previous studies indicate the value of employee rewards and recognition on organizational success. For example, De Villiers-Scheepers (2011) showed in a study that employee rewards and recognition is essential for work engagement. Siegrist (1996) indicates that employees could become ill when they feel that their effort at work is not adequately rewarded (see 2.3.1.5). However, as indicated by the motivation-hygiene theory of Herzberg (1966) (see 2.3.1.5), type of reward and type of recognition are crucial. Herzberg found that rewards and recognition that were aimed at increasing employee motivation deal with internal motivation and encompass examples such as giving employees more responsibility and opportunities for promotion. Herzberg found that rewards and recognition that is aimed at internal matters leads to long term and genuine employee motivation. This finding is supported by Danish and Usman (2010) in their Pakistani study with 220 employees on rewards, recognition and employee motivation. Danish and Usman found that the employees in their study preferred recognition in the form of informal talks with supervisors, having informal dinners with supervisors (good supervisor relationships), participating in decision-making (autonomy), having interesting work content (job enrichment), but also periodical salary increments. Hofstede (1980) as well as the U.S National Center for Educational Statistics (NCES, 1997) found, for example, that educators' job satisfaction was poorly related to salary. Stajkovic and Luthans (2001) also found that social incentives were better long term motivators for employees than financial rewards. Frase (2001) conducted a study on 38 educators in Arizona, U.S.A, and found that rewards and recognition that were aimed at intrinsic educator satisfaction showed the greatest results in terms of educator motivation and job satisfaction.

Namibian secondary school educators indicated that rewards and recognition did contribute to psychological conditions (safety, meaningfulness, autonomy), work engagement (emotional, physical), positive organizational outcomes (organizational commitment, OCBO) and positive individual outcome general health (fewer somatic complaints, lower anxiety, lower depression, good social functioning). However, it was also found that Namibian educators put a high value on incentives that made them grow internally, although external rewards and recognition such as salary remained important. Hypotheses 36, 37 and 38 are thus partially supported in this study.

5.1.1.7 Organizational support

Three hypotheses regarding organizational support for educators were tested, namely hypothesis 39 (organizational support is positively related to educator psychological conditions of meaningfulness and safety), hypothesis 40 (organizational support is positively related to educator cognitive, emotional and physical work engagement) and hypothesis 41 (organizational support is positively related to positive organizational outcomes of organizational commitment, organizational citizenship behaviour, low turnover intention and a positive individual outcome general health).

Another finding of the current study is that a high level of organizational support increases Namibian secondary school educator experience of safety and meaningfulness of education work (full support for hypothesis 39). In addition, it was found in this study that organizational support contributes to educator autonomy

whilst a positive correlation was found between organizational support and educator availability). This makes sense as educators will feel increasingly safe in their work environment if they have the knowledge that their school is supporting and protecting them (Baer & Frese, 2003; Edmondson, 1999; Kahn, 1990). Educators indicate that ample organizational support causes them to be emotionally engaged (partial support for hypothesis 40 as organizational support does not contribute significantly to educator cognitive and physical engagement, however a positive correlation has been found between organizational support and educator cognitive and physical engagement). In his study on engagement with 102 employees working in a variety of organizations in Canada, Saks (2006) also found that organizational support of employees led to engagement. Furthermore, the current study found that organizational support points to higher organizational commitment by Namibian secondary school educators. Social Exchange Theory predicts reciprocity and thus underlines the “organizational support – educator organizational commitment” finding in this study (Blau, 1986; Cropanzano & Mitchell, 2005). Experiencing organizational support, Namibian educators usually do more work than is expected from them to benefit the organization (OCBO) and they show a low turnover intention (partial support for hypothesis 41 as organizational support was not found to significantly contribute to educator general health, however, a positive correlation was found between organizational support and the health factors of educators). Rhoades and Eisenberger (2002) confirm these findings in their literature review of about 70 studies concerning how organizations support their employees (perceived organizational support, POS) and state that high POS contributes significantly to OCBO and in a lesser way to extra-role behaviour directed towards individuals

(OCBI). These authors also found that POS points to lower employee turnover intention. Although the current study did not find that POS contributed to employee well-being, Rhoades and Eisenberger (2002) state that POS leads to the limitation of strain symptoms like headaches, fatigue, burnout and anxiety of employees and increases positive mood. This finding is corresponding with a number of studies that found that organizational support led to increased employee organizational commitment, extra-role behaviour (OCBI and OCBO) and a rapid decrease in turnover intention (Wayne et al., 2002; Wayne et al., 1997; Eisenberger et al., 1986). Thus, in this study it became clear that organizational support had a strong impact on psychological conditions (safety, meaningfulness, autonomy), work engagement (emotional) and organizational outcomes (organizational commitment, OCBO, low turnover intention).

5.1.1.8 Sense of coherence

Three hypotheses regarding sense of coherence were tested, namely hypothesis 42 (sense of coherence is positively related to educator psychological conditions of meaningfulness, safety, availability and autonomy), hypothesis 43 (sense of coherence is positively related to educator cognitive, emotional and physical work engagement) and hypothesis 44 (sense of coherence is positively related to positive organizational outcomes of organizational commitment, organizational citizenship behaviour, low turnover intention and a positive individual outcome general well-being/health).

In this study it was found that Namibian secondary school educators that had a high degree of sense of coherence would feel psychologically safe at work and be able to make meaning out of their job (partial support for hypothesis 42 as sense of coherence of educators did not contribute significantly to psychological availability and autonomy, however a positive correlation was found between sense of coherence and psychological availability and autonomy). This finding is in agreement with Antonovsky and others who found that increased psychological meaningfulness was one of the crucial products of sense of coherence (Antonovsky, 1987; Pallant & Lae, 2002). Strümpher (2003) refers to sense of coherence as a meaning providing variable. Nielsen et al. (2008), in their study on the role of sense of coherence with bully victims, found that sense of coherence had a protective function, thus transmitting the feeling of safety. Findings of the current study also indicate that educators with a high level of sense of coherence will be emotionally and physically engaged in their work (partial support for hypothesis 43 as sense of coherence was not found to contribute significantly to cognitive engagement, however sense of coherence and cognitive engagement correlate positively with each other). Harry and Coetzee (2011) also confirmed a strong positive relationship between engagement and sense of coherence in their study on sense of coherence, well-being and burnout of employees in a call centre at an institution of higher education in South Africa. A healthy level of sense of coherence indicated an increase in educator commitment to the school they worked at. Strümpher and Mlonzi (2001), in three studies on Antonosky's Sense of Coherence Scale and job attitudes, confirmed a positive relationship between sense of coherence and organizational commitment. Educators with a high sense of coherence will enjoy good general health with low levels of

somatic symptoms, anxiety and insomnia, social dysfunction and depression. A strong sense of coherence is essential for general educator well-being. Feldt (1997) also matched higher levels of employee well-being to a high level of sense of coherence. Studies found that a person's sense of coherence played an important role in health and well-being (Antonovsky, 1987; Rothmann, 2003). It was, furthermore, found in this study that Namibian educators with a high sense of coherence would have a low turnover intention. When one takes into consideration that a high level of sense of coherence encompasses comprehensibility, manageability and meaning (Antonovsky, (1987), it is clear that such an educator will have little reason to feel like leaving the education profession. The current study did not find a significant contribution of sense of coherence on citizenship behaviours. However, a positive relationship between sense of coherence and OCBO was evident. Hypothesis 44 is, therefore, partially supported by the findings of this study. Thus, secondary school educators in Namibia indicated that a higher level of sense of coherence impacted psychological conditions (safety, meaningfulness), engagement (physical, emotional), positive organizational outcomes (organizational commitment, low turnover intention) and individual outcome general health (fewer somatic complaints, low anxiety, good social functioning, low depression) positively.

The following tables summarize which job factors were found in the current study to contribute to or correlate positively with psychological conditions, work engagement and positive organizational/individual outcomes.

Table 86 is a summary of the job factors (and sense of coherence) that contribute towards certain psychological conditions for work engagement of Namibian secondary school educators.

Table 86

Factors that Contribute towards Psychological Conditions

Factors	Psychological condition
Job enrichment, co-worker relations, supervisor support, supervisor trust, organizational support, rewards and recognition, sense of coherence	Psychological safety
Work-role fit, job enrichment, co-worker relations, supervisor support, cognitive resources, organizational support, rewards and recognition sense of coherence	Psychological meaningfulness
Work-role fit, job enrichment, cognitive resources	Psychological availability
Work-role fit, co-worker relations, supervisor support, supervisor trust, organizational support, rewards and recognition	Autonomy

Table 86 indicates which job factors educators need in order to experience psychological safety, meaningfulness, availability and autonomy at their school. From Table 86 it can be deduced that both the educational organization (with job factors) as well as individual Namibian secondary school educators (with sense of coherence) can contribute to the higher experience of essential psychological conditions by educators.

Table 87 is a summary of the job factors (and sense of coherence) that contribute towards work engagement of Namibian secondary school educators.

Table 87

Factors that Contribute towards Work Engagement

Factors	Variants of work engagement
Work-role fit, emotional and physical resources	Cognitive engagement
Work-role fit, job enrichment, supervisor support, supervisor trust, cognitive, physical and emotional resources, organizational support, rewards and recognition, sense of coherence	Emotional engagement
Work-role fit, job enrichment, co-worker relations, physical and emotional resources, cognitive resources, rewards and recognition, sense of coherence	Physical engagement

Table 87 indicates which job factors educators need in order to experience cognitive, emotional and physical work engagement at school. From Table 87 it can be deduced that both the educational organization (with job factors) as well as individual Namibian secondary school educators (with sense of coherence) can contribute to the higher experience of work engagement.

Table 88 is a summary of the job factors (and sense of coherence) that contribute towards positive organizational and individual outcomes of Namibian secondary school educators.

Table 88

Factors that Contribute towards Positive Organizational and Individual Outcomes

Factors	Organizational outcomes
Physical and emotional resources, cognitive resources, good co-worker relations, rewards and recognition, sense of coherence	Low prevalence of somatic symptoms
Physical and emotional resources, cognitive resources, good co-worker relations, sense of coherence	Low anxiety and insomnia
Cognitive, physical and emotional resources, sense of coherence	Low depression
Work-role fit, job enrichment, co-worker relations, supervisor support, physical and emotional resources, rewards and recognition, sense of coherence	Good social functioning
Work-role fit, job enrichment, co-worker relations, supervisor support, supervisor trust, organizational support, sense of coherence	Organizational commitment
Work-role fit, job enrichment, co-worker relations, supervisor support, organizational support, rewards and recognition	Organizational citizenship behaviour organization
Cognitive resources	Organizational citizenship behaviour individual
Work-role fit, job enrichment, physical and emotional resources, cognitive resources, organizational support, rewards and recognition, sense of coherence	Low turnover intention

Table 88 indicates which job factors educators need in order to experience positive organizational outcomes as well as the positive individual outcome general health at their school. From Table 88 it can be deduced that both the educational organization (with job factors) as well as individual Namibian secondary school educators (with sense of coherence) can contribute to the higher experience of positive organizational and positive individual outcomes.

5.1.2 Effects of psychological conditions

The following is a discussion of the impact of psychological conditions (safety, meaningfulness, availability, autonomy) on engagement (cognitive, emotional, physical), positive organizational outcomes (organizational commitment, organizational citizenship behaviour, turnover intention) and positive individual outcome general health. This contribution has been determined by Pearson correlations and hierarchical regression analysis.

5.1.2.1 Psychological safety at work

Two hypotheses regarding psychological safety were tested, namely hypothesis 4 (psychological safety relates positively to cognitive, emotional and physical work engagement of educators) and hypothesis 5 (psychological safety relates positively to organizational outcomes of organizational commitment, organizational citizenship behaviour, low turnover intention and a positive individual outcome general well-being/health).

In this study it was found that Namibian secondary school educators who felt psychologically safe at work experienced high levels of cognitive engagement (partial support for hypothesis 4). A feeling of safety provides ample opportunity to employees to be cognitively engaged at work as they do not have to use their cognition to protect themselves (Edmondson, 2003). However, although it was indicated that a feeling of psychological safety did not contribute significantly to

emotional and physical engagement of educators, positive correlations were found between psychological safety and emotional/physical engagement. Research confirms the findings of this study, namely that educator work engagement is positively affected by psychological safety (Dollard & Bakker, 2010; Kahn, 1990; May et al., 2004; Nembhard & Edmondson, 2006; Rothmann & Rothmann, 2010; Saks, 2006). It was, furthermore, found in the current study that psychological safety contributed to educators' feelings of organizational commitment. Ford and Tetrick (2011) confirm that a psychologically safe work environment increases organizational commitment by employees. It was also found in this study that a feeling of psychological safety at work was essential for educator well-being. When educators do not feel safe at work they have a greater chance of developing somatic complaints, anxiety and insomnia as well as depression. In their study with Australian educators Dollard and Bakker (2010) confirm that a psychologically safe climate at work contributes to employee well-being. As this study did not find a significant contribution of psychological safety to educator citizenship behaviour and turnover intention, hypothesis 5 is partially supported. However, a positive correlation was found between psychological safety feelings of educators and OCBI/OCBO, whilst a negative correlation was found between psychological safety and turnover intention. In agreement with the findings of the current study, no previous studies could be found that show a direct effect of psychological safety on turnover intention. However, it can be anticipated that educators who feel safe at work will experience low turnover intention. A study by Lee, Wu and Hong (2007) conducted in Taiwan found that psychological safety encourages OCB. Psychological safety thus contributes positively to work engagement (cognitive), a

positive organizational outcome (organizational commitment) and the positive individual outcome of general health (fewer somatic complaints, lower anxiety, lower depression).

5.1.2.2 Psychological meaningfulness at work

Two hypotheses regarding psychological meaningfulness were tested, namely hypothesis 6 (psychological meaningfulness relates positively to cognitive, emotional and physical work engagement of educators) and hypothesis 7 (psychological meaningfulness relates positively to organizational outcomes of organizational commitment, organizational citizenship behaviour, low turnover intention and a positive individual outcome general well-being/health).

This study indicates that Namibian secondary school educators who experience psychological meaningfulness at work are cognitively, physically and emotionally engaged in their education job (thus confirming hypothesis 6). This finding is in agreement with Kahn (1990) as well as with Nelson and Simmons (2003) who found that meaningfulness is a psychological condition that is essential for work engagement (Aktouf, 1992; Rothmann & Rothmann, 2010; Van Zyl et al., 2010; Vinarski-Peretz & Carmeli, 2011). Educators, in the current study, who experienced psychological meaningfulness in their work, showed a high level of organizational commitment. This finding is consistent with Avolio, Zhu, Koh, and Bhatia (2004) who conducted a study on 400 nurses in Singapore and found that when nurses experienced psychological meaningfulness at work, their organizational commitment

and energy levels were higher. Furthermore, it was found in the current study that meaningfulness contributed to OCBO. It makes sense that educators, who feel they find meaning in their work, will go the extra mile for their school, especially if education is a calling for them. In the same vein, Van Zyl et al. (2010) found in their study with industrial/organizational psychologists that when individuals experienced meaningfulness in their work, they would be more engaged, which would again lead to organizational citizenship behaviours. Furthermore, Wrzesniewski (2003) found that when people did not find meaningfulness in their work, they spontaneously conducted job re-crafting in an attempt to find more meaningfulness. In this way employees start to do additional tasks outside of their job description, which increases organizational citizenship behaviours. This fits in well with educators who are involve in extramural activities with learners (sport, vehicle driving lessons) to derive meaningfulness out of their work but at the same time benefitting learners and the school. Furthermore, the current study indicates that psychological meaningfulness points to a low level of turnover intention with Namibian educators. Prouse (2010) also found that psychological meaningfulness lowered turnover intention with airline pilots and cabin crew at an airline company in New Zealand. With these findings hypothesis 7 can be partially supported as this study did not find a significant contribution of experiences of psychological meaningfulness to educator general health. However, a positive correlation has been found between psychological meaningfulness and general health of educators in Namibia. This is consistent with the findings of Zika and Chamberlain (1992) who conducted a study on mothers and elderly people in New Zealand. These researchers found a strong association between psychological meaningfulness and positive health. The current

study found that educators who experienced psychological meaningfulness in their work were engaged (cognitively, emotionally, physically), experienced positive organizational outcomes (organizational commitment, OCBO, low turnover intention) as well as a positive individual outcome (general health). Meaningfulness can thus be regarded as an essential condition for the work engagement of Namibian educators with the subsequent by-products of positive organizational and positive individual outcomes which will benefit learners directly and thus Namibia in general in terms of a well-educated Namibian population.

5.1.2.3 Psychological availability at work

Two hypotheses regarding psychological availability were tested, namely hypothesis 8 (psychological availability relates positively to cognitive, emotional and physical work engagement of educators) and hypothesis 9 (psychological availability relates positively to organizational outcomes of organizational commitment, organizational citizenship behaviour, low turnover intention and a positive individual outcome general well-being/health).

This study found that Namibian secondary school educators who felt cognitively, emotionally and physically available to their job experienced high levels of cognitive, emotional and physical engagement in their work (thus confirming hypothesis 8). This finding is in agreement with Kahn (1990) who regards available employees as engaged employees (May et al., 2004). Olivier and Rothmann (2007) also found in their study on the antecedents of work engagement at a multinational

oil company in South Africa that psychological availability is a strong predictor of work engagement. Another finding of the current study is that higher levels of psychological availability lead to high organizational commitment (to the school of employment) and that educators tend to do more work for individuals (co-workers and learners) (OCBI) and the organization (school) (OCBO) than is expected from them. Furthermore, Namibian educators showed that psychological availability decreased the turnover intention of educators. Also, increased anxiety and insomnia as well as social dysfunction seem to be symptoms of a lack of psychological availability, as was found in the current study (thus confirming hypothesis 9). No previous research results could be found concerning the contribution of psychological availability to organizational commitment, OCB, turnover intention and general health. However, it makes sense that the educator who feels available to the workplace will probably also be committed to the school, show higher levels of citizenship behaviours and experience less stress and health problems. In the current study it was found that Namibian secondary school educators with higher levels of psychological availability would experience work engagement (cognitive, emotional, physical), positive organizational outcomes (organizational commitment, OCBI, OCBO, a lower turnover intention) and general health (lower anxiety, better social functioning).

5.1.2.4 Autonomy at work

Two hypotheses regarding autonomy were tested, namely hypothesis 10 (autonomy relates positively to cognitive, emotional and physical work engagement of

educators) and hypothesis 11 (autonomy relates positively to organizational outcomes of organizational commitment, organizational citizenship behaviour, low turnover intention and a positive individual outcome general well-being/health).

In the current study it was found that Namibian secondary school educators who felt they were allowed a great deal of autonomy at work, would show higher levels of cognitive, emotional and physical work engagement (confirmation of hypothesis 10). This finding is confirmed by Spreitzer (1995), as well as Van den Broeck et al. (2011), who found that employee autonomy rendered a sense of freedom to a person to take the necessary work decisions and, therefore, becoming more engaged in his/her work. A sense of autonomy provides the educator with a feeling of responsibility with an increased level of work engagement. Utman (1997), in a study on performance effects of motivational states, also found that the employee who was frustrated in terms of autonomous actions could become disengaged from work. Bakker and Demerouti (2007) regarded autonomy as a work resource that allows people to work independently and which increases work engagement. Another finding of the current study is that autonomy contributed to educator organizational commitment. This finding is supported by Van den Broeck et al. (2011) who, in their study of self-determination theory and workaholics, found that increased levels of employee autonomy contributed to these employees' organizational commitment. Although this current study did not find a significant contribution of autonomy on OCB, turnover intention and general health of educators, a positive correlation was found between educator autonomy and OCB. A negative correlation was found between autonomy and turnover intention. With regard to autonomy and general

health, a positive correlation was found between autonomy and somatic symptoms (possibly autonomy leads to more responsibility and thus stress which can lead to psychosomatic symptoms), whilst a negative correlation was found between autonomy and social dysfunction, anxiety and depression. Hypothesis 11 is thus partially supported. The current study consequently found that educator autonomy contributed to work engagement (cognitive, emotional, physical) and a positive organizational outcome (organizational commitment). These findings make sense if one takes into consideration that Van den Broeck, Vansteenkiste, De Witte, Soenens, and Lens (2010) state that needs are fundamental determinants of human behaviour. The Self-determination Theory depicts autonomy as a need (Deci & Ryan, 2000). Therefore, a greater chance for engagement and positive organizational outcomes exist if the employee's need for autonomy is satisfied.

The following tables summarize which psychological conditions were found to contribute to or correlate positively with work engagement and positive organizational/individual outcomes in the current study.

Table 89 is a summary of the psychological conditions of Namibian secondary school educators that contribute towards work engagement.

Table 89

Psychological Conditions that Contribute towards Work Engagement

Psychological conditions	Dimensions of work engagement
Psychological safety, psychological meaningfulness, psychological availability, autonomy	Cognitive engagement
Psychological meaningfulness, psychological availability, autonomy	Emotional engagement
Psychological meaningfulness, psychological availability, autonomy	Physical engagement

Table 89 shows which psychological conditions were indicated by Namibian secondary school educators to contribute to work engagement.

Table 90 is a summary of the psychological conditions of Namibian secondary school educators that contribute towards positive organizational/individual outcomes.

Table 90

Psychological Conditions that Contribute Towards Positive Organizational and Individual Outcomes

Psychological conditions	Organizational outcomes
Psychological safety, psychological meaningfulness, psychological availability, autonomy	Organizational commitment
Psychological meaningfulness, psychological availability	Organizational citizenship behaviour organization
Psychological availability	Organizational citizenship behaviour individual
Psychological safety, psychological availability	Good General health
Psychological meaningfulness, psychological availability	Low turnover intention

Table 90 shows which psychological conditions Namibian secondary school educators indicated to be crucial for educator work engagement.

5.1.3 Effects of work engagement on organizational outcomes

What follows is an outline of the impact of work engagement (cognitive, emotional, physical) on positive organizational outcomes (organizational commitment, organizational citizenship behaviour, turnover intention) and positive individual outcome general health. This contribution has been determined by Pearson correlations and hierarchical regression analysis.

5.1.3.1 Emotional, physical and cognitive engagement at work

Three hypotheses regarding work engagement were tested, namely hypothesis 1 (emotional engagement is positively related to positive organizational outcomes of organizational commitment, organizational citizenship behaviour, low turnover intention) and a positive individual outcome general well-being/health), hypothesis 2 (physical engagement is positively related to positive organizational outcomes of organizational commitment, organizational citizenship behaviour, low turnover intention and a positive individual outcome general well-being/health) and hypothesis 3 (cognitive engagement is positively related to positive organizational outcomes of organizational commitment, organizational citizenship behaviour, low turnover intention and a positive individual outcome general well-being/health).

It was found in this study that Namibian secondary school educators who were emotionally engaged in their work would function socially well at work and be of good general health. As support for this finding, Hakanen et al. (2006) also found that educators who were emotionally engaged without having the back-up emotional resources, were prone to suffer ill-health. Furthermore, it has been found that a high level of emotional engagement would lead to a higher level of organizational commitment. In this study it was also found that emotional engagement contributed to OCBO. Another finding was that educators who were emotionally engaged showed low levels of turnover intention (confirmation of hypothesis 1). Namibian secondary school educators thus indicated that high levels of emotional engagement would contribute to positive organizational outcomes (organizational commitment, OCBO, and lower turnover intention) and the positive individual outcome general health (good social functioning).

With regard to the physical engagement of Namibian secondary school educators it was found that educators who were physically engaged would show low levels of somatic symptoms and anxiety, possibly due to high physical activity. These educators would also function socially. High levels of physical engagement with educators would also lead to low intention to resign with increased organizational commitment and increased OCBO (confirmation of hypothesis 2). Namibian secondary school educators thus indicated that high levels of physical engagement would contribute to positive organizational outcomes (organizational commitment, OCBO, and lower turnover intention) and a positive individual outcome general health (fewer somatic symptoms, lower anxiety, good social functioning).

There was no indication that cognitive engagement of educators contributed to organizational or individual outcomes in this study. In addition, no significant correlation could be found between educator cognitive engagement and positive organizational outcomes (organizational commitment, organizational citizenship behaviour and turnover intention) and positive individual outcomes (general health). This led to the rejection of hypothesis 3.

Although no previous studies could be found regarding contribution of specific types of engagement (emotional, physical, cognitive) on organizational and individual outcomes, many studies confirm the contribution of total engagement to organizational and individual outcomes. For example, Blizzard (2002), in a study on job satisfaction and engagement of nurses, emphasizes that work engagement leads to higher levels of organizational commitment. Hakanen et al. (2006), in their study on burnout and work engagement of educators, also show that work engagement contributes to organizational commitment. In their study on work engagement with academic staff in South Africa Barkhuizen and Rothmann (2006) found that work engagement leads to lower levels of ill-health, especially with regard to somatic symptoms and depression. Leiter and Bakker (2012) also connect extra-role behaviour to work engagement when they state that engagement is often defined in terms of extra-role behaviour. Du Plooy and Roodt (2010) found in their study on the predictors of turnover intention that engagement was negatively related to turnover intention. Quite a number of studies confirm that work engagement is associated with low turnover intention (Bakker, Demerouti, & Schaufeli, 2005; Harter et al., 2002; Saks, 2006; Schaufeli & Bakker, 2004).

Table 91 summarizes the findings in this study regarding how work engagement (cognitive, emotional, physical) contributes to or correlates positively with positive organizational/individual outcomes.

Table 91

Variants of Work Engagement that Contribute towards Positive Organizational and Individual Outcomes

Organizational outcomes	Variants of work engagement
No organizational outcomes indicated	Cognitive engagement
Good social functioning, organizational commitment, organizational citizenship behaviour organization, low turnover intention	Emotional engagement
Low anxiety and insomnia, low prevalence of somatic symptoms, good social functioning, low turnover intention, organizational commitment, organizational citizenship behaviour organization	Physical engagement

Table 91 shows which positive organizational/individual outcomes result from different variants of work engagement, as indicated by Namibian secondary school educators.

5.1.4 A model of well-being for secondary school educators

Namibian secondary school educators struggle with poor general health. High job demands, inadequate personal resources, poor supervisor relations and low rewards and recognition are a few of the findings of this study that appear to lead to poor educator well-being and higher turnover. Poor well-being of educators will be a major factor in low learner academic performance and low educational standards. Namibia is a developing country and will not be able to provide sudden large increases in external educational resources or higher salaries (rewards) for educators. Therefore, it is crucial that internal resources of educators are mobilized. The following model for activation of internal educator resources, as indicated in Figure 11, has been formulated as a result of this study.

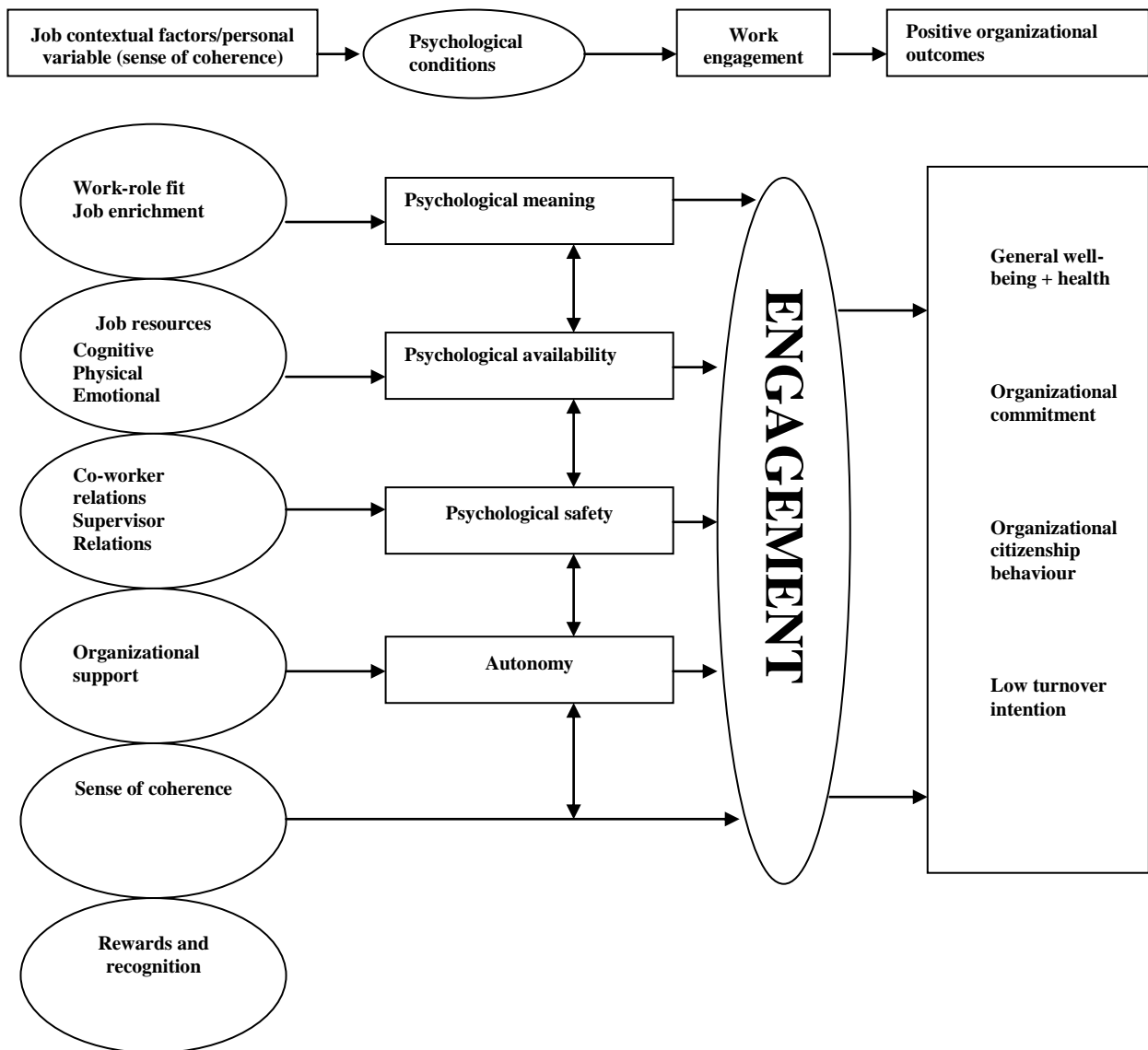


Figure 11. Model for educator well-being and low turnover intention

According to Figure 11, job factors and the personal variable sense of coherence together with psychological conditions contribute to educator work engagement, which results in positive organizational and individual outcomes. According to this model, education as an organization (with job factors), the individual educators (with sense of coherence, psychological conditions and work engagement), as well as the

educator corps as a group (with co-worker relations) and the parents of the learners that the particular school serves (being able to provide support to educators, which increases emotional resources of educators), are essential in the achievement of positive educational outcomes (organizational commitment, organizational citizenship behaviours, low turnover intention, increased educator health/well-being) in Namibia.

In this study it was found (for the above model in Figure 11) that *education as an organization* can use *job factors* to contribute to positive educational outcomes in Namibia via work engagement. If education authorities/managers would ensure positive levels of all job factors, Namibian secondary school educators would be able to work for more positive organizational/individual outcomes. In this sense, the current study found that all job factors, but especially physical resources, emotional resources and work-role fit contributed significantly to Namibian secondary school educators' experience of cognitive engagement. This study also found that all job factors, but especially work-role fit, job enrichment and personal physical/emotional/cognitive resources contributed significantly to educator emotional engagement. Furthermore, all job factors, especially work-role fit, job enrichment and personal physical/emotional/cognitive resources contributed significantly to physical engagement of educators. From all these job factors it was found that if the Namibian education authorities would ensure that educators fit well into their work-role and feel that they grow personally because of their work (job enrichment), educator total engagement will be positive.

In this study it was found (for the above model in Figure 11) that *education as an organization* can use *job factors* to contribute directly to positive educational outcomes in Namibia. All the job factors, but especially work-role fit, job enrichment, co-worker relations and supervisor support contributed significantly to educators' organizational commitment. All the job factors were found to encourage Namibian educators to reach out towards individuals, like colleagues, even if this was not part of their job description (OCBI). All job factors, but especially work-role fit and co-worker relations were found to contribute to Namibian educators' experience of organizational citizenship behaviour that was focused on the organization as a whole (OCBO). All job factors, but especially work-role fit and personal physical/emotional/cognitive resources were found to contribute significantly to Namibian educators' decision whether to stay or leave their school. If educational authorities and school management teams would neglect educator work-role fit and personal educator resources, an increase in educator turnover intention in Namibia can be expected. All job factors, especially adequate personal cognitive/emotional/physical resources and good co-worker relationships were found to decrease/prevent (psycho)somatic symptoms as well as anxiety and insomnia of Namibian educators. This study, furthermore, found that all job factors, but especially good work-role fit, job enrichment, good co-worker relations, good supervisor support and personal resources contributed to healthy educator social functioning. All job factors, but especially personal resources were found to work against the presence of educator depression in Namibia.

In this study it was found (for the above model in Figure 11) that *the individual educators can use personal variables (sense of coherence), psychological conditions and work engagement* to contribute to positive educational outcomes in Namibia. However, it should be kept in mind that individual educators are to a great extent dependent on job factors (as instituted and managed by educational authorities and management) in order to experience positive psychological conditions and work engagement with the aim of reaching positive individual/organizational outcomes. In this regard it was found that all psychological conditions (safety, meaningfulness, availability, autonomy) contributed to Namibian educators' experience of cognitive engagement, whilst especially psychological meaningfulness and autonomy contributed to educators' emotional engagement. Furthermore, it was found in this study that all psychological conditions, but especially meaningfulness of work and psychological availability contributed significantly to educators' physical engagement. It was also found in this study that all psychological conditions, but especially a sense that the work they do is meaningful to them contributed the most to total educator work engagement in Namibia. Psychological conditions, but especially psychological safety, were found to decrease the presence of somatic symptoms and depression of Namibian educators. This study also found that psychological conditions, but especially psychological safety and availability prevent anxiety and insomnia of educators. Psychological conditions, but especially availability and autonomy contribute to good social functioning of educators. This study also found that when Namibian educators have a healthy sense of coherence, they will have a better chance towards increased work engagement levels. This study, furthermore, confirmed that a strong sense of coherence would increase

Namibian educator organizational commitment and decrease turnover intention significantly. It was also found in this study that if the individual educator would have a strong sense of coherence, such an educator would most probably experience good health. The findings of this study show that educator sense of coherence plays especially an important role in the prevention of somatic symptoms, anxiety and depression.

For the above model in Figure 11, it can thus be shown from the findings of this study how important educational authorities (with job factors) and educators (with psychological conditions, work engagement and sense of coherence) are in the achievement of positive individual and organizational outcomes (educator well-being, low educator turnover intention, better academic performance of learners). However, educators as a group (co-worker relations) and parents of learners (support as a source of educator emotional resources) should be regarded as part of the above model in Figure 11.

Part of the above model in Figure 11 would be the degree to which psychological conditions (meaningfulness, safety, availability and autonomy) influenced the relationship between job factors/sense of coherence and work engagement as well as in how far psychological conditions influenced the relationship between job factors/sense of coherence and organizational/individual outcomes. Three hypotheses regarding the influence of psychological safety were tested, namely hypothesis 12 (psychological conditions mediate the relationship between job factors and sense of coherence on the one hand and engagement on the other hand), hypothesis 13

(psychological conditions mediate the relationship between job factors and sense of coherence on the one hand and positive organizational outcomes on the other hand) and hypothesis 14 (psychological conditions mediate the relationship between job factors and sense of coherence on the one hand and educator general health on the other hand).

With regard to the mediation effect of psychological conditions between job factors and sense of coherence on the one hand and work engagement on the other hand, it was found that:

- Psychological meaningfulness mediated the relationship between work-role fit, job enrichment, cognitive resources and sense of coherence on the one hand and work engagement on the other hand.
- Psychological availability mediated the relationship between work-role fit, job enrichment and cognitive resources on the one hand and physical engagement on the other hand;
- Autonomy mediated the relationship between job enrichment, supervisor trust and rewards and recognition on the one hand and emotional engagement on the other hand.

Hypothesis 12 is partially supported by above findings. Rothmann and Rothmann (2010) found that psychological meaningfulness mediated the relationship between work-role fit and work engagement. Saks (2006) found psychological meaningfulness to mediate between job enrichment and work engagement.

With regard to the mediation effect of psychological conditions between job factors and sense of coherence on the one hand and organizational outcomes on the other hand, it was found that:

- Psychological availability mediated the relationship between work-role fit, job enrichment and cognitive resources on the one hand and organizational citizenship behaviour (individual and organization) on the other hand;
- Psychological meaningfulness as well as psychological availability mediated the relationship between work-role fit, job enrichment and cognitive resources on the one hand and turnover intention on the other hand;
- Psychological meaningfulness mediated the relationship between work-role fit, job enrichment, cognitive resources and sense of coherence on the one hand and organizational commitment on the other hand;
- Autonomy mediated the relationship between job enrichment and supervisor trust on the one hand and organizational commitment on the other hand.

Hypothesis 13 is partially supported by the findings above.

With regard to the mediation effect of psychological conditions between job factors and sense of coherence on the one hand and educator general health on the other hand, it was found that:

- Psychological safety (rejection) mediated the relationship between work-role fit, co-worker relations, cognitive resources and sense of coherence on the one hand and somatic symptoms on the other hand;
- Psychological safety (rejection) mediated the relationship between work-role fit, co-worker relations, cognitive resources and sense of coherence on the one hand and anxiety/ insomnia on the other hand;
- Psychological safety (rejection) mediated the relationship between work-role fit, co-worker relations, cognitive resources and sense of coherence on the one hand and depression on the other hand.
- Psychological safety (appreciation) mediated the relationship between co-worker relations, physical resources and emotional resources on the one hand and somatic symptoms on the other hand;
- Psychological availability mediated the relationship between work-role fit, job enrichment and cognitive resources on the one hand and anxiety and insomnia on the other hand;
- Psychological availability mediated the relationship between work-role fit, job enrichment and cognitive resources on the one hand and social dysfunction of the other hand;
- Autonomy mediated the relationship between job enrichment and supervisor trust on the one hand and social dysfunction on the other hand.

Hypothesis 14 is partially supported by the findings above.

With regard to the mediation effects of psychological conditions it can be concluded that psychological conditions partially mediated the relationship between job factors/sense of coherence and work engagement as well as between job factors/sense of coherence and positive organizational/individual outcomes, as indicated in the above model of Figure 11.

5.2 CHAPTER SUMMARY

This chapter focused on a discussion of the results of this research study. The results with regard to effects of job factors and sense of coherence on educator psychological conditions, work engagement and positive organizational/individual outcomes were reported. This chapter also highlighted the results of the effects of psychological conditions on work engagement and positive organizational/individual outcomes of secondary school educators in Namibia. Furthermore, this chapter reported the results of educator work engagement on positive organizational/individual outcomes. The chapter was concluded with a model of well-being for secondary school educators in Namibia.

CHAPTER 6

RECOMMENDATIONS

The high turnover rates of educators in Namibia are an issue of concern (see 1.1). Professional people decide to leave their profession, into which they had invested many years of study, knowing that they would probably not find new employment easily because of national and worldwide economic hardships; these staff turnover rates could only increase if economic conditions in Namibia and worldwide improve. Improved economic circumstances in a country usually lead to more and different work opportunities, which are often more attractive to educators. It is thus essential that education authorities focus on work circumstances for educators in order to prevent an increased exodus of valuable employees. Therefore, the following recommendations, as formulated from the findings of this study, are made.

6.1 RECOMMENDATIONS FOR NAMIBIAN SECONDARY SCHOOL EDUCATION

Recommendations for Namibian secondary school education will be structured according to four categories, namely primary intervention (change of the environment), secondary intervention (help educators to increase their coping techniques), tertiary intervention (support educators with interventions like therapy and coaching) and findings from this study to increase educator well-being.

6.1.1 Primary intervention (change of the environment)

In order for human beings to function well at work, their work environment should be such that it supports healthy functioning and productive work. In the case of education, educators and learners would benefit from a well-developed and neat school environment. Adequate classrooms with necessary teaching aids support quality education. Office space for school management as well as clean and functioning ablution facilities for learners and educators is essential. Indoor air quality, ventilation system performance, lighting, space, density (classrooms should not be overcrowded), acoustic conditions, reduction of external sources of noise and furniture layout are important environmental factors that play an important role in educator and learner performance. Namibian schools that are in the fortunate position of having brick buildings and classrooms should take care of these structures, keeping them painted in learning supporting colours. Gardens and tidy learner playgrounds see to an aesthetic learning and working environment. Positive environmental changes at school in Namibia are not only the responsibility of education authorities and the Ministry of Education. Learners, educators and the community can be activated to help to create a learning and work friendly environment. Research found that a conducive work environment reduces absenteeism, illness and employee turnover, whilst increasing quality of work output and retention and recruitment of staff (Vischer, 1995). Workplace climate can also be seen as an important emotional environmental strategy to increase educator and learner productivity. If the school climate is negative, all possible measures should be taken to change this.

6.1.2 Secondary intervention (increasing coping techniques)

In this study it was found that educators 55 years and older (0.4% of educators in Namibia) showed the highest levels of work-role fit and co-worker relations (best co-worker relations were also found with educators less than two years and more than 16 years in education). Work-role fit contributes significantly to the experience of meaningfulness in work, whilst co-worker relations contribute significantly to a feeling of safety at work. Psychological meaningfulness and psychological safety are essential contributors to work engagement. As the mean age of educators is 31.7 years it can be assumed that the greater part of Namibian educators struggle with low levels of work-role fit and co-worker relations. This, in turn, will have a negative impact on the meaningfulness of and the safety at work and could lead to lower educator work engagement levels. It is, therefore, essential that education authorities in Namibia ensure that work-role fit and the co-worker relations of educators younger than 55 years of age are addressed as this will increase the resilience of educators which will lead to better coping.

Educators in this study indicated they were dissatisfied with the rewards and recognition they received in their profession. Better remuneration packages and reward systems should be designed for Namibian educators. An annual award ceremony for best educators of the year in every educational region in Namibia could, for example, serve as a form of recognition and motivation for educators in Namibia. Adequate recognition of educators will probably make them feel valued,

which could increase their coping possibilities as they might be able to tolerate more stress.

It was also found in this study that Namibian secondary school educators did not feel very well supported by their organization. 'Organization' in this sense could mean the specific school where they are employed, the Ministry of Education or, as is the case with private schools, the governing body of the private school. Organizational support would most probably increase assertiveness and confidence with educators and thus reducing the impact of stress on the educator. An increase in organizational support is, therefore, essential for secondary school educators in Namibia, and can be regarded as a tool for coping with stressful circumstances.

Results of this study indicated that educators felt that their psychological safety was compromised due to experience of rejection. It could be that educators feel rejected by their school management, the Ministry of Education or by the community they serve. It is, therefore, important that governing bodies of educators should review to what extent they probably reject educators. Supervisor trust and supervisor support could help educators cope better with their stressful circumstances.

Currently the government of Namibia is lobbying for willing Grade 12 learners to take government bursaries to study education in order to supply in the great need of educators in the country. Due to tough economic times it might be that young people grab the opportunity to study education just because of the availability of bursaries and guaranteed employment after studies are completed and not due to calling.

Education, however, is a challenging profession. It is often the educator who feels a passion and calling for education who can endure the tough work circumstances of education and still deliver quality work. If a young person chooses education as a career for the wrong reasons, such a person will just contribute to the high turnover rate of educators, high drop-out rate of learners and high general well-being problems that educators experience. It thus remains essential that education authorities ensure that students who receive bursaries for education studies are selected carefully. Calling can be regarded as a tool in the hands of the educator to handle stress better as the educator that feels called for the profession would probably be more tolerant of the stress inherent to education. To ensure that educators feel called for their profession, one should consider whether prospective education students should also go through a selection procedure. School education, especially the secondary school level, plays an important role in the establishment of future stakeholders of the Namibian economy. It should thus be considered that screening of future Namibian educators should be just as strict as for medical and psychology careers.

Employees, such as educators, were found to seek meaningfulness in their profession. If they do not find meaningfulness in their jobs, they tend to resign more easily (Holbeche & Springett, 2003). There is evidence that people search more for meaningfulness at their workplaces than in their lives in general (Kular, Gatenby, Rees, Soane, & Truss, 2008). One of the reasons for this could be that people spend much time at work. Another reason could be that people construct their identities around their jobs. To assist educators in finding meaningfulness in their job could

thus be another way of handing them a tool for better coping. Work-role fit, that comes through training, selection, recognition, good relationships at work amongst other, should be concentrated on.

An increase in the feeling of psychological safety at work can be a tool in the educator's hand to endure difficult work circumstances better. Psychological safety can primarily be increased by ensuring good co-worker relations and increasing supervisor trust and supervisor support, through for example the increase of team activities.

6.1.3 Tertiary intervention (therapy, workshops, coaching)

In this study it was found that Namibian secondary school educators struggled with social dysfunction and somatic symptoms. Due to numerous studies worldwide that found significant high stress levels with educators, it can be assumed that the elevated levels of social dysfunction and somatic symptoms might be the result of a high frequency of experiences of stress. Stress will probably always remain an integral part of the education profession, but Namibian educators could be introduced to stress management programmes. In this way educators would be better equipped to deal with their work stress, which could lead to lower levels of social dysfunction and somatic symptoms. With lower levels of social dysfunction and somatic symptoms, educator absenteeism figures and even turnover rates might be reduced.

With regard to health, this study also indicates that male educators more often struggle with depression, whereas females struggle more with anxiety, insomnia,

somatic symptoms and social dysfunction. Also, especially Afrikaans, English and German (compared to Oshiwambo) speaking educators appear to struggle with social dysfunction. With regard to ethnicity and health, this study found that African educators seemed to struggle the most with depression. When conducting stress management programmes, these differences in the experiences of health problems should be addressed for better results.

As educators in higher job positions did not report significantly better levels of general health, despite their higher levels of organizational citizenship behaviour organization (OCBO), organizational citizenship behaviour individual (OCBI), organizational commitment (OC) and lower turnover intention, special attention should be given to stress levels and the management thereof by educators in these higher job positions. This might improve the health of educators in senior job positions significantly. Highly functional and healthy leaders are required for a healthy education corps.

In this study it was found that Namibian secondary school educators were not cognitively well engaged in their work. At the same time it was found that educators experienced inadequate levels of personal physical and emotional resources. Namibian secondary school educators indicated that their physical and emotional resources contributed to cognitive engagement. Having found in this study that both cognitive engagement as well as physical and emotional resources of educators were low, it makes sense as previous studies indicated that low physical and emotional resources lead to low cognitive engagement (see 2.3.1.4). It is thus recommended

that personal physical and emotional resources of educators in Namibia should be increased in order to elevate their cognitive engagement levels. This can, for example, be achieved through coaching and workshops for educators.

Educators, new to the profession of education in secondary schools in Namibia, and young educators should go through an intensive mentoring program in order to guide them towards work engagement and the consequent positive organizational outcomes. Mentoring should occur within a supportive and trusting climate and not in an authoritarian fashion.

There is often an emphasis on learners and poor academic results of learners in Namibia. Educators are generally blamed as the culprits that cause high drop-out rates and the poor academic performance of learners. There is seldom, if ever, a newspaper article in Namibia that focuses on hardships that educators endure, turnover rates of educators, living circumstances and challenging work circumstances of educators. It is common for secondary school educators to be put under tremendous pressure by education authorities, principals, school management members, learners and parents alike. The findings of this study indicate that it is crucial that the Ministry of Education of Namibia should focus on educator health before any other actions are taken to improve educational standards in Namibia. As this study found, job resources are rated as highly important to educators in order to be able to do their work well. The educator remains the main tool in the hand of education authorities in order to ensure healthy educational standards in Namibia. If the educator is not nurtured and taken good care of, such an educator will struggle to

find the internal resources to educate the learner well. Workshops and coaching designed for educators to cope better, could help in this regard.

It is the prerogative of the Namibian government that every child in this country should move through the education system. This would mean that the Namibian child is conditioned and groomed by the education system over a period of at least 10 years. If Namibian learners are exposed to educators that are exhausted, suffer from burnout and poor general well-being, this grooming process does not hold good prospects for future generations of this country. An emphasis on the health and well-being and general positive circumstances of the educator in Namibia is therefore essential.

In the process of highlighting the educator and the well-being and further mentoring and development of the Namibian educator, the focus should be on suggested job factors, psychological conditions of engagement, work engagement and positive organizational outcomes as employed in this study. For example, it was found in this study that educators regarded job enrichment as a crucial prerequisite for educator engagement. Principals and management teams at schools could thus work out ways to foster educator engagement in schools, whereas higher education authorities could do the same for school management teams.

As research findings indicate that educators resign more easily when their school is of a multi-cultural setting (see 2.3.1.3.2), as is often the case in Namibia, courses for

educators could focus on difference and how to work effectively with a class with learners of different cultural backgrounds.

It is crucial that positive psychological interventions (PPI's; see 2.2.3) are taught to educators. With PPI's, which help educators to focus more readily on positive rather than negative aspects of their stressful work, educators stand a better chance to experience a higher quality of work life with accompanying positive outcomes for education in Namibia.

Namibian educators should be encouraged to seek psychotherapeutic help when they feel that their work is too stressful, before more negative consequences such as burnout develop.

It is anticipated that educator well-being, happiness, flourishing and a general positive spirit will benefit and foster positive learning outcomes of learners specifically and national economic objectives in general. From this study it becomes clear that educator well-being is embedded in a rich structure of personal and work-related factors as well as psychological conditions, work engagement and the consequent positive organizational outcomes discussed in this work. This study also indicates that educator well-being cannot be fostered by external motivators such as salary and reprimands or sanctions against educators, alone. Job factors, personal factors, psychological conditions and work engagement of secondary school educators in Namibia should be addressed in order to find positive results for education in Namibia.

6.1.4 Recommendations according to findings of this study

For Namibian secondary school educators *to feel safe* at their workplace, they should experience good co-worker relations, feel that their job enriches them, have trusting and supportive relations with their supervisors, get good salaries and recognition for their work done and be positive even in stressful times (sense of coherence).

For Namibian secondary school educators *to find meaningfulness* in their jobs, they need to fit well into their work-role, feel that their job is enriching them, enjoy good co-worker relations, feel support from the supervisor and the organization, receive good salaries and recognition for their work done, be provided with adequate cognitive resources and harbour a good sense of coherence.

To feel psychologically available for their jobs, Namibian secondary school educators need to feel they fit well into their work-role and feel personally enriched by their jobs.

For Namibian secondary school educators *to feel autonomous* in their jobs, they should feel that they fit well into their work-role, that they have good co-worker relations, that they have supportive relationships with their supervisor and organization, that they feel they can trust their supervisor and that they are satisfied with their salaries and the recognition for their work that they receive.

For *increased cognitive engagement*, educators need to feel they fit well into their work-role and have sufficient physical and emotional resources. Furthermore, cognitive engagement of educators in Namibia will increase when they feel psychologically safe, when their work is meaningful to them, when they feel psychologically available for their work and when they are allowed to exercise a certain amount of autonomy at the workplace.

For *increased emotional engagement*, educators need to fit well into their work-role, they should feel that their job contributes towards their personal growth, that they have a trusting relationship with their supervisor(s), that they have a supportive relationship with the organization and their supervisor(s), that they have adequate cognitive, emotional and physical resources, that they are satisfied with their salaries and the recognition they receive for their work and that they are resilient in the face of stressors, thus having a high sense of coherence. Furthermore, to be more emotionally engaged, educators need to find their work meaningful. They should feel psychologically available for their work and be allowed to have high levels of autonomy at work.

For *increased physical engagement*, educators need to fit well into their work-role, feel that the work they do enriches them personally, that they have adequate physical, emotional and cognitive resources, that they are satisfied with their salaries and recognition received for their work and that they feel a high sense of coherence. Furthermore, for educators to be increasingly physically engaged, they should feel

that the work they do is meaningful, should feel psychologically available for their work and enjoy a high level of autonomy at work.

In order *to minimize the prevalence of (psycho)somatic symptoms* with educators in Namibia, educators should have adequate physical, emotional and cognitive resources, have good co-worker relations, be satisfied with their salaries and the recognition they receive for their work and have a high sense of coherence. Furthermore, feeling psychologically safe at work and being psychologically available for their job will also lead to a decline in somatic symptoms for educators. Being increasingly physically engaged at their jobs will also limit the prevalence of somatic symptoms of educators.

In order *to minimize the prevalence of anxiety and insomnia* with educators in Namibia, educators should have adequate physical, emotional and cognitive resources, have good co-worker relations and have a high sense of coherence. Furthermore, feeling psychologically safe at work and being psychologically available for their job will also lead to a decline in anxiety and insomnia for educators. Being increasingly physically engaged at their jobs will also limit the prevalence of anxiety and insomnia for educators.

In order *to minimize the prevalence of depression* with educators in Namibia, educators should have adequate physical, emotional and cognitive resources and have a high sense of coherence. Furthermore, feeling psychologically safe at work

and being psychologically available for their job will also lead to a decline in depressive symptoms for educators.

In order *to minimize the prevalence of social dysfunction* with educators in Namibia, educators should feel that they fit well into their work-role, that they have adequate physical and emotional resources, that they have good co-worker relations, that they feel that their job enriches them personally, that they feel that their supervisor supports them well, that they are satisfied with their salaries and the recognition they receive for their work and that they have a high sense of coherence. Furthermore, feeling psychologically safe at work and being psychologically available for their job will also lead to a decline in social dysfunction with educators. Being increasingly emotionally and physically engaged at their jobs will also limit the prevalence of social dysfunction by educators.

For educators *to feel increasingly committed* to the school and education (organizational commitment), they should feel that they fit well into their work-role, that their job enriches them personally, that they have good relations with their co-workers, that they experience that they can trust their supervisor(s), that they experience that their supervisor(s) and organization support them and that they have a high sense of coherence. Furthermore, in order to feel committed to their organization, educators should experience a feeling of safety and autonomy at work, should feel that the work they do is meaningful and that they are psychologically available for their work. Being increasingly emotionally and physically engaged at their jobs will also increase the organizational commitment of educators.

For educators *to do more at the workplace than is expected from them in order to benefit the organization directly (organizational citizenship behaviour organization, OCBO)*, they should feel that they fit well into their work-role, that their job enriches them personally, that they have good relations with their co-workers, that they have the experience that their supervisor(s) and organization supports them and that they are satisfied with their salaries and the recognition they get for their work. Furthermore, in order to feel high OCBO, educators should feel that the work they do is meaningful and be psychologically available for their work. Being increasingly emotionally and physically engaged in their jobs will also increase the OCBO of educators.

For Namibian educators *to do more at the workplace than is expected from them in order to benefit other individuals directly and the organization indirectly (organizational citizenship behaviour individual, OCBI)*, they indicated that they should have adequate levels of cognitive resources. Furthermore, in order to feel high OCBI, educators should be psychologically available for their work.

For educators *to have a low turnover intention*, they should feel that they fit well into their work-role, that their job enriches them personally, that they have adequate physical, emotional and cognitive resources, that they experience that their organization supports them, that they are satisfied with their salaries and recognition they receive for their work and that they have a high sense of coherence. Furthermore, in order to keep educator turnover intention low, educators should feel that the work they do is meaningful and they should be psychologically available for

their work. Being increasingly emotionally and physically engaged at their jobs will also keep the turnover intention of educators low.

Above recommendations can be executed through the implementation of processes as depicted by Figure 11, the model for educator well-being and low turnover intention.

6.2 FOR FURTHER RESEARCH

As it was indicated in this study that Namibian secondary school educators' psychological safety was compromised by rejection, it is important to focus on where such rejection originates from. Data analysis should, in a further study, include the contribution (if any) of positive individual/organizational outcomes on work engagement and psychological conditions.

Since it was found in this study that German speaking educators showed the lowest levels of health and well-being problems, it might prove beneficial to the Namibian secondary school system to attempt to find the reason(s) for their low levels of health and well-being complaints.

Another finding of this study was that job position had a significant impact on organizational citizenship behaviour organization (OCBO), organizational citizenship behaviour individual (OCBI), organizational commitment (OC) and turnover intention of Namibian secondary school educators. In this regard it was

found that principals, heads of departments, subject heads and senior educators showed higher levels of OCBO, OCBI, OC and the lowest levels of turnover intention when compared to those of junior educators and education students. Follow-up research should look at why this is the case, as these reasons could be beneficial to the development of better education circumstances in Namibia.

Educators that are 55 years of age and older showed the highest levels of work-role. Good work-role fit benefits the experience of the meaningfulness of work, which again increases work engagement. Good work-role fit is thus essential for Namibian educators. It would thus be beneficial to the Namibian education system to establish why older educators experience better work-role fit and to pass this wisdom on to younger Namibian educators who form the greater educator contingent in the country.

In addition, Namibian secondary school educators that are 55 years and older as well as those educators that are less than two years and more than 16 years in education, seemed to experience the best co-worker relationships. Good co-worker relations increase the feeling of safety at work, which again leads to an increase in work engagement. It is thus essential to establish why these specific age categories of educators experience better co-worker relations and to apply this knowledge to the other age categories, which form the greater number of educators in Namibia.

In this study, the psychological condition of meaningfulness was found to be a central factor in the determination of work engagement. There is evidence that when

people feel a calling for a certain job, a closer match between self-concept and work-role takes place. Work-role fit is then reached. As soon as people feel they fit into their work-roles, they find meaningfulness in their work and become engaged (Rothmann & Hamukang'andu, in press). Engagement leads to positive organizational and positive individual outcomes, which will prevent the intention to resign. In order to predict the engagement levels of Namibian educators, it would be essential to find out how meaningful current educators in Namibia find their work.

Relatively limited research has been conducted on the Namibian educator. Decisions regarding education management in Namibia are thus often taken owing to what worked in other countries. It is, therefore, essential that more studies are conducted on Namibian educators and Namibian learners by Namibian researchers in order to establish which system would work the best within the Namibian identity.

At the moment, with such a huge backlog in educational research in Namibia, any valid and reliable study would just contribute to positive, educational circumstances in Namibia. However, currently, with the vulnerable condition of educators in Namibia, it would be crucial to do more well-being studies on educators. It is essential to enlarge a study like this one to pre-primary and primary school educators in all regions of Namibia.

It is crucial that future research within the area of education is conducted within the positive realm. Due to budgetary constraints the focus should not be on what the Namibian authorities should “pay” in order to improve education. The emphasis

should rather be placed on the positive, psychological development of what already exists – such as enhancing the capacity of the existing, employed educator. It would, furthermore, be essential to attempt to find out in how far climate and environment influences educator productivity in Namibia.

6.3 CHAPTER SUMMARY

In this chapter recommendations were made with regard to education circumstances in Namibia and much needed future research. These recommendations were discussed according to the categories of primary intervention, secondary intervention and tertiary intervention.

CHAPTER 7

CONCLUSIONS AND LIMITATIONS

7.1 CONCLUSIONS WITH REGARD TO GENERAL FINDINGS

The testing of measurement models for positive organization outcomes for educators in secondary schools in Namibia resulted in a three-factor model for engagement (cognitive, emotional, physical), a four-factor model for health and general well-being (somatic symptoms, anxiety and insomnia, depression, social dysfunction), a three-factor model for psychological conditions of engagement (safety, meaningfulness, availability), a one-factor model for organizational commitment, a two-factor model for organizational citizenship behaviour (OCBO, OCBI), a one-factor model for orientation to life/sense of coherence and a one-factor model for turnover intention.

This study found that Namibian secondary school educators experienced significant low levels of general health, with especially social dysfunction as a prominent complaint. Social dysfunction is an indication of poor general well-being, because people that are not well will struggle to function well socially. Educators also indicated that they suffered especially from (psycho)somatic symptoms, anxiety/insomnia and depression. The poor general health of Namibian educators differed with regard to demographic variables (gender, language, ethnic group). Male educators experienced depression more often, whereas female educators appeared to

struggle more with anxiety, insomnia, somatic symptoms and social dysfunction. Afrikaans, English and German speaking educators showed higher levels of social dysfunction than Oshiwambo speakers. African educators (compared to European and Coloureds) indicated higher depression.

Namibian secondary school educators also indicated that they were not satisfied with the rewards and recognition they received for the services they rendered. Rewards and recognition could include a salary package and recognition from supervisors, co-workers, the community and higher employing authorities in education. However, this study also found that rewards and recognition were not major contributors to psychological conditions of educators, work engagement or to increased positive organizational outcomes. Salaries were important to Namibian secondary school educators and they indicated that they were not satisfied with their salaries. However, at the same time, Namibian educators indicated other factors with regard to the fostering of psychological conditions, work engagement and positive organizational outcomes were as important as external motivators such as salaries. A possible reason why Namibian educators do not complain publically more often about their salaries might be that in a developing country, like Namibia, where more than 50% of its citizens are unemployed and where the majority of Namibians live on between US\$1 and US\$2 per day (see 2.1), an average educator salary of +/- N\$160 000 per annum might be regarded as well paid. For this reason Namibian educators might regard their current salary as a crucial motivator, but not the most important motivator for positive educator engagement.

In connection with a lack of recognition, educators indicated that they did not feel understood, but rather felt dominated and even rejected by their supervisors (subject heads, heads of departments, principals), thus indicating poor educator-supervisor relationships. Because of this lack of recognition and experiences of rejection, educators indicated low levels of psychological safety. The experience of organizational support would be essential for educators in order to exhibit and experience positive organizational outcomes. Furthermore, domineering supervisors prohibit educator autonomy, which will have a detrimental effect on positive educator output.

Furthermore, Namibian secondary school educators indicated a lack of personal resources, especially physical and emotional resources, which could be the cause of poor general health (burnout). This makes sense as this study found neglected supervisor-educator relationships in Namibian secondary schools, whilst good supervisor-employee relationships are a crucial source of emotional resources. In addition, poor parental involvement and poor parental support of the school, their children and educators (see 2.1.5.7) also contributed to the lack of emotional resources educators experienced. Namibian educators often receive in-service training, which might be the reason why it was not indicated that cognitive resources were severely lacking. The lack of resources that Namibian educators experience, indicate severe consequences like poor general health and well-being and higher turnover intention (see 4.4.1.5). The lack of appropriate personal resources thus seems to be a major cause for poor general health and high turnover intention of

secondary school educators in Namibia. The findings in this study indeed indicate that Namibian educators experience high turnover intention.

Namibian secondary school educators in supervisory and management positions showed the highest levels of positive organizational outcomes, namely OCBO, OCBI, organizational commitment and lowest turnover intention. Junior educators, who had been less than two years in education and education students busy with practical work at schools, showed the lowest levels of OCBO. It should be the aim of educator employers to enhance the levels of positive organizational and individual outcomes of the greater educator force, if quality of education and educational standards in Namibia should rise. A focus on measures to better engage younger educators in Namibia is thus called for.

Educators 55 years and older indicated experiencing the highest levels of work-role fit and co-worker relationships. Thus, the longer Namibian secondary school educators are in the education profession, the greater the chance that they exhibit and experience positive job factors, positive psychological conditions, work engagement and positive organizational outcomes. The group of Namibian educators between the ages 20-34 showed the lowest levels of work-role fit. This could be one of the reasons why young educators tend to resign easily. As the average age of educators in Namibia is 31.7 years (Emis, 2011), one can argue that the greater number of Namibian secondary school educators might feel that they do not fit into their work-role. This will have a detrimental negative effect on the quality of secondary education in Namibia at large as Namibian secondary school educators indicated that

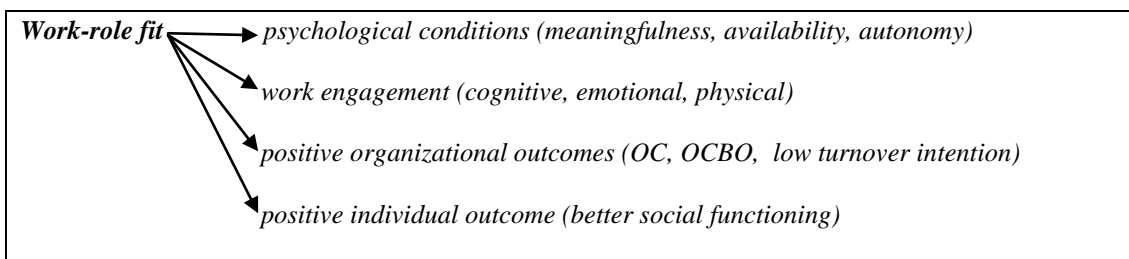
work-role fit contributed to cognitive, emotional and physical work engagement, psychological conditions of meaningfulness, availability and autonomy as well as to organizational commitment, OCBO, a low turnover intention and general health (see 4.4.1.1).

7.2 CONCLUSIONS WITH REGARD TO THE IMPACT OF JOB FACTORS ON PSYCHOLOGICAL CONDITIONS, WORK ENGAGEMENT AND POSITIVE ORGANIZATIONAL/INDIVIDUAL OUTCOMES

The contribution of work-role fit to psychological conditions, work engagement and positive organizational/individual outcomes as indicated by Namibian secondary school educators is depicted in Table 92.

Table 92

The Impact of Educator Work-role Fit on Psychological Conditions, Work Engagement and Positive Organizational and Individual Outcomes



From Table 92 it flows that a higher level of work-role fit (job factor) contributes positively towards psychological, meaningfulness, availability and autonomy (psychological conditions). Work-role fit also contributes to cognitive, emotional and

physical engagement of educators. Work-role fit increases educators' organizational commitment, OCBO and decreases turnover intention (positive organizational outcomes) and points to better general health (positive social functioning), which is a positive individual outcome.

The contribution of job enrichment to psychological conditions, work engagement and positive organizational/individual outcomes as indicated by Namibian secondary school educators is depicted in Table 93.

Table 93

The Impact of Educator Job Enrichment on Psychological Conditions, Work Engagement and Positive Organizational and Individual Outcomes

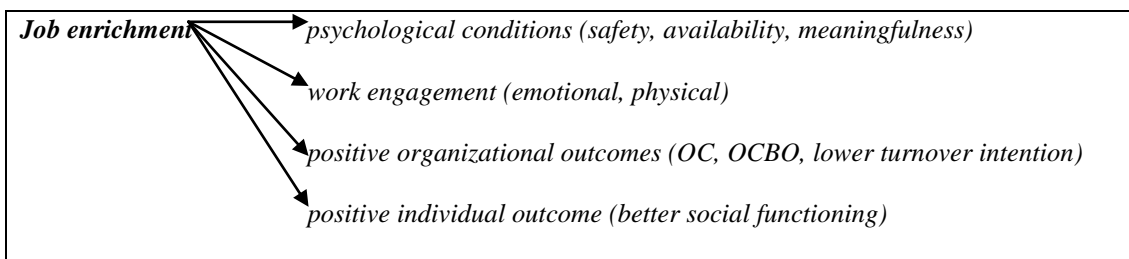
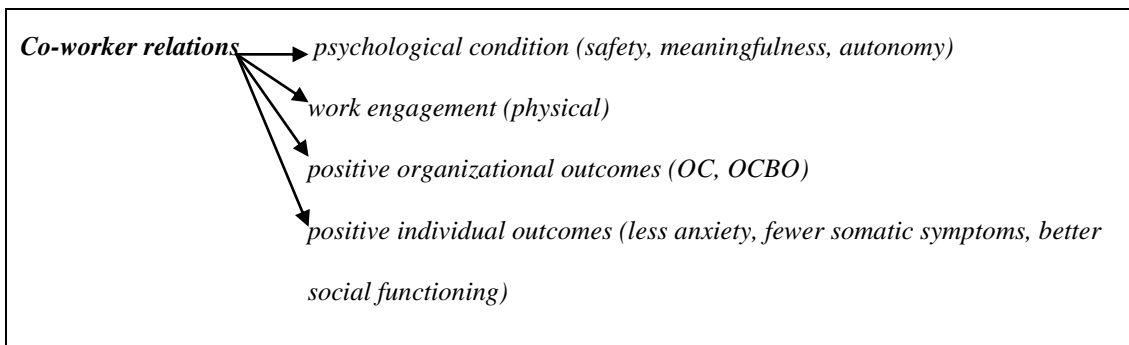


Table 93 shows that educator job enrichment has positive effects on psychological safety, availability and meaningfulness as well as on emotional and physical engagement. Job enrichment also leads to organizational commitment, OCBO and healthy social functioning.

The contribution of co-worker relations to psychological conditions, work engagement and positive organizational/individual outcomes as indicated by Namibian secondary school educators is depicted in Table 94.

Table 94

The Impact of Educator Co-worker Relations on Psychological Conditions, Work Engagement and Positive Organizational and Individual Outcomes



According to Table 94, satisfying co-worker relations encourage psychological safety, meaningfulness and autonomy for educators. Such positive co-worker relations also increase physical engagement, organizational commitment and OCBO. Poor co-worker relationships increase the likelihood of educator illness and poor well-being, with anxiety, somatic symptoms and social dysfunction to be the most prominent complaints of educators.

The contribution of supervisor support to psychological conditions, work engagement and positive organizational/individual outcomes as indicated by Namibian secondary school educators is depicted in Table 95.

Table 95

The Impact of Supervisor Support on Psychological Conditions, Work Engagement and Positive Organizational and Individual Outcomes

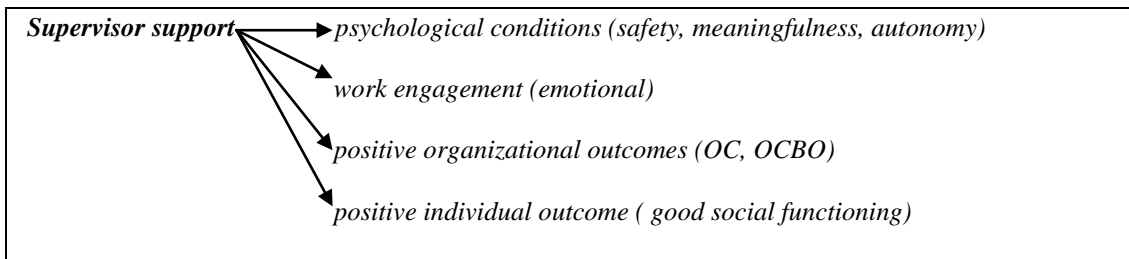


Table 95 indicates that supervisor support of educators contributes to educator safety, meaningfulness and autonomy. Good supervisor support also contributes to educators' emotional engagement. Supervisor support also contributes also to the positive organizational outcomes of organizational commitment and OCBO as well as positive individual outcome good social functioning (general health).

The contribution of supervisor trust to psychological conditions, work engagement and positive organizational/individual outcomes as indicated by Namibian secondary school educators is depicted in Table 96.

Table 96

The Impact of Supervisor Trust on Psychological Conditions, Work Engagement and Positive Organizational and Individual Outcomes

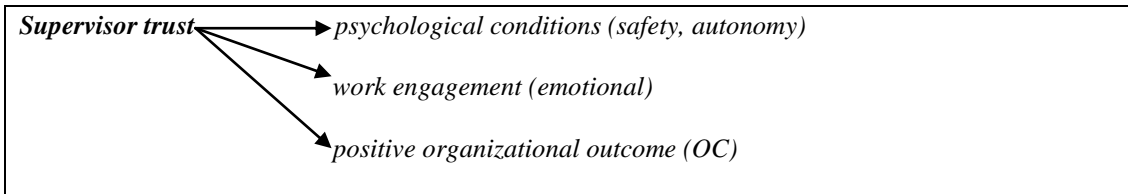
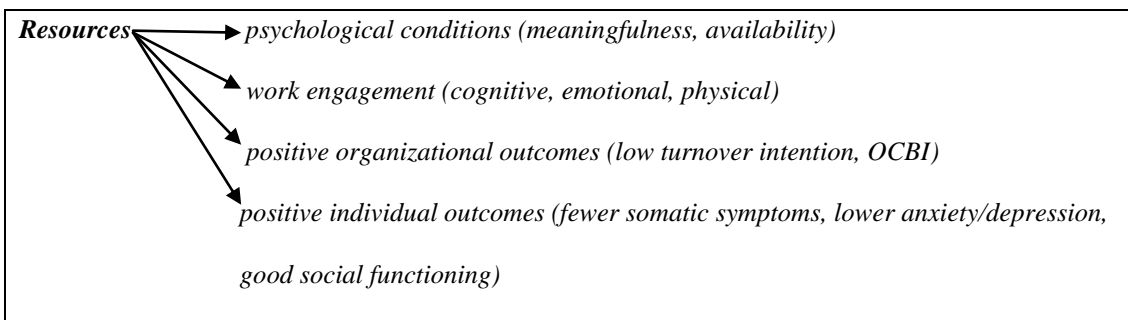


Table 96 indicates that when educators feel trust towards their supervisor(s), they experience higher levels of safety and autonomy at work. Good supervisor trust also contributes towards educators' emotional engagement and educators' organizational commitment.

The contribution of resources (cognitive, emotional, physical) to psychological conditions, work engagement and positive organizational/individual outcomes as indicated by Namibian secondary school educators is depicted in Table 97.

Table 97

The Impact of Educator Resources on Psychological Conditions, Work Engagement and Positive Organizational and Individual Outcomes



According to Table 97, the availability of physical, emotional and cognitive resources has a major impact on Namibian secondary school educators. Adequate resources lead to engagement and positive organizational outcomes (Bakker & Demerouti, 2007, 2008). This study found that Namibian secondary school educators made important decisions about their careers because of the availability of resources. These decisions can impact the total quality of post primary phase education in Namibia. For example, it is indicated that a lack of physical and emotional resources will most probably play a major role in higher turnover intention rates, poor educator well-being (somatic complaints, increased anxiety and insomnia, increased depression, social dysfunction) and disengagement from work. It is, furthermore, indicated in this study that a lack of resources will diminish the meaningfulness of work for educators whilst causing them to be less available at work and being less helpful to co-workers. A lack of resources points to a lack of emotional and physical educator engagement, increased health problems and an increase in turnover intention.

The contribution of rewards and recognition to psychological conditions, work engagement and positive organizational/individual outcomes as indicated by Namibian secondary school educators is depicted in Table 98.

Table 98

The Impact of Educator Rewards and Recognition on Psychological Conditions, Work Engagement and Positive Organizational and Individual Outcomes

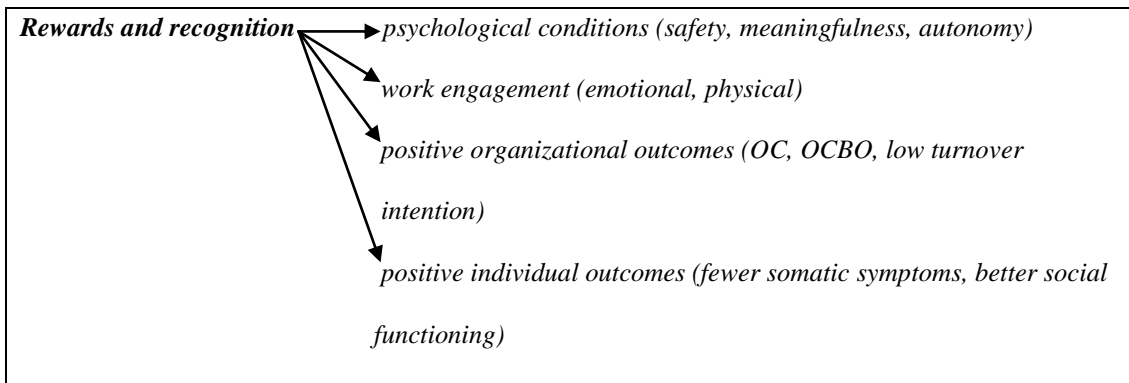


Table 98 indicates that adequate rewards and recognition for educators in Namibian secondary schools will contribute to feelings of safety, meaningfulness and autonomy at the workplace. These educators will also be more physically and emotionally engaged at work. Rewards and recognition contribute to Namibian secondary school educators' level of organizational commitment and OCBO and point to lower levels of turnover intention. Furthermore, good rewards and recognition will help to keep Namibian educators healthy and well.

The contribution of organizational support to psychological conditions, work engagement and positive organizational/individual outcomes as indicated by Namibian secondary school educators is depicted in Table 99.

Table 99

The Impact of Organizational Support on Psychological Conditions, Work Engagement and Positive Organizational and Individual Outcomes

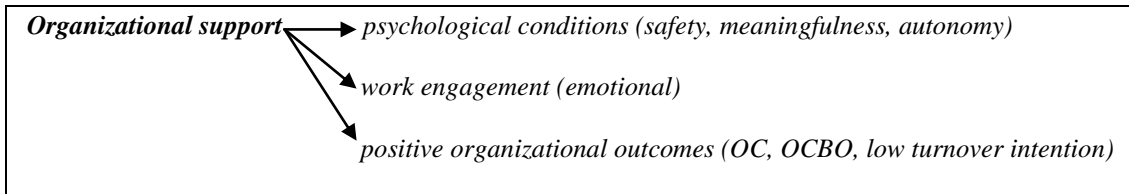


Table 99 indicates that adequate organizational support for educators in Namibian secondary schools will contribute to feelings of safety, meaningfulness and autonomy at the workplace. These educators will also be emotionally more engaged at work. Organizational support contributes to Namibian secondary school educators' level of organizational commitment and OCBO and points to lower levels of turnover intention.

The contribution of sense of coherence to psychological conditions, work engagement and positive organizational/individual outcomes as indicated by Namibian secondary school educators is depicted in Table 100.

Table 100

The Impact of Educator Sense of Coherence on Psychological Conditions, Work Engagement and Positive Organizational and Individual Outcomes

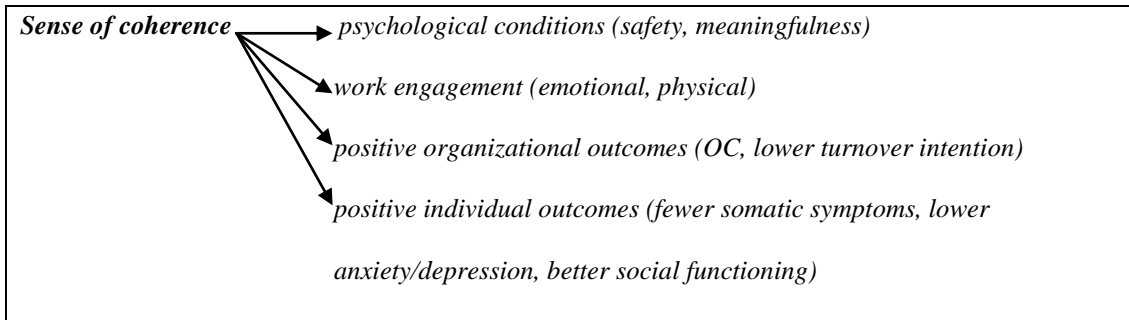


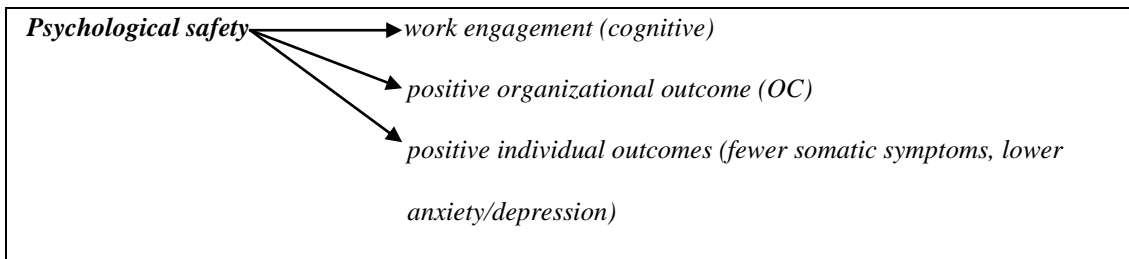
Table 100 indicates that educators with a high level of sense of coherence will feel safe in their work environment and be better able to achieve meaningfulness from their work. Namibian secondary school educators with a high sense of coherence will be emotionally and physically engaged. These educators will be more committed to their school and will experience better general health. High levels of sense of coherence are indicated to produce low levels of turnover intention for Namibian secondary school educators.

7.3 CONCLUSIONS WITH REGARD TO THE IMPACT OF PSYCHOLOGICAL CONDITIONS ON WORK ENGAGEMENT AND POSITIVE ORGANIZATIONAL/INDIVIDUAL OUTCOMES

The contribution of psychological safety to work engagement and positive organizational/individual outcomes as indicated by Namibian secondary school educators is depicted in Table 101.

Table 101

The Impact of Educator Psychological Safety on Work Engagement and Positive Organizational and Individual Outcomes



According to Table 101, findings of this study show that psychologically safety at work is crucial for the increased cognitive engagement of Namibian secondary school educators. When educators feel safe at their school, they show higher levels of organizational commitment. Psychological safety at work thus triggers positive conditions for educators so that they consequently experience positive health.

The contribution of psychological meaningfulness to work engagement and positive organizational/individual outcomes as indicated by Namibian secondary school educators is depicted in Table 102.

Table 102

The Impact of Educator Psychological Meaningfulness on Work Engagement and Positive Organizational and Individual Outcomes

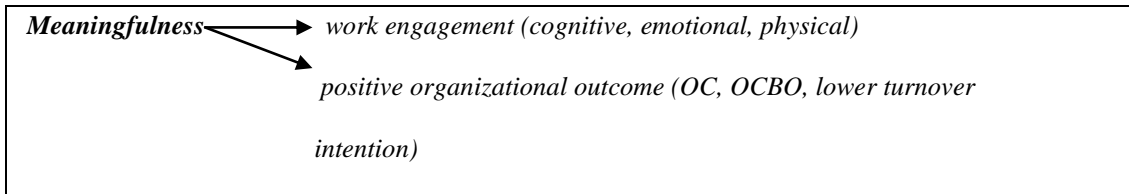


Table 102 indicates that Namibian secondary school educators who experience psychological meaningfulness in their work can fully engage (cognitively, emotionally and physically) in their work. These educators are also increasingly committed to their school and do more work than what is formally expected from them. This study also indicates that psychological meaningfulness leads to lower turnover intention.

The contribution of psychological availability to work engagement and positive organizational/individual outcomes as indicated by Namibian secondary school educators is depicted in Table 103.

Table 103

The Impact of Educator Psychological Availability on Work Engagement and Positive Organizational and Individual Outcomes

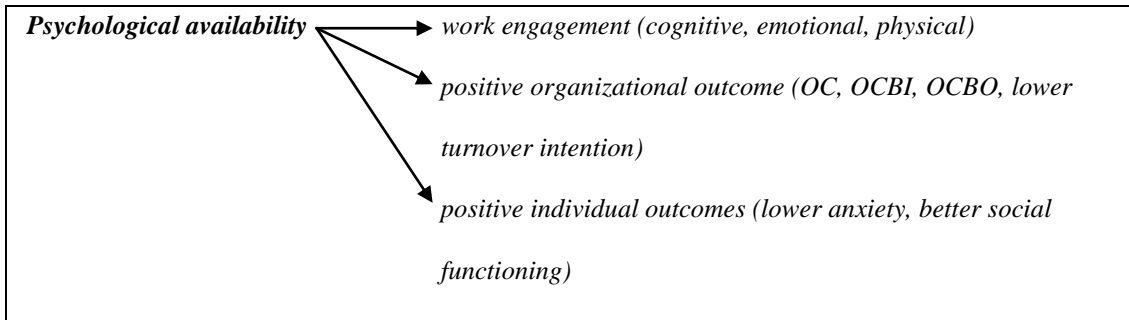


Table 103 indicates that Namibian secondary school educators who feel psychologically available for their work will be cognitively, emotionally and physically involved in their work. These educators feel a higher level of organizational commitment, OCBI, OCBO and a lower turnover intention. Educators that are available for their work also experience better health and general well-being. The contribution of autonomy to work engagement and positive organizational/individual outcomes as indicated by Namibian secondary school educators is depicted in Table 104.

Table 104

The Impact of Educator Autonomy on Work Engagement and Positive Organizational and Individual Outcomes

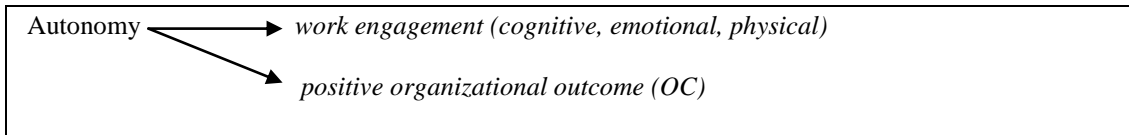


Table 104 indicates that Namibian secondary school educators with a higher level of autonomy at work are cognitively, emotionally and physically engaged with higher levels of commitment to their schools.

7.4 CONCLUSIONS WITH REGARD TO THE IMPACT OF WORK ENGAGEMENT ON POSITIVE ORGANIZATIONAL/INDIVIDUAL OUTCOMES

The contribution of cognitive engagement to positive organizational/individual outcomes as indicated by Namibian secondary school educators is depicted in Table 105.

Table 105

The Impact of Educator Cognitive Engagement on Positive Organizational and Individual Outcomes

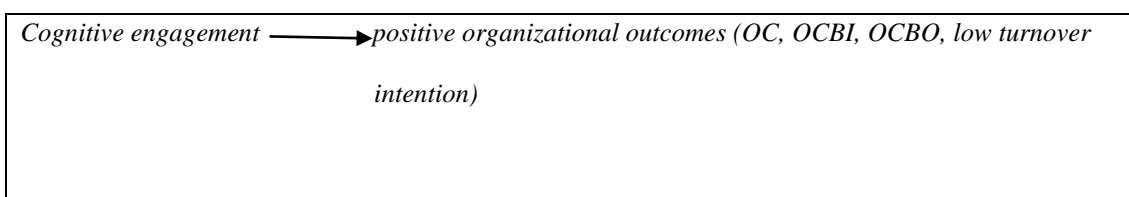


Table 105 indicates that Namibian secondary school educators who are cognitively engaged, will feel committed to their organization with elevated levels of OCBI and OCBO and a low intention to quit.

The contribution of emotional engagement to positive organizational/individual outcomes as indicated by Namibian secondary school educators is depicted in Table 106.

Table 106

The Impact of Educator Emotional Engagement on Positive Organizational and Individual Outcomes

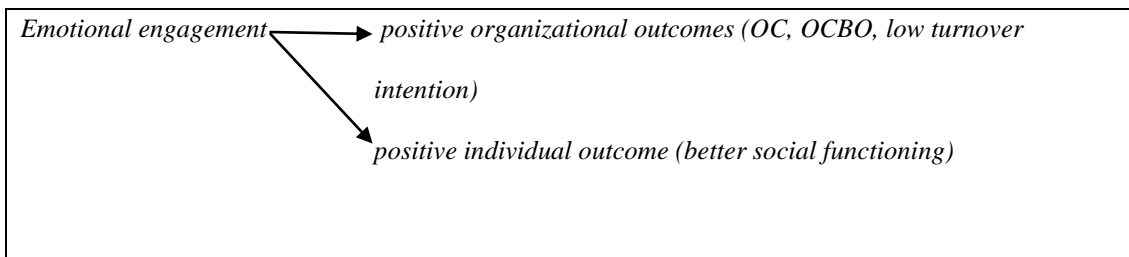


Table 106 indicates that Namibian secondary school educators who are emotionally engaged will be more committed to their school and show higher levels of OCBO. Emotionally engaged educators have lower levels of turnover intention. Emotional engagement also points to better social functioning of Namibian educators.

The contribution of physical engagement to positive organizational/individual outcomes as indicated by Namibian secondary school educators is depicted in Table 107.

Table 107

The Impact of Educator Physical Engagement on Positive Organizational and Individual Outcomes

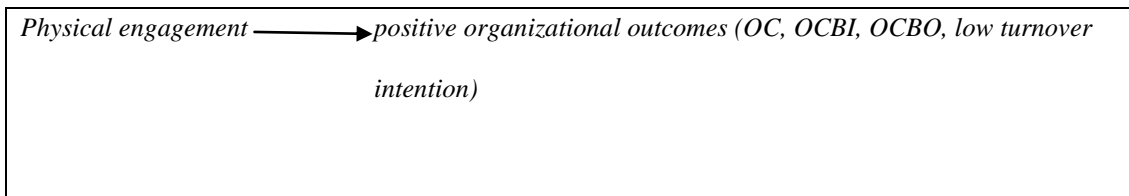


Table 107 indicates that Namibian secondary school educators who are physically engaged will experience higher levels of organizational commitment, OCBI, OCBO and lower levels of turnover intention.

7.5 CONCLUSIONS WITH REGARD TO MEDIATION EFFECTS OF PSYCHOLOGICAL CONDITIONS

With regard to the mediation effect of psychological conditions of work engagement, the impact of work-role fit, job enrichment, cognitive resources and sense of coherence on total engagement is mediated through psychological meaningfulness. Psychological availability mediates the relationship between work-role fit, job enrichment and cognitive resources on the one hand and physical engagement on the other hand. Autonomy mediates the relationship between job enrichment, supervisor trust and rewards and recognition on the one hand and emotional engagement on the other hand. Thus, psychological meaningfulness, availability and autonomy mediate between certain job factors and work engagement of Namibian secondary school educators.

With regard to the mediation effect of psychological conditions of engagement between job contextual factors and positive organizational outcomes, it has been found in this study that psychological availability mediates between work-role fit, job enrichment and cognitive resources on the one hand and organizational commitment and OCBO on the other hand. Both psychological availability and psychological meaningfulness mediate the relationship between work-role fit, job enrichment and cognitive resources on the one hand and turnover intention on the other hand. Psychological meaningfulness also mediates the relationship between work-role fit, job enrichment, cognitive resources and sense of coherence on the one hand and organizational commitment on the other hand. Autonomy mediates the relationship between job enrichment and supervisor trust on the one hand and organizational commitment on the other hand. Thus, psychological availability, meaningfulness and autonomy mediate the relationship between certain job contextual factors and positive certain organizational outcomes.

With regard to the mediation of psychological conditions of engagement between job factors and general educator health, psychological safety (rejection) mediates the relationship between work-role fit, co-worker relations, cognitive resources and sense of coherence on the one hand and somatic symptoms, anxiety and insomnia and depression on the other hand. Psychological safety (appreciation) mediates the relationship between co-worker relations, cognitive and emotional resources on the one hand and somatic symptoms on the other hand. Psychological availability mediates the relationship between work-role fit, job enrichment and cognitive resources on the one hand and anxiety/insomnia and social dysfunction on the other

hand. Autonomy mediates the relationship between job enrichment and supervisor trust on the one hand and social dysfunction on the other hand. Thus, psychological conditions mediate the relationship between certain job factors and general health of Namibian secondary school educators.

7.6 LIMITATIONS

This study had a number of limitations. The use of self-report measurement of the variables could lead to common method variance between predictor variables and outcome variables. Common method variance has to do with the amount of spurious covariance that variables share due to the common method that was used when the data were collected (Malhotra, Kim, & Patil, 2006).

This study was cross-sectional in nature with a survey method of data collection. Therefore, causal relationships between variables to explain poor health of Namibian secondary school educators could not be identified with certainty. Such causal factors can be much better assessed in a longitudinal study (Maxwell, 2007). Cross-sectional studies are under the influence of mean population trends, which leads to an underestimation of other influencing variables.

Furthermore, the survey battery used in this study consisted of a number of questionnaires that ranged between three and 28 items. Often when using questionnaires in this fashion, sub-constructs are assessed by items that are very similar in nature. In addition, the survey was conducted in English. A variety of

educators coming from at least six different home language groups completed the questionnaires. It might thus be that some of the items were not understood by the participants, leading to erroneously falsified answers.

Because of financial and time constraints, the researcher did not travel to all the educational regions to explain and distribute the survey battery. This might have led to educators not understanding the purpose of the study, or not understanding the items in the survey at all times. This might be one of the reasons why a relatively small sample of educators voluntarily participated in the study. Furthermore, the far Northern educational regions of Namibia were not included in the study due to a number of reasons. Most of the Namibian secondary schools are in the far Northern areas of Namibia and it would have contributed tremendously to this study if those areas would have been included.

The effect of variables on each other was conducted from one side only in order to maintain the scope of the study. Thus, the study aimed to establish the contribution of job factors and sense of coherence on psychological conditions and work engagement in an attempt to establish resulting positive organizational and individual job outcomes. Data analysis did not make provision for establishing, for example, the contribution of organizational commitment on the work engagement of educators. It makes sense to argue that the educator with a high level of organizational commitment will also be the more engaged educator. However, this study just looked at the contribution of engagement to organizational commitment, for example.

7.7 CHAPTER SUMMARY

This chapter focused on the main conclusions with regard to the general findings of this study. Limitations of the study were also outlined and discussed.

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ANNEXURE 1 – PERMISSION LETTER TO MINISTRY OF EDUCATION

18 October 2010

The Permanent Secretary: **Mr. Vitalis Ankama**

Ministry of Education

Private Bag 13186

Windhoek

Dear Mr. Ankama

Re: Application for research on teachers at Namibian Secondary Schools in selected educational regions

I am a PhD student at the University of Namibia. The topic of my approved research is: *The psychological well-being of teachers in Namibian Secondary Schools in selected educational regions.*

For the purpose of this study, I would like to involve 10 Secondary Schools in each of the Khomas, Otjozondjupa, Omaheke and Erongo Regions. Teachers of selected schools will be requested to complete a questionnaire anonymously. The completion of the questionnaires by the teachers should be done in their spare time, thus the normal school program will not be interrupted. The completion of the questionnaires will also be on a volunteer basis. It will thus remain the choice of the teacher whether he/she will complete the questionnaire.

As I involve teachers in my study, I need to ask the Ministry's permission to distribute the questionnaires to teachers in the mentioned regions. I therefore address this letter for permission for my research to you.

I attach a copy of my research proposal to this letter. I am also available, should you have any questions. I would highly appreciate it if I could get your feedback by fax on number 061 307384, or email mjanik@unam.na. My cell phone number: 081 242 8620.

I want to thank you in advance for your input in my research work and hope sincerely that you will grant me permission to continue with my research.

Kindly,

.....

Manfred Janik (Psychology Lecturer: University of Namibia)

ANNEXURE 2 – PERMISSION LETTER TO REGIONAL DIRECTORS OF EDUCATION

26 October 2010

The Regional Director: Mr. B. Boys
Hardap Region
Fax: 063 242053

Dear Mr. Boys

Re: Permission for research in certain Secondary Schools

I am a lecturer in the Psychology Department of the University of Namibia, busy with my P.hD. The topic of my research is: *The Emotional Well-being of Teachers in Secondary Schools in Namibia*. My study leader is Prof. Sebastiaan Rothmann (jan@ianrothmann.com).

As part of the research, I need about 800 Secondary School teachers to complete a questionnaire for me. However, before I can access the schools, I first need the permission of the Regional Director of each Educational Region in Namibia. I already received permission from the Permanent Secretary of Education to continue with the research (letter attached), who prompted me to also get the permission of the Regional Directors.

It is very difficult for me to already attach a list of the schools in your Region that I will ask to assist me. I already started to phone the schools to get a feeling of how willing teachers are to fill in the questionnaire, and many just don't see their way open as a result of their current high workload. It might thus be that I get 5 willing participants in one school and 10 at another. However, I promise to fax you a list of the schools where I dished out questionnaires, as soon as such a list is compiled.

I dearly hope that you will grant me permission to continue with my research in your Region as soon as possible. I would greatly appreciate it if you could mail me at mjanik@unam.na or fax to: 061 307 384. Please don't use the University address on this letterhead, as I might then not get hold of your response.

Kindly,

.....

Manfred Janik

ANNEXURE 3 – PERMISSION LETTER TO PRINCIPALS

27 October 2010

**The Principal: Mr. Rust
Academia Secondary School
Windhoek**

Dear Mr. Rust

Re: Emotional well-being research of Secondary School teachers

I refer to our telephone conversation on 27/10/10 in which I asked you permission to distribute questionnaires to your staff regarding my research on the emotional well-being of our teachers in Namibia.

We do talk in general about the high stress and difficult work circumstances that our teachers experience, but we don't have research findings on the topic. In addition, currently, more teachers leave the profession per year than the country is able to train. This will have a severe effect in the near future on Namibia's capacity to supply quality education to our children. The question is: why do teachers leave the profession? To answer this question and address the situation in a responsible way, we need research findings. This research postulates that emotional well-being plays a crucial role in a teacher's decision to leave to profession.

I have to emphasize that the filling in of the questionnaire is voluntary and anonymous.

Please be ensured of my gratitude for being able to distribute my questionnaire also to your staff.

Kind regards,

.....
Manfred Janik (Department Psychology, University of Namibia)
E-mail: mjanik@unam.na
Telephone: 081 242 8620 or 2063144 or 256198

ANNEXURE 4 – QUESTIONNAIRE

University of Namibia
340 Mandume Ndemufayo Avenue
P/Bag 13301
Windhoek
Tel: 061-2063111
Faculty of Humanities & Social Sciences

Dear Participant

RE: RESEARCH PROJECT

Thank you for your willingness to participate in this research project that attempts at investigating the general psychological well-being of Secondary School teachers in Namibia. The questionnaire is a lengthy one, but your time to complete it might contribute towards healthier future work circumstances for Namibian teachers.

All information that we receive is confidential. Participant details will remain anonymous. The researcher will provide feedback to interested teachers/participants if contacted.

Your contribution to this study is extremely important and its success depends on the number of participants who complete the questionnaires. Please assist in submitting a truthful reflection of your thoughts, experiences and feelings.

Please answer all questions as honestly and accurately as it is possible to do so. Details of how to complete the questionnaire are provided. It will take approximately 45-60 minutes to complete the questionnaire.

Please return the completed questionnaire to your secretary. In the event of queries or questions, feel free to ask or contact us at:

- Prof. Sebastiaan Rothmann: ian@ianrothmann.com
- Manfred Janik: mjanik@unam.na or 081 242 8620

Thanking you in advance for your participation.

Prof. Sebastiaan Rothmann (Project Leader)

Manfred Janik (Researcher)

BIOGRAPHICAL SECTION

Please answer the following questions by marking the appropriate boxes:

1. Gender

Male

Female

2. Age

Please specify your age in years on the line below:

3. Marital status

Single

Divorced

Widowed

Married

Living with a partner

4. Qualification/s

Gr. 12 certificate

Diploma

Postgraduate diploma

Degree

Honours degree

Masters degree

Doctoral degree

5. Job tenure

Please specify the number of years in your current position:

6. Job position

Student teacher (still in full-time training)

Junior teacher (two years or less in full-time teaching)

Senior teacher (more than two years in full-time teaching)

Head of Department

Principal

7. Type of school

Government

Semi-government

Private

8. Years at the school

Please specify the number of years you teach at the current school:

9. Years in teaching

Please specify the total number of years that you are in the teaching profession:

10. Nationality

Namibian	<input type="checkbox"/>
Non-Namibian	<input type="checkbox"/>

12. Home language

Afrikaans	<input type="checkbox"/>
English	<input type="checkbox"/>
Oshiwambo	<input type="checkbox"/>
Herero	<input type="checkbox"/>
Damara	<input type="checkbox"/>
Nama	<input type="checkbox"/>
Tswana	<input type="checkbox"/>
Portuguese	<input type="checkbox"/>
German	<input type="checkbox"/>
Other (Please specify)	<input type="checkbox"/>

11. Ethnicity

African	<input type="checkbox"/>
European	<input type="checkbox"/>
Asian	<input type="checkbox"/>
Colored	<input type="checkbox"/>
Other	<input type="checkbox"/>

13. Region of occupation

Khomas	<input type="checkbox"/>
Otjozondjupa	<input type="checkbox"/>
Omaheke	<input type="checkbox"/>
Erongo	<input type="checkbox"/>

WELL-BEING QUESTIONNAIRE

Please answer **ALL** the items simply by underlining or marking the answer which you think most nearly applies to you. Thank you very much for your cooperation.

	STATEMENT	SCALE								
1	My job "fits" how I see myself.	strongly disagree	1	2	3	4	5	6	7	strongly agree
2	The work I do on this job helps me satisfy who I am.	strongly disagree	1	2	3	4	5	6	7	strongly agree
3	My job "fits" how I see myself in the future.	strongly disagree	1	2	3	4	5	6	7	strongly agree
4	How much autonomy is there in your job? That is, to what extent does your job permit you to decide on your own how to go about doing the work?	very little	1	2	3	4	5	6	7	very much
5	To what extent does your job involve doing a "whole" and identifiable piece of work? That is, is the job a complete piece of work that has an obvious beginning and end? Or is it only a small part of the overall piece of work, which is finished by other people or by automatic machines?	very little	1	2	3	4	5	6	7	very much
6	How much variety is there in your job? That is, to what extent does the job require you to do many different things at work, using a variety of your skills and talents?	very little	1	2	3	4	5	6	7	very much
7	In general, how significant or important is your job? That is, are the results of your work likely to significantly affect the lives or well-being of other people?	very little	1	2	3	4	5	6	7	very much
8	To what extent do managers or co-workers let you know how well you are doing on your job?	very little	1	2	3	4	5	6	7	very much
9	To what extent does doing the job itself provide you with information about your work performance? That is, does the actual work itself provide clues about how well you are doing – aside from any "feedback" co-workers or supervisors may provide?	very little	1	2	3	4	5	6	7	very much
10	My supervisor helps me solve work-related problems.	strongly disagree	1	2	3	4	5	6	7	strongly agree
11	My supervisor encourages me to develop new skills.	strongly disagree	1	2	3	4	5	6	7	strongly agree

	STATEMENT	SCALE									
12	My supervisor keeps informed about how employees think and feel about things.	strongly disagree	1	2	3	4	5	6	7	strongly agree	
13	My supervisor encourages employees to participate in important decisions.	strongly disagree	1	2	3	4	5	6	7	strongly agree	
14	My supervisor praises good work.	strongly disagree	1	2	3	4	5	6	7	strongly agree	
15	My supervisor encourages employees to speak up when they disagree with a decision.	strongly disagree	1	2	3	4	5	6	7	strongly agree	
16	Employees are treated fairly by my supervisor.	strongly disagree	1	2	3	4	5	6	7	strongly agree	
17	My supervisor is committed to protecting my interests.	strongly disagree	1	2	3	4	5	6	7	strongly agree	
18	My supervisor does what he/she says he/she will do.	strongly disagree	1	2	3	4	5	6	7	strongly agree	
19	I trust my supervisor.	strongly disagree	1	2	3	4	5	6	7	strongly agree	
20	My interactions with my co-workers are rewarding.	strongly disagree	1	2	3	4	5	6	7	strongly agree	
21	My co-workers value my input.	strongly disagree	1	2	3	4	5	6	7	strongly agree	
22	My co-workers listen to what I have to say.	strongly disagree	1	2	3	4	5	6	7	strongly agree	
23	My co-workers really know who I am.	strongly disagree	1	2	3	4	5	6	7	strongly agree	
24	I believe that my co-workers appreciate who I am.	strongly disagree	1	2	3	4	5	6	7	strongly agree	
25	I sense a real connection with my co-workers.	strongly disagree	1	2	3	4	5	6	7	strongly agree	
26	My co-workers and I have mutual respect for one another.	strongly disagree	1	2	3	4	5	6	7	strongly agree	
27	I feel a real "kinship" with my co-workers.	strongly disagree	1	2	3	4	5	6	7	strongly agree	
28	I feel worthwhile when I am around my co-workers.	strongly disagree	1	2	3	4	5	6	7	strongly agree	
29	I trust my co-workers.	strongly disagree	1	2	3	4	5	6	7	strongly agree	
30	I find it difficult to focus my attention while at work.	strongly disagree	1	2	3	4	5	6	7	strongly agree	
31	I can't think straight by the end of my workday.	strongly disagree	1	2	3	4	5	6	7	strongly agree	
32	I have problems remembering all the things I need to do at work.	strongly disagree	1	2	3	4	5	6	7	strongly agree	

	STATEMENT	SCALE								
33	I feel emotionally healthy at the end of the workday.	strongly disagree	1	2	3	4	5	6	7	strongly agree
34	I feel like I'm at the end of my rope emotionally.	strongly disagree	1	2	3	4	5	6	7	strongly agree
35	I feel emotionally drained from my work.	strongly disagree	1	2	3	4	5	6	7	strongly agree
36	I feel tired before my workday is over.	strongly disagree	1	2	3	4	5	6	7	strongly agree
37	I feel physically used up at the end of the workday.	strongly disagree	1	2	3	4	5	6	7	strongly agree

Indicate the extent to which you receive the following outcomes for performing your job well:

	STATEMENT	SCALE								
		very little	1	2	3	4	5	6	7	very much
38	A pay raise.	very little	1	2	3	4	5	6	7	very much
39	Job security.	very little	1	2	3	4	5	6	7	very much
40	A promotion.	very little	1	2	3	4	5	6	7	very much
41	More freedom and opportunities.	very little	1	2	3	4	5	6	7	very much
42	Respect from the people you work with.	very little	1	2	3	4	5	6	7	very much
43	Praise from your supervisor.	very little	1	2	3	4	5	6	7	very much
44	Training and development opportunities.	very little	1	2	3	4	5	6	7	very much
45	More challenging work assignments.	very little	1	2	3	4	5	6	7	very much
46	Public recognition (e.g. employee of the month).	very little	1	2	3	4	5	6	7	very much
47	A reward or token of appreciation (e.g. lunch).	very little	1	2	3	4	5	6	7	very much
48	I get all the information I need to do my work and plan my schedule.	strongly disagree	1	2	3	4	5	6	7	strongly agree
49	I do not have access to useful training on the job.	strongly disagree	1	2	3	4	5	6	7	strongly agree
50	Excellent work pays off in this organisation.	strongly disagree	1	2	3	4	5	6	7	strongly agree
51	My organisation strongly considers my goals and values.	strongly disagree	1	2	3	4	5	6	7	strongly agree
52	My organisation shows little concern for me.	strongly disagree	1	2	3	4	5	6	7	strongly agree
53	My organisation cares about my opinions.	strongly disagree	1	2	3	4	5	6	7	strongly agree
54	My organisation is willing to help me if I need a special favour.	strongly disagree	1	2	3	4	5	6	7	strongly agree
55	Help is available from my organisation when I have a problem.	strongly disagree	1	2	3	4	5	6	7	strongly agree
56	My organisation would forgive an honest mistake on my part.	strongly disagree	1	2	3	4	5	6	7	strongly agree
57	If given the opportunity, my organisation would take advantage of me.	strongly disagree	1	2	3	4	5	6	7	strongly agree

	STATEMENT	SCALE								
58	I worry about how others perceive me at work.	strongly disagree	1	2	3	4	5	6	7	strongly agree
59	I am afraid my failings will be noticed by others.	strongly disagree	1	2	3	4	5	6	7	strongly agree
60	I worry about being judged by others at work.	strongly disagree	1	2	3	4	5	6	7	strongly agree
61	The work I do is meaningful to me.	strongly disagree	1	2	3	4	5	6	7	strongly agree
62	The work I do is very important to me.	strongly disagree	1	2	3	4	5	6	7	strongly agree
63	My job activities are personally meaningful to me.	strongly disagree	1	2	3	4	5	6	7	strongly agree
64	The work that I do on this job is worthwhile.	strongly disagree	1	2	3	4	5	6	7	strongly agree
65	My job activities are significant to me.	strongly disagree	1	2	3	4	5	6	7	strongly agree
66	I feel that the work I do on my job is valuable.	strongly disagree	1	2	3	4	5	6	7	strongly agree
67	I am confident in my ability to handle competing demands at work.	strongly disagree	1	2	3	4	5	6	7	strongly agree
68	I am confident in my ability to deal with problems that come up at work.	strongly disagree	1	2	3	4	5	6	7	strongly agree
69	I am confident in my ability to think clearly at work.	strongly disagree	1	2	3	4	5	6	7	strongly agree
70	I am confident in my ability to display the appropriate emotions at work.	strongly disagree	1	2	3	4	5	6	7	strongly agree
71	I am confident that I can handle the physical demands at work.	strongly disagree	1	2	3	4	5	6	7	strongly agree
72	I am confident about my ability to do my job.	strongly disagree	1	2	3	4	5	6	7	strongly agree
73	I have mastered the skills necessary for my job.	strongly disagree	1	2	3	4	5	6	7	strongly agree
74	I am self-assured about my capabilities to perform my work activities.	strongly disagree	1	2	3	4	5	6	7	strongly agree
75	If you make a mistake at work, it is often held against you.	strongly disagree	1	2	3	4	5	6	7	strongly agree
76	Individuals in my section are able to bring up problems and tough issues.	strongly disagree	1	2	3	4	5	6	7	strongly agree
77	People in my section sometimes reject others for being different.	strongly disagree	1	2	3	4	5	6	7	strongly agree
78	It is safe to take a risk in my section.	strongly disagree	1	2	3	4	5	6	7	strongly agree

	STATEMENT	SCALE								
79	It is difficult to ask colleagues at work for help.	strongly disagree	1	2	3	4	5	6	7	strongly agree
80	No one in my section would deliberately act in a way that undermines my efforts.	strongly disagree	1	2	3	4	5	6	7	strongly agree
81	Working with colleagues in my section, my unique skills and talents are valued and utilised.	strongly disagree	1	2	3	4	5	6	7	strongly agree

	STATEMENT	SCALE								
82	I have considerable opportunity for independence and freedom in how I do my job.	strongly disagree	1	2	3	4	5	6	7	strongly agree
83	I have significant autonomy in determining how I do my job.	strongly disagree	1	2	3	4	5	6	7	strongly agree
84	I can decide on my own how to go about doing my work.	strongly disagree	1	2	3	4	5	6	7	strongly agree
85	I have a great deal of control over what happens in my department.	strongly disagree	1	2	3	4	5	6	7	strongly agree
86	I have significant influence over what happens in my department.	strongly disagree	1	2	3	4	5	6	7	strongly agree
87	My impact on what happens in my department is large.	strongly disagree	1	2	3	4	5	6	7	strongly agree

1 never or almost never	2 very infrequently	3 Quite infrequently	4 sometimes	5 quite frequently	6 very frequently	7 almost always or always
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	STATEMENT	SCALE								
88	I get so into my job that I lose track of time.	never or almost never	1	2	3	4	5	6	7	almost always or always
89	I am rarely distracted when performing my job.	never or almost never	1	2	3	4	5	6	7	almost always or always
90	I am very absorbed in my work.	never or almost never	1	2	3	4	5	6	7	almost always or always
91	When I am working, I often lose track of time.	never or almost never	1	2	3	4	5	6	7	almost always or always
92	I feel I am able to contribute new ideas.	never or almost never	1	2	3	4	5	6	7	almost always or always
93	I am passionate about my job.	never or almost never	1	2	3	4	5	6	7	almost always or always
94	I feel energised when I work.	never or almost	1	2	3	4	5	6	7	almost always

STATEMENT		SCALE								
		never							or always	
95	I am enthusiastic about my job.	never or almost never	1	2	3	4	5	6	7	almost always or always
96	I get excited when I perform well on my job.	never or almost never	1	2	3	4	5	6	7	almost always or always
97	I feel a lot of energy when I am performing my job.	never or almost never	1	2	3	4	5	6	7	almost always or always

	STATEMENT	SCALE								
98	I am full of energy in my work.	never or almost never	1	2	3	4	5	6	7	almost always or always
99	I feel alive and vital at work.	never or almost never	1	2	3	4	5	6	7	almost always or always
100	I feel physically strong at work.	never or almost never	1	2	3	4	5	6	7	almost always or always
101	Working at my organisation has a great deal of personal meaning to me.	strongly disagree	1	2	3	4	5	6	7	strongly agree
102	I really feel that problems faced by my organisation are also my problems.	strongly disagree	1	2	3	4	5	6	7	strongly agree
103	I feel personally attached to my work organisation.	strongly disagree	1	2	3	4	5	6	7	strongly agree
104	I am proud to tell others I work at my organisation.	strongly disagree	1	2	3	4	5	6	7	strongly agree
105	I feel a strong sense of belonging to my organisation.	strongly disagree	1	2	3	4	5	6	7	strongly agree
106	I frequently think of quitting my job.	strongly disagree	1	2	3	4	5	6	7	strongly agree
107	I am planning to search for a new job during the next 12 months.	strongly disagree	1	2	3	4	5	6	7	strongly agree
108	If I have my own way, I will be working for this organisation one year from now.	strongly disagree	1	2	3	4	5	6	7	strongly agree

How often do you show the following behaviour at work?

1 never or almost never	2 very infrequently	3 Quite infrequently	4 sometimes	5 quite frequently	6 very frequently	7 almost always or always
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	STATEMENT	SCALE								
109	Adjust your work schedule to accommodate other employees' request for time off.	never or almost never	1	2	3	4	5	6	7	almost always or always
110	Give up time to help others who have work or non-work problems.	never or almost never	1	2	3	4	5	6	7	almost always or always

STATEMENT		SCALE								
111	Assist others with their duties.	never or almost never	1	2	3	4	5	6	7	almost always or always
112	Offer ideas to improve the functioning of the organisation.	never or almost never	1	2	3	4	5	6	7	almost always or always
113	Take action to protect the organisation from potential problems.	never or almost never	1	2	3	4	5	6	7	almost always or always
114	Defend the organisation when other employees criticize it.	never or almost never	1	2	3	4	5	6	7	almost always or always

GENERAL HEALTH QUESTIONNAIRE

Instructions:

We would like to know if you have had any medical complaints and how your health has been in general over the past few weeks. Please answer ALL the questions simply by underlining or marking the answer which you think most nearly applies to you. Remember that we want to know about present and recent complaints not those that you had in the past. It is important that you try to answer ALL the questions. Thank you very much for your cooperation.

Have you recently:

	STATEMENT	SCALE			
115	Been feeling perfectly well and in good health?	not at all	no more than usual	rather more than usual	much more than usual
116	Been feeling in need of a good tonic?	not at all	no more than usual	rather more than usual	much more than usual
117	Been feeling run down and out of sorts?	not at all	no more than usual	rather more than usual	much more than usual
118	Felt that you are ill?	not at all	no more than usual	rather more than usual	much more than usual
119	Been getting any pains in your head?	not at all	no more than usual	rather more than usual	much more than usual
120	Been getting a feeling of tightness or pressure in your head?	not at all	no more than usual	rather more than usual	much more than usual
121	Been having hot or cold spells?	not at all	no more than usual	rather more than usual	much more than usual
122	Lost much sleep over worry?	not at all	no more than usual	rather more than usual	much more than usual
123	Had difficulty in staying asleep once you are off?	not at all	no more than usual	rather more than usual	much more than usual
124	Felt constantly under strain?	not at all	no more than usual	rather more than	much more than

	STATEMENT	SCALE			
				usual	usual
125	Been getting edgy and bad-tempered?	not at all	no more than usual	rather more than usual	much more than usual
126	Been getting scared or panicky for no good reason?	not at all	no more than usual	rather more than usual	much more than usual
127	Found everything getting on top of you?	not at all	no more than usual	rather more than usual	much more than usual
128	Been feeling nervous and strung-up all the time?	not at all	no more than usual	rather more than usual	much more than usual
129	Been managing to keep yourself busy and occupied?	not at all	no more than usual	rather more than usual	much more than usual
130	Been taking longer over the things you do?	not at all	no more than usual	rather more than usual	much more than usual
131	Felt on the whole you were doing things well?	not at all	no more than usual	rather more than usual	much more than usual
132	Been satisfied with the way you've carried out your task?	not at all	no more than usual	rather more than usual	much more than usual
133	Felt you are playing a useful part in things?	not at all	no more than usual	rather more than usual	much more than usual
134	Felt capable of making decisions about things?	not at all	no more than usual	rather more than usual	much more than usual
135	Been able to enjoy your normal day-to-day activities?	not at all	no more than usual	rather more than usual	much more than usual
136	Been thinking of yourself as a worthless person?	not at all	no more than usual	rather more than usual	much more than usual
137	Felt that life is entirely hopeless?	not at all	no more than usual	rather more than usual	much more than usual

	STATEMENT	SCALE			
138	Felt that life isn't worth living?	not at all	no more than usual	rather more than usual	much more than usual
139	Thought of the possibility that you might do away with yourself?	not at all	no more than usual	rather more than usual	much more than usual
140	Found at times that you couldn't do anything because your nerves were too bad?	not at all	no more than usual	rather more than usual	much more than usual
141	Found yourself wishing you were dead and away from it all?	not at all	no more than usual	rather more than usual	much more than usual
142	Found that the idea of taking your own life kept coming into your mind?	not at all	no more than usual	rather more than usual	much more than usual

ORIENTATION TO LIFE QUESTIONNAIRE

Instructions:

Here is a series of questions relating to various aspects of our lives. Each question has 7 possible answers. Please mark the number which best expresses the extent to which the statement is applicable to you. Note that numbers 1 and 7 are the extreme answers, while number 4 means that both statements are equally applicable to you. If the words under 1 are right for you, draw a cross over number 1; if the words under 7 are right for you, draw a cross over number 7. If you feel differently, cross the number which best expresses your feeling. Please give only one answer to each question.

143	Do you have the feeling that you don't really care about what goes on around you?									
	very seldom or never	1	2	3	4	5	6	7	very often	
144	Has it happened in the past that you were surprised by the behaviour of people whom you thought you knew well?									
	never happened	1	2	3	4	5	6	7	always happens	
145	Has it happened that people whom you counted on disappointed you?									
	never happened	1	2	3	4	5	6	7	always happens	
146	Until now your life has had:									
	no clear goal or purpose	1	2	3	4	5	6	7	very clear goals and purpose	
147	Do you have the feeling that you are being treated unfairly?									
	very often	1	2	3	4	5	6	7	Very seldom or never	
148	Do you have a feeling that you are in an unfamiliar situation and don't know what to do?									
	very often	1	2	3	4	5	6	7	Very seldom or never	
149	Doing the things that you do everyday is:									
	a source of deep pleasure and satisfaction	1	2	3	4	5	6	7	a source of pain and boredom	
150	Do you have very mixed-up feelings and ideas?									
	very often	1	2	3	4	5	6	7	Very seldom or never	

151	Does it happen that you have feelings inside that you would rather not like to feel?								
	very often	1	2	3	4	5	6	7	Very seldom or never

152	Many people - even those with a strong character - sometimes feel like losers in certain situations. How often have you felt in this way in the past?								
	never	1	2	3	4	5	6	7	very often
153	When something happened, have you generally found that:								
	you overestimated or underestimated its importance	1	2	3	4	5	6	7	you saw it in the right perspective
154	How often do you have the feeling that there's little meaning in the things you do in your daily life?								
	very often	1	2	3	4	5	6	7	very seldom or never
155	How often do you have feelings that you're not sure that you can keep under control?								
	very often	1	2	3	4	5	6	7	very seldom or never